MSc Thesis Communication Science

How to Apologize Online: The effects of crisis communication timing, channel and framing on organizational trust and reputation
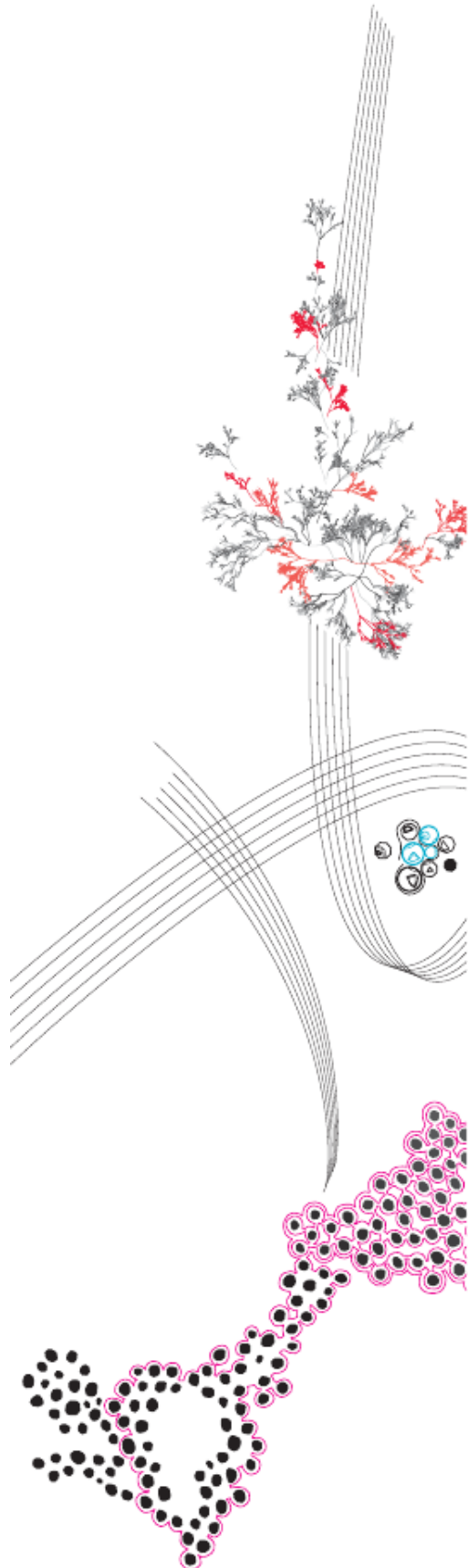
Elif Ozer

S2079615

Supervisors: Dr. A.D. Beldad and Dr. S.R. Jansma

June, 2022

Department of Communication Science
Faculty of Behavioural Management and Social Science

UNIVERSITY OF TWENTE.

Abstract

Aim: Crises can harm an organization's reputation and responding effectively to these crises can mitigate the impact. Intentional crises often elicit an apology from the party responsible according to many studies on crisis communication. However, owing to the rising use of social media, how the organization at fault ought to apologize remains to be explored further. This study examined to what extent timing, channel, and framing influence the perceived reputation and trust of an organization when apologising for an intentional crisis on social media. The mediating role of consumer affective response, as well as stakeholders' initial attitudes towards the privacy crisis as a co-variate were considered in this study.

Method: A questionnaire was used to assess stakeholders' perceptions of the organization's reputation and their trust in it. A total of 214 respondents from the University of Twente participated in the 2 (Timing: Proactive vs. Reactive) x 2 (Channel: Text vs. Video) x 2 (Framing: Neutral vs. Emotional) between-subject experiment.

Results: A MANCOVA revealed that emotional framing positively affected reputation and trust with the consumer affective response mediation. Moreover, proactive response by text and emotional response by video increased sympathy. Additionally, the stakeholders' initial attitude towards the privacy crisis was surpassed by the crisis communication strategy.

Relevance: The study highlighted implications for the founding theories and scales of crisis communication and reputation management need for an evaluation to fit into today's world. Overall, the study concluded that crisis communication should follow a holistic approach.

Keywords: crisis management, intentional crisis, stealing thunder, framing, social media, apology, trust, reputation

Content

1. Introduction

Everyone, at some point in their lives, has made a mistake. Apologizing for making a mistake, facing what has been done and riding out the consequences of actions shows character. Organizations are run by humans; they can make mistakes and taking responsibility for these mistakes shows the character of the organization. However, sometimes the mistakes an organization makes can be detrimental to its reputation. Crises that are born from the mistakes of an organization are termed intentional crises (Coombs, 2007). This type of crisis, like others, disrupts an organization's operations, which is not only financially destructive but also jeopardizes the concerned parties' reputations (Cornelissen, 2017). To determine the best approach to respond to crises, a variety of studies have investigated crisis management strategies. The attribution of responsibility is often high for intentional crises since they are preventable, hence, it is argued that strategic utilization of apologies can safeguard reputations (Benoit, 1995; Coombs 2007; Coombs & Holladay, 2012; Hearit, 1994). However, there is much to learn on how to apologise for a mistake in today's digital world.

Today's digital world is built around user-generated content, such as blogs, podcasts, and social networking sites that are defined as "social media" (Pew Internet & American Life Project, 2010). In times of crises, social media use has been observed to surge, aided by its large audience and participatory nature (Pew Internet & American Life Project, 2006). This prompts some experts to believe that public engagement with audiences on social media is a useful tool in crisis management (Jin et al., 2011). Hence, it is enticing for organizations to utilize it for crisis communication. On the other hand, it has made crisis communication more difficult for organizations since social media allows stakeholders to create material, monitor an organization's reaction to a problem, and plan actions against it (Roshan et al., 2016). Active social media users

or individuals who become engaged during crises give social media content a greater level of credibility than traditional mass media crisis reportage (Procopio & Procopio, 2007). An increasing number of research on crisis communication consider social media as a significant setting because it can maximize and minimize crises (Lucinda & Jin, 2017).

The usefulness of social media as a crucial platform for crisis communication displays the importance of the setting. This indicates that the use of a social media application affects how people interpret and respond to crisis communication messages (Xu, 2020). This is relevant to McLuhan's (1967) proposition of the medium as the message. According to research, the form of the information may be as essential as the actual crisis response message (Jin & Liu, 2010; Schultz, Utz, & Goritz, 2011). The channel used can have an impact on public information seeking and sharing, perceived crisis responsibility, and organizational reputation (Schultz, Ultz, & Goritz, 2011).

Individuals' fundamental need to comprehend unexpected and negative events involves sense-making to discover the crisis. Thereby, they are more likely to learn more about a crisis on social media than they are through traditional media (van Prooijen & Douglas, 2017). Due to the widespread interactivity on social media platforms, multiple narratives about a crisis can be generated online (Austin et al., 2012). A narrative is a significant tool for selecting and interpreting meaningful events and reconstructing reputations (Ku, 2001). Many of these narratives take the shape of conspiracy theories, which are claims about how several players get together in secret to achieve a hidden aim that is widely seen to be malicious (van Prooijen & Douglas, 2017). Controlling the narrative is critical for an organization's ability to manage the issue and its reputation. Since social media allow the organization to speak directly to its stakeholders without the need for intermediaries, they can immediately engage their audience

and address the crisis through their own narrative, thereby leaving little room for alternative narratives.

Nowadays, with the digitalization of the world, organizations must include social media in crisis management (Jin et al., 2011). The effect of social media, which has been revolutionizing the area of crisis communication by producing risks and prospects, is overlooked by theories and models concerned with this field (Cheng, 2016). The Situational Crisis Communication Theory (SCCT), for instance, according to Wang et al (2021), lacks a thorough assessment of media influence, particularly the impact of social media on crisis communication. Rather than emphasizing how current research as a whole contributes to knowledge about effective framework of social media crisis communication, researchers incline to examine the collective characteristic features and trends of theories in existing research (Wang et al., 2021). This lack of awareness can lead to a crisis being handled incorrectly and endangering the organization's competitive position (Roshan et al., 2016). Therefore, it is important to explore how organizations communicate on social media to help safeguard their reputations after a crisis.

There are three important aspects to consider when dealing with an online intentional crisis: timing, channel, and framing. An organization that is facing a crisis has two options of response to choose between. They can either be the first to publicly disclose the nature of the problem that may affect stakeholders or be hesitant about the issue at first and only respond when a third party uncovers the problem (Beldad et al., 2017). Hence, an organization can proactively address a crisis, or they can reactively respond to it (Claeys et al., 2013).

Moreover, this crisis response can be done on social media through the utilization of text or video. Almost half of the population depends on social media for news, according to Walker

and Matsa (2021). Although, in the early days of social media, a significant portion of posts (e.g., on Facebook and Twitter) were text-based. Soon after, these networks allowed for the sharing of photos and subsequently videos, and independent platforms, such as Instagram, devoted themselves to these specialized types of media (Appel et al., 2020). Thus, it is vital to observe the potential advantages and disadvantages the channel type provides to the apologizing party.

Lastly, the apology post on social media can be framed as emotional or neutral (Park et al., 2012). Framing of a message can affect the reputational damage by influencing the consumers' affective response generated by the crisis attributions, which are high for intentional crises (Coombs & Holladay, 1996). Although the main aim is to apologise for a mistake made by the organisation, it is vital to deliver this apology in an effective way to protect the reputation of the organization. Therefore, the following research questions are posed:

To what extent do timing, channel, and framing influence the perceived reputation and trust of an organization when apologising for an intentional crisis?

To what extent do timing, channel, and framing interact to influence consumer affective response toward the organization when apologizing for an intentional crisis?

To what extent do timing, channel, and framing influence reputation and trust when mediated by consumer affective response?

2. Theoretical Framework

2.1. Crisis Communication

The occurrence of an unexpected or sudden event that disrupts an organization's operations, is termed a crisis. It is not only financially harmful, but it is also a reputational risk for the parties involved (Cornelissen, 2017). The management of an organization needs to be able to handle mistakes and safeguard its reputation as well as the trust of its stakeholders. According to Coombs and Holladay (2002), there are three types of crises: victim, accidental, and intentional crisis clusters. To address these different crisis clusters, various crisis management strategies have been developed (Coombs, 2007). These include denying a crisis exists, diminishing by providing excuses, rebuilding by apologizing, and bolstering by reminding the stakeholders of the organization's past good works (Coombs, 2007). Due to intentional crises being preventable, the attribution of blame is generally high. Thus, the use of apologies in crisis communication is essential to arguments about how to use it strategically to protect reputations and repair trust (Coombs & Holladay, 2012; Xie & Peng, 2009). There are three major lines of crisis communication research highlighting the significance of an apology in preventable crises: image restoration (Benoit, 1995), corporate apologia (Hearit, 1994), and Situational Crisis Communication Theory (SCCT) (Coombs, 2007).

2.1.1. *Reputation*

The value of a reputation is commonly regarded as an intangible asset. The importance of this asset lies in the fact that it can attract customers, improve financial performance, create a competitive advantage and more (Carmeli & Tishler, 2005; Fomrun & Gardberg, 2000). A reputation is a collective assessment by stakeholders of how well an organization

meets expectations based on its previous actions (Wartick, 1992). These stakeholders that assess an organization are any group that can influence or be affected by the organization's actions (Bryson, 2004). Reputations are threatened by crises since a crisis provides a reason for the stakeholders to have negative emotions about the organization (Coombs, 2007). According to Coombs and Holladay (2009), stakeholders tend to feel either sympathy or anger towards an organization after a crisis. The emotions that the stakeholders experience towards the organization, positive or negative, affect the reputation of the organization (Coombs & Holladay, 2005; Luoma-aho, 2009; McDonald et al., 2010). Although some stakeholders are informed directly by the organization about the occurrence of a crisis, most stakeholders learn about it through the news and social media. Hence, the media plays a vital role in shifting the reputations of organizations.

The perceived reputation of an organization after a crisis affects the way stakeholders interact with it and can cause harm to the organization. Identification of the crisis type helps anticipate the responsibility stakeholders attribute to the organization. Once the initial crisis responsibility is established then the next steps to limit reputational harm from the crisis can be taken. To illustrate, an intentional crisis attributes a major responsibility to the organization due to its preventable nature. In this case, it is vital to acknowledge that increased attributions of responsibility can generate stronger feelings of anger. Hence, accepting responsibility is the most appropriate way to deflect reputational damage (Coombs, 2007; Coombs & Holladay, 2002). Moreover, generating a feeling of sympathy while apologizing for a preventable crisis can reduce anger and decrease negative interaction with the organization.

2.1.2. *Trust*

Trust in organizations is critical for businesses since it fosters and strengthens ties between the organization and its stakeholders, resulting in supportive behaviour (Ingenhoff & Sommer, 2010). Despite its importance as a relationship resource, trust is vulnerable to several dangers, including crises (Xie & Peng, 2009). Hence, repairing trust plays an important role in crisis communication. The topic of trust has been extensively examined and debated in the literature (e.g., Mayer et al., 1995).

Trust is defined as people's willingness to extend their vulnerability to the doings of those whom they have no control over (Hosmer, 1995). Trust is not necessarily based on logic; sometimes individuals trust because they have a positive feeling about someone (Mulford et al., 1998). Thus, trust develops as a result of an emotional link formed between individuals, allowing them to go beyond rational prediction and take a "leap of faith" that their trust will be fulfilled (Greenwood & van Buren III, 2010). On that account, the emotions of sympathy and anger that are felt by the stakeholders because of a crisis affect their trust towards the organization.

The foundation for understanding trust for another party is built on ability, benevolence, and integrity. These three properties, taken together, account for a significant portion of trustworthiness in the literature (Mayer et al., 1995). Ability refers to an organization's competence to deliver on its promises, which occurs when it possesses sufficient expertise and skills; integrity is a commitment to a set of fundamental values that the trustor finds acceptable; and benevolence is a genuine care for the interests of consumers and the desire to serve them, despite an egocentric financial motivation (Mayer et al., 1995). Thereby, these three components are critical in determining to what extent individuals trust an organization following an intentional crisis.

2.2. Timing

Timing is critical during a crisis, and it may be divided into two types of responses, proactive and reactive. Proactive timing is frequently referred to as stealing thunder in the literature and is a crisis management technique (Beldad et al., 2017). It focuses on being proactive and honest with stakeholders throughout the whole crisis management process, from the moment the first indicators of a crisis occur until the organization focuses on crisis recovery (Beldad et al., 2017; Lee, 2020). Conversely, reactive timing suggests that organizations react to a crisis by defending their own interests and acting as though they are speaking to a passive audience (Lee, 2020).

In the digital age, giving honest and truthful crisis information, as well as communicating with stakeholders promptly during a crisis, can help to prevent rumours and the chance of alternative narratives disseminating (Beldad et al., 2017; Lee, 2020). Although controlling the narrative is becoming increasingly challenging in the digital era, due to different narratives that may arise on various media, stealing thunder can combat this. When confronted with a crisis, stakeholders' first instinct is to try to find out what went wrong and who is to blame, so-called causal attribution. This attribution can lead to a variety of narratives (Coombs, 2007). However, stakeholders are less likely to generate and spread competing narratives about an issue when the impacted organization distributes crisis information that transparently describes the situation (Lee, 2020). Moreover, organizational decision-making on the crisis message may be straightforward and take less time since stealing thunder is about delivering honest information (Lee, 2020). Overall, proactive timing can create more sympathy towards the organization rather than anger.

On the other hand, because of the inherent legal and organizational concerns connected with the self-revelation of crisis information (Patel & Reinsch, 2003), proactive response

strategies have not been frequently used in crisis communication (Ulmer, 2012). Additionally, time constraints to respond fast to issues might lead to erroneous judgments and ineffective crisis responses (Lee, 2020). Hence, in certain cases, a reactive response type, where the organization reacts to the issue, might be more beneficial. Nonetheless, self-revelation of negative information can indicate that the organization is confident in its ability to handle the crisis and cause the stakeholders to perceive the crisis as less severe (Lee, 2020). Over and above that, stakeholders have the right to honest information in a crisis, and the organization has the legal and ethical obligation to deliver it quickly, especially when harm is imminent (Beldad et al., 2017; Lee, 2020). An organization fulfilling these obligations can receive a higher level of sympathy from its stakeholders (Lee, 2020). In sum, the following hypothesis can be argued:

H1: Responding to an intentional crisis proactively would a) increase consumer sympathy towards the organization and b) reduce anger compared to a reactive response.

2.3. Channel

As communication mediums, text and video are distinct. Video communications, according to Pfau and Wan (2006), cause viewers to focus on the message source, whereas print messages cause readers to focus on the message content. Audio-visual media has become the core of mass communication, with television, computers, and eventually the internet and digital platforms revolutionizing the communication industry. Relational, nonverbal, and vocal clues, as well as a "face" for the message, may all be sent using video messaging humanizing the organization. The organization's spokesperson can use visual media to give extra communication cues and a stronger social presence when compared to a press release (Coombs & Holladay, 2009). The spokesperson's visual signals would provide an extra framing function for viewers and might

underline the organization's care for stakeholders (Entman, 1993). Hence, stakeholders perceive a person speaking on behalf of the organization rather than simply reading the name of the organization. This could entail that the stakeholders would feel more sympathy towards the organization rather than anger. Moreover, communication through video on social media provides an opportunity for the organization to deliver its voice directly to the stakeholders. This can aid in showing regret and exhibiting acts that take the situation seriously (Foote, 2012).

Although it seems as if the two types of channels are distinct, Coombs and Holladay (2009) have concluded that they ought to be utilized in combination to reach as many people as possible. Their research provides no concrete differences in the effect the channel types have on crisis communication. Coombs and Holladay, however, conducted this study in 2009, when social media was not as evolved and widespread as it is now. They have considered the internet as a variable, but they have not factored in today's social media. As a result, in this study, a difference in these channel types is expected, since the difference in video and text messages has become more distinct (Appel et al., 2020). The second hypothesis can be formulated as follows: *H2: Responding to an intentional crisis with a video would a) increase consumer sympathy towards the organization and b) reduce anger compared to responding with text.*

2.4. Framing

The framing of a message is critical because it influences how people define problems, sources of problems, attributions of blame, and solutions to problems (Cooper, 2002). An apology can be framed in two ways: by displaying emotions or by remaining neutral (Park et al., 2012). Both can be useful in certain circumstances. Organizations are regarded as legitimate, according to the neo-institutional theory, when they adhere to societal standards (Allen & Caillouet, 1994). In

most cases, a crisis involves a transgression of these standards; therefore, expressing emotions might assist to normalize this situation. During an intentional crisis, the use of emotion can assist the organization to appear more legitimate by adhering to the social expectations of the stakeholders even though the circumstance contradicts them (Allen & Caillouet, 1994; Coombs & Holladay, 1996). These social expectations of the consumer in the modern world are that the party at fault ought to regret their mistake and "feel bad" (Allen & Caillouet, 1994; Coombs & Holladay, 1996). Furthermore, since intentional crises have a high level of ascribed blame, displaying emotion for crisis victims may be interpreted as the organization assuming greater responsibility and having a better likelihood of consumers showing sympathy (Claeys et al., 2013; Coombs, 2007). A spokesperson might send out good relational messages with the utilization of emotion that reaffirm the organization's commitment to individuals who have been impacted by the situation and reduce consumers' anger (Coombs & Holladay, 2009). Hence, the following hypothesis can be formed:

H3: Responding to an intentional crisis emotionally would a) increase consumer sympathy towards the organization and b) reduce anger compared to a neutral response.

2.5. Interaction Effect

It is important to take the interaction of the variables into account. The effect of one independent variable may be influenced by the level of another independent variable. Hence, when the interaction effect is considered, different findings from the main effects might be anticipated. First, the timing variable will be addressed when interacting with channel type and framing. Following that, the interplay between framing and channel variables will be explored.

Although it has been hypothesized that utilizing an audio-visual approach to apologize can be more beneficial than text, in combination with other variables this can change. When following a proactive timing strategy, apologising via video can be unnecessary. The nature of the proactive timing response type is to inform the public about the crisis and how it is being handled (Lee, 2020). Therefore, text can be enough to notify the public and show that the organization has the competence to resolve the issue. This way the consumers would not feel anger toward the organization. On the other hand, when responding reactively to a crisis, it can be more appropriate to use video as a channel type. This would show the organization as accepting greater responsibility and deeming this matter as important for them. Additionally, reacting to a crisis might attract more negative emotions toward the organization and a video response can help limit this. The customer may feel more sympathy for the organization due to this channel type's ability to increase sympathetic sentiments (Entman, 1993). As a result, the following hypothesis can be suggested:

H4: Responding to an intentional crisis proactively with text would a) increase consumer sympathy towards the organization and b) reduce anger compared to responding with video.

It is vital to remember that, to have an effect, emotions must be contextually suitable. The timing of emotions is another important factor in their efficacy. In the event of a proactive timing strategy, expressing emotion may not be necessary and might even cause a more negative public view than showing no emotions. Since showing emotion might suggest that the crisis is worse than it actually is, neutral framing can reduce the anger of the consumers (Coombs & Holladay, 1996). On the other hand, emotional message framing may be more successful in the event of a reactive timing approach since the organization will show regret and be perceived as accepting

more responsibility. In addition, reacting to a crisis might attract more negative emotions toward the organization and an emotional response can help limit this. Stakeholders may attribute more credence to content from external sources than the organization's narrative in the case of crises that the public regards as preventable (Foote, 2012). Hence, emotional signals integrated into crisis responses, according to van der Meer and Verhoeven (2014), may impact corporate reputations by enhancing acceptance of the organization's message and diminishing sentiments of anger. This would increase the sympathy the consumers feel towards the organization. Thereby, the fifth hypothesis can be formulated as follows:

H5: Responding to an intentional crisis proactively neutrally would a) increase consumer sympathy towards the organization and b) reduce anger compared to responding with emotion.

Information may be communicated in a variety of ways, both verbally and nonverbally (Jacob et al, 2012). The latter is frequently argued to have a stronger impact on how people are perceived (Jacob et al., 2013). The channel type can affect the framing of the message since non-verbal cues are present in a video (Entman, 1993). An audio-visual channel provides the chance of observing both the verbal and non-verbal messaging, hence, it is vital to consider the effect of gestural emotional cues. Nonverbal emotional signals can be facial expressions and changes in the tone of voice. These signals provide the message's recipient with the information they need to figure out what the sender is thinking, feeling, or intending to do. Individuals can use observation to improve the accuracy of their inferences by detecting (in)consistencies between verbal and nonverbal information by combining the numerous signals that are received simultaneously (Jacob et al., 2013). This aids comprehension of the sender's message while also indicating their frame of mind, therefore, non-verbal cues can have a crucial impact on the way individuals are

perceived. In the case of an apology, the sender of the message can provide appropriate non-verbal emotions resulting in a mutual understanding of regret. Thus, the channel type would interact with the emotional cues that the consumers would observe and amplify the emotional framing resulting in decreased anger and increased sympathy towards the company. Overall, the following hypothesis can be stated:

H6: Responding to an intentional crisis emotionally with a video would a) increase consumer sympathy towards the organization and b) reduce anger compared to responding with text.

2.6. Mediator

Organizational crises are frequently highly emotional occurrences for both organizations and consumers. As a result, communication between the two parties in crisis situations is sentimental. Emotions play an important role in the interaction between communication and reputation (Coombs, 2010; Tomasz et al., 2010). A person will attribute responsibility for an occurrence and will have an affective response to it. These emotions can be anger or sympathy since, in attribution theory, these are the primary emotions (Coombs, 2007). The more the public assign crisis culpability to an organization, the greater the probability is of the public forming unfavourable impressions of the organization. Increased attributions of blame result in increased anger and an unfavourable perception of the organization's reputation (Coombs & Holladay, 1996).

Emotions assist individuals in making decisions by realigning how much they value the other party (Halse et al., 2017). Trust-based interactions are decision dilemmas in which decision-makers must choose between opposing goals that cannot be achieved at their maxima simultaneously. The individualist perspective sees trust as a chance to acquire resources.

From a sociological perspective, trust reveals important information about the nature of people. The knowledge about others is utilized to avoid exploitation and to build trust-based relationships. In the context of trust, a variety of emotions are significant. Anger and sympathy are two emotions that arise from trust relationships and predict conduct in future trust interactions with the same party (Schniter et al., 2020). This is vital for crisis communication since consumer affective response towards an organization after a negative occurrence can affect their trusting behaviour (Valette-Florence & Valette-Florence, 2020).

Management's communication and behaviour have an impact on how people view the organization and the crisis (Coombs, 2007). Communication can be used to attempt to influence consumer affective response to an attribution (Coombs & Holladay, 1996). The favourable and unfavourable sentiments that stakeholders have toward the organization have an impact on the organization's reputation (Coombs & Holladay, 2005; Luoma-aho, 2009; McDonald et al., 2010) as well as the trust that stakeholders have in it (Greenwood & van Buren III, 2010; Valette-Florence & Valette-Florence, 2020). When stakeholders are angry with the organization after a crisis, the organization's perceived reputation and trust in it suffers. However, if stakeholders are sympathetic to the organization after the crisis, this can assist safeguard the organization's reputation and the stakeholders' trust (Coombs & Holladay, 1996). This dictates how the consumers interact with the organization in the future. Thus, the following hypothesis can be formed:

H7: Effect of a) timing, b) channel, and c) framing on trust and reputation is mediated by consumer affective response towards the organization.

Figure 1

Research Model
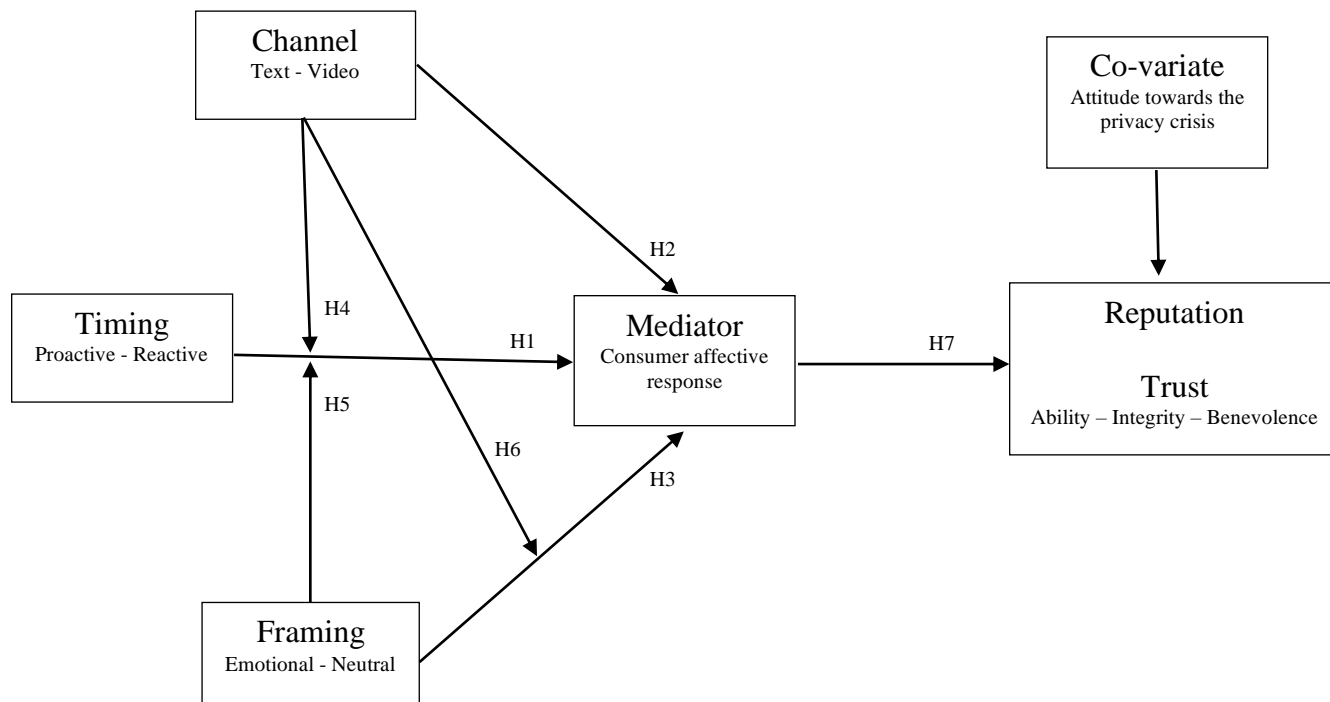
3. Method

3.1.Research Design

A between-subject experimental design was adopted in this research. An intentional crisis scenario was utilized in this experiment. The manipulations resulted in the creation of eight experimental conditions using the three independent variables. Table 1 illustrates this. This 2 (Timing: Proactive vs. Reactive) x 2 (Channel: Text vs. Video) x 2 (Framing: Emotional vs. Neutral) experiment aided in determining the ideal method to apologize for an intentional online crisis. This study employed a between-subject design since it allowed each subject to view only one of the experimental conditions, removed any carryover effect from previous conditions, and permitted comparisons of variations across experimental groups. Participants were randomly allocated to one of eight experimental conditions.

Table 1

Experimental Conditions

Channel Type		Framing			
		Emotional		**Neutral**	
		Timing		**Timing**	
	Text	Proactive	Reactive	Proactive	Reactive
		Timing		**Timing**	
	Video	Proactive	Reactive	Proactive	Reactive

3.2.Procedure

In order to measure the dependent variables, data were collected using a questionnaire. The Qualtrics online platform was used to collect data and transform it into an SPSS file. The survey was distributed by snowball sampling, which involved contacting potential respondents both online and in person. Although not random, this sampling approach made data collection easier and faster.

The questionnaire included an informed consent section where respondents were provided with information about the survey and were asked for their consent to participate in the study. In addition, it provided demographic information about the sample. Moreover, they were asked to state their privacy concerns. The questionnaire was also randomized so that each respondent received a different set of questions and statements.

3.2.1. Pilot Study

A pilot study was performed to create stimulus materials that reflected reality and were of interest to the target group. Participants were asked to indicate whether a crisis scenario was realistic and if they would be concerned about the issue. A total number of eight people of whom four were male and four were female participated in the pre-test. They were recruited by convenience and their age ranged from 20 to 29 years with a mean of 23 years. Participants were asked to complete a short questionnaire containing five intentional crisis scenarios. The participants evaluated the reality and appropriateness of the crises. This evaluation led to the decision of choosing a crisis scenario for the experiment.

3.2.2. Pre-Test

Prior to the final distribution, a pre-test was conducted to assess the perception of the stimulus material as well as the questionnaire instruments' reliability. Members of the target population were recruited to test the crisis scenarios and the questionnaire. The pre-test had a total of 8 respondents, with 3 being male and 5 being female. They were chosen by practicality, and their ages varied from 20 to 49, with a mean of 28.

First, the participants were instructed to distinguish whether the stimulus material was text or video. Consequently, they were asked if the crisis message was presented proactively or reactively. Respondents were subsequently queried whether they could discern emotions in the crisis message. As a consequence of assessment checks with participants and manipulation checks, no changes were made. Finally, the entire questionnaire was checked for spelling, comprehensibility, clarity, and language to ensure that the manipulations were accurately measured.

3.2.3. Manipulation Check

After analysing the results from the pre-test manipulation check questions, the three manipulations were declared effective for the main research. First, the responders had to pick between text and video for the crisis response message channel. In the condition they were allocated to, all respondents (100%) seemed to be able to identify the utilized channel type for the company's message.

Thereafter, participants were prompted to identify if the company was the first to publicly reveal the crisis or if they were reacting to public concern about the issue. This was done to

check for the timing manipulation. The question was accurately answered by 6 respondents (75%).

Lastly, respondents had to discern whether the organization in the scenario used emotional or neutral communication for the framing variable. To confirm the accuracy of this manipulation check, four questions were included, asking if there were any elements of emotion, regret, shame, or drama. The message framing of the crisis response was correctly identified by 7 respondents (87.5 %). Further, an independent T-test indicated a significant difference in framing manipulation (neutral vs. emotional) (t (6) = -4.85, p =.003). The neutral condition (M = 2.66, SD =.381) differed from the emotional condition (M = 5.05, SD =.778) in terms of mean scores. In all, 2 (25%) respondents answered one or more manipulation check questions incorrectly.

3.3.Materials

An intentional crisis scenario was used in the experiment, as well as eight various ways of apologizing for the problem at hand. To avoid prior reputation effect, a fictional company was used (Siomkos, 1999). The timing, channel type, and framing were all manipulated to assess the organization's perceived reputation, trust, and stakeholder emotion. Participants in each group observed a fictitious intentional crisis scenario.

The aspects of the crisis message that were manipulated for this experiment were provided in the form of a press release and a press conference on the organization's Twitter profile. This experiment was conducted on the company's social media page. Due to its widespread usage and prominence, Twitter was chosen as the medium for spreading the apology message. In addition, the experimental materials were created utilizing Canva, an editing platform.

A fictional brand called "Walkie Talkie" was in an intentional crisis in the crisis scenario. Walkie Talkie is a widely recognized messaging app in this scenario. Participants learn that the corporation has made all its consumers' data available on social media. A data breach scenario was employed in this study because of the perceived seriousness of online privacy in today's digital world. An employee posted sensitive information on social media, and although the post was taken down, the incident still caused a data breach. As a result, Walkie Talkie took to social media to apologize for the situation.

The apology message was varied with either proactive timing or reactive timing. The participants were exposed to one of the two types of communication. The proactive messaging informed the public that they have had a data breach and apologised for the issue. Meanwhile the reactive messaging reacted to the news blaming the company for the data breach and apologized for the situation.

Furthermore, each of the experimental materials contained either emotional framing about the situation or neutral framing regarding the problem. One of the two communicated emotions was shown to each participant. The first apology held regret and shame. These emotions were used in the apology due to the intentional crisis to mitigate negative feelings from stakeholders (Coombs & Holladay, 1996; Coombs & Holladay, 2005; van der Meer & Verhoeven). The second statement, on the other hand, was devoid of emotional content. The organization solely provided factual information and apologized in that message.

Lastly, as previously discussed, owing to the platforms' continuous and dynamic evolution and expansion, the channel type utilization in social media is inconsistent between research and time periods. As a result, more research is needed to see if there is a difference in how organizations apologize when they utilize video or text as the channel type. The apology

was released as a press release (text) or a news conference on social media (video). Both were made available to the public as a statement from the organization's CEO. The difference between these channel types have been illustrated in Figure 2. See Table 2 for the characteristics of each scenario. The different stimuli used in the experiment can be observed in Appendix B.

Figure 2

Examples of Channel Type (top: video, bottom: proactive, neutral text)

Table 2

Material Characteristics

Framing	Timing		Channel
	Proactive	Reactive	
Emotional	The public is informed about the crisis first by the company via text with emotional elements of shame and regret	The company reacts to the public concern over the crisis via text with emotional elements of shame and regret	Text
Neutral	The public is informed about the crisis first by the company via video without emotional elements of shame and regret	The company reacts to the public concern over the crisis via video without emotional elements of shame and regret	Video
Neutral	The public is informed about the crisis first by the company via text without emotional elements of shame and regret	The company reacts to the public concern over the crisis via text without emotional elements of shame and regret	Text
Emotional	The public is informed about the crisis first by the company via video with emotional elements of shame and regret	The company reacts to the public concern over the crisis via video with emotional elements of shame and regret	Video

3.4. Respondents

This study initially included a total of 416 English-speaking participants, of whom 202 were removed owing to incorrectly answering manipulation check questions, resulting in a final sample of 214 respondents (105 males, 106 females, and 2 non-binary). The ages of the participants varied from 17 to 54, with a mean of 25.15 (SD=7.89). Approximately 50% of the respondents were pursuing a bachelor's degree, 29% were following a (pre) master's degree, 4% were completing their PhD, and 17% were employed. The Netherlands had the greatest number of responses (24.8%), followed by Turkey (14%) and Germany (14%). Table 3 summarizes the demographic information supplied by the participants in detail. The participants were separated into eight different conditions, each with at least 25 individuals, as shown in Table 4.

Table 3

Demographics

		N	%	M	SD
Age				25.15	7.89
Gender					
	Male	105	49.1		
	Female	106	49.5		
	Non-Binary	2	0.9		
Status					
	Bachelor	108	50.5		
	(Pre) Master	62	29		
	Ph.D.	8	3.7		
	Employed	36	16.8		
Nationality					
	Africa	2	0.9		
	Asia	49	22.9		
	Europe	143	66.8		
	North America	11	5.1		
	South America	8	3.7		
	Oceania	1	0.5		
Total		**214**	**100**		

Table 4

Division Per Condition

Condition	Stimuli	N	%	Age		Gender
				M	**SD**	
1	Proactive Neutral Text	25	11.68	24.44	5.79	13 Male 12 Female
2	Proactive Emotional Text	32	14.95	25.64	8.56	15 Male 17 Female
3	Reactive Neutral Text	26	12.14	24.11	5.91	15 Male 11 Female
4	Reactive Emotional Text	26	12.14	23.15	6.48	9 Male 16 Female
5	Proactive Neutral Video	25	11.68	23.40	5.28	16 Male 9 Female
6	Proactive Emotional Video	27	12.61	31.40	12.53	12 Male 15 Female
7	Reactive Neutral Video	27	12.61	24.44	6.89	13 Male 13 Female 1 non-binary
8	Reactive Emotional Video	26	12.14	24.26	6.20	12 Male 13 Female 1 non-binary
Total		**214**	**100**			

3.5.Measures

Each of the dependent variables, mediator, and co-variate were operationalized into measurable constructs to be evaluated. These constructs were evaluated using a 7-point Likert scale structure, which is appropriate when measuring attitudes on an ordinal scale (Likert, 1932). All statements were pre-tested before being published in the survey to obtain a sense of how they will be interpreted by potential responders. Statements that were misconstrued were changed or eliminated from the questionnaire. The final questionnaire had a total of 7 constructions, each with several statements. Furthermore, items for the scales were implemented from the research of Chun (2005), Paine (2003), McDonald et al. (2011) and Beldad (2016).

3.5.1. Reputation

The reputation scale from Chun (2005), which comprises a range of constructions and items, is used to assess an organization's reputation. Due to its broad scope, however, this measure does not match completely for gauging the post-crisis reputation of particular organizations. Alternatively, the scale used in post-crisis reputation research (e.g., Coombs & Holladay, 1996; Coombs & Holladay, 2002) is primarily focused on organizational trust. For instance, the Coombs and Holladay Organizational Reputation Scale (2002) item "The organization is concerned with the well-being of its publics" corresponds to the trust scale item "Whenever this organization makes an important decision, I know it will be concerned about people like me". Owing to this, adopting the reputation scale in its entirety would not match the current research, nonetheless, using the scale for post-crisis reputation would coincide with the trust scale. As a result, only the items from the reputation scale that matched the crisis scenario were chosen to be used in the experiment.

The first dependent variable, the reputation of the organization, has four items to measure the post-crisis reputation of the affected company. The first item was concerned with the product and services of the company. The second item was about the vision and leadership A statement about the workplace environment is "This organization looks like a good company to work for" (Chun, 2005) whereas the statement regarding corporate social responsibility is "This organization maintains a high standard in the way it treats people" (Chun, 2005).

3.5.2. Trust

For assessing the second dependent variable, trust in the organization, three constructs have been measured. The first construct for this variable is *ability* and items like "I feel confident about this organization's skills" (Paine, 2003) were used. The construct *integrity* was measured by using items such as, "This organization treats people like me fairly and justly" (Paine, 2003). Finally, *benevolence* has been measured with items including statements similar to "This organization can be relied on to keep its promises" (Paine, 2003).

3.5.3. Emotion

The mediator variable is emotion towards the organization and two emotions were tested. The first emotion, *anger*, was tested with the item "When I think about this organization, I feel angry" (McDonald et al., 2011). Synonyms of angry, annoyed, disgusted, and outraged have also been among the items to test the anger scale. A similar procedure was applied to the emotion of *sympathy* by utilizing the words sympathetic, sorry, compassion, and empathy. In total 8 items were used in the questionnaire to test the emotion scale.

3.5.4.   Privacy Attitude

Lastly, the co-variate, the attitude consumers have towards the crisis, has been measured with the privacy valuation scale by Beldad (2016) in order to quantify this particular privacy issue. The construct has three items including statements such as, "I am convinced that my information privacy online should be respected and protected" (Beldad, 2016). An overview of the items used in this study can be observed in Appendix C.

3.5.5.   Validity and Reliability of Measures

The data were statistically analysed using IBM SPSS Statistics to ensure that the constructs were valid and reliable. The dependent variables consisting of multiple scales, trust and emotion, were tested for validity. A principal component analysis with varimax rotation was used to determine the connection between these measures. Trust is a three-dimensional dependent variable that includes ability, integrity, and benevolence as measures. The factor analysis for the trust variable revealed that the items measuring trust and benevolence loaded into the same factor. Moreover, the recoded benevolence item "I think it is important to watch Walkie Talkie closely so that it does not take advantage of people like me" was loaded into a separate factor (see Table 5).

Table 5

Rotated Component Matrix for Trust

	Component		
	1	2	3
I feel very confident about Walkie Talkie's skills.		.739	
Walkie Talkie has the ability to accomplish what it says it will do.		.705	
Walkie Talkie is known to be successful at the things it tries to do.		.649	
Walkie Talkie treats people like me fairly and justly.	.827		
Sound principles seem to guide Walkie Talkie's behaviour.	.883		
Walkie Talkie does not mislead people like me.	.756		
Whenever Walkie Talkie makes an important decision, I know it will be concerned about people like me.	.670		
Walkie Talkie can be relied on to keep its promises		.650	
I think it is important to watch Walkie Talkie closely so that it does not take advantage of people like me*			.952
I am willing to let Walkie Talkie make decisions for people like me.		.824	
I believe that Walkie Talkie takes the opinions of people like me into account when making decisions.		.607	
Explained Variance	59.06%	8.84%	7.41%
Eigenvalue	6.49	.973	.816
Cronbach alpha	.902	.898	-

KMO= .927; Minimum factor loading=.607; Percentage of variance explained= 75.33%; 1=Trust-based Integrity; 2= Trust-based Ability; 3= Trust-based Benevolence
*Recoded

Hence, to increase the validity and reliability of the trust variable, the items "Walkie Talkie can be relied on to keep its promises" and "I think it is important to watch Walkie Talkie closely so that it does not take advantage of people like me" were excluded from the benevolence scale. The results of this are shown in Table 6.

Table 6

Rotated Component Matrix for Trust

	Component		
	1	2	3
I feel very confident about Walkie Talkie's skills.		.739	
Walkie Talkie has the ability to accomplish what it says it will do.		.790	
Walkie Talkie is known to be successful at the things it tries to do.		.815	
Walkie Talkie treats people like me fairly and justly.	.804		
Sound principles seem to guide Walkie Talkie's behaviour.	.849		
Walkie Talkie does not mislead people like me.	.764		
Whenever Walkie Talkie makes an important decision, I know it will be concerned about people like me.	.704		
I believe that Walkie Talkie takes the opinions of people like me into account when making decisions.			.594
I am willing to let Walkie Talkie make decisions for people like me.			.887
Explained Variance	63.54%	9%	6.94%
Eigenvalue	5.71	.811	.625
Cronbach alpha	.905	.883	.673

KMO= .922; Minimum factor loading=.594; Percentage of variance explained= 79.49%; 1=Trust-based Integrity; 2= Trust-based Ability; 3= Trust-based Benevolence

Furthermore, the variable emotion consists of two scales measuring anger and sympathy. The results of the validity test displayed that while all four items could be used for sympathy only two were valid for the anger scale (see Table 7).

Table 7

Rotated Component Matrix for Emotion

	Component		
	1	2	3
angry		.851	
annoyed		.889	
disgusted			.900
outraged			.901
sympathetic	.828		
sorry	.805		
compassion	.875		
empathy	.782		
Explained Variance	48.24%	19.52%	12.83%
Eigenvalue	3.86	1.56	1.02
Cronbach alpha	.871	.823	.848

KMO= .782; Minimum factor loading=.782; Percentage of variance explained= 80.61%; 1=Sympathy; 2=Anger

Therefore, two items "disgusted" and "outraged" were removed from the anger scale. The results of the corrected emotion scale are demonstrated in Table 8. The internal consistencies of the dependent variables were determined using Cronbach's alpha. The reliability of all the scales was at least acceptable (all $\alpha > .6$). The reputation and privacy attitude variables had a Cronbach's alpha of .894 and .889 respectively.

Table 8

Rotated Component Matrix

		Component	
		1	2
angry			.913
annoyed			.887
sympathetic		.831	
sorry		.819	
compassion		.867	
empathy		.779	
	Explained Variance	56.87%	20.73%
	Eigenvalue	3.41	1.24
	Cronbach alpha	.871	.823

KMO= .793; Minimum factor loading=.779; Percentage of variance explained= 77.6%; 1=Sympathy; 2=Anger

4. Results

4.1. Manipulation Check

In order to collect accurate data, the participants were subject to a series of manipulation tests to assess their perception of the different experimental conditions. This has provided information on whether the respondents differed in assumed independent variables. To illustrate, the subjects could indicate whether they observed a text or a video (channel), whether it was proactive or reactive (timing), and whether it was an emotional or neutral (framing) crisis response.

First of all, for the crisis response message channel, respondents had to choose between text and video. 410 respondents (98.6%) were able to distinguish the used channel type for the company's communication in the condition to which they were assigned. As a result, individuals who stated that they saw a text while the stimuli were video (and vice versa) were eliminated from the study.

Following that, participants were asked to determine if the organization was the first to publicly disclose the crisis or if they were responding to public outcry over the issue. This was designed to check for time manipulation. 263 people gave a correct answer to the manipulation check question (63.3%). As a result, those who said the stimuli were proactive while it was reactive (and vice versa) were also removed from the data.

Finally, respondents had to determine if the framing variable was employed by the organization in the scenario using emotive or neutral communication. Four questions were included to confirm the effectiveness of this manipulation, asking if there were any components of emotion, regret, shame, or drama on a scale of 1 to 7. Participants whose average answer was 3.99 or less were recoded as 0, while those who answered 4 or more on average were recoded as 1. This offered a foundation for separating the stimuli's perceived framing. 373 respondents correctly recognized the crisis response message framing (89.7%). The ones that inaccurately

denoted the conditions' frame type were removed. Thereafter, an independent T-test revealed a significant difference in manipulation of framing (neutral vs. emotional), (t (212) = -23.25, p < .001). Scores in the neutral condition (M = 2.66, SD = .93) differ from those in the emotional condition (M = 5.38, SD = .78). Therefore, the framing manipulation was rendered effective.

Overall, the number of subjects that falsely identified 2 or more manipulation check questions was 28 (6.7%). In all, 202 (48.4%) respondents answered one or more manipulation check questions incorrectly and were removed from the dataset. The modifications were considered effective for further study after the inaccurate responses were excluded.

4.2.Correlations Analysis

To provide an initial sense of the linkages between the dependent, mediator, and co-variables, a correlation analysis was used to establish the relationship between the variables. Table 9 shows the descriptive statistics and correlations of the outcome variables. There is no evidence for possible floor or ceiling effects, or a restriction of range effect, based on the mean score and standard deviation. Further, the direction of the link between the dependent variables makes logical sense. High levels of anger, for instance, are inversely connected with reputation, trust, and compassion. Additionally, based on the correlation analysis, there is no evidence to presume multicollinearity.

Table 9

Correlations of Dependent Variables

	Mean (SD)	PA	TB	TI	TA	R	A	S
PA	6.16 (.909)	1						
TB	3.39 (1.20)	-.12	1					
TI	4.05 (1.24)	-.03	.65**	1				
TA	3.79 (1.15)	-.13	.70**	.78**	1			
R	4.27 (1.22)	-.08	.59**	.77**	.80**	1		
A	4.59 (1.32)	.06	-.43**	-.58**	-.51**	-.50**	1	
S	3.44 (1.32)	-.17*	.49**	.53**	.50**	.56**	-.42**	1

PA— Privacy Attitude, A—Anger, S— Sympathy, R— Reputation, TA— Trust-based Ability, TI—
Trust-based Integrity, TB— Trust-based Benevolence.

*Significant at .05. **Significant at .01. ***Significant at .001

4.3.Main Effects

The main effects of the three independent variables on the dependent variables were investigated. Multivariate analysis of covariate (MANCOVA) and analysis of covariate (ANCOVA) were performed in order to observe the main effects while taking the covariate, privacy attitude, into account. The findings of MANCOVA and ANCOVA of the main effects are presented at the end of the section in Table 11.

4.3.1. Timing

A MANCOVA showed no significant main effect of timing on anger ($F (1, 205) = .038$, $p =.845$), sympathy ($F (1, 205) = .062$, $p =.803$), ability ($F (1, 205) = 1.96$, $p =.162$), and benevolence ($F (1, 205) = .356$, $p =.551$). Although, timing had significant effect on reputation ($F (1, 205) = 6.67$, $p =.010$) and integrity ($F (1, 205) = 3.99$, $p =.047$), hypotheses 1a and 1b concerning the effect of timing were not supported.

4.3.2. Channel

A MANCOVA showed no significant main effect of channel on anger ($F (1, 205) = 1.52$, p =.218), sympathy ($F (1, 205) = .41$, p =.522), reputation ($F (1, 205) = 3.65$, p =.057), ability ($F (1, 205) = 2.52$, p =.114), and benevolence ($F (1, 205) = .36$, p =.550). Although, channel had significant effect on integrity ($F (1, 205) = 4.34$, p =.038), hypotheses 2a and 2b concerning the effect of channel were not supported.

4.3.3. Framing

A MANCOVA showed a significant main effect of framing type ($F (6, 200) = 14.22$, p <.001). Framing influenced all six dependent variables: anger, sympathy, reputation, ability, integrity, and benevolence. Participants who were exposed to a neutral framing disclosed higher levels of anger ($M = 4.80$, $SD = 1.28$) compared to those who observed the emotional framing ($M = 4.39$, $SD =1.32$). Further, those who viewed the emotional framing indicated high levels of sympathy ($M = 4.04$, $SD =1.17$), reputation ($M = 4.75$, $SD = .99$), ability ($M = 4.19$, $SD = 1.06$), integrity ($M = 4.51$, $SD = 1.10$), and benevolence ($M = 3.77$, $SD = 1.16$) relative to those confronted with the neutral framing (sympathy: $M = 2.80$, $SD =1.14$; reputation: $M = 3.75$, $SD =1.23$; ability: $M = 3.37$, $SD = 1.09$; integrity: $M = 3.56$, $SD = 1.19$; benevolence: $M = 2.98$, $SD =1.10$). Therefore, hypotheses 3a and 3b were supported. The findings are presented in Table 10 and Table 11.

Table 10

Summary Statistics of Framing

	Neutral			Emotional		
	N	Mean	Std. Deviation	N	Mean	Std. Deviation
Anger	103	4.80	1.28	111	4.39	1.32
Sympathy	103	2.80	1.14	111	4.04	1.17
Reputation	103	3.75	1.23	111	4.75	.99
Ability	103	3.37	1.09	111	4.19	1.06
Integrity	103	3.56	1.19	111	4.51	1.10
Benevolence	103	2.98	1.10	111	3.77	1.16

Table 11

Results of MANCOVA and ANCOVA for Main Effects

	MANCOVA			ANCOVA					
				A	S	R	TA	TI	TB
	Wilks' Λ	F value	df	F value	F value	F value	F value	F value	F value
Privacy Attitude	.955	1.56	6, 200	.229	2.53	.229	1.20	.285	.999
Channel	.973	.916	6, 200	1.52	.411	3.65	2.52	4.34*	.358
Timing	.952	1.67	6, 200	.038	.062	6.67**	1.96	3.99*	.356
Framing	.701	14.22***	6, 200	5.23*	63.05***	46.17***	31.67***	37.27***	25.44***

Note: MANCOVA—multivariate analysis of covariance; ANCOVA—analysis of covariance.
A—Anger, S— Sympathy, R— Reputation, TA— Trust-based Ability, TI— Trust-based
Integrity, TB— Trust-based Benevolence.
*Significant at .05. **Significant at .01. ***Significant at .001

4.4.Interaction Effects of the Independent Variables

The interaction effects of the three independent factors on the dependent variables were tested.

To examine the interplay while taking the covariate, privacy attitude, into account, multivariate

analysis of covariate (MANCOVA) and analysis of covariate (ANCOVA) were used. Table 14,

at the end of the section, shows the overall results of MANCOVA and ANCOVA for the
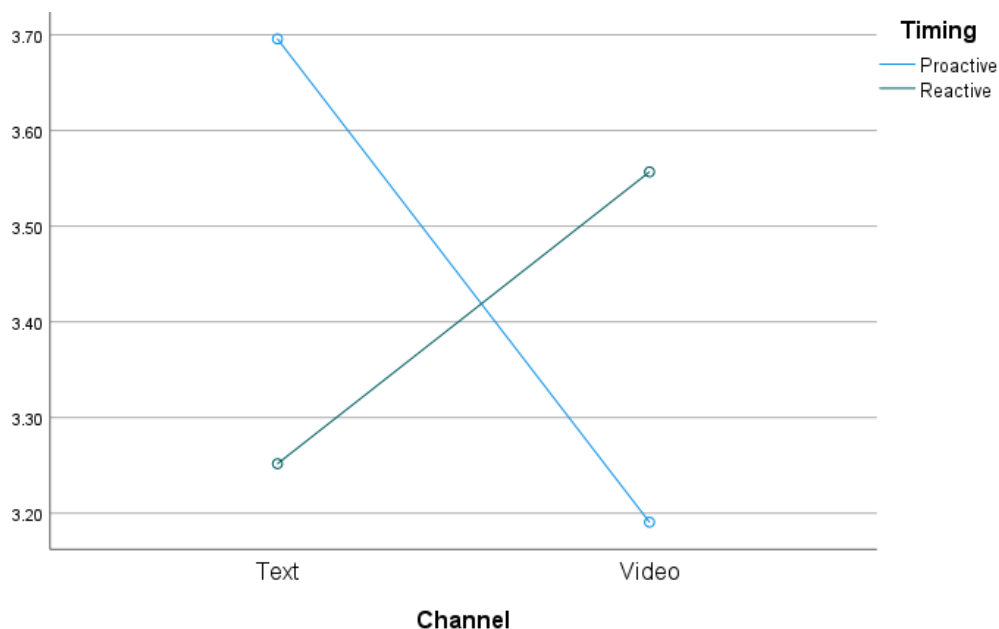
interaction effects.

4.4.1. Timing X Channel

A MANCOVA showed no significant interaction effect of timing and channel on anger (F (1, 205) = .04, p =.843), ability (F (1, 205) = 2.73, p =.100), integrity (F (1, 205) = 1.97, p =.161), and benevolence (F (1, 205) = 2.35, p =.126).

However, there was a significant interaction effect of timing and channel on sympathy (F (1, 205) = 6.69, p =.010). Sympathy was higher when the proactive response was sent as text (M = 3.75, SD = 1.19) than when video channel was utilized (M = 3.21, SD = 1.48). Furthermore, in the reactive condition, sympathy was higher when the message was sent as a video (M = 3.53, SD = 1.33) rather than text (M = 3.23, SD = 1.23). Figure 1 clearly shows that the gap between proactive and reactive timing is wide in both channels, text and video. The results indicate that hypothesis 4a can be supported while 4b cannot be supported.

Figure 1

Interaction Effect of Timing and Channel on Sympathy

Further, timing and channel had a significant interaction effect on reputation (F (1, 205) = 5.62, p =.019). Reputation was higher when the proactive response was sent as text (M = 4.76 SD = 1.04) than when video channel was utilized (M = 4.15, SD = 1.31). Furthermore, in the reactive condition, reputation was higher when the message was sent as a video (M = 4.08, SD = 1.17) rather than text (M = 4.03, SD = 1.23). Figure 2 demonstrates when the text channel is employed, the gap between proactive and reactive timing grows. The findings can be observed below in Table 12.

Figure 2

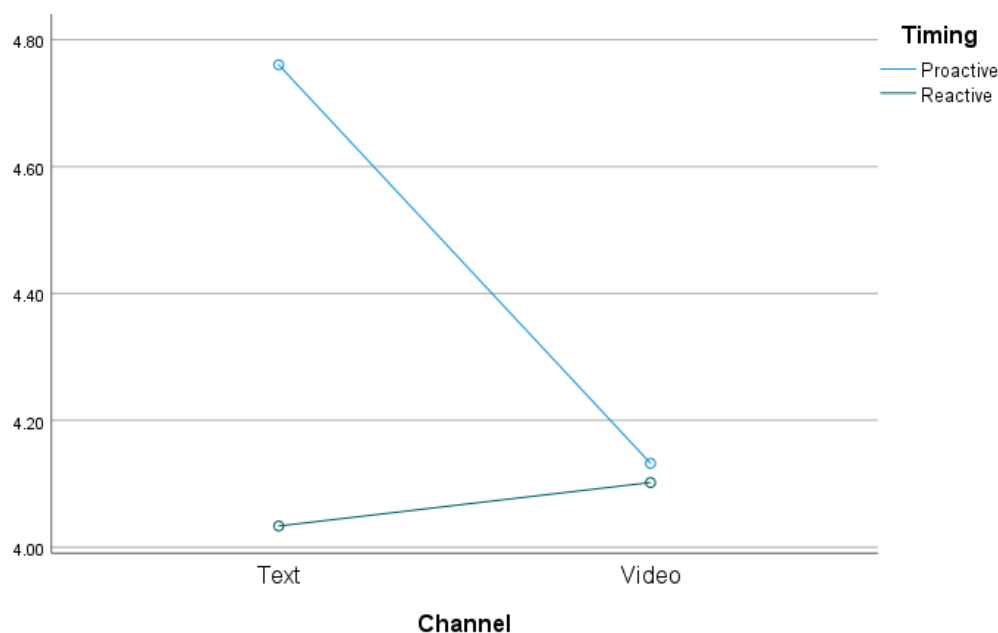*Interaction Effect of Timing and Channel on Reputation*

Table 12

Summary Statistics of Timing and Channel

		Proactive			Reactive		
		N	Mean	Std. Deviation	N	Mean	Std. Deviation
Anger	Text	57	4.43	1.40	52	4.52	1.24
	Video	52	4.70	1.37	53	4.71	1.26
Sympathy	Text	57	3.75	1.19	52	3.23	1.23
	Video	52	3.21	1.48	53	3.53	1.33
Reputation	Text	57	4.76	1.04	52	4.03	1.23
	Video	52	4.15	1.31	53	4.08	1.17
Ability	Text	57	4.15	1.17	52	3.66	1.07
	Video	52	3.66	1.14	53	3.67	1.17
Integrity	Text	57	4.47	1.07	52	3.93	1.15
	Video	52	3.94	1.41	53	3.81	1.23
Benevolence	Text	57	3.64	1.12	52	3.25	1.32
	Video	52	3.26	1.15	53	3.39	1.20

4.4.2. Timing X Framing

A MANCOVA showed no significant interaction effect of timing and framing on anger ($F_{(1, 205)} = .12$, $p = .731$), sympathy ($F_{(1, 205)} = 1.18$, $p = .278$), reputation ($F_{(1, 205)} = 3.11$, $p = .079$), ability ($F_{(1, 205)} = 3.28$, $p = .071$), integrity ($F_{(1, 205)} = 2.56$, $p = .111$), and benevolence ($F_{(1, 205)} = 1.11$, $p = .293$). Therefore, hypothesis 5a and 5b could not be supported.

4.4.3. Channel X Framing

A MANCOVA showed no significant interaction effect of channel and framing on anger ($F_{(1, 205)} = 1.13$, $p = .288$), ability ($F_{(1, 205)} = 3.58$, $p = .060$), integrity ($F_{(1, 205)} = 2.58$, $p = .110$), and benevolence ($F_{(1, 205)} = .21$, $p = .649$).

Nevertheless, there was a significant interaction effect of channel and framing on sympathy ($F_{(1, 205)} = 5.62$, $p = .019$). Sympathy was higher when the response was sent as a

neutral text (M = 3.00, SD = 1.13) than when video channel was utilized (M = 2.55, SD = 1.12). Furthermore, in the emotional condition, sympathy was higher when the message was sent as a video (M = 4.17, SD = 1.19) rather than text (M = 3.94, SD = 1.16). Figure 3 illustrates how using video as a channel increases the difference between neutral and emotional framing. When delivered as a video rather than text, the neutral feeling appears to elicit fewer sympathetic sentiments. Hence, hypothesis 6a is supported and 6b is not supported.

Figure 3

Interaction Effect of Channel and Framing on Sympathy
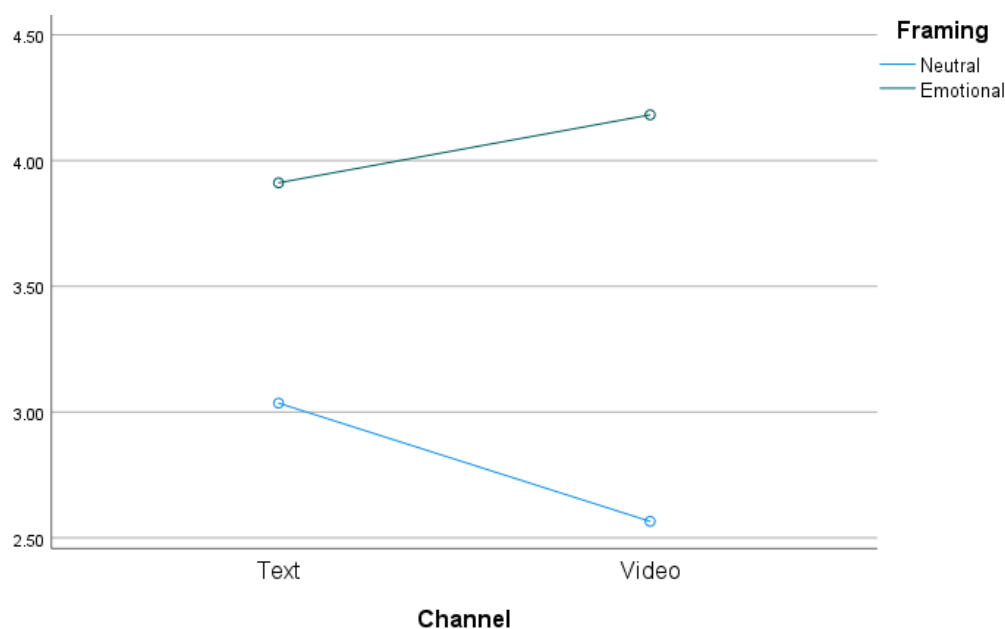
Moreover, channel and framing had a significant interaction effect on reputation (F (1, 205) = 5.36, p =.022). Reputation was higher when the neutral response was sent as text (M = 4.05, SD = 1.36) than when video channel was utilized (M = 3.44, SD = 1.01). Furthermore, in the emotional condition, reputation was higher when the message was sent as a video (M = 4.78, SD = 1.08) rather than text (M = 4.73, SD = .92). Figure 4 depicts how the utilization of video as a

channel widens the gap between neutral and emotional framing. The neutral framing seems to evoke a lower perceived reputation of the company when provided as a video rather than text. The details can be examined in Table 13.

Figure 4

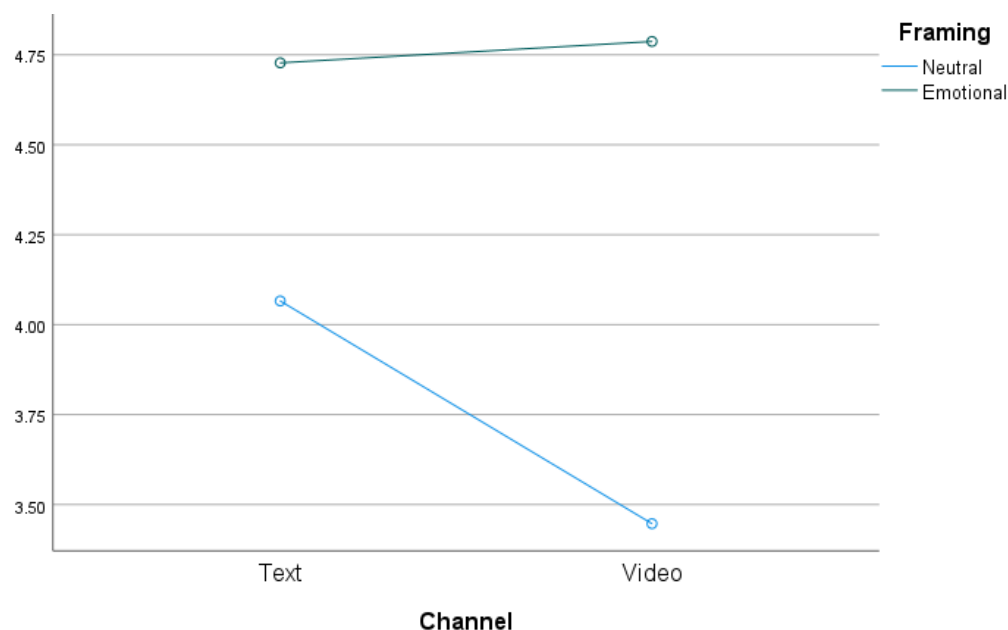*Interaction Effect of Channel and Framing on Reputation*

Table 13

Summary Statistics of Channel and Framing

		Text			Video		
		N	Mean	Std. Deviation	N	Mean	Std. Deviation
Anger	Neutral	51	4.60	1.37	52	5.01	1.16
	Emotional	58	4.37	1.27	53	4.40	1.38
Sympathy	Neutral	51	3.00	1.13	52	2.55	1.12
	Emotional	58	3.94	1.16	53	4.17	1.19
Reputation	Neutral	51	4.05	1.36	52	3.44	1.01
	Emotional	58	4.73	.915	53	4.78	1.08
Ability	Neutral	51	3.60	1.16	52	3.11	.973
	Emotional	58	4.19	1.07	53	4.21	1.05
Integrity	Neutral	51	3.84	1.16	52	3.27	1.16
	Emotional	58	4.54	1.01	53	4.47	1.20
Benevolence	Neutral	51	3.04	1.07	52	2.89	1.13
	Emotional	58	3.81	1.26	53	3.76	1.05

4.4.4. Timing X Channel X Framing

A MANCOVA showed no significant interaction effect of timing, channel, and framing on anger (F (1, 205) = .28, p =.601), sympathy (F (1, 205) = .48, p =.492), reputation (F (1, 205) = 3.72, p =.055), ability (F (1, 205) = .18, p =.656), integrity (F (1, 205) = .29, p =.590), and benevolence (F (1, 205) = .21, p =.648).

Table 14

Results of MANCOVA and ANCOVA

	MANCOVA			ANCOVA					
				A	S	R	TA	TI	TB
	Wilks' Λ	F value	df	F value	F value	F value	F value	F value	F value
Channel * Timing	.948	1.82	6, 200	.039	6.69**	5.62*	2.73	1.97	3.35
Channel * Framing	.954	1.61	6, 200	1.13	5.62*	5.36*	3.58	2.58	.208
Timing * Framing	.978	.765	6, 200	.119	1.18	3.11	3.28	2.56	1.11
Channel * Timing * Framing	.969	1.05	6, 200	.275	.475	3.72	.175	.291	.209

Note: MANCOVA—multivariate analysis of covariance; ANCOVA—analysis of covariance. A—Anger, S— Sympathy, R— Reputation, TA— Trust-based Ability, TI— Trust-based Integrity, TB— Trust-based Benevolence.
*Significant at .05. **Significant at .01. ***Significant at .001
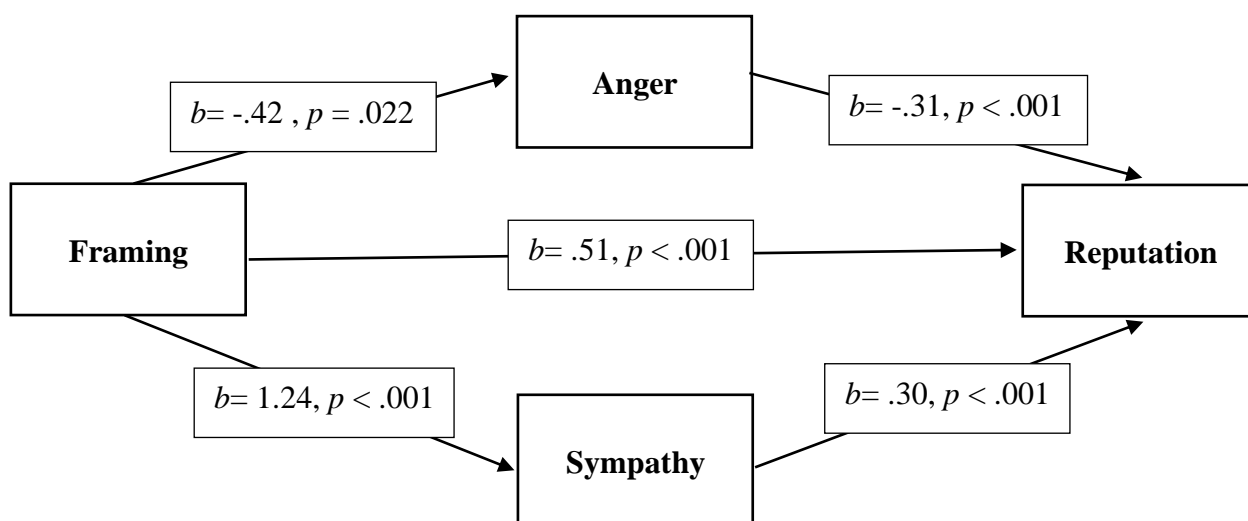
4.5. Mediation Analysis: Emotion

To see if emotion mediates the association between the framing and the two dependent variables, four different mediation analyses were conducted using the technique proposed by Hayes (Hayes, 2022).

4.5.1.   Framing, Emotions, and Reputation

The mediation analysis found that framing had a significant indirect influence on reputation via anger (b =.129, 95% BCa CI = [.020,.248]) and sympathy (b =.367, 95% BCa CI = [.204,.558]). This means that the emotions stakeholders have towards the organization can explain 49.55% of the variation in reputation. The model is illustrated in Figure 5.
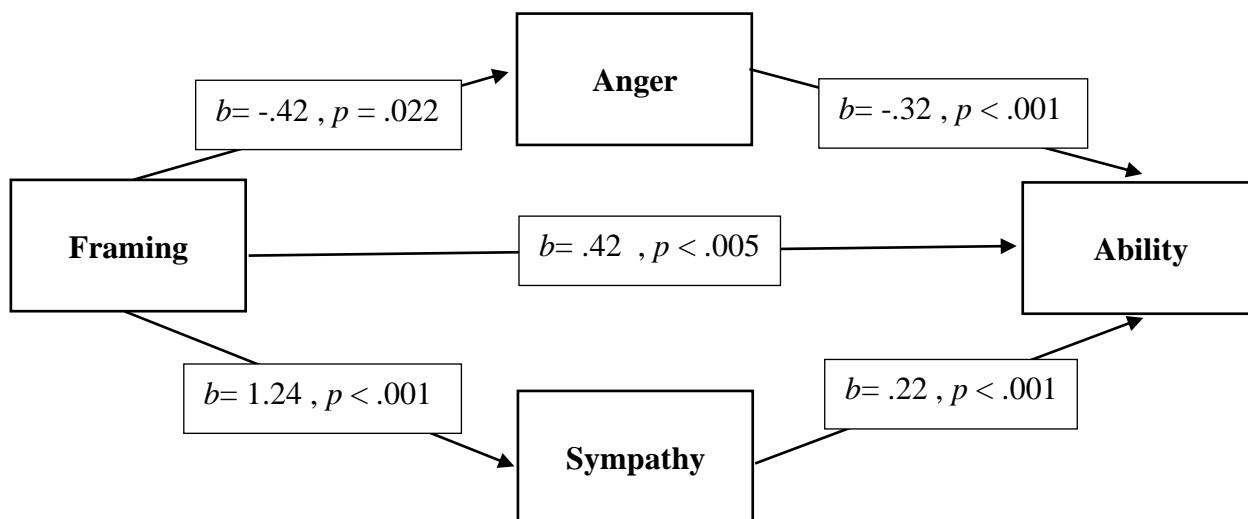
Figure 5
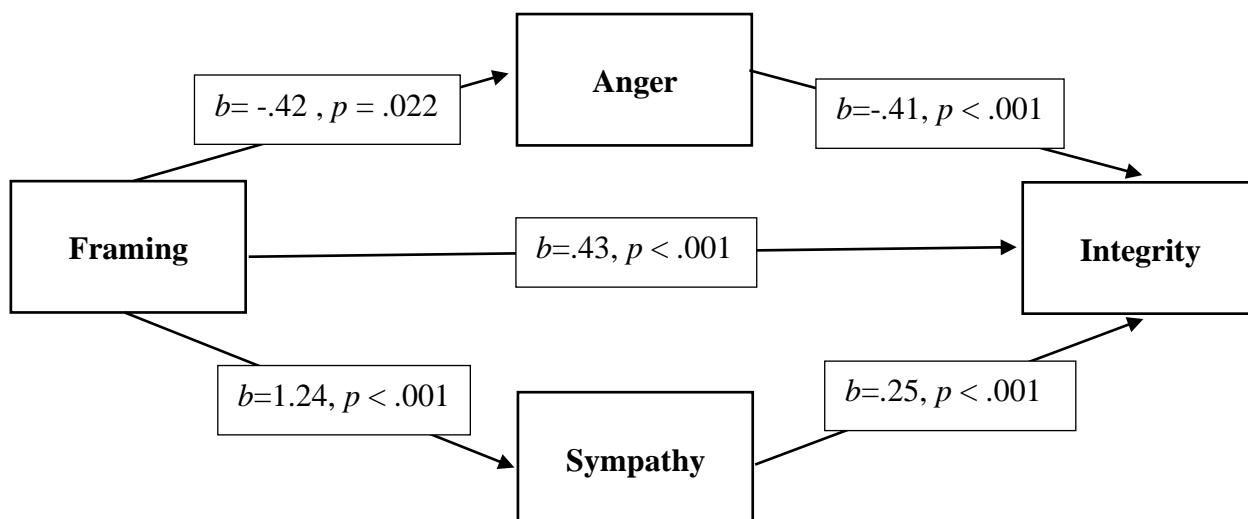
Mediating Effect of Emotion on Reputation

4.5.2.   Framing, Emotions, and Trust-based Ability

Framing had a substantial indirect impact on reputation via anger (b =.134, 95% BCa CI = [.019,.273]) and sympathy (b =.275, 95% BCa CI = [.109,.4547]), according to the mediation analysis. This suggests that consumer affective response can account for 40.95% of ability variance. Figure 6 depicts the mediation model.

Figure 6

Mediating Effect of Emotion on Trust-based Ability

4.5.3.   Framing, Emotions, and Trust-based Integrity

According to the mediation study, framing had a substantial indirect impact on reputation through anger (b =.172, 95% BCa CI = [.026,.336]) and sympathy (b =.3048, 95% BCa CI = [.137,.502]). This suggests that stakeholders' feelings about the company account for 47.70% of the variance in integrity. The mediation model is outlined in Figure 7 hereunder.

Figure 7

Mediating Effect of Emotion on Trust-based Integrity

4.5.4.   Framing, Emotions, and Trust-based Benevolence

Per the mediation study, framing had a significant indirect impact on reputation through anger (b =.107, 95% BCa CI = [.012,.237]) and sympathy (b =.336, 95% BCa CI = [.155,.555]). This suggests that stakeholders' feelings about the organization account for 44.29% of the variance in benevolence. This may be seen observed in Figure 8 below.

Figure 8

Mediating Effect of Emotion on Trust-based Benevolence
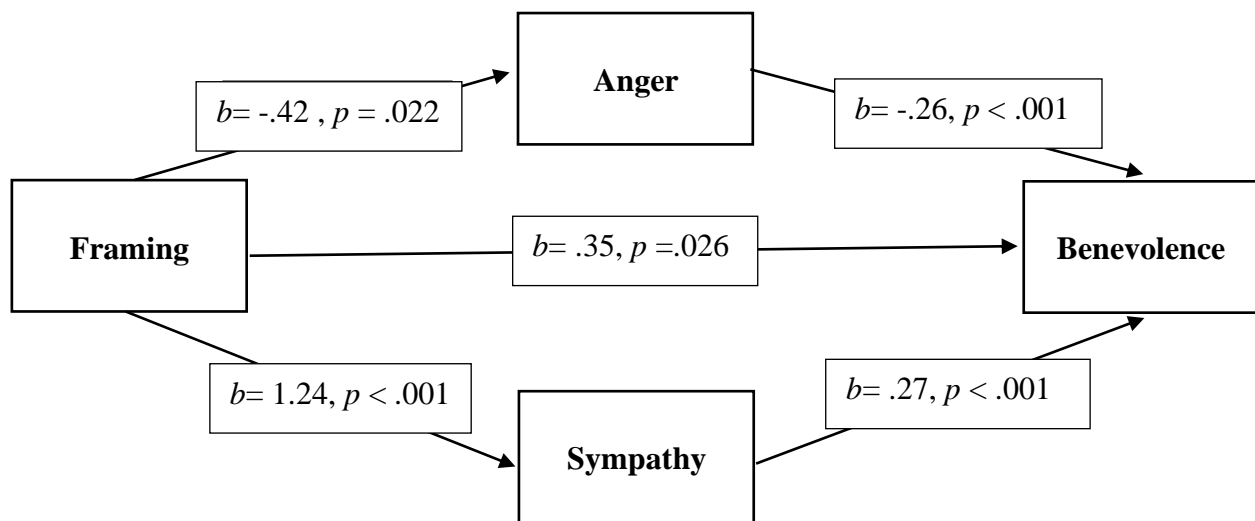
All in all, hypothesis 7c can be supported since emotions significantly mediate the relationship between framing and reputation as well as framing and trust.

4.6.Privacy Attitude Covariate

In order to determine participants' attitudes towards the crisis scenario that involved privacy violation used in the manipulations, three statements "I find it important to have control over the use of my personal information online", "I find it important that I can determine who should have access to my personal information online", and "I am convinced that my information privacy online should be respected and protected" were utilized. Participants generally found it important to have control over the usage of their data (M = 5.98, SD = 1.09), they also found it vital to determine who can access their data (M = 6.21, SD = 1.00), they were also convinced that their data should be respected (M = 6.31, SD = 0.90). In general, the respondents were conscious of online privacy. However, MANCOVA showed that the co-variate did not have any significant effect on the dependent variables (see Table 11).

Table 15

Overview of the hypothesis and results

No	Hypothesis	Result
H1	Responding to an intentional crisis proactively would a) increase consumer sympathy towards the organization and b) reduce anger compared to a reactive response.	Not supported
H2	Responding to an intentional crisis with a video would a) increase consumer sympathy towards the organization and b) reduce anger compared to responding with text	Not supported
H3	Responding to an intentional crisis emotionally would a) increase consumer sympathy towards the organization and b) reduce anger compared to a neutral response.	Supported
H4	Responding to an intentional crisis proactively with text would a) increase consumer sympathy towards the organization and b) reduce anger compared to responding with video.	Supported: 4a Not supported: 4b
H5	Responding to an intentional crisis proactively neutrally would a) increase consumer sympathy towards the organization and b) reduce anger compared to responding with emotion.	Not supported
H6	Responding to an intentional crisis neutrally with a video would a) increase consumer sympathy towards the organization and b) reduce anger compared to responding with text.	Not supported
H7	Effect of a) timing, b) channel, and c) framing on reputation and trust is mediated by emotion towards the organization.	Supported: 7c Not supported: 7a, 7b

5. Discussion

5.1.Discussion of Results

Organizations' reputations can be damaged by crises, which can compromise their numerous assets. Responding appropriately to crises can help to limit reputational harm. Intentional crises frequently necessitate an apology from the party at blame (Coombs, 2007). Various studies on corporate apologetics and crisis communication exist, however owing to the increased use of social media, many of them do not reflect today's digital world (Cheng, 2016; Wang et al., 2021). Social media has transformed crisis communication due to its capacity to reach a broader audience. This research attempted to see to what extent time, channel, and framing affect an organization's perceived reputation and trust when it apologizes for an intentional crisis on social media. Using eight distinct scenarios to investigate the time, channel, and framing of an apology revealed some significant findings. First, the individual effects of timing, channel, and framing on consumer affective response will be evaluated. Second, the interaction effect of these variables on the mediator will be analysed. Thirdly, the mediation effect on reputation and trust will be discussed. Finally, the effect of the co-variate, privacy attitude, on the dependent variables will be mentioned.

Firstly, the individual effects of timing, channel, and framing on consumer affective response were considered. Timing and channel individually do not significantly influence the emotive reaction of the customer. This goes against the hypothesised association, and it might be because these factors are too subtle in this study to have a significant impact on consumer's emotive response when considered individually. However, in line with the hypothesis, the results suggest that neutral framing, when apologizing for an intentional crisis, generates more anger compared to emotional framing. Conceivably, in contrast to neutral framing, emotional framing

showed higher degrees of sympathy. The results were consistent with the argumentations that emotional framing aids in increasing sympathy since harnessing emotion makes a company seem more genuine (Allen & Caillouet, 1994; Coombs & Holladay, 1996) and as if it is taking on more responsibility (Claeys et al., 2013; Coombs, 2007). In addition, utilizing emotion helps the organization to show its dedication to individuals impacted by the problem and reduce anger (Coombs & Holladay, 2009). Thereby, when apologizing for an intentional crisis, to raise sympathy emotionally framed apology ought to be used.

Secondly, the interaction effects were hypothesized to differ from the main effects due to their nature of interplay. The results suggest that response with proactive timing and text as the channel rather than video raises the level of sympathy. Since the nature of the proactive timing response type is to inform the public about the crisis and how it is being handled, the text shows the competence of the organization (Lee, 2020). Conversely, responding with a video rather than a text increased sympathy in the reactive condition. This is because it indicates that the organization is taking on more responsibility, elicits additional framing, and illustrates that they value this issue (Entman, 1993).

Moreover, in accordance with the current study's reasoning, the emotionally framed video channel elicited more sympathy than the text channel. Interestingly, the results suggest that using text rather than video for neutrally framed communication provides more sympathy. Both of these findings can be explained by the claims made by Entman (1993) and Jacob et al. (2013). The video channel has non-verbal cues embedded in the message (Entman, 1993). The consumers' ability to concurrently monitor verbal and non-verbal information increases the accuracy of their judgements. To have a mutual comprehension of regret, the message sender ought to convey appropriate non-verbal emotions (Jacob et al., 2013). The emotionally framed

video reinforced the sentiments of regret by providing coherent verbal and non-verbal emotions, meanwhile, the neutral video failed to do this.

Interestingly, both interactions with the channel type variable did not have a significant influence on anger. The reason for both interplays not affecting anger can be because it is a very strong sentiment due to the nature of the crisis. Therefore, the subtle manipulations could only affect the level of sympathy the consumers have rather than the anger. Yet, the fact that channel type interacts with framing and timing to affect consumer sympathy contradicts the claims of Coombs and Holladay (2009). They had concluded that there were no significant differences in the effect the channel type has on crisis communication. Further, they argued that the combination of video and text should be utilized in order to reach as many people as possible. Therefore, although in 2009 channel type did not significantly affect crisis communication, in today's world it appears to influence it. Henceforth, using a combination of text and video may no longer be an effective crisis communication strategy.

In addition, contrary to the hypothesis, the results suggested that the interaction of framing and timing had no significant effect on consumer affective response. This may be caused by the limitations of this study. Further research is needed to verify whether this interaction affects consumer emotions towards the organization.

Thirdly, in this study, the mediating role of consumer affective response was investigated. The findings show that stakeholder emotion mediates framing's impact on an organization's reputation and trust, which is consistent with the hypothesis. Honing in on the mediation of consumer affective response between framing and reputation several aspects ought to be discussed. To start with, the results indicate that framing communications in an emotional or neutral way affects the emotions of the viewer which, as a result, alters the reputation of the

organization. The more emotive an apology statement is, the more sympathy it produces, and the less damage it does to the organization's reputation. An interpretation could be that the more emotion displayed by the organization, the more responsibility it appears to assume by demonstrating regret for the event. This is in line with Coombs' (2007) Situational Crisis Communication Theory, which claims that crisis responsibility has an impact on stakeholder emotions.

Nonetheless, there are two aspects to consider relating to SCCT. First, when it comes to the predominance of crisis responsibility, it depends on certain situations to evaluate it as negative or positive for corporate reputation. To illustrate, a high level of crisis responsibility can exhibit less potential damage to that reputation than when the organization does not apologize. Secondly, while the findings of this study indicate that consumer affective response influenced by framing has an impact on reputation, this is in contrast to Coombs' (2007) notion that emotions only affect behavioural intentions and not reputation.

It is crucial to consider the role of emotions in trusting relationships in order to address the mediation of consumer affective response between framing and trust. Emotions that the trustee has toward the trustor, according to literature (e.g., Schniter et al., 2020 and Valette-Florence & Valette-Florence, 2020), can assist predict future trust-related interactions. This is because a feeling experienced by a trustor is an interpretation of an event, in this case, the crisis response. Furthermore, by conforming to societal expectations of stakeholders even when the situation contradicts them, emotional framing can help an organization appear more legitimate and normalize the issue (Allen & Caillouet, 1994; Coombs & Holladay, 1996). As a result, the findings show that emotional framing has an impact on how stakeholders perceive the issue and fosters sympathy, which has a beneficial impact on their trust in the organization.

Last but not least, the privacy attitude of the stakeholders was measured in order to observe how their consciousness about the issue would play a role in their perception of the reputation and trust of the organization. Although the study demonstrates a negative correlation between privacy attitude and stakeholders' sympathy, suggesting that the more privacy-conscious the less sympathy they feel towards the organization, it did not have a significant effect on the general findings. This might be an indication of how the crisis is handled can surpass the initial attitude towards the issue at hand.

5.2. Implications

Certain crisis communication strategies are required depending on the type of crisis; in the case of a deliberate crisis, the strategy is to apologize. The current study looked into how organizations might apologize after an intended crisis in order to protect their reputations and trustworthiness. Various implications have been identified as a result of this study's findings.

First and foremost, the experiment contributes to the comprehension of the relationship between initial attitudes toward a crisis and crisis communication. The way a crisis is handled can surpass the initial attitude that stakeholders have towards the issue. This finding emphasizes the significance of crisis communication tactics and how they can make or break an organization's reputation and trust. Secondly, incorporating an emotional framing into the crisis response enhances sympathy while limiting anger, which fosters reputation and trust. As a result, an organization's use of emotional framing while apologizing may be more beneficial. Accordingly, this finding adds to the existing Situational Crisis Communication Theory, it suggests that stakeholder emotions are a bigger factor in crisis communication for impacting reputation. More research may be required to incorporate emotions into the SCCT, as it is apparent that emotions play a larger role than originally assumed. Finally, when deciding on the

channel type for the apology statement, the results should be considered. In contrast to Coombs (2009), this study discovered a significant effect of channel type on an organization's reputation and trustworthiness. While it is recommended that text be used with proactive timing and video be used with reactive timing, emotionally framed video can promote sympathy.

Overall, different types of crisis circumstances necessitate different types of crisis communications. In order to protect organizational reputation and trust, it is critical to evaluate factors that can help generate more positive and less negative stakeholder feelings.

5.3. Limitations and Recommendations

The findings of this study ought to be considered in light of various limitations, which can provide insight into future research recommendations. Firstly, the experiment's population was not confined to a specific nationality or age range. This was owing to the practicality of data collection as well as the nature of the crisis scenario. Nonetheless, it imposed a restriction on analysing a specific population. Nationalities have different trusting beliefs due to culture, norms, values, underlying behavioural assumptions and cognitive processes (Doney et al., 1998). Therefore, the results may have been impacted by these differences in the data. Future research can consider a more specific population to analyse online crises.

In addition, the sample size was reduced by half since 202 participants were excluded for improperly answering the manipulation check questions. The reason for this may be that some manipulations may have been subtle that participants could not recognize them. As a result, the significance of the results may have been impacted as a result of the decrease in sample size. Removing the individuals from the sample, on the other hand, helped to produce more reliable results.

Thirdly, the hypothesis was susceptible to considerable interpretation due to a dearth of research on online crisis communication. For instance, the post-crisis reputation scale (Coombs & Holladay, 2002) overlapping with the trust scale (Paine, 2003) resulted in the adjustment of the reputation scale (Chun, 2005) to fit the case of this study. Nonetheless, this resulted in this study to challenge some founding theories on crisis communication. Future research ought to examine expanding the post-crisis reputation scale, as the findings support that trust is not the only factor to consider when assessing a party after a crisis.

Lastly, methodological choices were constrained by the absence of the likability scale to measure the spokesperson of the organization. This could possibly have resulted in inaccurate measurement of the video channel creating more questions regarding its physical aspects of it. To demonstrate, likability, charisma, and the gender of the spokespersons, as well as the setting's influence on organizational reputation and trust. Nevertheless, the results of this study, which reveal that channel type is a significant factor, provide grounds for future research to take these characteristics into account.

6. Conclusion

The main aim of this study was to address the lack of research on crisis communication on social media. Timing, channel, and framing were taken into account to study how they influence the perceived reputation and trust of an organization apologising for an intentional crisis on social media. Furthermore, their interaction effect, as well as the mediation of consumer affective response, were considered. The initial stakeholder attitude towards privacy was also regarded as a vital variable in this experimental study.

The findings indicated that framing had a main effect on the reputation and trust of an organization with the mediation of consumer affective response. Emotionally framing a crisis message can aid in generating sympathy and positively influence the reputation and trustworthiness of an organization. In addition, it is argued that the interaction of proactive timing and text channel builds sympathy and increases reputation. The results of the interaction of reactive timing have been interpreted as the utilization of video channels can be more beneficial. Moreover, since it generates more sympathy and better levels of reputation, emotive video has been viewed as an effective means of responding to an intentional crisis. The need of employing an appropriate crisis communication strategy has been reaffirmed with the findings from the initial stakeholder attitude. It demonstrated that the manner the intended crisis is managed outweighs the stakeholders' prior attitudes toward the issue. Finally, the founding theories and scales of crisis communication and reputation management need an evaluation to fit into today's world.

In essence, this study shows that crisis communication ought to be approached holistically. Organizations must construct an appropriate crisis communication strategy in line with the characteristic of the crisis they are dealing with.

References

Allen, M.W., & Caillouet, R.H. (1994). Legitimation endeavors: Impression management
strategies used by an organization in crisis. *Communication Monographs, 61*, 44-62.
https://doi.org/10.1080/03637759409376322

Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The future of social media in
marketing. *Journal of the Academy of Marketing Science*, *48*(1), 79–95.
https://doi.org/10.1007/s11747-019-00695-1

Austin, L., Fisher Liu, B., & Jin, Y. (2012). How Audiences Seek Out Crisis Information:
Exploring the Social-Mediated Crisis Communication Model. *Journal of Applied
Communication Research*, *40*(2), 188–207.
https://doi.org/10.1080/00909882.2012.654498

Beldad, A. D. (2016). Sealing one's online wall off from outsiders. *International Journal of
Technology and Human Interaction*, *12*(1), 21–34.
https://doi.org/10.4018/ijthi.2016010102

Beldad, A. D., van Laar, E., & Hegner, S. M. (2017). Should the shady steal thunder? The effects
of crisis communication timing, pre-crisis reputation valence, and crisis type on post-crisis
organizational trust and purchase intention. *Journal of Contingencies and Crisis
Management*, *26*(1), 150–163. https://doi.org/10.1111/1468-5973.12172

Bryson, J. M. (2004). What to do when Stakeholders matter. *Public Management Review*, *6*(1),
21–53. https://doi.org/10.1080/14719030410001675722

Carmeli, A., & Tishler, A. (2005). Perceived organizational reputation and organizational
performance: An empirical investigation of industrial enterprises. *Corporate Reputation
Review*, *8*(1), 13–30. https://doi.org/10.1057/palgrave.crr.1540236

Chun, R. (2005). Corporate reputation: Meaning and measurement. *International Journal of Management Reviews*, *7*(2), 91–109. https://doi.org/10.1111/j.1468-2370.2005.00109.x

Claeys, A.-S., Cauberghe, V., & Leysen, J. (2013). Implications of stealing thunder for the impact of expressing emotions in organizational crisis communication. *Journal of Applied Communication Research*, *41*(3), 293–308. https://doi.org/10.1080/00909882.2013.806991

Coombs, W. T. (1995). Choosing the right words: The development of guidelines for the selection of the "appropriate" crisis-response strategies. *Management Communication Quarterly, 8*(4), 447–476. https://doi.org/10.1177/0893318995008004003

Coombs, W. T. (2006). The protective powers of crisis response strategies. *Journal of Promotion Management, 12*(3-4), 241–260. https://doi.org/10.1300/j057v12n03_13

Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review, 10*(3), 163–176. https://doi.org/10.1057/palgrave.crr.1550049

Coombs, W. T. (2010). Parameters for Crisis Communication. In W. T. Coombs & S. J. Holladay (Eds.), *The Handbook of Crisis Communication* (pp. 17–53). Wiley.

Coombs, W. T., & Holladay, S. J. (1996). Communication and Attributions in a Crisis: An Experimental Study in Crisis Communication. *Journal of Public Relations Research*, *8*(4), 279–295. https://doi.org/10.1207/s1532754xjprr0804_04

Coombs, W. T., & Holladay, S. J. (2002). Helping crisis managers protect reputational assets. *Management Communication Quarterly, 16*(2), 165–186. https://doi.org/10.1177/089331802237233 64

Coombs, W. T., & Holladay, S. J. (2005). An exploratory study of stakeholder emotions: Affect and crises. *Research on Emotion in Organizations*, 263–280. https://doi.org/10.1016/s1746-9791(05)01111-9

Coombs, W. T., & Holladay, S. J. (2009). Further explorations of post-crisis communication: Effects of media and response strategies on perceptions and intentions. *Public Relations Review*, *35*(1), 1–6. https://doi.org/10.1016/j.pubrev.2008.09.011

Cooper, A. H. (2002). Media framing and social movement mobilization: German peace protest against INF missiles, the Gulf War, and NATO peace enforcement in Bosnia. *European Journal of Political Research*, *41*(1), 37–80. https://doi.org/10.1111/1475-6765.00003

Cornelissen, J. (2017). *Corporate communication. A guide to theory and practice* (5th ed.). SAGE Publications.

Doney, P. M., Cannon, J. P., & Mullen, M. R. (1998). Understanding the Influence of National Culture on the Development of Trust. *Academy of Management Review*, *23*(3), 601–620. https://doi.org/10.5465/amr.1998.926629

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, *43*(4), 51–58. https://doi.org/10.1111/j.1460-2466.1993.tb01304.x

Fediuk, T. A., Pace, K. M., & Botero, I. C. (2010). Crisis Response Effectiveness: Methodological Considerations for Advancement in Empirical Investigation into Response Impact. In W. T. Coombs & S. J. Holladay (Eds.), *The Handbook of Crisis Communication* (pp. 221–242). Wiley.

Foote, L. M. (2012). Honing crisis communication skills. *Journal of Management Education*, *37*(1), 79–114. https://doi.org/10.1177/1052562912455419

Greenwood, M., & van Buren III, H. J. (2010). Trust and stakeholder theory: Trustworthiness in the organisation–stakeholder relationship. *Journal of Business Ethics*, *95*(3), 425–438. https://doi.org/10.1007/s10551-010-0414-4

Halse, S. E., Tapia, A., Squicciarini, A., & Caragea, C. (2017). An emotional step toward automated trust detection in crisis social media. *Information, Communication & Society*, *21*(2), 288–305. https://doi.org/10.1080/1369118x.2016.1272618

Hayes, A. F. (2022). *Introduction to Mediation, Moderation, and Conditional Process Analysis, Third Edition: A Regression-Based Approach (Methodology in the Social Sciences)* (Third ed.). The Guilford Press.

Hosmer, L. T. (1995). Trust: The Connecting Link between Organizational Theory and Philosophical Ethics. *The Academy of Management Review*, *20*(2), 379–403. https://doi.org/10.2307/258851

Ingenhoff, D., & Sommer, K. (2010). Trust in companies and in CEOs: A comparative study of the main influences. *Journal of Business Ethics*, *95*(3), 339–355. https://doi.org/10.1007/s10551-010-0363-y

Jacob, H., Bruck, C., Domin, M., Lotze, M., & Wildgruber, D. (2013). I Can't Keep Your Face and Voice Out of My Head: Neural Correlates of an Attentional Bias Toward Nonverbal Emotional Cues. *Cerebral Cortex*, *24*(6), 1460–1473. https://doi.org/10.1093/cercor/bhs417

Jacob, H., Kreifelts, B., Bruck, C., Erb, M., Hosl, F., & Wildgruber, D. (2012). Cerebral integration of verbal and nonverbal emotional cues: Impact of individual nonverbal dominance. *NeuroImage*, *61*(3), 738–747. https://doi.org/10.1016/j.neuroimage.2012.03.085

Jin, Y., & Liu, B. F. (2010). The Blog-Mediated Crisis Communication Model:

    Recommendations for Responding to Influential External Blogs. *Journal of Public*

    Relations Research, *22*(4), 429–455. https://doi.org/10.1080/10627261003801420

Jin, Y., Liu, B. F., & Austin, L. L. (2011). Examining the Role of Social Media in Effective

    Crisis Management. *Communication Research*, *41*(1), 74–94.

    https://doi.org/10.1177/0093650211423918

Ku, A. S. (2001). The `Public' up Against the State. *Theory, Culture & Society*, *18*(1), 121–144.

    https://doi.org/10.1177/02632760122051670

Lee, S. Y. (2020). Stealing thunder as a crisis communication strategy in the Digital age.

    Business Horizons, *63*(6), 801–810. https://doi.org/10.1016/j.bushor.2020.07.006

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology, 22*

    140, 55.

Luoma-aho, V. (2009), "Love, hate and surviving stakeholder emotions", in Yamamura, K.

    (Ed.), 12th Annual International Public Relations Research Conference, University of

    Miami, Coral Gables, FL, pp. 323-333.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational

    trust. *Academy of Management Review*, *20*(3), 709–734.

    https://doi.org/10.5465/amr.1995.9508080335

McDonald L. M., Glendon A. I., & Sparks B. (2011), Measuring consumers' emotional reactions

    to company crises: Scale development and implications, In R. Ahluwalia, T. L. Chartrand,

    & R. K. Ratner *NA - Advances in Consumer Research* Volume 39, eds., Association for

    Consumer Research, 333-340.

McDonald, L. M., Sparks, B., & Glendon, A. I. (2010). Stakeholder reactions to company crisis

communication and causes. *Public Relations Review*, *36*(3), 263–271.

https://doi.org/10.1016/j.pubrev.2010.04.004

Mulford, M., Orbell, J., Shatto, C., & Stockard, J. (1998). Physical Attractiveness, Opportunity,

and Success in Everyday Exchange. *American Journal of Sociology*, *103*(6), 1565–1592.

https://doi.org/10.1086/231401

Paine, K. D. (2003). Guidelines for measuring trust in organizations. Retrieved

from http://www.instituteforpr.org/wp-content/uploads/2003_MeasuringTrust.pdf

Park, S. J., MacDonald, C. M., & Khoo, M. (2012). Do you care if a computer says sorry?

Proceedings of the Designing Interactive Systems Conference on - DIS '12.

https://doi.org/10.1145/2317956.2318067

Patel, A., & Reinsch, L. (2003). Companies can apologize: Corporate apologies and legal

liability. *Business Communication Quarterly*, *66*(1), 9–25.

https://doi.org/10.1177/108056990306600103

Pew Internet & American Life Project. (2006). Blogger callback survey. Retrieved from

http://www. pewinternet.org

Pew Internet & American Life Project. (2010). Web 2.0. Retrieved from

http://www.pewinternet.org/topics/ Web-20.

Pfau, M., & Wan, H.-H. (2006). Persuasion: An intrinsic function of public relations. In C. H.

Botan & V. Hazleton (Eds.), *Public relations theory II* (pp. 101–136). Lawrence Erlbaum

Associates Publishers.

Procopio, C. H., & Procopio, S. T. (2007). Do You Know What It Means to Miss New Orleans?

Internet Communication, Geographic Community, and Social Capital in Crisis. *Journal*

of Applied Communication Research, *35*(1), 67–87.

https://doi.org/10.1080/00909880601065722

Roshan, M., Warren, M., & Carr, R. (2016). Understanding the use of social media by

organisations for crisis communication. *Computers in Human Behavior*, *63*, 350–361.

https://doi.org/10.1016/j.chb.2016.05.016

Schniter, E., Shields, T., & Sznycer, D. (2020). Trust in humans and robots: Economically

similar but emotionally different. *Journal of Economic Psychology*, *78*, 102253.

https://doi.org/10.1016/j.joep.2020.102253

Schultz, F., Utz, S., & Göritz, A. (2011). Is the medium the message? Perceptions of and

reactions to crisis communication via twitter, blogs and traditional media. *Public

Relations Review*, *37*(1), 20–27. https://doi.org/10.1016/j.pubrev.2010.12.001

Siomkos, G. J. (1999). On achieving exoneration after a product safety industrial crisis. *Journal

of Business & Industrial Marketing*, *14*(1), 17–29.

https://doi.org/10.1108/08858629910254076

Ulmer, R. R. (2012). Increasing the impact of thought leadership in crisis communication.

Management Communication Quarterly, *26*(4), 523–542.

https://doi.org/10.1177/0893318912461907

Valette-Florence, R., & Valette-Florence, P. (2020). Effects of emotions and brand personality

on consumer commitment, via the mediating effects of brand trust and attachment.

Recherche et Applications En Marketing (English Edition), *35*(1), 84–110.

https://doi.org/10.1177/2051570720905703

van der Meer, T. G. L. A., & Verhoeven, J. W. M. (2014). Emotional crisis communication.

Public Relations Review, *40*(3), 526–536. https://doi.org/10.1016/j.pubrev.2014.03.004

van Prooijen, J. W., & Douglas, K. M. (2017). Conspiracy theories as part of history: The role of societal crisis situations. *Memory Studies*, *10*(3), 323–333. https://doi.org/10.1177/1750698017701615

Walker, M., & Matsa, K. E. (2021, September 20). News Consumption Across Social Media in 2021. Pew Research Center's Journalism Project. Retrieved 22 March 2022, from https://www.pewresearch.org/journalism/2021/09/20/news-consumption-across-social-media-in-2021/

Wang, L., Schuetz, C. G., & Cai, D. (2021). Choosing Response Strategies in Social Media Crisis Communication: An Evolutionary Game Theory Perspective. *Information & Management*, *58*(6), 103371. https://doi.org/10.1016/j.im.2020.103371

Wartick, S. L. (1992). The relationship between intense media exposure and change in corporate reputation. *Business & Society*, *31*(1), 33–49. https://doi.org/10.1177/000765039203100104

Xie, Y., & Peng, S. (2009). How to repair customer trust after negative publicity: The roles of competence, integrity, benevolence, and forgiveness. *Psychology and Marketing*, *26*(7), 572–589. https://doi.org/10.1002/mar.20289

Xu, J. (2020). Does the medium matter? A meta-analysis on using social media vs. traditional media in crisis communication. *Public Relations Review*, *46*(4), 101947. https://doi.org/10.1016/j.pubrev.2020.101947

Appendix A
Questionnaire

Dear participant,

Thank you for your interest in participating in this research project! Before the experiment starts, it is important that you are well-informed about the procedure. Therefore, please read this information letter carefully and do not hesitate to ask for clarification about this text or the general procedure.

The aim of this study is to get an insight into what is the most suitable way for organizations to apologize for mistakes they make on social media. This will be done by filling out this survey consisting out of different styles of questions. This study will take you approximately 5 minutes to complete. Your personal information will remain confidential and will not be shared without your explicit consent. Your research data will be analysed to answer the research question as described above in the aim of this research.

Note that that further processing of your data is possible if this is compatible with this purpose. Completely anonymized data can be made publicly accessible. You can refuse to participate in the research or withdraw from the experiment at any time without having to provide an explanation. You have up to 7 days after participating in this experiment to withdraw your permission to allow your answers or data to be used in the research.

For more information about the research or to withdraw your permission to allow your data to be processed, you are welcome to contact the researcher Elif Ozer (e.ozer-1@student.utwente.nl). If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Secretary of the Ethics Committee/domain Humanities & Social Sciences of the Faculty of Behavioural, Management and Social Sciences at the University of Twente by ethicscommittee-hss@utwente.nl.

I hope to have provided you with sufficient information. I would like to take this opportunity to thank you in advance for your assistance with this research. If you would like to participate in the survey, click on "Yes" below.

With this you declare:
- I am 16 years or older.
- I have read and understood the information.
- I agree to participate in the study and to use the data obtained with it.
- I reserve the right to withdraw this consent without giving any reason.
- I reserve the right to stop the study at any time I wish.

○ Yes, I consent.

To what extent do you agree or disagree with the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I find it important to have control over the use of my personal information online.	○	○	○	○	○	○	○
I find it important that I can determine who should have access to my personal information online.	○	○	○	○	○	○	○
I am convinced that my information privacy online should be respected and protected.	○	○	○	○	○	○	○

In the following part of this questionnaire, you will observe a fictious crisis scenario and how the company has responded to this. Please observe it carefully.

A messaging app called "Walkie Talkie" which you regularly use to communicate with others has been hit by a data breach crisis. The company's employee has posted sensitive information on their social media account causing the personal data of millions that use the app to be accessible by anyone. Although they have removed their post, it has caused damage to the company.

*** Stimulus Material***

To what extent do you agree or disagree with the following statements after observing Walkie Talkie's response?

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
This organization stands behind its services	○	○	○	○	○	○	○
This organization has excellent leadership	○	○	○	○	○	○	○
This organization is well managed	○	○	○	○	○	○	○
This organization maintains a high standard in the way it treats people	○	○	○	○	○	○	○

To what extent do you agree or disagree with the following statements after observing Walkie Talkie's response?

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I feel very confident about Walkie Talkie's skills.	○	○	○	○	○	○	○
Walkie Talkie has the ability to accomplish what it says it will do.	○	○	○	○	○	○	○
Walkie Talkie is known to be successful at the things it tries to do.	○	○	○	○	○	○	○

Walkie Talkie treats people like me fairly and justly.	○	○	○	○	○	○	○
Sound principles seem to guide Walkie Talkie's behavior.	○	○	○	○	○	○	○
Walkie Talkie does not mislead people like me.	○	○	○	○	○	○	○
Whenever Walkie Talkie makes an important decision, I know it will be concerned about people like me.	○	○	○	○	○	○	○
Walkie Talkie can be relied on to keep its promises	○	○	○	○	○	○	○
I think it is important to watch Walkie Talkie closely so that it does not take advantage of people like me.	○	○	○	○	○	○	○
I am willing to let Walkie Talkie make decisions for people like me.	○	○	○	○	○	○	○
I believe that Walkie Talkie takes the opinions of people like me into account when making decisions.	○	○	○	○	○	○	○

"When I think about Walkie Talkie, I feel..."

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
angry	○	○	○	○	○	○	○
annoyed	○	○	○	○	○	○	○
disgusted	○	○	○	○	○	○	○
outraged	○	○	○	○	○	○	○
sympathetic	○	○	○	○	○	○	○
sorry	○	○	○	○	○	○	○
compassion	○	○	○	○	○	○	○
empathy	○	○	○	○	○	○	○

Please observe the response again to accurately answer the last set of questions.

*** Stimulus Material***

The crisis response was sent using a...

○ Text
○ Video

The crisis response was...

○ first announced by Walkie Talkie
○ Walkie Talkie's reaction to news

To what extent do you agree or disagree with the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The response sounds emotional	○	○	○	○	○	○	○
The response expresses regret	○	○	○	○	○	○	○
The response shows Walkie Talkie is ashamed about the crisis	○	○	○	○	○	○	○
The response has dramatic elements	○	○	○	○	○	○	○

Where are you from?

[⌄]

How do you describe yourself?

○ Male

○ Female

○ Non-binary / third gender

○ Prefer not to say

What describes you best?

○ Bachelor's student

○ (Pre) Master's student

○ Ph.D. student

○ Employed

How old are you?

16 20 25 29 33 38 42 46 51 55 59 63 68 72 76 81 85

Appendix B
Stimuli

Proactive, Neutral and Text

Walkie Talkie ✔ @WalkieTalkie · 3h

A statement from the CEO, Andrew Wallace, concerning the data breach incident.

Walkie Talkie has a responsibility to protect your data. Earlier today our security department informed us that your data became accessible to anyone for a couple of minutes due to an accident. I would like to apologize for this data breach.

The situation has been reported to the relevant authorities. None of your financial data or passwords were compromised during this breach. However, some personally identifiable information, as well as unstructured data, might have been exposed. If you have questions about this incident, contact Customer Care at your convenience.

We take the security of your information seriously and are working on making Walkie Talkie safer for you.

Andrew Wallace
CEO of Walkie Talkie

💬 67   ↻ 87   ♡ 691   ⤳

Proactive, Emotional and Text

Walkie Talkie ✔ @WalkieTalkie · 3h

A statement from the CEO, Andrew Wallace, concerning the data breach incident.

Walkie Talkie has a responsibility to protect your data. Earlier today our security department informed us that your data became accessible to anyone for a couple of minutes due to an accident. This was not only a breach of data but also a breach of trust. On behalf of Walkie Talkie, I am extremely sorry and ashamed for failing to fulfil our responsibility.

The situation has been reported to the relevant authorities. None of your financial data or passwords were compromised during this breach. However, some personally identifiable information, as well as unstructured data, might have been exposed. If you have questions about this incident, please contact Customer Care at your convenience.

We sincerely value the security of your information and are intensely working on making Walkie Talkie safer for you. I truly regret this incident occurring and hope to gain back your trust one step at a time.

Andrew Wallace
CEO of Walkie Talkie

💬 67   ↻ 87   ♡ 691   ⤳

Reactive, Neutral and Text

Walkie Talkie ✔ @WalkieTalkie · 3h

A statement from the CEO, Andrew Wallace, concerning the data breach incident.

> Walkie Talkie has a responsibility to protect your data. I am making this statement in response to the published news about the data breach incident. Yesterday your data became accessible to anyone for a couple of minutes due to an accident. I would like to apologize for this data breach.
>
> The situation has been reported to the relevant authorities. None of your financial data or passwords were compromised during this breach. However, some personally identifiable information, as well as unstructured data, might have been exposed. If you have questions about this incident, contact Customer Care at your convenience.
>
> We take the security of your information seriously and are working on making Walkie Talkie safer for you.
>
> *Andrew Wallace*
> CEO of Walkie Talkie

💬 67   🔁 87   ♡ 691   ⤵

Reactive, Emotional and Text

Walkie Talkie ✔ @WalkieTalkie · 3h

A statement from the CEO, Andrew Wallace, concerning the data breach incident.

> Walkie Talkie has a responsibility to protect your data. I felt obliged to make a statement in response to the published news about the data breach incident. Yesterday your data became accessible to anyone for a couple of minutes due to an accident. This was not only a breach of data but also a breach of trust. On behalf of Walkie Talkie, I am extremely sorry and ashamed for failing to fulfil our responsibility.
>
> The situation has been reported to the relevant authorities. None of your financial data or passwords were compromised during this breach. However, some personally identifiable information, as well as unstructured data, might have been exposed. If you have questions about this incident, please contact Customer Care at your convenience.
>
> We sincerely value the security of your information and are intensely working on making Walkie Talkie safer for you. I truly regret this incident occurring and hope to gain back your trust one step at a time.
>
> *Andrew Wallace*
> CEO of Walkie Talkie

💬 67   🔁 87   ♡ 691   ⤵

Appendix C
Items

Reputation (Chun, 2005)	
	Walkie Talkie stands behind its services.
	Walkie Talkie has excellent leadership.
	Walkie Talkie is well managed.
	Walkie Talkie maintains a high standard in the way it treats people.
Trust (Paine, 2003)	
Ability	I feel very confident about Walkie Talkie's skills.
	Walkie Talkie has the ability to accomplish what it says it will do.
	Walkie Talkie is known to be successful at the things it tries to do.
Integrity	Walkie Talkie treats people like me fairly and justly.
	Sound principles seem to guide Walkie Talkie's behaviour.
	Walkie Talkie does not mislead people like me.
	Whenever Walkie Talkie makes an important decision, I know it will be concerned about people like me.
Benevolence	Walkie Talkie can be relied on to keep its promises.
	I believe that Walkie Talkie takes the opinions of people like me into account when making decisions.
	I am willing to let Walkie Talkie make decisions for people like me.
	I think it is important to watch Walkie Talkie closely so that it does not take advantage of people like me. *(reversed)*
Emotion (McDonald et al., 2011)	
Anger	When I think about Walkie Talkie, I feel angry.
	When I think about Walkie Talkie, I feel annoyed.
	When I think about Walkie Talkie, I feel disgusted.
	When I think about Walkie Talkie, I feel outraged.
Sympathy	When I think about Walkie Talkie, I feel sympathetic.
	When I think about Walkie Talkie, I feel sorry.
	When I think about Walkie Talkie, I feel compassion.
	When I think about Walkie Talkie, I feel empathy.
Privacy valuation (Beldad, 2016)	
	I find it important to have control over the use of my personal information online.
	I find it important that I can determine who should have access to my personal information online.
	I am convinced that my information privacy online should be respected and protected.