Unmasked: How message transparency and two-sidedness in a crisis response influence reputational outcomes in a preventable crisis

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Abstract

Everyone makes mistakes. When an organization makes a misstep, a crisis may unlock. Then, crisis communicators need to produce effective crisis messages to protect the organization's reputational assets. However, it is debatable what effective crisis communication entails, as many message and context factors play a role. The current research focuses on a preventable crisis. In this context, it is investigated what the influence of message transparency, message sidedness and the combination of both in crisis responses is. **PURPOSE** In this manner, the present study aims to contribute to the literature on message quality in crisis communication, by shedding light on textual features that so far have been neglected largely by academics. Moreover, the study's objective is to move away from abstract guidelines for handling crises. Instead, the goal is to make practitioners aware of the influence of providing more, more specific and clearer information on the crisis situation in a crisis response. Further, with this research it is aimed to inform crisis communicators about the effects of including both positive and negative comments about the company in crisis, thereby question the current trend of only communicating the positive. **METHOD** Concretely, the impact on trust, crisis forgiveness, purchase consideration and crisis blame has been measured by employing a 2 (high transparency/low transparency) x 2 (one-sided/two-sided) online experiment. The sample consisted of participants that were fluent in Dutch, generally highly educated and mostly female. In total, 188 responses were saved, of which 100 could be used for inference. **RESULTS** Linear regression has been performed, investigating the main effects of transparency and two-sidedness, as well as the interaction effect of these variables. No significant causal relationships between the message features and outcome variables have been found. **CONCLUSION** Based on this, it is concluded that transparent communication cannot decrease the negative reputational outcomes of a preventable crisis. Possibly, the paradox of transparent communication and non-transparent behaviour leading to a preventable crisis may be too wide, which might cancel the effect of the crisis message. Nevertheless, the present study still stimulates crisis communication professionals to invest in transparency and two-sidedness, as it is believed that this way of communicating is more ethically approved and thereby essential for stakeholder relation management.

Keywords:

Message transparency, two-sidedness, preventable crisis, crisis communication, reputation

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1. Introduction

In the current world, imperfection is often not tolerated by the public. Therefore, organizations need to know what action to undertake when something goes wrong. Particularly in crises, this is important for companies. For instance, when famous endorsers of a company make a substantial mistake, the company can best protect its reputation by cutting the endorser loose (Sato, Arai, Tsuji, & Kay, 2020). Also, effective reputation management is vital when an organization makes a misstep itself. Particularly when that misstep could have been prevented, the organization's reputation is at stake and proper crisis communication is a must (Coombs, 2007). Thus, being imperfect nowadays calls for intelligent crisis responses.

Nevertheless, crisis communicators do not always create effective messages. As stated by Eisend (2007) and Kim and Sung (2014), communication practitioners often focus on producing positive messages. Thereby, they pay less attention to high quality transparent communication. Meanwhile, the public naturally tends to acquire more information about the crisis – crisis situations in general – through mass and social media channels (Austin, Liu, & Jin, 2012). When, consequently, the audience concludes that the organization is to be blamed, the organization faces more unfavourable attitudes among the public (Nekmat & Kong, 2019). Only producing one-sided and non-transparent messages, then, is problematic. Particularly, as in the crisis communication literature transparency is perceived as a key factor to (re)gain positive perceptions, such as trust (Seeger, 2006). In other words, there seems to be a need for transparency in the current crisis communication practice.

To some extent, this has been recognized by several academics. Transparent communication has been studied in various manners, ranging from transparency cues (Kim, Hong, & Cameron, 2014) and timing (Beldad, Van Laar, & Hegner, 2018; Claeys, Cauberghe, & Pandelaere, 2016) to message transparency (Holland, Seltzer, & Kochigina, 2021; Holland, Krause, Provencher, & Seltzer, 2018). On the conceptual level, Rawlins (2008a), Wehmeier and Raaz (2012), and Schnackenberg and Tomlinson (2016) discuss what it means to communicate transparently. Specifically, it is highlighted that transparency is not confined to the mere spreading of information (disclosure), but also includes how comprehensible the information is (Schnackenberg & Tomlinson, 2016). Studies by Holland et al. (2018) and Holland et al. (2021) have translated this work to an operationalization of message transparency in crisis communication. In their researches, positive reputational outcomes, such as credibility impressions, as a result of highly transparent messages have been found.

However, these studies have failed to measure the impact of message transparency and two-sidedness together in crisis responses. Two-sidedness itself has received academic attention in distinct domains, such as advertising (Golden & Alpert, 1987), information processing (Flanagin, Winter, & Metzger, 2020) and intervention design (Cornelis, Cauberghe, & De Pelsmacker, 2013). Further, Kim and Sung (2014) investigated the influence of two-sidedness in crisis communication and found

positive results for reputational factors. Still, to the researcher's knowing, little studies have addressed the influence of message sidedness in crisis communication. This is problematic, as two-sided messages have the potential to show that you also acknowledge the issues customers see, which is vital in crisis communication (Seeger, 2006). Therefore, the effects of two-sidedness in crisis responses need further investigation. Additionally, two-sidedness contributes to message quality and increases credibility (Eisend, 2007), which is similar to the effects of transparency. That is why in this research it is believed that when a message is both very transparent and two-sided, the public gets a more coherent and reliable impression of the organization, possibly leading to more favourable reputational outcomes such as trust. This logic, however, has received little attention in the literature. Hence, the interplay between two-sidedness and transparency needs statistical clarification.

Therefore, the goal of the present study is to address these literature gaps. Specifically, it is relevant to investigate whether transparency, two-sidedness and their potential interaction yield less negative organizational attitudes in the case of a crisis that could have been prevented. The focus is put on a preventable crisis, as opposed to a victim or accidental crisis, as this crisis type is associated with the most perceived responsibility (Coombs, 2007), which may negatively impact trust, forgiveness, purchase considerations and perceptions of blame among the public. Hence, it is valuable to know whether the positive outcomes of transparent communication hold in the worst and least transparent situation: a preventable crisis. Thus, the current research answers the following research question: *to what extent do message transparency and two-sidedness in a crisis response lead to less negative attitudes toward an organization among the public, in the case of a preventable crisis?* Concretely, the present study focuses on the influence on trust, crisis forgiveness, purchase consideration and crisis blame.

This research question is the core of this research report. By answering this question, it is aimed for to further empirically clarify the impact of message quality, through transparency and two-sidedness, on reputational outcomes. Moreover, this research seeks to assist crisis communicators in constructing their crisis responses during preventable crises. The path of answering the research question presented above is elaborated on in this report. The following chapters discuss this study's theoretical groundwork, research method, results, implications, limitations, and conclusions.

2. Theoretical Framework

2.1 Situational Crisis Communication Theory
One of the influential theories in the crisis communication literature is the Situational Crisis Communication Theory (SCCT). This work, as explained by Coombs (2007), considers differences in crisis severity and the (mis)match of crisis reaction and crisis type, by looking at how the public responds to different crises. Further, SCCT includes practical tips for crisis communicators.

At the core of SCCT is perceived crisis responsibility. That determines the reputational threat (Coombs, 2007). In SCCT, crisis types are distinguished and linked to crisis responsibility. Coombs (2007) elaborates on three cases: victim crises (low perceived responsibility), accidental crises (mediocre perceived responsibility), and preventable crises (high perceived responsibility). In other words, the more the public thinks that the crisis is the organization's fault, more attributed blame can be expected, and the higher are the reputational risks. This research focuses on preventable crises specifically, meaning that the threat for reputation is naturally high. This risk may be reduced when the audience is willing to forgive the organization, since the public is then more likely to stay connected to the company. Thus, in crisis situations the consumer-organization relationship is dependent on whether the audience blames and/or forgives the company.

To understand how these mechanisms work, we turn to Attribution Theory. This theory is a foundation for SCCT (Coombs, 2007) and explains how emotions are connected to cognitive processes. Concretely, Weiner (1985) states that the human emotional reaction is first based on the consequence of an occurrence, and later on the (assumed) cause of that occurrence. Put differently, people attach affective meaning to how a specific situation came to exist. Thus, in crises the audience looks for an entity that can be blamed and, consequently, will have a positive or negative feeling about that (Coombs, 2007). It is likely that customers hold the organization involved accountable, particularly in a preventable crisis. However, when the public does not attribute blame to the company, conative reactions – such as purchase behaviour – are in favour of the organization (Weiner, 2006, as cited in Coombs, 2007). This effect may also appear when the company is blamed initially, but forgiven later on. In conclusion, for companies dealing with a crisis, it is important to be perceived as least responsible as possible. Additionally, organizations would benefit when they are not blamed for the crisis.

2.2 Outcome Variables

Ways to reduce attributed crisis blame may be constructing transparent crisis messages, as well as including both positive and negative parts in those messages. This, since transparency and two-sidedness can significantly increase positive/decrease negative organizational perceptions (Holland et al., 2021; Eisend, 2007). This is tested for a preventable crisis in the current research, concentrating on vital reputational factors that shape the customer-organization relationship. Concretely, the focus is put on *crisis blame* (CB), *crisis forgiveness* (CF), *purchase consideration* (PC) and *trust*.

Before measuring how these reputational factors are impacted, definitions are needed. In this report, CB is defined as the extent to which the audience judges that the organization is to be blamed for the crisis. Next, based on definitions provided by Finkel, Rusbult, Kumashiro and Hannon (2002), and Xie and Peng (2009), in the current study the definition for CF is the audience's willingness to let go of negative attitudes and intentions towards the organization and approach the organization constructively after a crisis. Further, PC is perceived as the audience's assessments of an organization

and its products as preparation for making a purchase at that organization – similar to the definition provided in the article of Spears and Singh (2004). Finally, in the present research, trust is regarded as an overarching concept including trust perceptions related to an organization's ability, benevolence and integrity. In the following sections, hypotheses for the influence of transparency and two-sidedness on the specified outcome variables above are provided.

2.3 Message Transparency

2.3.1 Perspective on message transparency.
Reducing blame and increasing forgiveness, purchase consideration and trust for an organization in crisis may be achieved by publishing a transparent crisis response. Providing a definition for *message transparency* (MT), however, is not necessarily common in literature (Wehmeier & Raaz, 2012). Nonetheless, Rawlins (2008a), for example, shares his perspective on transparency. He argues that transparent communication reaches beyond the mere release of information, which he refers to as "disclosure" (p. 74). Rawlins (2008a) claims that reducing transparency to disclosure is problematic, for more disclosure does not guarantee a better understanding of the information provided. Though, most definitions of transparency in the literature do solely focus on the act of giving information, according to the analysis of Wehmeier and Raaz (2012) of more than 100 research papers covering transparency. Contrastingly, the other group of definitions adds that communication is only transparent when it is comprehensible – similar to the remarks of Rawlins (2008a). Exemplifying this, Kim et al. (2014) state that transparency is "an organization's strategic behavior to make as much information available as possible to help publics reason and to make organizations responsible and accountable" (p. 815). In line with this definition, in the current study transparent communication is perceived as more than sharing information. Rather, message transparency is about the way in which message receivers are informed.

However, practicing transparency is not necessarily holy. Literature discusses the flaws of transparency as well. For instance, it can be argued that complete openness may lead to significant privacy concerns, and that transparency is bound to invoke black-and-white thinking (Ananny & Crawford, 2018). The latter is also made salient by Albu and Flyverbom (2019): "we want to avoid a position that implies binaries, such as whether transparency is good or bad, since such binaries pre-empt the exploration of transparency as a dynamic, situated, and sometimes paradoxical phenomenon" (p. 269). It can be argued that the assumed positive impact of transparency in communication is largely context-dependent, making transparency a complex concept.

Moreover, the complexity of transparency becomes visible in its multi-dimensionality. Specifically, it is tested and found that "disclosure", "clarity", and "accuracy" taken together shape transparency (Schnackenberg, Tomlinson, & Coen, 2021). These results are based on how Schnackenberg and Tomlinson (2016) defined transparency: "the perceived quality of intentionally

shared information from a sender" (p. 1788). Zooming in on the three underlying aspects – disclosure, clarity and accuracy, transparency appears to be a rich concept relating to many facets of communication as elaborated on by Schnackenberg and Tomlinson (2016). Firstly, it is explained that disclosure relates to the perceived relevance of information in the eyes of the audience. Secondly, clarity is enhanced when the audience sees the information provided as more comprehensible. Thirdly, it is described that when information is regarded as true, the information is accurate.

In the current research, this definition of transparency is adopted, as it regards transparency as wider than solely disclosure and thereby respects its complex nature. Moreover, recent studies (Holland et al., 2018; Holland et al., 2021) have found ways to apply the theoretical foundation of Schnackenberg and Tomlinson (2016) to crisis communication and message transparency specifically, by constructing messages with either a high or low dose of disclosure, clarity and accuracy. This is relatively rare in the literature and therefore needs further investigation. Hence, the work by Holland et al. (2021) functions as an example and constructs the groundwork for the current research.

2.3.2 Effects of message transparency.

The influence of (non-)transparent communication on organizational outcomes is significantly covered in the communication literature. To illustrate, communicating in a non-transparent way is sometimes used as a strategy during a crisis (Contreras-Pacheco, Claasen, & Garrigós-Simón, 2021). Though, other studies argue that communicators should favour transparent messages. For instance, message transparency can lead to the audience being able to count on the organization (Kundeliene & Leitoniene, 2015). Another example is the research of Holland et al. (2018), in which it was concluded that transparent crisis messages developed a stronger perception of organizational transparency among the public. Put differently, transparency in messages leads the audience to believe that the sender of that message is transparent too.

In turn, this perception is associated with an important reputational factor: trust. It is found that a greater sense of organizational transparency leads to higher levels of trust (Rawlins, 2008a; Rawlins, 2008b). More concretely, this effect on trust can be specified to its components ability, benevolence and integrity. Mayer, Davis and Schoorman (1995) have thoroughly elaborated on the dimensions of trust and defines the facets in the following way. Firstly, *ability-related trust* (AT) can be seen as the public's faith in "that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain" (p. 717). Secondly, *benevolence-related trust* (BT) is perceived as "the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive" (p. 718). Thirdly, Mayer et al. (1995) define *integrity-related trust* (IT) as "the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable" (p. 719). In short, research suggests that transparency has a positive impact on trust perceptions relating to competence, selflessness and morality.

Furthermore, research considering message transparency has found positive effects on emotions and credibility perceptions. To exemplify, in their experiment about message transparency in crisis communication, Holland et al. (2021) found that transparent responses decreased feelings of anger among the audience. It is assumed that, when anger is reduced, the public puts less blame on the company, is more willing to forgive and thus more willing to have a constructive relationship with the organization. Moreover, transparent crisis communication gives a significant impression of organizational credibility (Holland et al., 2021). This is relevant, as the association between credibility and intention to buy is positive, as illustrated by Ertz, Jo, Karakas, and Sarigöllü (2021). Their research, however, was performed in the realm of advertising. Since the present study focuses on organizational outcomes in the case of a preventable crisis, this research rather concentrates on the less positive alternative *purchase consideration*. Even though PC is different than intention to buy, the current study still believes that a positive effect of transparency on PC can be expected. In sum, the literature discussed provides a scientific basis for the following hypotheses.

H1: Higher transparency in a crisis response leads to more (a) ability-related trust, (b) benevolence-related trust, (c) integrity-related trust, (d) crisis forgiveness, (e) purchase consideration, and to less (f) crisis blame.

2.4 Message Sidedness

2.4.1 Perspective on message sidedness.
The second independent variable included in the present research is *message sidedness* (MS), for which it is distinguished between one-sided and two-sided messages. As can be read in the articles of Allen (1991) and O'Keefe (1999), a message is considered one-sided when the textual focus is put on only one part of the story. Two-sided messages pay attention to both sides of the coin. Further, these seemingly more nuanced messages can differ in whether one of the arguments mentioned is refuted. Allen (1991) explains that "refutational two-sided messages were messages that mention counterarguments to the position advocated and then refute them" (p. 393). Contrastingly, non-refutational messages seem to be more neutral and do not explicitly include an attack on the counterargument (O'Keefe, 1999). Thus, messages can differ in two-sidedness and, regarding two-sided messages, the presence of refutation. This research specifically focuses on two-sided messages that are not refuted.

2.4.2 Effects of message sidedness.
Many researchers from different academic niches have studied the impact of two-sidedness on message receivers, but presumably most prominently in the field of marketing. The influence of two-sidedness can depend on several factors, such as an individual's need for cognition (Winter, Krämer,

Rösner, & Neubaum, 2015), flexibility in thinking (Flanagin et al., 2020) and culture (Ertz et al., 2021). Generally, it becomes clear that message sidedness is related to credibility perceptions. For example, in his meta-analytic review about the influence of two-sidedness, O'Keefe (1999) concludes that the effect of two-sidedness depends on whether the message is related to advertising or not. However, in O'Keefe's research (1999), crisis communication seems to be a grey area, making it highly interpretive to determine in which category (advertising or not) crisis responses fall. Nonetheless, the main effect of two-sidedness on message credibility is significantly positive, indicating that two-sided messages are generally perceived as more credible.

Further, two-sidedness does not only make the message more credible, but the source of the message too. This was found in the extensive analysis of Eisend (2007), who tested the causalities of two-sidedness as described in earlier theories, such as Attribution Theory and Inoculation Theory. Concretely, Eisend (2007) found that, in the context of marketing, the source of the message is perceived as more credible when the message is two-sided. Also, it was concluded that credibility increased receivers' dedication to read the message, which led to more favourable reactions. Moreover, though in conflict with the notions of O'Keefe (1999), Eisend (2007) reports that more credibility stimulated favourable opinions about the organization, leading to a greater willingness to buy products. As mentioned before, this positive effect of credibility on purchase intention was also found by Ertz et al. (2021). Thus, two-sided messages seem to result in positive organizational outcomes, according to marketing scholars.

Applying this to corporate communication, it can be said that the public's positive reactions to two-sided messages may translate to a greater willingness to forgive an organization in a crisis. To illustrate, Kim and Sung (2014) researched the effectiveness of distinct crisis strategies, varying in two-sidedness, for different crisis types on the audience's perceptions. Using SCCT's terminology, they concluded that in a victim crisis ambivalent messages – as opposed to one-sided messages - led the audience to believe that the organization was less responsible for the crisis. For a preventable crisis, Kim and Sung (2014) found that one-sided messages did not result in more positive outcomes than two-sided messages. Taking this finding together with the insights of marketing academics, the current research does hypothesize that crisis blame is lower for two-sided crisis responses in preventable crises. Furthermore, Rawlins (2008a) argues that providing two-sided information enables the audience to judge the organization's responsibility, implying that message sidedness may be seen as closely related to – if not part of – message transparency. Therefore, in this study it is expected that two-sided messages lead to positive organizational outcomes in terms of trust, forgiveness, blame and purchase consideration – similar to the hypotheses of message transparency.

H2: A two-sided crisis response leads to more (a) ability-related trust, (b) benevolence-related trust, (c) integrity-related trust, (d) crisis forgiveness, (e) purchase consideration, and to less (f) crisis blame.

2.5 Message Transparency and Two-Sidedness

Next to the expected main effects of message transparency and two-sidedness, the present study also hypothesizes an interaction effect between the two variables. By the researcher's knowing, such an effect has not been investigated before in the context of crisis communication, which makes the current research relevant. Holland et al. (2018) and Holland et al. (2021) did study the effects of more (less) disclosure, clarity and accuracy – as proposed by Schnackenberg and Tomlinson (2016) - on the public's perceptions in crisis situations, but did not treat message sidedness as a distinct factor. Yet, in the current research it is believed that two-sidedness is a separate variable and can be manipulated independently. Further, it is presumed that two-sidedness does make the influence of transparency stronger, as message ambivalence in crisis communication is likely to contribute to quality perceptions of the information provided. As mentioned before, Rawlins (2008a) supports this by arguing that when two sides of the coin are shown, the audience is better able to judge whether the company is responsible. Finally, the audience is likely to see an organization as more transparent when two-sided information is shared, as this is relatively rare and thus seems to go against the organization's interest (Settle & Golden, 1974, as cited in Kim & Sung, 2014). This effect is similar to the before-discussed influence of message transparency on organizational transparency (Holland et al., 2018). Thus, in the present study it is argued that when a crisis response is both highly transparent and two-sided, the message is perceived congruent and gives off a less ambiguous impression. Therefore, it is anticipated that message transparency and message sidedness interact. In other words, it is hypothesized that the positive effect of a highly transparent message is strengthened when that message is two-sided.

H3: There is a significant interaction effect of message transparency and message sidedness, for which a two-sided crisis response that is highly transparent leads to a reinforcement of (a) ability-related trust, (b) benevolence-related trust, (c) integrity-related trust, (d) crisis forgiveness, (e) purchase consideration, and to a weakening of (f) crisis blame.

2.6 Research Model

All in all, in the current research it is investigated whether message transparency and message sidedness decrease negative perceptions of an organization in a preventable crisis. Additionally, it is researched whether there is an interaction effect between transparency and two-sidedness. The hypothesized main effects of this study's independent variables on the relevant reputational outcomes have been visualized in the research models in Figure 1 and Figure 2.

Figure 1

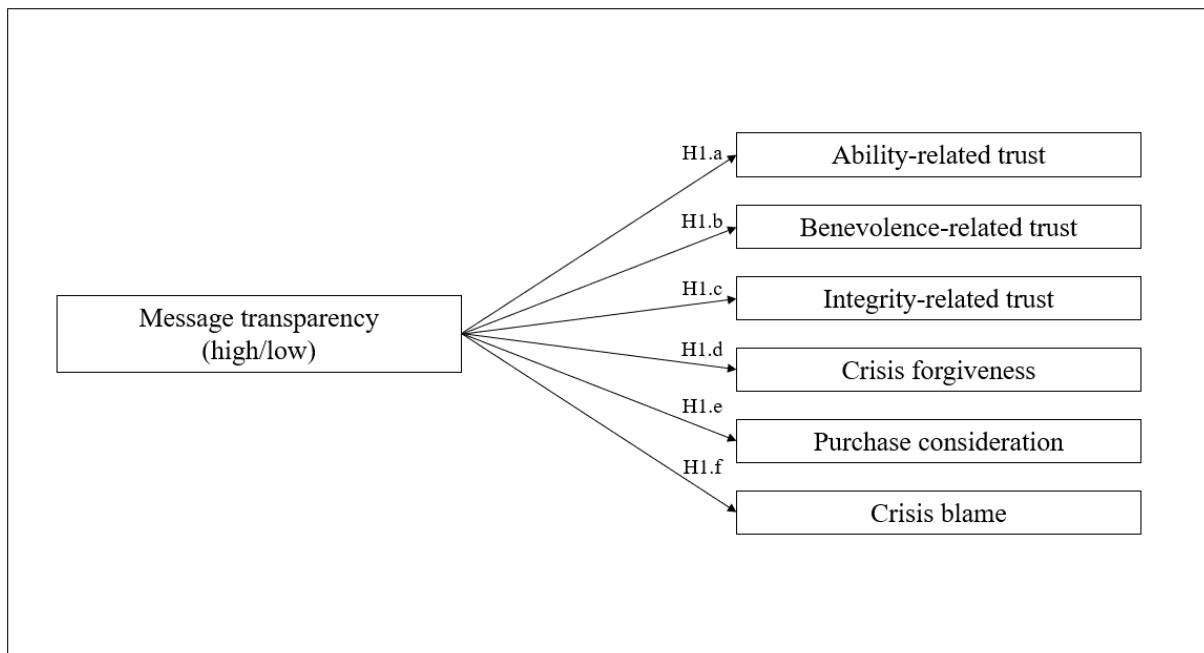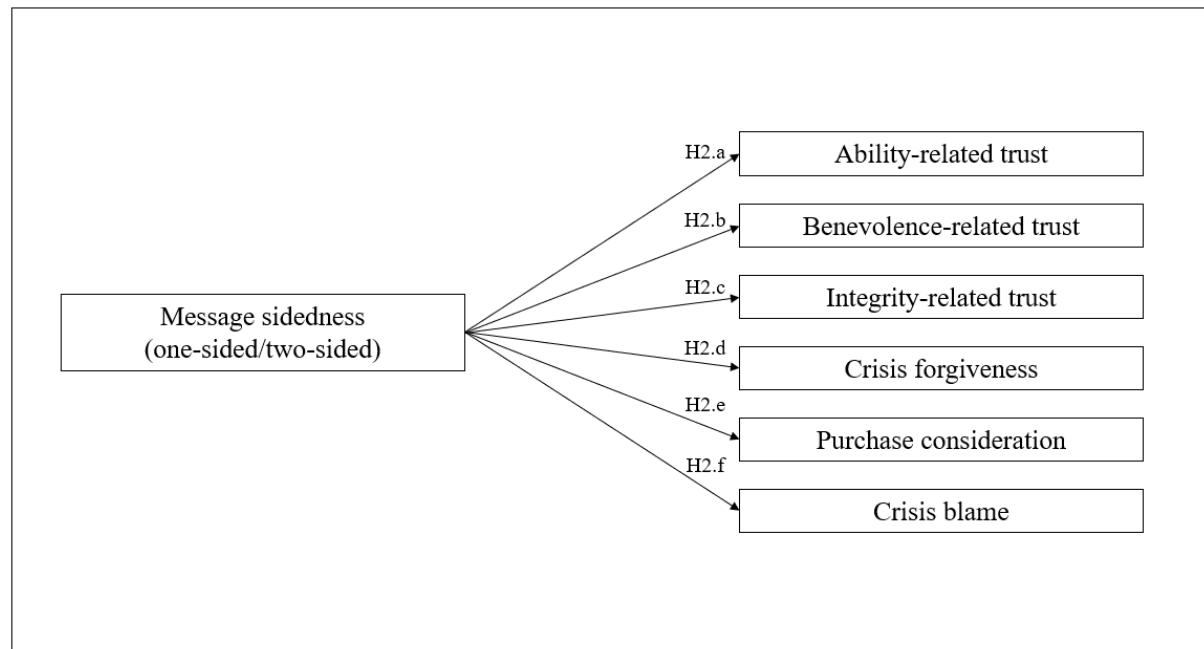*Hypothesized research model: Message transparency*

Figure 2

Hypothesized research model: Message sidedness

3. Method

3.1 Research Design

The previously presented hypotheses were tested with a 2 x 2 experimental design. Through an online questionnaire, participants firstly read a news article describing the preventable crisis, which was the same for each participant. Afterwards, the participant was exposed to one of the four experimental conditions: a crisis response. The, in total, four crisis responses differed in message transparency (high/low) and message sidedness (one-sided/two-sided). Ultimately, it was measured whether message transparency and two-sidedness impact ability-related trust, benevolence-related trust, integrity-related trust, crisis forgiveness, purchase consideration and crisis blame. In a later part, the procedure is described in more detail. All in all, the study's experimental setting allowed for measuring the influence of message transparency, message sidedness and how these two textual factors interact regarding the measured outcome variables. In the following sections, more information is provided on the stimuli, measurements, procedure and sample of the current study.

3.2 Stimuli

Before the questionnaire was available online, the news article and the crisis responses were thoroughly discussed by the researcher and a professor in communication science. This, to be able to effectively test the manipulations and to make the texts seem as realistic as possible. In Appendix B, the four experimental conditions are presented. In the following section, the precise manipulations are elaborated on.

3.2.1 News article.

As the research question became concrete, a list of criteria for the news article was created. Since the objective of the present study was to test whether transparent communication can be a communication strategy in the least transparent situation, it was important that it was clarified that the organization's initial behaviour (apart from the crisis response) was not transparent. Therefore, the crisis was framed as a preventable crisis (see Coombs, 2007). Furthermore, it was relevant that the news article clarified that another entity, not the organization, revealed the crisis. As Beldad et al. (2018) point out, this is often referred to as "thunder" in the crisis communication literature. Ultimately, it was required that the news article was realistic, as the study aimed towards inference on crisis communication in reality. Hence, several news articles on product/food recalls (see e.g. NOS, 2021a; NOS, 2021b; Houterman, 2022) were read to inspire the news article in the present study. Additionally, accompanied crisis responses were often looked at as well (see e.g. Chevrolet, n.d.; Ferrero, 2022). In the news article included in this research, both visual factors, such as buttons, as well as textual factors, e.g. a quote,

were paid attention to. Thus, substantial effort was put in to make the news article appropriate for the current research.

3.2.2 Message transparency.

This is also true for the four crisis responses, in which one stimulus was the level of message transparency. This variable was manipulated after taking a closer look at the perspective on transparency of Schnackenberg and Tomlinson (2016) and the successful manipulations in message transparency of Holland et al. (2018) and Holland et al. (2021). Building on their previous works, in this study message transparency (high/low) was manipulated through adding much (little) disclosure, clarity and accuracy to the crisis responses. Concretely, a high level of disclosure was achieved by adding more information (e.g. about the food research). Disclosure was made salient by always including that information in the news article, but excluding it in the crisis response condition that was lower in transparency. Further, accuracy was manipulated by providing either precise numbers and percentages (much transparency) or rough textual indications (little transparency). Similar to disclosure, these numbers were always included in the news article to show the (lack of) contrast with the crisis response high/low in transparency. Finally, differences in clarity were achieved through using either explicit descriptions (much transparency) or implicit descriptions (little transparency) for the same word. For instance, the highly transparent responses elaborated on the presence of "animal feces" in the food, while the conditions lower in transparency mentioned "undesired organic material". Again, the highly transparent wording was already present in the news article.

3.2.3 Message sidedness.

The second stimulus present in the crisis responses was message sidedness. Specifically, two conditions included one-sided parts and the other two conditions included two-sided parts. The manipulations of this variable were not related to the instructions for customers. Rather, message sidedness was prominent in the parts of the crisis responses that elaborated on the organizational identity and values. Important was that message sidedness was manipulated separately from disclosure to be able to measure the variables' effects independently. Put differently, two-sided messages were constructed in such a way that they did not provide the audience with more information, compared to the one-sided crisis responses. To exemplify, a two-sided message contained the phrase: "This is how [brand name] is there for you, but we make mistakes too". A one-sided message, however, included the following sentence: "This is how [brand name] is there for you and that will always be like this". Finally, this research focused on non-refutational two-sided messages, as it is argued that the lack of refutation of the negative comment conveys a more transparent attitude. Consequently, it is more likely that message transparency and two-sidedness interact. Moreover, it is interesting to investigate the effects of non-refutational two-sided messages, as the outcomes give information about whether

letting go of control (by not refuting) leads to being more in control when it comes to reputation protection.

3.3 Measurement

After participants were exposed to the stimuli, they were asked to indicate to what extent they (dis)agreed with statements that measured the dependent variables. Concretely, purchase consideration, ability-related trust, benevolence-related trust, integrity-related trust, crisis blame and crisis forgiveness were measured respectively.

3.3.1 Items.

To ensure proper validity and reliability, all items included were based on previous researches. To fit to the current study, some changes have been made and some items created by the research team itself have been added. Moreover, both positively and negatively phrased statements were part of the questionnaire to ensure that the questionnaire came across as neutral and participants did not feel pushed into a certain direction. Finally, a 7-point Likert scale was used, containing the following options for answering: totally disagree, disagree, slightly disagree, neither agree nor disagree, slightly agree, agree, and totally agree. This scale was employed to be able to respect the nuances in the participants' opinions.

In total, the present study included 35 items to measure the selected outcome variables. For *purchase consideration*, 6 items were part of the questionnaire. These were mostly based on Kim and Sung (2014) and Ertz et al. (2021). Items like "I would consider buying products from [brand name]" and "I could still buy products from [brand name]" were included for PC. The 6 statements for *integrity-related trust* included items such as "I think that [brand name] sticks to its word". The statements for IT find their roots in work by Fuoli, Van de Weijer and Paradis (2017) and Mayer and Davis (1999). These studies, accompanied by items included by Xie and Peng (2009) are the basis for *ability-related trust* (6 items) and *benevolence-related trust* (5 items). A typical example of an item for AT is "[brand name] seems to have good qualifications", while BT is measured by items similar to "I think that [brand name] treats customers respectfully". Further, the 6 statements for *crisis blame* – e.g. "I blame [brand name] for the crisis" - are predominantly based on Kim and Sung (2014) and Coombs and Holladay (2002). Finally, the 6 items for *crisis forgiveness* partly stem from Xie and Peng (2009). To exemplify, CF was measured with items such as "After reading [brand name]'s response, I give [brand name] a second chance". The complete list of initial items can be found in Appendix C. All statements have been carefully translated to Dutch, as the questionnaire was in Dutch.

3.3.2 Statistics.

3.3.2.1 Factor analysis.

Before the hypotheses were tested, factor analyses were performed in SPSS to investigate whether the intended 6 dependent variables were statistically distinguished. This, however, was not fully the case. The principal component analyses did not make a distinction between ability-related trust, benevolence-related trust and integrity-related trust. Instead, these items predominantly loaded on the same factor, which is why it was decided to combine the variables into one overarching construct measuring trust. Ultimately, after three factor analyses, 4 meaningful constructs were determined. These were trust (11 items), crisis forgiveness (3 items), purchase consideration (6 items) and crisis blame (4 items). As can be seen in Appendix D, several items have been excluded from the analysis.

3.3.2.2 Reliability analysis.

Next, the reliability of the 4 scales was assessed. For all constructs, the Cronbach's alpha has been generated. These indicated sufficient reliability for trust (α = .94), crisis forgiveness (α = .81), purchase consideration (α = .93) and crisis blame (α = .90). Excluding items from analysis would not lead to substantially higher Cronbach's alphas, which is why the constructs distinguished in the factor analyses have not been altered.

3.3.2.3 Investigation of other variables.

Further, it was researched whether descriptive variables had to be accounted for in the linear model. This was investigated by generating chi-square for gender (male/female) and education (low/high), and performing ANOVA for age (continuous). By applying a 5% significance level, it was concluded that the conditions were not significantly related to gender (X^2(3, N = 100) = 2.84, p = .43) and education (X^2(3, N = 100) = 2.50, p = .49). Likewise, the different crisis responses did not significantly predict age (F(3, 96) = 1.56, MSE = 275.46, p = .21). Thus, the analyses revealed that sufficiently similar demographic groups were exposed to the different experimental conditions.

3.4 Procedure

The current research tested hypotheses through an online questionnaire in Dutch, consisting of multiple parts: informed consent, the news article, one of the four crisis responses, items for the dependent variables, manipulation check questions and lastly debriefing. The research procedure has been approved by the Ethical Committee of the Faculty of Behavioural, Management and Social Sciences at the University of Twente. The procedure was inspired by the studies of Holland et al. (2018) and Holland et al. (2021). This is advantageous for comparing the present study's findings with those of previous research and anchors the current study in the existing literature.

The first part of the questionnaire was the same for every respondent. Firstly, potential participants received the link to the research. After being informed about the study briefly and being provided with contact information, the respondents indicated whether they were 18 years or older and whether they agreed to usage of their data in this research. Only when adult participants gave their permission, the questionnaire continued. After providing information about their age, gender and education, all participants were introduced to a news article that was the same for each person (see Appendix A). This article reported a food recall (because of the presence of animal feces in a rice product), which was initiated after a fictitious research institute investigated and published the health risks of the product. Moreover, the article paid attention to the crisis response of the organization in crisis.

The second part of the questionnaire was different for the participants, due to the experimental setting of the study. After having read the news article, respondents were asked to read the crisis response - a reaction to the research institute's publication, which was said to be fictitiously released before the news article. In total, there were four different crisis responses that differed in levels of message transparency and message sidedness (see Appendix B). These were the only variables that were aimed to be manipulated.

In the third part of the questionnaire, the actual measurement of the dependent variables took place. While considering the news article and the crisis response, respondents were asked to indicate to what extent they agreed with the statements presented. Respectively, participants gave their opinions relating to purchase consideration, ability-related trust, benevolence-related trust, integrity-related trust, crisis blame and crisis forgiveness. In total, they filled out 35 questions related to the dependent variables present in this study.

In the fourth and final part of the questionnaire, the research was finalized. First, respondents answered questions to check the manipulations in this study. Specifically, four items were included to assess the stimuli. After, participants received the debriefing. In this part, more information about the research objective and procedure was provided. It was a conscious choice to withhold information about the conditions at the beginning of the research, as it was anticipated that this knowledge would bias the results. Obviously, after having gained a better understanding of the research, participants were offered the opportunity to withdraw from the study if they wished to do so. Finally, respondents were asked to not share the complete information about the study to other possible participants, to reduce bias as much as possible.

3.5 Participants

The language of the questionnaire was Dutch, which is why only people fluent in Dutch were able to participate in this study. This was decided, since the present research aims to investigate the effects of textual factors in crisis responses. To be able to properly research this, it was important that participants processed the textual nuances and not only comprehend the general message.

Furthermore, by only focussing on Dutch participants, the influence of message transparency and two-sidedness can better be analysed, as culture barely plays a role.

In total, 188 responses to the questionnaire were recorded in approximately 9 days in May 2022. The sample was not random, as the researcher's network was used to recruit participants – mostly through WhatsApp, Facebook and LinkedIn. Moreover, through snowball sampling an attempt was made to gain respondents. To remain part of the study, participants needed to have given informed consent at the beginning, be 18 years or older, be fluent in Dutch, have used a reasonable amount of time to finish the questionnaire and have completed all questions, except for the final question asking consent after debriefing. Ultimately, 100 respondents were included in the statistical analyses.

These participants were divided over the four experimental conditions. As made visible in Table 1, this division was approximately equal. Further, all respondents indicated their age, gender, and education (see Table 1). In the sample, age ranged from 19 years to 83 years old (M = 36.43, SD = 16.74), with the great majority of participants being under 50. Next, more women than men were included in the analysis. Finally, most participants had completed higher education.

Table 1

Sample Frequencies

Condition	
Low transparency x one-sided	n = 23
Low transparency x two-sided	n = 28
High transparency x one-sided	n = 26
High transparency x two-sided	n = 23
Age	
18 – 40 years old	n = 61
41 – 60 years old	n = 31
61 – 80 years old	n = 6
81 – 100 years old	n = 2
Gender	
Male	n = 31
Female	n = 69
Completed education	
Secondary education or similar	n = 16
Vocational education or similar	n = 22
University of applied sciences or similar	n = 33
Research university or similar	n = 29
Total	N = 100

4. Results

4.1 Manipulation Check

Before investigating whether this study's hypotheses can be accepted or rejected, it is important to check the quality of the experimental conditions. Concretely, it was investigated whether the different conditions predicted credibility perceptions of the news article and the crisis response, using ANOVA. It can be said that between the experimental conditions there was no significant difference in credibility perceptions of the news article ($F(3, 96) = 1.41$, $MSE = 1.65$, $p = .24$), as well as the crisis response ($F(3, 96) = 1.64$, $MSE = 1.49$, $p = .19$). This indicates that differences in perceived credibility of the stimuli would not significantly explain distinct responses to the four crisis responses. Further, it can be said that both the news article (M = 4.90, SD = 1.29) and the crisis response (M = 4.83, SD = 1.23) were generally viewed as realistic, but not very strongly.

Next, with regression it was tested whether the highly transparent messages and two-sided messages were significantly recognized as such. This, however, was not the case. The highly transparent crisis responses did not lead to significantly higher transparency perceptions ($b = 0.49$, $t(98) = 1.58$, $p = .12$). For message sidedness, it was found that two-sided messages significantly led to perceptions of one-sidedness ($b = 0.61$, $t(98) = 2.17$, $p = .03$), which opposes the intended effect of the message sidedness stimulus. The lack of participants' recognition of high/low transparency and one-/two-sidedness may indicate that the manipulations in the present study were not sufficiently strong. Another explanation may be that transparency and two-sidedness are too subtle to be recognized and are more similar to priming effects. This, however, would need further investigation.

4.2 Revised Research Model

In order to test the hypotheses, linear regression was performed for the remaining dependent variables, using SPSS. A 95% confidence interval was employed. As a result of the factor analyses, the research model has been adapted. Originally, this study aimed to measure ability-related trust, benevolence-related trust and integrity-related trust as separate constructs. However, these dimensions of trust have not been distinguished in the factor analysis. Instead, an overall trust variable remained, containing items from the three subscales. As the hypotheses for AT, BT and IT all point in the same direction, it is reasonable to test these hypotheses for trust as one factor (now referred to as H1.abc, H2.abc and H3.abc). Thus, it was analysed whether more transparency (H1.abc) and two-sidedness (H2.abc) in the crisis response led to more trust. Also, the hypothesized positive interaction effect (H3.abc) was tested. The hypotheses for crisis forgiveness, purchase consideration and crisis blame remain the same. The revised hypotheses can be found below. Also, the revised research model of the main effects is displayed in Figure 3 and Figure 4.

H1: Higher transparency in a crisis response leads to more (abc) trust, (d) crisis forgiveness, (e) purchase consideration, and to less (f) crisis blame.

H2: A two-sided crisis response leads to more (abc) trust, (d) crisis forgiveness, (e) purchase consideration, and to less (f) crisis blame.

H3: There is a significant interaction effect of message transparency and message sidedness, for which a two-sided crisis response that is highly transparent leads to a reinforcement of (abc) trust, (d) crisis forgiveness, (e) purchase consideration, and to a weakening of (f) crisis blame.

Figure 3

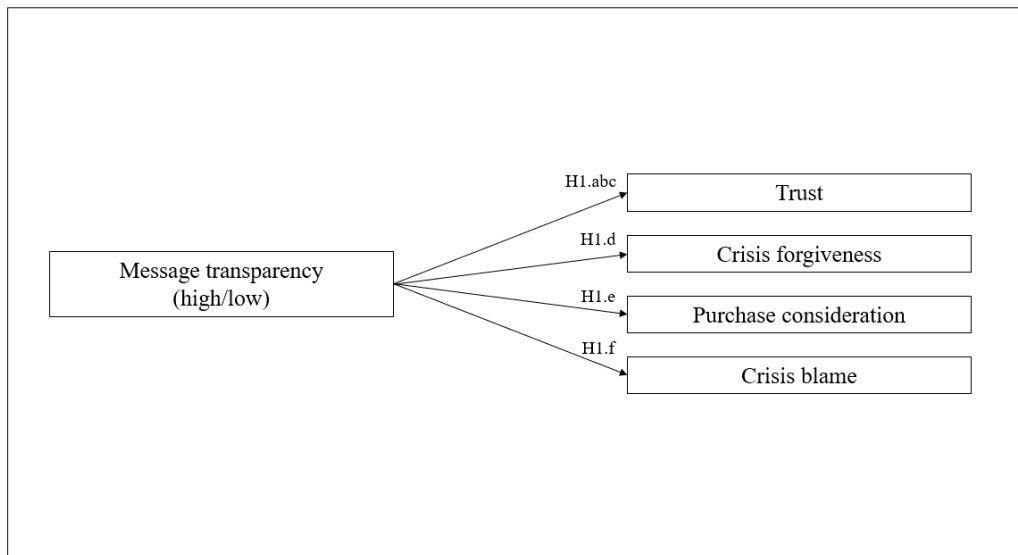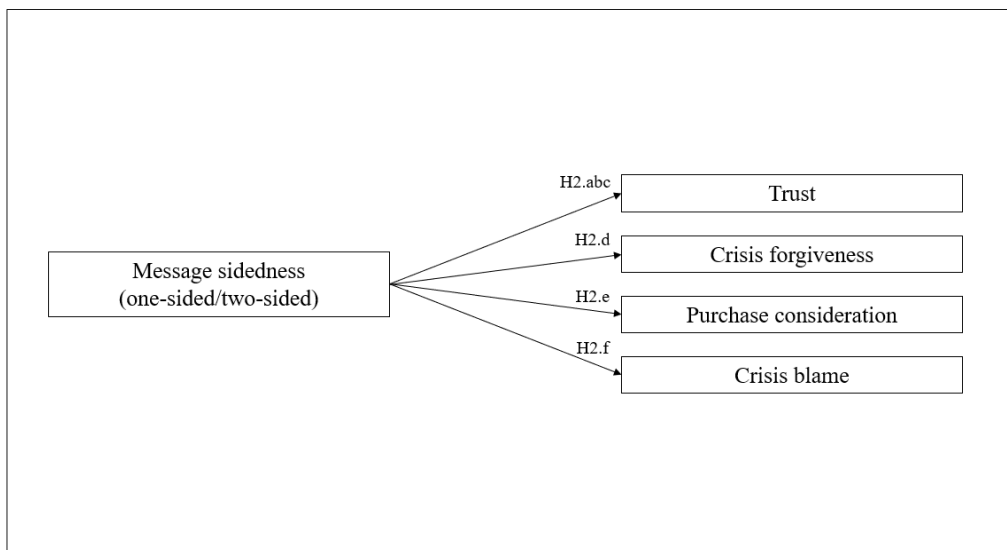*Revised hypothesized research model: Message transparency*

Figure 4

Revised hypothesized research model: Message sidedness

4.3 Descriptive Results

Before testing the research model above, it is valuable to investigate the descriptive results of trust, crisis forgiveness, purchase consideration and crisis blame. These variables were measured with a 7-point Likert scale. Answer options ranged from "totally disagree" (value = 1) to "totally agree" (value = 7). From the descriptive analysis it becomes clear that the sample slightly trusted the company in crisis (M = 4.92, SD = 0.93). Also, the participants generally forgave the organization (M = 4.68, SD = 1.06), but not necessarily convincingly. Further, on average the public was fairly neutral when it came to considering to buy from the company (M = 4.43, SD = 1.38). Ultimately, in general the respondents rather blamed the organization for the crisis (M = 4.74, SD = 1.25). In short, regarding trust, crisis forgiveness, purchase consideration and crisis blame, on average the participants reported to have mild views – both in a positive and negative sense.

4.4 Hypothesis Testing

By applying linear regression, inferences can be made regarding the hypotheses for message transparency, message sidedness and the interaction effect of a two-sided crisis response that is highly transparent. The relevant output of the regression analysis can be viewed in Table 2.

Table 2

Hypothesis Testing

	b	t	df	p
Trust				
Message transparency (H1.abc)	0.25	0.93	96	.36
Message sidedness (H2.abc)	0.16	0.59	96	.55
Interaction effect (H3.abc)	-0.57	-1.52	96	.13
Crisis forgiveness				
Message transparency (H1.d)	-0.01	-0.02	96	.99
Message sidedness (H2.d)	0.09	0.29	96	.77
Interaction effect (H3.d)	-0.31	-0.73	96	.47
Purchase consideration				
Message transparency (H1.e)	0.24	0.61	96	.54
Message sidedness (H2.e)	0.10	0.27	96	.79
Interaction effect (H3.e)	-0.56	-1.00	96	.32
Crisis blame				
Message transparency (H1.f)	-0.35	-0.98	96	.33
Message sidedness (H2.f)	-0.12	-0.33	96	.74
Interaction effect (H3.f)	0.72	1.43	96	.16

4.4.1 Trust.

In the dataset, no significant results for trust were found. Concretely, there was no significant main effect of message transparency and message sidedness on trust (see Table 2). Thus, this study fails to accept H1.abc and H2.abc, which hypothesized that more MT and MS increase trust. Moreover, the hypothesized positive interaction effect of message transparency and message sidedness on trust was insignificant. Therefore, the present research fails to accept H3.abc too. Finally, the explained variance of the tested model was $R^2 = .03$.

4.4.2 Crisis forgiveness.

Secondly, it was tested whether more transparency and two-sidedness in a crisis response lead to more crisis forgiveness among the public. Furthermore, it was analysed whether more transparency and two-sidedness interact and reinforce the hypothesized positive effect on crisis forgiveness. However, the current study did not find significant main effects of message transparency and message sidedness on crisis forgiveness. Additionally, there was no significant interaction effect. Thus, the current study fails to accept H1.d, H2.d and H3.d. The model reported an explained variance of $R^2 = .01$.

4.4.3 Purchase consideration.

Thirdly, this research tested a model ($R^2 = .01$) that hypothesized positive effects of message transparency and message sidedness on purchase consideration. Though, more transparency did not significantly lead to a higher purchase consideration. Likewise, two-sidedness did not increase participants' purchase considerations. Lastly, the highly transparent two-sided crisis response did not produce a significant interaction effect. In other words, the present research fails to accept H1.e, H2.e and H3.e.

4.4.4 Crisis blame.

Lastly, it was analysed whether more transparency and two-sidedness reduce crisis blame, and whether these variables interact, thereby weaken crisis blame. However, this model ($R^2 = .03$) did not report significant effects. First, no significant main effects of transparency and two-sidedness were found. Second, the two-sided message with a high level of transparency did not cause a significant interaction; an additional weakening of crisis blame. Thus, this study fails to accept H1.f, H2.f and H3.f.

4.5 Linear Assumptions

Finally, four linear assumptions – linearity, independence, equal variance and normality – have been tested. It can be said that, for all outcome variables, linearity and independence have been met. Equal variance of residuals was not met for all four dependent variables. Lastly, normality was violated. This, however, is not considered very problematic in the current study, as Schmidt and Finan (2018)

point out that a normality violation does not severely decrease the quality of the linear model when the sample is sufficiently large. In fact, they state that transforming the linear model to take away the violation is often associated with a validity reduction of the results, compared to keeping the linear model. Therefore, the present study's premise is that the linear model is valuable in the current research context.

5. Discussion

5.1 Main Findings

The current study covered a new domain in the crisis communication literature. Specifically, it was tested to what extent high transparency and two-sidedness in a crisis response increase positive perceptions (or decrease negative perceptions) of an organization that caused a preventable crisis. The perceptions analysed in this study were trust, crisis forgiveness, purchase consideration and crisis blame. No significant main effects and interaction effects on the outcome variables were found in the case of a preventable crisis. Put differently, high levels of disclosure, clarity and accuracy accompanied by two-sided statements in a crisis response did not fabricate more trust, crisis forgiveness and purchase consideration, and not less crisis blame among the public.

The current research is anchored in the crisis communication literature and can thus be compared to studies in the field. For example, studies by Holland et al. (2018) and Holland et al. (2021) found significant positive reputational outcomes for message transparency in crisis messages. This constructed the foundation for the research question in the present study. However, the findings do not support this trend, as no significant effects have been found. Also, the hypothesized interaction effect of a highly transparent two-sided crisis response did not appear. This possibly indicates that transparency and message sidedness are more distinct factors than initially argued, which is valuable information for communication scholars.

Further, this study investigated the influence of two-sidedness in crisis messages, which needs to be interpreted in the light of the two-sidedness literature. The findings did not support the hypothesized positive effects. However, this is in line with the research of Kim and Sung (2014). These researchers looked at the impact of two-sidedness on organizational perceptions for different crisis types as distinguished in SCCT. Concretely, they found that crisis blame in a preventable crisis was not statistically dependent on whether the crisis communication was one- or two-sided. In a victim crisis, though, Kim and Sung (2014) did find a significant positive influence of two-sidedness. Therefore, it seems acceptable to assume that the existence and nature of the impact of two-sidedness in message design is highly context-specific. This point was also made by O'Keefe (1999). Thus, the present study warns academics in communication science for the risk of overgeneralizing the effects of two-sidedness.

The current outcomes need to be discussed more in-depth. First of all, they have implications for existing literature on crisis communication and message design. Further, the present findings are relevant to practitioners in the field. However, the results need to be interpreted carefully, as the current research is limited to some extent. Therefore, it is relevant to unpack possible directions for future research. In the following sections, these different angles on the present study will be highlighted.

5.2 Theoretical Implications

This study's findings ask for a further exploration of message transparency and message sidedness. Although it is said that the quality of (crisis) communication is improved by transparency (Seeger, 2006) and two-sidedness (Eisend, 2007), the current research did not find direct positive effects for key reputational factors such as trust. Moreover, it was concluded that the sample did not recognize the crisis messages as highly transparent, even though the current approach was based on successful manipulations by other communication academics in the past (see e.g. Holland et al., 2018). Thus, transparency and two-sidedness are important elements of a crisis response, but hard to recognize.

This paradox challenges the widely advocated perspective on transparent communication. Currently, transparent communication is perceived as essential. However, the present findings confirm those that believe that the positive influence of message transparency and two-sidedness is conditional (for two-sidedness see e.g. O'Keefe, 1999), since the positive outcomes do not appear in the research context that has been applied in the current study. Therefore, it is helpful to zoom in on the present research's context – a preventable crisis, and what feelings it may trigger among the public.

An explanation for the lack of positive outcomes may be found in cognitive dissonance theory. This theory in social psychology has been introduced by Leon Festinger (1957) (as cited in Kassin, Fein, & Markus, 2017). He argues that when individuals come to hold paradoxical beliefs, they may feel mental stress. Consequently, they want to decrease this feeling. As explained by Kassin et al. (2017), stress relief can occur when the individual constructs new additional thoughts that diminish the paradox. This mechanism might have been activated when the participants read the crisis response in the current research. Namely, at first participants were informed about the non-transparent behaviour of the organization through the news article, as the crisis was preventable. If they then read a highly transparent two-sided crisis response, it is likely that participants experienced contradictory views on the organization; both a transparent and non-transparent impression. Turning to cognitive dissonance theory, perhaps participants then refused to think positively about the organization and turned to scepticism. Consequently, no increase in trust, crisis forgiveness and purchase consideration was found, as well as no decrease in crisis blame.

5.3 Practical Implications

At first sight, in the current research it would be suggested that communication practitioners should not invest too much time in transparent crisis communication. This, as the findings show that highly transparent messages do not lead to more trust, crisis forgiveness and purchase consideration, and less crisis blame. The same applies to message sidedness, implying that communication professionals should not necessarily emphasize on two-sided messages during crises. When crisis communicators do not explicitly focus on transparent communication, they also do not have to worry about the risks associated with that type of communication, such as privacy issues (see again Ananny & Crawford, 2018). Thus, avoiding transparency and two-sidedness in corporate messages has its perks.

However, transparency is advantageous beyond directly producing a favourable reputation. Firstly, Rawlins (2008a) lays out that transparent communication is widely perceived as the ethical option. Moreover, it can be argued that writing transparent and two-sided messages is inherent to managing relationships with customers. This should be priority, as building and maintaining a strong relationship with customers is key in crisis communication (Seeger, 2006). Hence, communication professionals are still advised to write two-sided messages with high levels of disclosure, clarity and accuracy in the future.

5.4 Limitations

For now, it is important to acknowledge that the current study has its weaknesses. Firstly, the stimuli were not recognized as intended. Specifically, the manipulation check indicated that transparent and two-sided crisis responses were not perceived as such. Message credibility, though, is not deemed to be a factor here as no significant difference in message credibility was found between the conditions. Thus, the current stimuli need to be manipulated more saliently in the future. This is surprising, as similar previous studies did have successful manipulations (Holland et al., 2018; Holland et al, 2021). These studies, however, had different sampling methods, which may mean that motivation to participate can also be a factor. Lastly, doing a pre-test may also be a solution to this problem in the future.

Next, the present study's sample was limited. Firstly, the sample was not random, which created a bias in the results. Secondly, although almost 200 responses to the questionnaire were recorded, only 100 cases passed the criteria for inclusion and were kept. Thus, the ultimate sample size was limited. This can be explained by for instance a lack of time, but also by the design of the questionnaire. Concretely, filling in the questionnaire required participants to read and process an extensive body of information. This may have had a negative impact on the participants' comprehension of and the motivation to read the articles. In other words, the research unintendedly excluded respondents that were less competent in reading. Therefore, it is not surprising that among the responses that were analysed, the majority had completed higher education.

Finally, statistical analyses showed that the models employed in this research could be improved. For example, it became clear that certain linear assumptions were violated, indicating that other models may better describe the relation between the stimuli and the organizational perceptions. Further, message transparency and message sidedness only explained a small part of the variance in the outcome variables, implying that other variables may have a larger influence on trust, CF, PC and CB. To exemplify, design factors (Chen et al., 2022) or demographic variables (Qiu, Kesebir, Günaydin, Selçuk, & Arzu Wasti (2022) could be influential. However, it is not deemed likely that participants' characteristics – specifically age, gender and education - play a role here, as ANOVA and chi-square analyses revealed that the sample was sufficiently equally distributed over the sample.

5.5 Suggestions for Future Research

Apart from replication, this study inspires several directions for future research. The current study focused on the role of transparent two-sided communication in the least transparent situation for organizations: a preventable crisis. However, as argued before, the public may experience a dissonance between the organization's initial non-transparent actions on the one hand, and the highly transparent crisis response on the other. Since this behaviour may cancel the effect of transparent communication, it is interesting to explore what happens when the transparent crisis response is better aligned with an organization's behaviour. Thus, in the future scholars should address how transparency and two-sidedness together in crisis responses influence the public's attitudes in victim and accidental crises.

Further, to enrich the crisis communication literature, academics should use different research methods to study the topic of message transparency and sidedness. Currently, many studies – including the present research – test the impact of message design in experimental quantitative settings (see e.g. Kim & Sung, 2014; Lim, 2018; Clementson, 2020). This similarity allows for comparison between studies, but also tends to regard crisis communication in an oversimplified manner. Next to testing significant differences, it would be valuable to take qualitative approaches to the topic to gain a deeper understanding of the underlying mechanisms. For instance, it would be valuable to conduct a study in which participants think out loud while reading a highly transparent and two-sided crisis response. Also, in interviews it is relevant to discuss why and when the public values transparency, and attitudes towards crisis responses in general. By asking these types of questions, it can be investigated whether the public does experience cognitive dissonance for example. This would inform communication scholars and practitioners further.

5.6 Conclusion

All in all, the current study has investigated how organizations in preventable crises should communicate to protect their reputations. Addressing the research question, this study suggests that message transparency, message sidedness and these elements combined do not significantly result in

more trust, crisis forgiveness, purchase consideration and less crisis blame. This may be explained by the study's limitations; an extensive research procedure perhaps has resulted in participants having difficulties in processing the stimuli. Moreover, the manipulations of transparency and two-sidedness have not been recognized by the sample. Alternatively, the mismatch between the non-transparent crisis situation on the one hand and the highly transparent crisis response on the other, might have led to dissonance among the public, thereby weakening the influence of the message features. However, future studies are asked to test whether this logic holds. Moreover, communication academics are encouraged to approach crisis communication in a more qualitative manner. Ultimately, for commercial and ethical reasons, it is believed that transparent communication is beneficial for both communicators and their audiences.
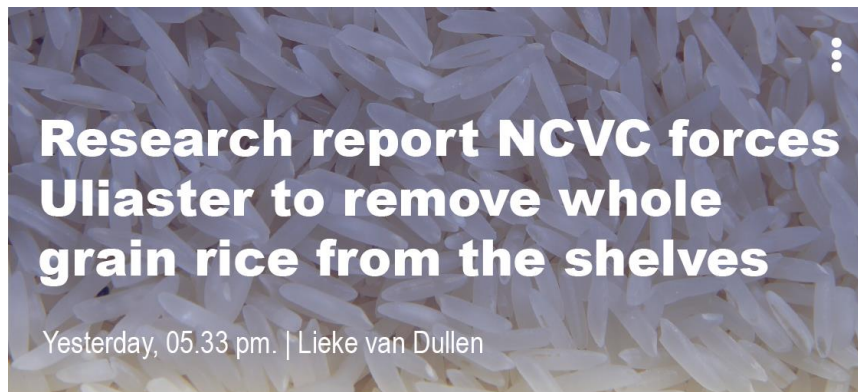
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Appendix A: Stimulus News Article[a][b]

Research report NCVC forces Uliaster to remove whole grain rice from the shelves

Yesterday, 05.33 pm. | Lieke van Dullen

ALKMAAR – From independent research from the Dutch Committee for Safe Consumption (NCVC) it becomes clear that the product *Whole Grain Rice Gold Crunchy* from food producer Uliaster Food Group cannot be consumed safely. In the rice, indications of animal feces have been found. Responding to the report of the NCVC, Uliaster now starts a food recall and the company advises consumers to stop eating the whole grain rice.

Physical complaints
Since 2008, food producer Uliaster, from Alkmaar, markets rice products, including *Whole Grain Rice Gold Crunchy*. A recent batch of this product (batch number 3189457 and expiry date February 19th, 2023) appeared to be of insufficient quality. This was noted by consumers. Egbert-Jan Koelens (spokesperson of the NCVC): "The committee received multiple notifications of consumers about the product. They suffered from physical complaints like a stomach ache and nausea after eating the whole grain rice".

The NCVC decided to test these claims by researching the product in a laboratory. The results were published this morning and confirm the sickening effect of the specific batch whole grain rice. In the laboratory, the food experts found material that indicates feces from mice in 2% of the whole grain rice production of Uliaster. Around 1500 consumers have bought the whole grain rice from this contaminated batch.

Uliaster
A couple of hours after the publication of the research, Uliaster responded with a press release. In this message, the organization announces to remove the rice from the shelves in the grocery stores. Also, consumers are urgently asked to immediately stop eating the product. Consumers can get their money back by returning the bought rice to the grocery store. Additionally, Uliaster emphasizes that the food recall only concerns the product *Whole Grain Rice Gold Crunchy* and thus does not have an influence on the other rice products of the company.

[a]In the study, the news article was presented in Dutch.
[b]The picture used in this design is downloaded from Monsterkoi on Pixabay.

Crisis Response 1: Low Transparency, One-Sided

Uliaster Food Group recalls batch Whole Grain Rice Gold Crunchy because of safety questions

Uliaster Food Group finds it important that its customers enjoy the best quality. We are proud of our passion for fine rice products. This is how Uliaster is there for you and that will always be this way.

Research shows that eating batch 3189457 from our product Whole Grain Rice Gold Crunchy is associated with safety questions. The report notes undesired organic material in a small part of our whole grain rice production. Several consumers may have experienced this. Therefore, Uliaster recalls the whole grain rice (with expiry date February 19th, 2023) from the grocery stores. Also, we ask consumers to stop eating this product now. Consumers that bought the whole grain rice from the specific batch can get money back. Our other products will just stay on the shelves.

At the moment, Uliaster investigates how this situation has come to exist. For this, we do all we can, as a high standard is top priority for us. We keep making an effort for quality.

For questions about the recall you can contact our customer service.

Yesterday, 02.49 pm. | Uliaster Food Group

[a]In the study, the crisis responses were presented in Dutch.

Uliaster Food Group recalls batch Whole Grain Rice Gold Crunchy because of health risks

Uliaster Food Group finds it important that its customers enjoy the best quality. We are proud of our passion for fine rice products. This is how Uliaster is there for you, but we also make mistakes.

Independent research from the Dutch Committee for Safe Consumption (NCVC) shows that eating batch 3189457 from our product Whole Grain Rice Gold Crunchy is associated with health risks. The report notes animal feces in 2% of our whole grain rice production. 1500 consumers may have experienced this through stomach ache or nausea. Therefore, Uliaster recalls the whole grain rice (with expiry date February 19th, 2023) from the grocery stores. Also, we ask consumers to stop eating this product now. Consumers that bought the whole grain rice from the specific batch can return the product at the grocery store and get their money back. Our other products will just stay on the shelves.

At the moment, Uliaster investigates how this situation has come to exist. For this, we do all we can, as a high standard is top priority for us. We grieve the problems with this delivery.

For questions about the recall you can contact our customer service.

Yesterday, 02.49 pm. | Uliaster Food Group

Uliaster Food Group recalls batch Whole Grain Rice Gold Crunchy because of safety questions

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At the moment, Uliaster investigates how this situation has come to exist. For this, we do all we can, as a high standard is top priority for us. We keep making an effort for quality.

For questions about the recall you can contact our customer service.

Yesterday, 02.49 uur. | Uliaster Food Group

Appendix C: Questionnaire Items

Table 2

Questionnaire: All Initial Items

Dependent variable	Item number	Item[c]
Purchase consideration	PC_item1	I could still buy products from Uliaster.
	PC_item2	I would not want to eat products from Uliaster.[a]
	PC_item3	I would advise against buying products from Uliaster.[a]
	PC_item4	If I would need rice, I would possibly choose a product from Uliaster.
	PC_item5	I would consider buying products from Uliaster.
	PC_item6	I am absolutely not interested in Uliaster's rice products.[a]
Ability-related trust	AT_item1	Uliaster does not seem capable of running a successful company.[ab]
	AT_item2	I have a lot of confidence in the capacity of Uliaster.[b]
	AT_item3	I see no reason to doubt the competency of Uliaster.[b]
	AT_item4	Uliaster seems to have good qualifications.
	AT_item5	I think I can count on Uliaster for normally meeting my quality requirements.[b]
	AT_item6	I believe that Uliaster is capable of preventing a repetition of such a crisis.[b]
Benevolence-related trust	BT_item1	Uliaster does not care about the wellbeing of people like me.[a]
	BT_item2	The needs and desires of people like me seem to be very important to Uliaster.
	BT_item3	Uliaster seems to attach much value to the wellbeing of consumers like me.
	BT_item4	I think that Uliaster would do everything in the interest of the consumers.[b]
	BT_item5	I think that Uliaster treats customers respectfully.
Integrity-related trust	IT_item1	I can badly recognize myself in the ethical values of Uliaster.[a]
	IT_item2	The behaviour of Uliaster seems to be based on clear moral principles.
	IT_item3	Uliaster seems to be an honest company.

	IT_item4	I think that Uliaster is bad at assessing what is just and what not.[a]
	IT_item5	I think that Uliaster sticks to its word.
	IT_item6	I think that Uliaster really tries to treat others in a fair way.
Crisis blame	CB_item1	I believe that Uliaster is completely responsible for the crisis.
	CB_item2	I think that Uliaster should be held accountable.[b]
	CB_item3	I find that the crisis is the mistake of Uliaster.
	CB_item4	I blame Uliaster for the crisis.
	CB_item5	I believe that the crisis mostly came to exist because of unfortunate circumstances.[ab]
	CB_item6	After reading Uliaster's response, I slightly understand Uliaster.
Crisis forgiveness	CF_item1	After reading Uliaster's response, I think positively about Uliaster.[b]
	CF_item2	After reading Uliaster's response, I condemn Uliaster.[ab]
	CF_item3	After reading Uliaster's response, I forgive Uliaster.
	CF_item4	After reading Uliaster's response, I disapprove of Uliaster.[a]
	CF_item5	After reading Uliaster's response, I give Uliaster a second chance.[b]
	CF_item6	After reading Uliaster's response, I slightly understand Uliaster.

[a]This item has been recoded before the statistical analyses have been executed.
[b]This item has been excluded from linear regression, based on the factor analysis.
[c]Uliaster refers to the fictitious brand in the preventable crisis.

Appendix D: Factor Analysis

Table 3

Factor Analysis: Rotated Component Matrix[a]

Dependent variable	Item	Factor[b] 1	2	3	4
Trust	BT_item2	.81			
	BT_item3	.81			
	IT_item6	.81			
	BT_item5	.78			
	BT_item1[c]	.75			
	IT_item5	.74			
	IT_item3	.71			
	IT_item4[c]	.70			
	IT_item2	.67			
	IT_item1[c]	.60			
	AT_item4	.57			
Purchase consideration	PC_item5		.88		
	PC_item4		.85		
	PC_item2[c]		.82		
	PC_item6[c]		.82		
	PC_item1		.76		
	PC_item3[c]		.74		
Crisis blame	CB_item3			.90	
	CB_item6			.89	
	CB_item4			.86	
	CB_item1			.74	
Crisis forgiveness	CF_item3				.69
	CF_item6				.68
	CF_item4[c]				.66

[a]This table displays the results of the third and final factor analysis.
[b]The factor loadings smaller than .50 are not displayed in this table.
[c]This item has been recoded before the factor analysis.