# You Cannot Stay Mad At This Face…Can You?

## The Relationship Between Message Delivery, Crisis Responsibility and Public Responses To Crisis.

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## Abstract

During a crisis organizations see their finances and reputation on the line as the public reacts to the crisis. Therefore, a crisis calls for immediate and adequate organizational responses to limit the negative public responses as much as possible. However, the responsibility an organization has to take for the crisis event differs and depends on the context of the crisis. Coombs (2007) provided a guideline of three different crisis clusters with low, moderate and high crisis responsibility. Dependent on the cluster different crisis responses are more suitable than others. Apology has been found to be a very effective response for moderate and high crisis responsibility situations. The delivery of this crisis response can differ in the level of media richness. This study measures the public responses of public anger, negative word-of-mouth, negative intentions of the CEO and the company, trust in the company's actions and competencies and forgiveness. A 2 (media richness: low vs. high) x 2 (crisis responsibility: moderate vs. high) design was used to explore how these variables influence the public responses of a crisis. Media richness was tested by using video taped and written apologies. The results show a significant impact of crisis responsibility on the dependent variables. No influence was found for message delivery as well as no interaction effect between crisis responsibility and message delivery.

**Keywords**

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# 1    Introduction

In today's society the internet became one of the most important communication channels ever since. It is used for a variety of interaction and communication. As part of this social media, for example, offer a great opportunity to network and to reach a big audience in a short amount of time. In the context of danger and crisis this fast pace spread of information is a great opportunity to warn other people of a potential threat. The Love-Parade disaster which happened in Duisburg, Germany, in 2010 is one of these examples. Participants gathered to have an open-air party in Duisburg which ended in a disaster with a human stampede and 10 deaths. Participants made use of the social media network Twitter to warn other people to not attend the festival anymore during this disaster. The police often make use of such social media as well to warn and inform the public about suspects and other occurrences. Additionally, many people make use of the internet to receive their news. Here, the internet offers more possibilities to visually present the news but also other forms of responses (e.g. organizational spokesperson) than traditional media do. Therefore, the internet can be classified to be a richer medium than solely printed media.

However, in times of crisis, social media offer a shade side of the medal as well. The fast spread of rumors and the ability to attend any conversation is a potential threat to organizations. As summarized in Lambret and Barki (2018) the ability to "*add one's voice to the Internet conversation is a new power to influence held by social media users who are continuously reacting (rather than reasoning) to anything occurring online and offline.*". The potential organizational threat lies in the fast-growing conversation about the respective crisis, which can damage the organizational image and reputation if unanswered by the organization.

Consequently, organizations need to respond to the crisis to firstly warn its stakeholders of potential risks when using their products (e.g. food poisoning) and secondly to limit the reputational damage. Here, the internet offers a great opportunity to the organization in crisis as it grants access to the same big audience. According to crisis management literature different organizational responses are needed depending on the crisis context and the crisis responsibility held by the organization (Coombs, 2007). However, Benoit and Drew (1997) found evidence that apology messages seem to be more effective than denial or bolstering responses when crisis responsibility is moderate or high, and Kiambi and Shafer (2016) add that apology is more effective than compensation when the organization is highly responsible. Secondly, the internet offers a different message delivery than traditional media. It is possible to not only reach out to the public with a written organizational statement (as for example a newspaper would offer) but it is also possible to deliver a video tape message to directly address the public. By doing so the organizational spokesperson is given the possibility to express non-verbal communication such as honesty and

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shock in order to step up to the transgression. As described in Tang and Gray (2018) a spokesperson (e.g. CEO) can grant the organization a human face and emotions such as suffering and remorse, whereas organizations are generally seen as to lack these emotions. This is especially true for richer media.

Current literature often investigated which type of crisis response seems to be more adequate in the respective crisis context, but it was less focused upon the actual delivery of the response (video taped response vs. written response) in combination with the organizational crisis responsibility (moderate vs high). Further, the effects of message delivery type and crisis responsibility on public anger, negative word-of-mouth, negative intentions, distrust and forgiveness are examined. The general research question is formulated:

RQ:     *How do message delivery and corporate crisis responsibility affect the public responses of public anger, negative word-of-mouth, negative intentions, distrust and forgiveness*?

The objectives of this paper are to enrich this part of the crisis management literature by providing an overview of the current academic literature with focus on crisis management literature as a foundation for the framework. The second section of this paper presents the chosen methodology to test the proposed framework, followed by the analyses which are made. Lastly, suggestions for crisis management are made.

## 2 Theoretical Framework

Corporate crises have serious consequences for the organization and their stakeholders as well. Depending on the crisis context, stakeholders may be at risk not only financial wise (e.g. broken or not properly working devices) but even their health can be on the line (e.g. food poisoning). Therefore, the organization needs to respond to the crisis publicly in a fast and proper way to keep their stakeholders save and the consequences of the crisis at the lowest level possible. Secondly, corporate crises endanger the respective organization in different ways. Stakeholders may be driven to see the organization in a negative light or even decide to not engage with the organization anymore. As a result the organizational reputation or even the actual selling numbers decrease in a significant way. Therefore, crisis management needs to adequately and quickly respond to negative publicity in order to limit the damage (Coombs, 2007). This chapter will give an overview of the important variables in this study, followed by the formulation of the hypotheses.

### 2.1 Crisis response

When a company faces a corporate crisis, it is not only endangered financial wise, but also sees its corporate image and reputation on the line. Negative word-of-mouth and customer's negative future intentions can decrease the organizations selling numbers (Coombs, 2007). Therefore, the organization needs to keep the costs at the lowest level possible.

Crisis researchers emphasize that the organization in crisis should take immediate and adequate action in order to limit the damage it takes (Coombs, 2006; Chung & Lee, 2017). For each crisis, an organization has to take either low, moderate or high responsibility for that same crisis event. The situational crisis communication theory (SCCT) by Coombs (2007) provides guidelines to classify whether the level of responsibility is low, moderate or high and which crisis response is most appropriate. Additionally, the SCCT provides three clusters of crisis response strategies: (1) denial, (2) diminish and (3) rebuild strategies. These strategies are characterized as primary response strategies with *scapegoat* as an example for denial strategies where crisis management accuses a group or person outside the organization for the crisis. *Excuse* is an example for diminishing response strategies where it is tried to minimize organizational responsibility by claiming inability to control the crisis and lastly *apology* as an example of rebuild strategies.

Benoit and Drew (1997) investigated the effectiveness of different corporate reactions to crises and distilled corporate apology messages as more effective than denial or bolstering responses. The SCCT adds, that corporate apology messages should only be used when the organization has to take moderate or high responsibility for the occurrence of the crisis. In other words, why would someone apologize when she or he is not accountable for a certain event.

Secondly, according to Kiambi and Shafer (2016) a corporate apology is more effective than actual compensation for crises with high corporate crisis responsibility. Stakeholders were more positive towards organizations which offered apologies instead of compensation and were less angry towards those.

## 2.2 Public responses to corporate crisis

As apologetic messages try to limit the damage and the public's negative responses

The crisis response tries to mitigate the public's negative reactions to the crisis. These reactions can be anger and negative word-of-mouth (Coombs & Holladay, 2008) which may not only lead to stakeholders breaking interaction with the company but advice significant others to do the same as well. Being suspicious of the company or its employees and highly distrusting them can be a stakeholder reaction as well. Lastly, the ultimate goal of apologetic messages is to awaken forgiveness in the transgressed party and to reestablish the relationship. This part of the chapter gives deeper insight in these variables and explains their importance.

### *Public anger*

Coombs and Holladay (2008) identified public anger as a key factor following corporate crisis. Public anger, understood as anger of the broad public, is able to damage or even end an organization's relationships with important stakeholders. Additionally, public anger can have a negative impact on stakholder's word-of-mouth about the organization. These stakeholders may say bad things about the organization or advice their significant others not to engage with the organization. Kim and Cameron (2011) found evidence that anger has a negative relationship with corporate reputation. Therefore, public anger does threaten the organization in crisis directly. Furthermore, Coombs and Holladay (2007) found in their study about communication dynamics that anger is directly related to the level of crisis responsibility. This means, an organization with a high crisis responsibility will face a high level of public anger.

### *Negative word-of-mouth*

Word-of-mouth (WOM) is defined in Cheng, Lam and Hsu (2006 p.97) as "*an informal, person-to-person communication between a perceived noncommercial communicator and a receiver regarding a brand, a product, an organization, or a service*". WOM is very important in the context of buying behavior and purchase decisions. Often, especially when the decision to buy a certain product or service is perceived as ambiguous, people rely on the information and experiences of their significant others regarding the product. As crisis awakes customer anger, as already discussed earlier in this

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paragraph, negative WOM is expected to be a direct consequence of corporate crisis. This is in line with the study of Coombs and Holladay (2008).

In the study of Cheng, Lam and Hsu (2006) negative WOM is divided into two parts. First, negative WOM can be a type of retaliatory action which can be defined as a sort of revenge and to actually hurt the organization. Secondly, negative WOM is used to warn others that there might be a risk when consuming the product or service of an organization. In this study, both types of negative WOm are included as both are considered as damaging the organization.

Jung and Seock (2017) argue that organizational apology following a crisis positively affects customer's perceptions of justice, which in return impacts customers perceived satisfaction. By holstering customer satisfaction, organizational apology improves customers WOM regarding the organization.

### Negative impressions

Negative impressions represent the public belief of an organization or its CEO during a crisis. Here, the public beliefs that the organization or the CEO can be held responsible for the occurrence and the belief is negative in nature (Chung & Lee, 2017). In addition, Wan and Schell (2007) describe when people become "suspicious" of an organization as negative impression as well.

### Distrust

As trust is building on other people's perception of being trustworthy, distrust can be understood as the absence of perceived trustworthiness. According to Mayer, Davis and Schoorman (1995) there are three antecedents of trustworthiness: *ability*, *benevolence* and *integrity*. A lack of one or more antecedents of trust would lead to distrust which is in line with the definition of distrust in the study of Chung and Lee (2017). According to them distrust is defined as "a cognitive perception that an organization is incompetent, exhibits irresponsible behavior, and violates obligations". Incompetence can be understood as a lack of the organization's ability to do a promised action, exhibition of irresponsible behavior is the counterpart of benevolence, and ultimately a violation of obligations matches a lack of integrity.

### Forgiveness

When we apologise for a misconduct, we automatically try to awake forgiveness in the victim (Szablowinski, 2012). Forgiveness becomes the ultimate objective of an apology and it is sought to reestablish the damaged relationship between two parties. This is supported by the study of Martinez-Vaquero, Pereira and Lenaerts (2015) about the relationships of revenge, apology and

forgiveness. They found that apology seems to be a major ingredient for forgiveness and should be sought in times of corporate crisis.

## 2.3  Independent variables

As Coombs (2007) explains in the SCCT there are different ways in crisis responses and they depend on the crisis situation the organization faces. Additionally, they not only depend on the level of crisis responsibility but may differ in the used method to deliver the message. Different scenarios are possible. For example, a crisis manager may choose to publish a written explanation and apology in a well-known newspaper. On the other hand, it is possible that crisis management decides that a high ranked employee (e.g. CEO) publishes a video taped message to communicate the crisis response. The following part gives deeper insight in these variables.

### *Message delivery*

As summarized in Hans and Hans (2015) about the aspects of kinesics, haptics and proxemics, non-verbal communication holds great value in human interaction. The proverb "*actions speak louder than words*" demonstrates this value. Communication research suggests that between 7% and 35% of a message is delivered through words and the rest through non-verbal communication. This demonstrates the great value provided by non-verbal communication. As an example, people are often in shock when they see a picture of a tyrant in a normal, everyday situation or the "normal" face of a murderer as these people do not appear as "monsters" which may have been the perception before.

Messages, and apologies as one of them, often differ in their level of vividness. Vividness is defined in Coyle's and Thorson's (2001) study about the effects of progressive levels of vividness in marketing related websites as "the representational richness of a mediated environment as defined by its formal features; that is, the way in which an environment presents information to the senses." [p.67]. Vividness has two subdimensions, breadth as the first one and depth as the second one. Breadth refers to the number of different senses engaged by the medium, and depth as to which extend the medium replicates parts of the sensory system (Coyle & Thorson, 2001). Fortin and Dholakia (2005) add that vividness is also referred to as media richness. They refer to Daft's and Lengel's (1986) study about organizational information requirements, media richness and structural design in which "richness is defined as information-carrying capacity of data." [p.11]. Face-to-face is considered the richest medium, followed by telephone, personal documents (e.g. letters), impersonal documents and as last numeric documents. According to Daft and Lengel (1986) media vary in richness because of different levels of immediate feedback capacity, the number of utilized cues and channels, personalization and language. Face-to-face is the richest because feedback,

multiple cues (e.g. body language, tone of voice), personal contact and message content in natural language are involved. Therefore, a videotaped apology is considered more vivid and therefore richer than the literal transcription of the apology because even though face-to-face communication, and therefore immediate feedback and personal contact, is not achieved, non-verbal cues like body language and tone of voice and natural language are involved.

*Media richness and public anger*

Xu, Cenfetelli and Aquino (2012) found in their study about the influence of media cue multiplicity on deceivers and those who are being deceived that media cue richness has influence on the moral anger of the participant in the context of being deceived. The underlying dynamic of this relationship is based on the Interpersonal Deception Theory (IDT) derived from Burgoon and Buller (1996). According to IDT deceiver and receiver behaviors and cognition vary as the context of the communication varies. Positivity bias, defined as people presuming others to be truthful, is more likely to be present in face-to-face communication. Media with low cue multiplicity may steer the audiences focus on limited stimuli and more on the task than on process-oriented issues (e.g. building rapport). In contrast richer media improve the exchange of multiple types of information (e.g. gestures, facial expressions) and enhances one's likability. Ultimately, the richer the medium was perceived the more moral anger diminished. They refer to "the set of emotions that arise from being deceived" (Xu, Cenfetelli & Aquino, 2012) [p. 3] as moral anger. There are consequences for the deceiver as moral anger can motivate a deceived party to punish the deceiver. Therefore, it is expected that:

H1a:    *Respondents exposed to the video apology will have less anger towards the organization than respondents exposed to the written apology.*

*Media richness and negative word-of-mouth*

WOM as defined as informal, person-to-person communication between two or more people is very important in the context of corporate crisis, as it is often used in ambiguous situations. Vazquez, Dennis and Zhan (2017) found proof in their study about consumer communications via mobile instant messaging, that media richness is strongly and directly related to positive WOM. The more social and richer a channel is perceived the more likely it is that people feel involved with the media channel. Ultimately this involvement translates to the feeling of emotional satisfaction with the interaction leading to positive WOM. Therefore:

H1b:    *Respondents exposed to the video apology will express less negative word-of-mouth than respondents exposed to the written apology.*

*Media richness and negative impressions*

As earlier described, rich media do have a superior capacity of social cues compared to less rich media. In the study of Tanis and Postmes (2003) about ambiguity reduction and impression formation of different media, they found strong support that the amount of social cues has an impact on the positivity of impression formation in computer-mediated communication (CMC). Underlying is the assumption that social cues are important for the reduction of ambiguity of personal impressions and that this reduction leads to a higher degree of intimacy and better contact quality. Based on Rutter and Stephenson (1979) and their cluelessness model *"cluelessness leads to psychological distance, psychological distance leads to task-oriented and depersonalized content, and task-oriented depersonalized content leads in turn to a deliberate, unspontaneous style and particular types of outcomes"* (Rutter, 1987, p. 74). Therefore, more cues decrease the psychological distance. Additionally, the social information processing theory by Walther (1992) adds that social cues and information about the communicators are important to develop positive relationships.  Not only has the amount of social cues positive influence on ambiguity reduction, but the mere presence of already neutral social cues lead to positive impressions. As negative impressions are the opposite of positive impressions, it is therefore expected that:

H1c:    *Respondents exposed to the video apology will express less negative impressions of the organization than respondents exposed to the written apology.*

In addition, the study of Turk, Jin, Stewart, Kim and Hipple (2012) about the interplay of an organization's prior reputation and CEO visibility, they found evidence that the visibility of CEOs in online videos, released as crisis responses, resulted in higher attitudes scores. This is based on their finding that shareholders preferred a present CEO when corporate crisis responses were published, as opposed to CEOs not being visible.
Therefore, it is expected that:

H1d:    *Respondents exposed to the video apology will express less negative impressions of the CEO than respondents exposed to the written apology*.

*Media richness and distrust*

As earlier described distrust can be understood as the absence of perceived trustworthiness. According to Aljukhadar, Senecal and Ouellette (2010) and their study about the effects of media richness and privacy disclosure, trust is influenced by media richness by enhancing social presence. According to them consumers observe and evaluate an agent's trustworthiness through nonverbal cues and while doing so, the mere observing already increases trust. Finally, the richer the medium was the more trust could have been evoked. This is supported by Lewicki and Polin (2013) which argue that when a negotiator emotionally signals to be cooperative nonverbal cues themselves create a foundation for trust. Therefore:

H1e:   *Respondents exposed to the video apology will express less distrust than respondents exposed to the written apology.*

*Media richness and forgiveness*

As earlier described forgiveness is a very important objective in times of crisis, as it reestablishes damaged relationships. Even though apology is very important to achieve being forgiven the relationship between a greater amount of cues (e.g. body language) and forgiveness remains rather undiscovered. As summarized in Hill (2013) nonverbal cues are associated to be effective when used in apology as they may refer to the internal state of transgressors and are eventually judged by the audience of the apology in terms of sincerity. However, if these cues are judged as not honest and sincere, the apology seems to be non-effective. Consequently, forgiveness is rather achieved through the level of the apologetic speaker's skill to express an honest and sincere apology than through non-verbal cues themselves. Therefore:

RQ1:   *How is forgiveness affected by the expressions of nonverbal cues in the case of United Airlines and Delta Airlines?*

**Corporate crisis responsibility (CCR)**

As earlier mentioned, the SCCT by Coombs (2007) provides guidelines how an organization should react when it faces a crisis. The organization's actions have to be immediate and adequate. The adequate actions an organization should take are highly dependent on the level of corporate crisis responsibility. Coombs distinguished three clusters of crisis responsibility, namely: *victim cluster*, *accidental cluster* and *preventable cluster*. Here the victim cluster means low level of crisis responsibility which is rising onto the preventable cluster with a maximum of crisis responsibility. As apology means to take full responsibility (Coombs, 2007) this type of crisis response may be more

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appropriate for a preventable or accidental crisis than for a victim crisis. As summarized in Coombs (2007) and De Blasio and Veale (2009) SCCT extends Attribution Theory (AT). Anger and sympathy are the core emotions in AT and a person attributes responsibility to an organization during crisis and will experience an emotional response to the crisis. When the organization will be held responsible for the event, the behavioral response will be negative, and the person will feel anger. Vice versa, the person will feel sympathy when the organization is not held responsible for the crisis event.

By taking the level of crisis responsibility into account this study wants to figure out if there are any influences on how a corporate apology may be received by the public. As a victim crisis relates to the lowest level of crisis responsibility, why should an organization apologize when they are victims of the crisis as well. Therefore, this study takes the factor of moderate and high crisis responsibility into account. Here, it is assumed that higher corporate crisis responsibility leads to higher negative outcomes.

*CCR and public anger*

As described before public anger is a key factor of corporate crisis and in fact threatens the corporate reputation directly. Coombs and Holladay (2007) found in their study about communication dynamics that anger is directly related to the level of crisis responsibility. This is based on the attributional theory of achievement motivation and emotion by Weiner (1985). According to this theory, anger, as well as gratitude, guilt, pity and shame are connected to the controllability dimension. Then, the more controllable a crisis is perceived by stakeholders, the more these emotions derive from this crisis situation. This means, an organization with a high crisis responsibility will face a high level of public anger.

H2a:     *Respondents exposed to the moderate crisis responsibility apology will have less anger towards the organization than respondents exposed to the high crisis responsibility apology.*

*CCR and negative word-of-mouth*

As earlier, word-of-mouth (WOM) is defined as being informal, person-to-person communication and is a direct consequence of corporate crisis. As summarized in the article of Coombs (2015) about the value of communication during a crisis and how to apply the right communication strategies during a crisis, the level of CCR attributed by the stakeholders of an organization to this certain organization, is directly linked to negative word-of-mouth. Again, this is based on the attribution theory. The more people attribute crisis responsibility to the organization the more negative their intentions, described as purchase intention and word-of-mouth become. This is also explained by Coombs and Holladay (2007) as the negative communication dynamic. Therefore:

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H2b:   *Respondents exposed to the moderate crisis responsibility apology will express less negative word-of-mouth than respondents exposed to the high crisis responsibility apology.*

*CCR and negative impressions*

As summarized in the first chapter of the handbook of crisis communication by Park and Len-Ríos (Fediuk, Coombs & Botero, 2010) about the effect of injured party on attributions of crisis responsibility, research has shown that crisis responsibility, as perceived by the organizational stakeholders, has a direct relationship to stakeholders negative impressions towards the organization. This is grounded in impression management, where communication is used to influence an organization's impression, which is endangered by crisis. The more crisis responsibility was attributed to the organization the more negative impressions were found. Therefore:

H2c:   *Respondents exposed to the moderate crisis responsibility apology will have less negative impressions of the organization than respondents exposed to the high crisis responsibility apology.*

H2d:   *Respondents exposed to the moderate crisis responsibility apology will have less negative impressions of the CEO than respondents exposed to the high crisis responsibility apology.*

*CCR and distrust*

As earlier described distrust, as understood as the absence of perceived trustworthiness, is the consequence of the lack of one or more antecedents of trust. Park and Len-Ríos (Fediuk, Coombs & Botero; 2010) summarized in the 29th chapter of the handbook of crisis communication that an increased level of perceived crisis responsibility directly leads to decreased levels of trust and therefore to more distrust. This is because trust, as one of the most important antecedents of organizational reputation, is highly endangered by the level of attributed responsibility. Again, this is argued based on the attribution theory, where controllability over a crisis is directly associated with the level of distrust elicited (Lee, 2004). Therefore:

H2e:   *Respondents exposed to the moderate crisis responsibility apology will express less distrust than respondents exposed to the high crisis responsibility apology.*

*CCR and forgiveness*

As described earlier, forgiveness is sought to be the ultimate objective of an apology. Earlier research aims short in discovering direct links between the level of perceived corporate crisis responsibility and the willingness of victims to forgive the certain transgressor. However, Coombs (2015) distilled in his article about the value of communication during a crisis, that psychological research found evidence that people tend to forgive competence trust violations easier than they do forgive integrity-based trust violations. This holds true for the field of accidental acts and intentional acts. Since competence and integrity are two very important elements of an organization, they do differ in the amount of responsibility attributed by stakeholders when transgressions took place. Accidental crises are considered as competence trust violations, whereas intentional crises are considered to be integrity based. Therefore, it is expected that:

H2f:    *Respondents exposed to the moderate crisis responsibility apology will be more forgivable than respondents exposed to the high crisis responsibility apology.*

**Interaction between message delivery and corporate crisis responsibility**

In the following paragraph a possible interaction effect of message delivery and crisis responsibility on the dependent variables will be discussed.

During crisis events the public will form attitudes about the organization in crisis when being exposed to crisis information (e.g. news articles). The organizational response to the crisis has the goal to shift these negative attitudes towards more positive ones, by trying to persuade the public. In the literature, the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986) offers a widely accepted perspective on persuasion and attitude change. The ELM suggests that recipients of persuasive information process these in one of two ways: the first one is the central route which is present when the recipient is highly involved and elaborates the information with great effort. The second way is the peripheral route, being the opposite of the central route, recipients devote a low amount of cognitive effort to elaborate the information presented. As summarized in Angst and Agarwal (2009) the framing of presented arguments is more important when the central route is present, whereas peripheral cues (e.g. attractiveness, charisma) have greater influence when the elaborative effort is low.

Coombs and Holladay (2009) argued, based on Pfau and Wan (2006), that the focus on the message source (peripheral cues) should be greater in video messages because less involvement is required by the audience. Text messages, in which the content (arguments) is more thoughtfully elaborated, require more involvement as the audience has to read the text in order to understand

the context. Therefore, video messages, as a source of peripheral cues and more likely to be processed with low elaborative effort, seem to be more persuasive when the involvement of the audience is low. On the opposite, text messages are more effective when the involvement is high because the audience is not distracted by peripheral cues.

Drawing on Coombs (2007) SCCT, earlier explained in this chapter, the different crisis clusters result in different attributions of crisis responsibility by stakeholders. The victim cluster with the lowest attribution, the accidental with moderate and the preventable cluster with the highest attribution of responsibility. Additionally, accidental crises are considered unintentional and uncontrollable by the organization, whereas preventable crises are considered controllable. Based on the SCCT McDonald, Sparks and Glendon (2010) studied stakeholder's reactions to crisis communication and causes. They found evidence that crisis controllability had great impact on the level of stakeholder involvement. The more the crisis was seen as controllable by the organization the stronger stakeholders were involved resulting in more negative emotions. Therefore, the higher the attribution of crisis responsibility the more involved the stakeholders become.

Summarized it is argued that the combination of the ELM with crisis responsibility and message delivery leads to the following assumption. As text messages are likely to be processed in a central way and video messages in a peripheral way and accidental crises result in less involvement than preventable crises: text messages seem to be more appropriate for preventable crises and video messages seem to be more appropriate for accidental crises. This leads to the following question:

RQ2:    *How does the message delivery of the apology interact with corporate crisis responsibility in regards to the public responses*?

## 2.4    Conceptual model

In this study a 2 (Media richness of the crisis response: low vs. high) x 2 (Crisis responsibility: moderate vs. high) design is used. In total four different categories are present. Figure 1 represents the model with the related hypotheses and the research question.
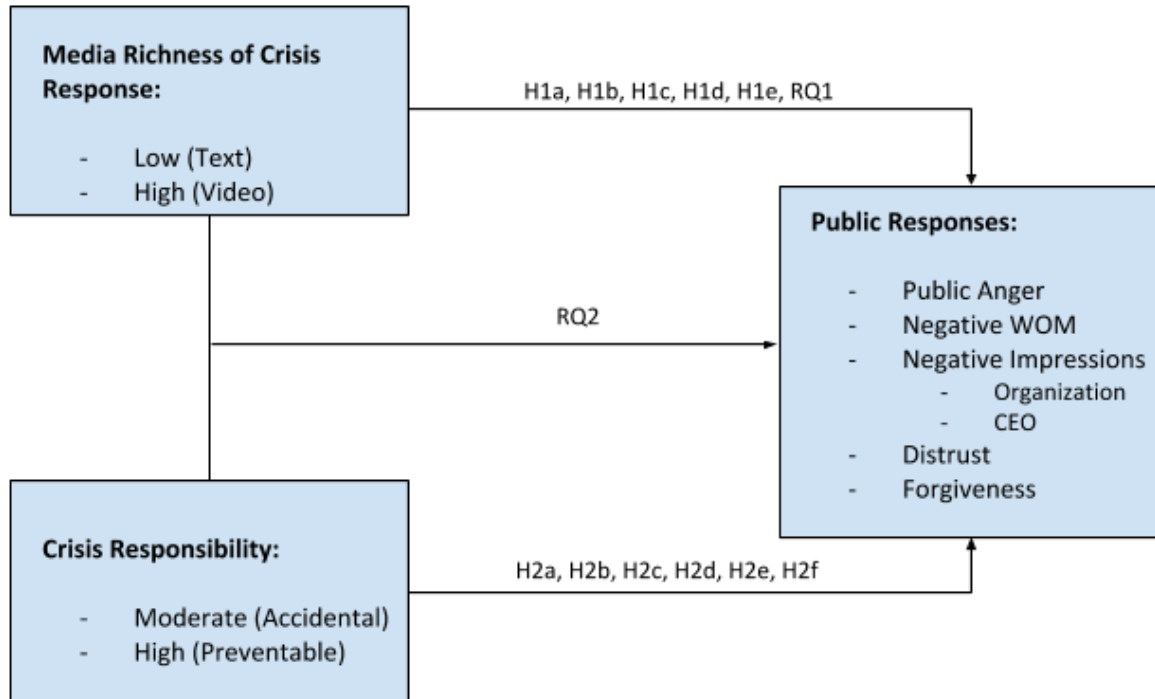


Figure 1.  *Conceptual model*

# 3   Methodology

In this chapter the applied method of the study will be explained. Starting with the research design, the used materials and procedures will be explained, followed up by a description of respondents and the dependent measures.

## 3.1  Research design and materials

The goal of this study is to shed light on the effects of different apology types and crisis responsibility on (1) *public anger*, (2) *negative word-of-mouth*, *negative impressions* towards (3) the CEO and (4) the company, (5) *distrust* and (6) *forgiveness*.

This study makes use of a 2 (Apology type: video vs text) x 2 (Crisis responsibility: moderate vs high) between-subjects research design. In sum 4 different conditions were used to investigate the effects of apology type and crisis responsibility on the 6 dependent variables. Figure 2 gives an overview of these conditions.

**Media Richness**

| | |
|---|---|
| **Condition 1** <br> -Low Media Richness <br> -High Crisis Responsibility | **Condition 2** <br> -High Media Richness <br> -High Crisis Responsibility |
| **Condition 3** <br> -Low Media Richness <br> -Moderate Crisis Responsibility | **Condition 4** <br> -High Media Richness <br> -Moderate Crisis Responsibility |

Crisis Responsibility

Figure 2. *Experimental conditions*

### *Stimuli Materials*

In this paragraph the used materials are described. To represent the organizational crises *Delta Airlines Flight Cancellations* and *United Airlines Flight 3411 Passenger Beating* were selected due to a number of criteria. Both crises belong to the airline industry, making comparison between these events more valid. Even though videotaping a study assistant, apologizing as the organizations CEO, would result in more control over the differences in the two videos it is decided to make use of real videos of the CEOs published on the social media platform Youtube because both crises are real life events. Both videos are shorter than 3 minutes in length and contain the four components (1) *responsibility*, (2) *sympathy*, (3) *compensation* and (4) *assurance* which are crucial for apologies (Lee & Chung, 2012).

### Crisis responsibility: moderate vs high

This part of the paragraph describes the crisis responsibility attributed to both crisis events. Starting with explanations of both selected crises and the pretest of the crisis responsibility, following up by the media richness materials with the respective pretest.

### Delta Airlines Crisis (moderate)

First, *Delta Airlines Flight Cancellations* was used for the moderate crisis responsibility condition. On December 17th, 2017, a fire at the Hartsfield-Jackson Atlanta International Airport resulted in a huge power outage leaving the whole airport without power for 11 hours. During this time of the year, many people are traveling via airplanes to be close to their relatives during the Christmas vacation. 800 flights in total had to be cancelled and passengers were uninformed about the situation for several hours. Important to note is that ultimately this crisis falls under the level of victim crisis instead of an accidental crisis (moderate CR). The fire which broke out was not caused by United Airlines staff, still the airline published a video of their CEO Edward Bastion apologizing for a backup-system which did not work. To make sure that both crises happened within the same industry, the crisis introduction of the Delta Airlines crisis was manipulated in a way that respondents get the impression of an accidental crisis (moderate CR). The manipulation stated that the power loss resulted from a fire which was accidentally caused by Delta Airlines staff and that the implemented backup-system failed to work. As described in the SCCT (Coombs, 2007) technical errors fall under the accidental cluster of organizational crises and have moderate crisis responsibility attributed.

### United Airlines Crisis (high)

Secondly, the *United Airlines Flight 3411 Passenger Beating* was used to represent the high crisis responsibility condition. On April 9th, 2017, manager of United Airlines regional branch United Express offered travel vouchers to passengers of Flight 3411 to make room for airline staff which needed to be at Louisville International Airport. Because all passengers denied the offer by United Express a random selection of passengers was made to be removed from the flight. Among these passengers was David Dao, a pulmonologist. Dao declined to leave the airplane when airline staff insisted him to leave. Hereupon, aviation security officers violently removed Dao from the airplane. In the process Dao's face hit an armrest resulting in Dao losing consciousness while bleeding. This crisis represents the preventable crisis cluster, attributed with high crisis responsibility. The SCCT (Coombs, 2007) states that *organizational misdeed with injuries* falls under this cluster as stakeholders are placed at risk and injuries occur. This clearly happened in this case.

*Pretest of Crisis Introductions*

Both crises were introduced with a short crisis introduction (Appendix B) to make sure that respondents had a basic knowledge of the respective crisis they were exposed to and to give the participant the understanding of the respective corporate crisis responsibility. As the moderate crisis responsibility introduction was manipulated, a pretest was conducted to check if respondents got the intended impression of the crises. In total 10 respondents read the introductions and answered a crisis responsibility scale from Brown and Ki (2013) on a 5-point Likert-scale. Examples of these items are "*The cause of the crisis was an intentional act by someone in the organization.*" and "*The crisis was preventable by the organization.*". The total mean for the moderate crisis responsibility condition was slightly below the Likert-mean of 3 indicating a slightly below moderate responsibility (M = 2.9, SD = .86). In addition, the total mean for the high crisis responsibility condition was indicating a higher crisis responsibility (M = 3.9, SD = .6). Furthermore, respondents were asked to range the crisis responsibility on a scale of 1 to 7 directly (1 = low crisis responsibility vs. 7 = high crisis responsibility). Respondents judged the moderate crisis responsibility introduction with (M = 4.9, SD = 1.4) which is in the intended range. The high crisis responsibility introduction was directly judged with (M = 6.5, SD = .7) which is high. Even though the high crisis responsibility condition was rated with a mean of 3.9 on the 5-point Likert-scale, which is not extremely high, a paired sample t-test revealed significant differences between both conditions, with $t(9) = -4.49$, $p = .002$. Therefore, both introductions were understood as intended and implemented in the study.

**Media richness of crisis response: video vs text**

As described in the theoretical framework message delivery can differ in their amount of media richness. To represent this variable, it is chosen to make use of video tapes showing the respective CEO as a rich medium. A video is able to show body language, tone of voice and natural language and therefore can be considered a rich medium. Secondly, literal transcripts of the CEO's speech is used for the poor medium condition. By doing so the non-verbal cues (indicators for media richness) are removed without the danger of different results based on different wording.

Both companies released apology videos to communicate about the crisis event. In both videos the CEO of the respective company apologizes for the crisis event. In the case of Delta Airlines, the CEO Edward Bastion sits in the middle of the screen. The video is 3 minutes long and the CEO is filmed in what appears to be his office. The video of United Airlines shows the CEO Oscar Munoz with a total length of 1minute 40 seconds. He is shown in the middle of the screen in front of a dark blue background.

*Pretest of Message Delivery*

Real life video messages have been chosen in order to make the study as realistic as possible. As both videos are real life apologies, there are differences between them (e.g. person speaking, background, etc.). To make sure these differences are not fundamental and might be responsible for the outcomes of this study, pretesting was conducted. During this pretest the general possibility for comparison of the videos has been tested in order to ensure that the videos are applicable for this study. In total 8 participants participated in the pretest of the high media richness of message delivery condition. During the pretest, respondents were asked to watch both videos once and to write down differences and similarities they encounter. After writing down their first impression of differences and similarities, respondents were asked to discuss their overall impression and if they had any problems seeing and hearing/understanding the CEOs and who was responsible for the crisis according to them.

In total 8 respondents participated in the pretest. The most prominent similarity codes were *apology* and *setup*, whereas the most prominent difference codes were *speech* and *setup*. This means that respondents pointed out that both CEOs apologized for the crisis event and the similarities in the setup. These similarities are that both CEOs are shown in the middle of the screen and both are wearing suits. Additionally, both videos were seen as video-taped in a professional way. Furthermore, according to Lee and Chung (2012) an apology has to contain four components, namely: (1) *responsibility*, (2) *sympathy*, (3) *compensation* and (4) *assurance*. To protect the study against differences within the apologies itself both apologies were analyzed in terms of apology components. Ultimately all apology components were found in both apologies.

Secondly, the most prominent differences were that one CEO spoke freely whereas the other one seemed to read off a text. Delta Airlines CEO Edward Bastion was filmed in what seems to be his office. In the background pictures of an airport are visible. Oppositional United Airlines CEO Oscar Munoz is shown in front of a dark blue, neutral background. Additionally, the video message of United Airlines was subtitled. Even though this is a difference between the two video messages it was decided to implement the videos because all respondents stated that they had no problems in either seeing or understanding the speaking of the CEOs. To preserve the realisticness of the study and its materials the video messages were used. Image 1 and 2 show screenshots of both CEOs.

Image 1. *United Airlines CEO Oscar Munoz*



Image 2. *Delta Airlines CEO Edward Bastian*



## 3.2 Procedure

Convenience sampling was used to collect participants for this study. With the help of the online survey platform Qualtrics the final instrument was conducted. Respondents were reached out to with the use of social media and the University of Twente's Sona System platform.

In the beginning, respondents received very general information about the topic of this study. In depth information about the study was avoided in order to not bias the following response. Furthermore, respondents were informed about their privacy rights, followed up by information of

confidentiality and their right to withdraw. An informed consent was added as well and if the respondent decided not to participate or to stop during the participation their data was not taken over into the final data set. The respondent had to be an adult in order to participate.

After reading the introduction of the study, the respondent was randomly assigned to one of the four conditions. She or he received a short introduction about the respective crisis (moderate CR vs high CR) and was asked to either watch the video apology or read the text apology of the CEO (Video vs Text). Lastly, the respondent answered questions regarding the constructs of (1) anger, (2) negative word-of-mouth, (3) negative impression: CEO, (4) negative impression: company, (5) trust and (6) forgiveness and demographic information. It is important to say that participants who were assigned to the moderate CR condition received a debriefing at the very end of the survey in which they were informed about the manipulation of the Delta crisis introduction. To protect Delta Airlines against reputational damage caused by the manipulation in this study, the respondent was informed that Delta Airlines was not responsible for the power outtake at the Atlanta Airport. Finally, the respondent was given the possibility to withdraw from the survey after being informed about the manipulation. The survey was written in English.

## 3.3    Participants

After the data collection 289 responses were taken over into the final data set. In total a drop-out rate of 19.3 % (69 incomplete responses or withdrawal) can be reported. A G*Power analysis suggested 269 participants for this study which is achieved. In total 216 (74.7%) Females and 73 (25.3%) Males participated, with their age ranging from 19 up to 77, with a *M = 27.5* years old. Participants were mostly German with *N = 235* (81.3%) and Dutch *N = 39* (13.5%) accounting for 94.8% of the whole sample. Furthermore, 269 of the respondents (93.1%) were no customers of the respective Airline company before and 225 (77.9%) did not know about the particular crisis before. Table 1 gives a complete overview of the demographic characteristics.

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Table 1. *Demographic distribution of sample characteristics*

|  |  | Moderate CR |  | High CR |  |
| --- | --- | --- | --- | --- | --- |
| **High Mediarichness** | | | | | |
| Age a) | | M=24.3 / SD=10.37 | | M=24.7 / SD=10.93 | |
| Gender b) | Male | 27% | Male | 29% | |
| | Female | 73% | Female | 71% | |
| Nationality c) | 1) | 81% | 1) | 78% | |
| | 2) | 11% | 2) | 16% | |
| | 3) | 7% | 3) | 6% | |
| Familiarity with Brand d) | 1) | 9% | 1) | 9% | |
| | 2) | 91% | 2) | 91% | |
| Familiarity with Crisis e) | 1) | 6% | 1) | 35% | |
| | 2) | 94% | 2) | 65% | |
| **Low Mediarichness** | | | | | |
| Age a) | | M=23.8 / SD=8.32 | | M=24.7 / SD=10.83 | |
| Gender b) | Male | 23% | Male | 22% | |
| | Female | 77% | Female | 78% | |
| Nationality c) | 1) | 78% | 1) | 87% | |
| | 2) | 19% | 2) | 8% | |
| | 3) | 3% | 3) | 5% | |
| Familiarity with Brand d) | 1) | 7% | 1) | 4% | |
| | 2) | 93% | 2) | 96% | |
| Familiarity with Crisis e) | 1) | 6% | 1) | 42% | |
| | 2) | 94% | 2) | 58% | |

a) Mean + SD of self reported age
b) Percentage division Male / Female
c) Percentage: 1)=German / 2)=Dutch / 3)=Other
d) Percentage: 1)=Familiar with the Brand / 2)=Unfamiliar with the Brand
e) Percentage: 1)=Familiar with the Crisis / 2)=Unfamiliar wiht the Crisis

## 3.4    Measures

As earlier stated, *public anger, negative word-of-mouth, negative impressions of the CEO, negative impressions of the company, distrust* and *forgiveness* were the dependent variables in this study. All items were measured on a 5-point Likert scale ranging from (1) *Totally disagree* up to (5) *Totally agree*. All items were adjusted to the content of this study when needed and can be found under

Appendix A. To check, whether the proposed independent variables, displayed in the conceptual research model, are correctly measured a confirmatory factor analysis (CFA) is performed. The CFA sheds light on the correctness of the model, scales with less explained variance than 50% are considered insufficient. Items which have a smaller coefficient than .6 are labeled as non-sufficient and are removed from the factorial model. Furthermore, to ensure reliability of the instrument, Cronbach's reliability analysis is performed. Table 3 shows the summarized Cronbach's alphas of the instrument.

### Anger

Anger was measured using a 5-item scale from the study of Lee and Chung (2012) about corporate apology and crisis communication. As this scale asks about the respondents perceived feelings, the answer options ranged from (1) *not at all* up to (5) *very strong*. An example of these items is "To what extent do you experience the following feelings (e.g. madness) towards the company?". Confirmatory factor analysis was conducted and revealed that one anger item, '*To what extent do you experience the following feeling (madness) towards the company?*', had to be removed. The other items measured a single construct with an eigenvalue of 2.63 and explain 65.75% variance with factor loadings ranging from .70 to .85. Secondly, Cronbach's alpha α = .82 shows good internal consistency.

### Negative word-of-mouth

To measure negative word-of-mouth a three-item scale from Coombs and Holladay (2008) and their study about the comparison of apology to equivalent crisis response strategies was used. One example of these items is "I would say negative things about the company and its service to other people.". Again, factor analysis confirmed that all three items load on a single construct with an eigenvalue of 2.07 with explained variance of 68.95% and Cronbach's alpha α = .77, which is good. Factor loadings ranged from .77 to .87 in total.

### Negative impression: CEO and Company

To measure both, negative impressions towards the CEO and the company, a 3-item scale from De Blasio and Veale (2009) was used. They studied the influence on consumer perceptions after organizational crises. The same scale was used for both variables and adapted accordingly. Examples of the items are "I am disappointed with the CEO." and "I evaluate the company negatively.".  All 3 items, in both cases, were measured on a 5-point Likert-scale (disagree-agree) and factor analysis confirmed that the 3-item scale measured a single construct in both cases. The single factor had an

eigenvalue of 2.53 and is accounting for 84.19% of variance and Cronbach's alpha α = .91 for the CEO construct. Here, factor loadings ranged from .88 to 9.4.

Additionally, the eigenvalue of the single factor in the company construct was 2.45 explaining 81.79% of variance with factor loadings from .88 to .92, Cronbach's alpha was found to be α = .89, which is good.

*Trust*

Another dependent variable is trust. An 11-item scale from Hon and Grunig (1999) and their guidelines for measuring relationships in public relations was used to measure the three components associated with trust: *competence*, *benevolence* and *integrity*. An example of these items is "I think it is important to watch this company closely to that it does not take advantage of people like me.". Confirmatory factor analysis revealed that the single construct of trust should be divided into two new constructs explaining 52% of variance, namely: *Trust in company's actions* with '*This organization treats people like me fairly and justly*' and '*Whenever this organization makes and important decision, I know it will be concerned about people like me*' as the first construct. These two items focus on ethics regarding stakeholders when the company makes decisions. Both items were part of the integrity component of the trust scale from Hon and Grunig before. Here, Cronbach's reliability analysis demonstrated sufficient internal consistency (α = .69). The second new construct *Trust in the company's competences* consists of three items '*I feel confident about this organization's skills*', '*This organization has the ability to accomplish what it says it will do*' and lastly '*This organization is known to be successful at the things it tries to do*'.

The three items completely focus on the respondents assessments regarding the company's skills to accomplish something. The items resemble the company's competence of the Hon and Grunig scale. Again, with a Cronbach's alpha of α = .69. Table 2 shows the rotated component matrix of the trust scale.  The remaining items were labeled as *dependability* items by Hon and Grunig and are characterized by the company making decisions for the respondent. Respondents may have been confused by the ambiguous wording of "*I am very willing to let this organization make decisions for people like me*" or "*I believe that this organization takes the opinions of people like me into account when making decisions*" leading to low correlations between these items.

Table 2. *Rotated component matrix of the trust scale*

| Statements | 1 | 2 |
|---|---|---|
| Trust_6 - This company has the ability to accomplish what it says it will do. | 0.81 | |
| Trust_11 - This company is known to be successful at the things it tries to do. | 0.76 | |
| Trust_5 - I feel very confident about this company's skills. | 0.75 | |
| Trust_2 - Whenever this company makes an important decision, I know it will be concerned about people like me. | | 0.89 |
| Trust_1 - This company treats people like me fairly and justly. | | 0.83 |
| Explained variance: | 36.66% | 31.57% |
| Eigenvalue: | 2.23 | 1.12 |
| Cronbach alpha: | 0.69 | 0.69 |

*Forgiveness*

The last dependent variable is forgiveness. It was measured by using a 5-item scale derived from the study of Xie and Peng (2009) about reparation of customer trust after negative publicity. One example of these items is "Given the company's response, I would forgive it.". Confirmatory factor analysis revealed that one item '*Given the company's response, I would condemn it.*' had to be removed. All other items loaded on a single construct with an eigenvalue of 2.67, accounting for 66.85% of variance with a respective Cronbach's alpha of α = .83, which is good. Factor loadings ranged from .78 to .86.

Table 3. *Cronbach's alphas of the instrument*

| Variable | N items | α |
|---|---|---|
| Anger a) | 4 | 0.82 |
| Negative WOM b) | 3 | 0.77 |
| Negative Impressions: CEO c) | 3 | 0.91 |
| Negative Impressions: Company d) | 3 | 0.89 |
| Trust in Company's actions e) | 2 | 0.69 |
| Trust in Company's competencies f) | 3 | 0.69 |
| Forgiveness g) | 4 | 0.83 |

## 3.5 Adjusted conceptual model

The conceptual model which was earlier described in the theoretical framework has to be adjusted because of the changes in the methodology. The final model is shown in figure 3. It is necessary to point out the changes in the dependent variables section. Distrust, as the absence of trust, breaks down into *Distrust in the company's actions* and *Distrust in the company's competencies*.
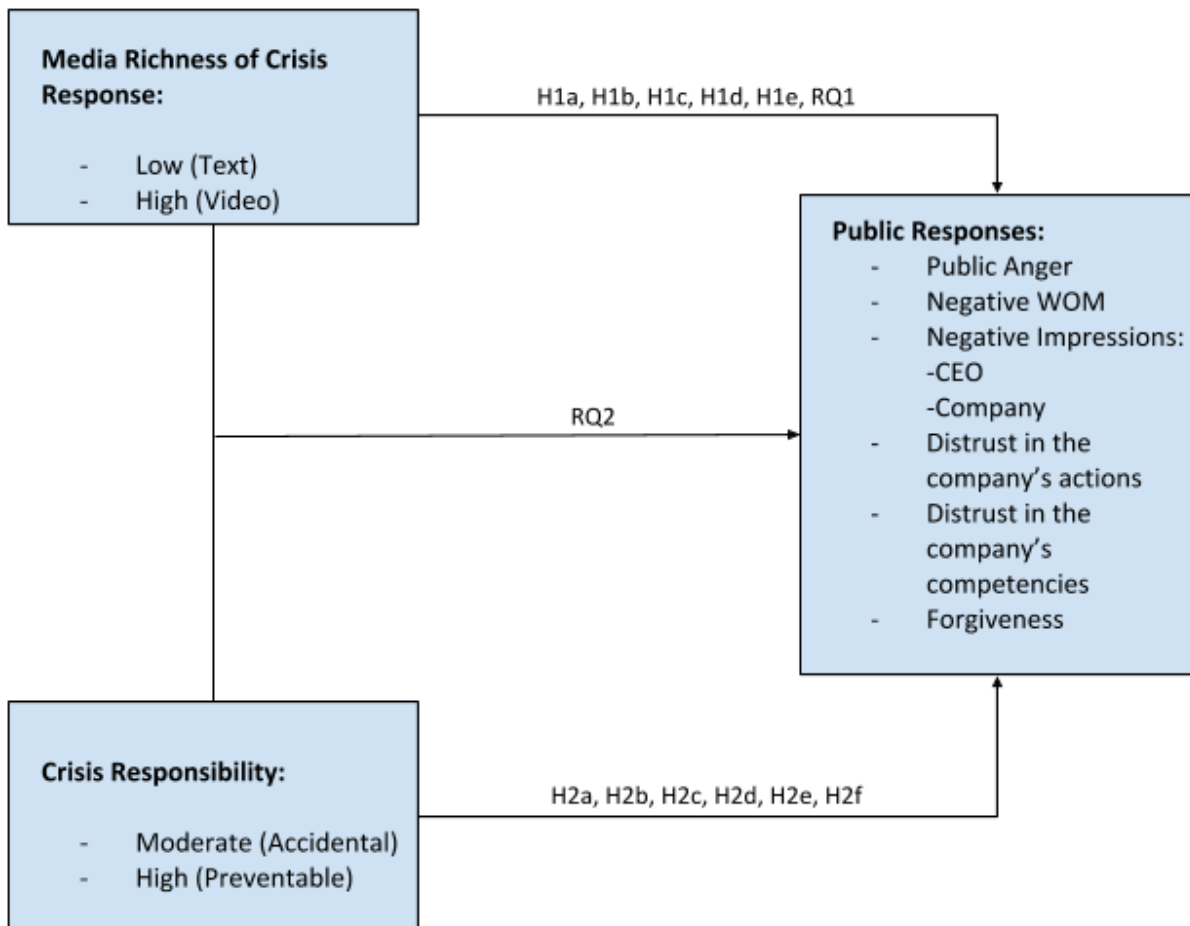
Figure 3. *Adjusted conceptual model*

## 3.6  Assumption testing

To be able to apply parametric tests a few assumptions have to be met. This paragraph focuses on testing these assumptions, namely: *Normality* (normal distribution of the data) and *Homogeneity* (same variance across all conditions).

*Normality*

Shapiro-Wilks test was conducted to test if the data is normally distributed across the four conditions: *media richness of the crisis response* (low / high) and *crisis responsibility* (moderate / high). Significant results from the Shapiro-Wilk test of normality indicate that the data is not normally distributed, therefore failing the assumption of normality and parametric testing is not applicable. A possible explanation for these results could be outliers in the data set which skew the data. However, outliers may provide important information and therefore should be kept if possible. One way to deal with non-normal distribution while keeping outliers is data transformation.

Rank transformation, as part of data transformation, ensures normal distribution, while robustness and little loss of statistical power are granted (Conover & Iman, 1981). Their article bridges the gap between parametric and non-parametric tests. When using this method, all observations will be ranked from the smallest observation, as 1, to the largest observation, as N. Ties in observations will be assigned by the mean. Rank transformation was applied to the observations of *media richness* and *crisis responsibility*.

*Homogeneity*

The second assumption which has to be met is the assumption of homogeneity, meaning all conditions have the same variance. After conducting the rank transformation, Box's test of equality of covariance and Levene's test of equality of error variance were carried out. Results are shown in table 4 and 5. Both tests had non-significant results (p > .05) indicating that the assumption of homogeneity is met.

Table 4. *Box's test of equality of covariance matrices.*

| Box's M | 87.65 |
|---------|-------|
| F | 0.998 |
| Sig. | 0.49 |

*Tests the null hypothesis that the error variance of the dependent variable is equal across groups.*

Table 5. *Levene's test of equality of error variances.*

| Variable | Levene Statistic | Sig. |
|----------|------------------|------|
| Anger | 0.11 | 0.96 |
| Negative word-of-mouth | 0.42 | 0.74 |
| Negative intentions: CEO | 1.30 | 0.28 |
| Negative intentions: Company | 1.35 | 0.26 |
| Trust in company's actions | 0.50 | 0.69 |
| Trust in company's competencies | 0.62 | 0.6 |
| Forgiveness | 0.06 | 0.98 |

*Tests the null hypothesis that the error variance of the dependent variable is equal across groups.*

# 4 Results

The results of this study will be presented in this chapter. Firstly, the main effects of media richness and corporate crisis responsibility are discussed, followed by the interaction between these variables. In the end, an overview of the hypotheses and answers to the research questions will be given.

## 4.1 Descriptive statistics

This paragraph deals with the descriptive statistics of the dependent variables and the respective conditions with a total of **N=289**. Table 6 shows the mean (M) and standard deviation (SD). First, descriptives of the independent variables will be discussed, followed by descriptives of interaction effects. Statements in the survey were recoded in the sense that high numbers indicate positive organizational outcomes.

### *Media richness*

Results of table 6 show that media richness had positive effect on anger, negative impression of the CEO and negative impressions of the company. A negative effect was found regarding the trust in the company's actions.

### *Crisis responsibility*

Participants were less angry in the moderate crisis responsibility condition (MCR) than participants in the high crisis responsibility condition (HCR). Next, less negative word-of-mouth intention was expressed in the MCR than in HCR. Participants had less negative impressions of the CEO in the MCR than in the HCR condition, as well as of the company. Furthermore, more trust in the company's actions was displayed in the MCR condition than in the HCR condition.  Trust in the company's competencies was higher in the MCR condition as well. At last, participants were more forgivable in the MCR condition than in the HCR condition.

### *Media richness and crisis responsibility*

In the following possible interaction effects between both independent variables are discussed. Interaction effects were found for negative word-of-mouth, trust in the company's actions, trust in the company's competencies and forgiveness.

Table 6. *Descriptive statistics per condition*

| | Moderate CR | | High CR | | Total | |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | Mean | SD |
| **High Mediarichness** | | | | | | |
| Anger* a) | 3.66 | 0.85 | 2.87 | 0.86 | 3.27 | 0.94 |
| Negative WOM b) | 3.24 | 0.74 | 2.47 | 0.70 | 2.86 | 0.82 |
| Negative Impressions: CEO* c) | 3.52 | 0.80 | 3.00 | 0.94 | 3.26 | 0.91 |
| Negative Impressions: Company* d) | 3.3 | 0.74 | 2.37 | 0.71 | 2.83 | 0.85 |
| Trust in Company's Actions e) | 3.16 | 0.65 | 2.4 | 0.74 | 2.78 | 0.79 |
| Trust in Company's Competencies f) | 2.94 | 0.60 | 2.72 | 0.51 | 2.83 | 0.56 |
| Forgiveness g) | 3.28 | 0.61 | 2.43 | 0.65 | 2.86 | 0.76 |
| **Low Mediarichness** | | | | | | |
| Anger* a) | 3.40 | 0.80 | 2.85 | 0.89 | 3.12 | 0.89 |
| Negative WOM b) | 3.12 | 0.76 | 2.50 | 0.74 | 2.8 | 0.81 |
| Negative Impressions: CEO* c) | 3.44 | 0.93 | 3.08 | 0.94 | 3.26 | 0.95 |
| Negative Impressions: Company* d) | 3.05 | 0.83 | 2.28 | 0.75 | 2.66 | 0.88 |
| Trust in Company's actions e) | 3.32 | 0.63 | 2.42 | 0.70 | 2.86 | 0.81 |
| Trust in Company's competencies f) | 2.89 | 0.59 | 2.73 | 0.64 | 2.8 | 0.62 |
| Forgiveness g) | 3.17 | 0.67 | 2.56 | 0.66 | 2.85 | 0.73 |
| **Total** | | | | | | |
| Anger* a) | 3.53 | 0.83 | 2.86 | 0.88 | | |
| Negative WOM b) | 3.18 | 0.75 | 2.49 | 0.72 | | |
| Negative Impressions: CEO* c) | 3.45 | 0.86 | 3.04 | 0.94 | | |
| Negative Impressions: Company* d) | 3.17 | 0.79 | 2.32 | 0.73 | | |
| Trust in Company's actions e) | 3.24 | 0.64 | 2.41 | 0.72 | | |
| Trust in Company's competencies f) | 2.91 | 0.59 | 2.72 | 0.58 | | |
| Forgiveness g) | 3.22 | 0.64 | 2.5 | 0.66 | | |

a) *5-point likert scale (1=strongly disagree / 5=strongly agree)*

* *Anger recoded (1=high anger / 5=low anger)*

* *Negative impressions recoded (1=negative impressions / 5= positive impressions)*

## 4.2    Hypothesis testing

In this paragraph the hypotheses, as argued in the theoretical framework, are going to be tested. To test whether the independent variables (media richness and crisis responsibility) had significant impact on the dependent variables (public responses), a Multivariate Analysis of Variance (MANOVA) was conducted. Wilks' lambda is used to test the group means of the dependent variables (public responses). Both independent variables were tested for significant impact, as well as for an interaction effect between them. The results are shown in table 7.

The results indicate that there is a significant impact of crisis responsibility on public responses based on, $F_{(7,279)} = 26.2$, Wilks' $\lambda =.60$ with $p < .05$. Statistical significance is not

confirmed for media richness p = .13, as well as an interaction effect between media richness and crisis responsibility p = .64.

Table 7. *Multivariate test for variance.*

|  | F-value | Sig. |
|---|---|---|
| Wilks' Lambda |  |  |
| Media Richness | 1.61 | 0.13 |
| Crisis Responsibility | 26.20 | .00* |
| Media Richness * Crisis Responsibility | 0.74 | 0.64 |

\* Significant effect: p< .05

Furthermore, a test of between subjects was conducted to get more information about the relationships of media richness and crisis responsibility with public responses. These results are displayed in table 8.

It shows significant effects of crisis responsibility on all dependent variables with anger F(1,285)=45.60; p = .00; negative word-of-mouth F(1,285)=72.56; p = .00; negative impressions of the CEO F(1,285)=16.84; p = .00; negative impressions of the company F(1,285)=97.99; p = .00; trust in the company's actions F(1,285)=115.66; p = .00 and competencies F(1,285)=9.22; p = .00 and at last forgiveness with F(1,285)=99.89; p = .00.

No statistically significant effects were found for the hypothesized relationship between media richness and public responses, as well as for interaction effects.

Table 8. *Test of between subjects design effects*

|  | F-value | Sig. | Hypothesis |
|---|---|---|---|
| **Media Richness** | | | |
| Anger | 2.33 | 0.13 | H1a |
| Negative WOM | 0.51 | 0.48 | H1b |
| Negative Impressions: CEO | 0.03 | 0.89 | H1c |
| Negative Impressions: Company | 4.29 | 0.04* | H1d |
| Trust in Company's Actions | 1.44 | 0.23 | H1e |
| Trust in Company's Competencies | 0.09 | 0.77 | H1e |
| Forgiveness | 0.03 | 0.87 | RQ1 |
| **Crisis Responsibility** | | | |
| Anger | 45.60 | 0.00* | H2a |
| Negative WOM | 72.56 | 0.00* | H2b |
| Negative Impressions: CEO | 16.84 | 0.00* | H2c |
| Negative Impressions: Company | 97.99 | 0.00* | H2d |
| Trust in Company's Actions | 115.66 | 0.00* | H2e |
| Trust in Company's Competencies | 9.22 | 0.00* | H2e |
| Forgiveness | 99.89 | 0.00* | H2f |
| **Media Richness * Crisis Responsibility** | | | |
| Anger | 1.12 | 0.29 | |
| Negative WOM | 0.96 | 0.33 | |
| Negative Impressions: CEO | 0.51 | 0.47 | |
| Negative Impressions: Company | 0.63 | 0.43 | RQ2 |
| Trust in Company's Actions | 0.59 | 0.44 | |
| Trust in Company's Competencies | 0.31 | 0.58 | |
| Forgiveness | 2.01 | 0.16 | |

a)   *5-point likert scale (1=strongly disagree / 5=strongly agree)*

\*   *Significant effect: p< .05*

## 4.3  Hypotheses

In this paragraph the hypotheses, argued in the theoretical framework, will be confirmed or rejected, based on the statistical results provided earlier in this chapter.

Table 9. *Hypotheses*

| Hypothesis | | Results |
|---|---|---|
| H1a | *Respondents exposed to the video apology will have less anger towards the organization than respondents exposed to the written apology.* | Rejected |
| H1b | *Respondents exposed to the video apology will express less negative word-of-mouth than respondents exposed to the written apology.* | Rejected |
| H1c | *Respondents exposed to the video apology will express less negative impressions of the organization than respondents exposed to the written apology.* | Rejected |
| H1d | *Respondents exposed to the video apology will express less negative impressions of the CEO than respondents exposed to the written apology.* | Rejected |
| H1e | *Respondents exposed to the video apology will express less distrust than respondents exposed to the written apology.* | Rejected |
| H2a | *Respondents exposed to the moderate crisis responsibility apology will have less anger towards the organization than respondents exposed to the high crisis responsibility apology.* | Confirmed |
| H2b | *Respondents exposed to the moderate crisis responsibility apology will express less negative word-of-mouth than respondents exposed to the high crisis responsibility apology.* | Confirmed |
| H2c | *Respondents exposed to the moderate crisis responsibility apology will have less negative impressions of the organization than respondents exposed to the high crisis responsibility apology.* | Confirmed |
| H2d | *Respondents exposed to the moderate crisis responsibility apology will have less negative impressions of the CEO than respondents exposed to the high crisis responsibility apology.* | Confirmed |
| H2e | *Respondents exposed to the moderate crisis responsibility apology will express less distrust than respondents exposed to the high crisis responsibility apology.* | Confirmed |
| H2f | *Respondents exposed to the moderate crisis responsibility apology will be more forgivable than respondents exposed to the high crisis responsibility.* | Confirmed |

Secondly, the research question argued in the theoretical framework will be answered in table 10.

Table 10. *Research questions*

| Research Question | | Results |
|---|---|---|
| RQ1 | How is forgiveness affected by the expressions of nonverbal cues in the case of United Airlines and Delta Airlines? | No significant effects of media richness on forgiveness were found. |
| RQ2 | How does the message delivery of the apology interact with corporate crisis responsibility in regards to the public responses? | No significant interaction between message delivery and corporate crisis responsibility was found. |

# 5    Discussion

In this chapter the general discussion and conclusion of the study are presented. The purpose of the study was to examine the roles of message delivery and corporate crisis responsibility on public anger, negative word-of-mouth, negative intentions, distrust and forgiveness.

*Message delivery: richness of media*

Academic literature suggests that the differences in message delivery influence the earlier mentioned public responses (Xu, Cenfetelli & Aquino, 2012; Tanis & Postmes, 2003; Vazquez, Dennis & Zhan, 2017). It is argued that the presence of non-verbal cues impacts these variables in a more positive manner than message delivery without these cues.

However, this study does not support these findings. All hypotheses but negative impressions of the company are found to be non-significant and therefore not supported. Still this significant effect is found to be of small size indicating other underlying factors. Other factors besides the persuasiveness of non-verbal cues seem to be present in the context of message delivery and crisis responses. It might be an explanation that video messages create a feeling of personalization in the audience which leads to these results. The CEO, as the organizational spokesperson, gives the organization a "face". For example, it could be that when a transgressed party suddenly sees the "face" of the transgressor that instead of feeling less angry, the transgressed party has a real person to channel its anger towards, resulting in even more anger. On the other hand, a sincere video message in which sympathy and honesty is communicated, might lead to decreased levels of anger. However, if sympathy and honesty are not expressed by the CEO, as the face of the organization, opposite effects are most likely.

It is worth noticing that Coombs and Holladay (2009) did not find significant results either when investigating differences in video or print message delivery in the context of crisis response. Future research might have a deeper and closer look on this topic regarding the differences in delivery, type of crisis response communicated by print or video messages and the spokesperson displayed. It is suggested that future research should take a deeper look at the differences regarding media channels and the delivered crisis response. It might be possible that certain crisis responses are best delivered by video messages whereas others are best delivered in a printed format (e.g. denial responses).

*Crisis Responsibility*

Previous crisis management literature suggests a strong influence of crisis responsibility on the dependent variables used in this study. This study supports these findings (Coombs, 2015; Fediuk, Coombs & Botero, 2010). All results regarding the crisis responsibility of the companies are found to

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be significant and therefore, the hypotheses are confirmed. It is shown that a crisis with less corporate crisis responsibility evokes less anger towards this company. This was also found in the study by Coombs and Holladay (2007) about negative communication dynamics during crisis. Secondly, the crisis with less crisis responsibility has led to less negative word-of-mouth and less negative impressions of both, the company and the CEO. Furthermore, respondents exposed to the crisis with moderate crisis responsibility displayed more trust towards the company's actions and competencies and were ultimately more forgivable. Again, this is in line with previous crisis literature (Lee, 2004; Coombs, 2015; Fediuk, Coombs & Botero, 2010).

*Message delivery & crisis responsibility*

Based on the Elaboration Likelihood Model (ELM) it was argued that an interaction effect between message delivery and crisis responsibility is possible. RQ2 was formulated as: "*How does the message delivery of the apology interact with corporate crisis responsibility in regards to the public responses?*". This study does not support this interaction between message delivery and crisis responsibility. It is possible that, even when the ELM suggests otherwise, severe transgressions call for a spokesperson to step up and take the word in the name of the organization. In the case of an airplane crash, with a high level of crisis responsibility, it may be advisable for the company to release a video message with the CEO as the spokesperson to express sympathy and honesty. Such a video message may be perceived as more personal by stakeholders and might have a greater impact. On the other hand, less sincere transgressions, which result in less involvement by the audience, could be answered with a written statement by the organization since they are less time consuming and need less resources. Again, it is suggested that future research takes a look into this topic. It would be worth studying which channel, regarding the media richness, is best suited for certain crisis responses, as they differ in their level of crisis responsibility.

## 5.1 Limitations

In this paragraph several limitations are discussed that need to be addressed to provide future research with suggestions to avoid error and bias. First, convenience sampling has been used to reach the required number of respondents. This sort of sampling limits the ability to achieve a representative population sample, because certain characteristics are overrepresented. Examples in this study are that most of the respondents are German, students and therefore highly educated and around their mid-twenties. A different sampling approach might be beneficial for future research. As an example, stratified sampling allows a more representative sample because it ensures that specific, predefined characteristics are included in the sample (Hardon & Hodgkin, 2004). Additionally, descriptive statistics revealed that respondents highly differed in the familiarity with the crisis. The

crisis of Delta Airlines (moderate responsibility) was only familiar to 6% of the population, whereas the crisis of United Airlines (high responsibility) was familiar to 35% and 42% of the population. These differences could have an impact on the results, because most of the respondents in the moderate crisis responsibility condition were exposed to the crisis for the first time and therefore did not have an opinion regarding the crisis before. The high crisis responsibility condition received a fairly high media coverage in Europe at that time. Respondents, familiar with this crisis have an earlier formed opinion about the crisis event which could have led to different results compared to respondents which were exposed to the crisis event for the first time. It is suggested that future research takes these differences into account. Either unknown or invented crisis events and companies can be used to ensure that all respondents are exposed to the crisis event for the first time and do not have tightened opinions regarding the crisis or company.

A second limitation is that even though both crises were perceived significantly different in terms of the corporate crisis responsibility, the difference between flight-cancelation and passenger beating may not have been extreme enough. During the pretest respondents rated the crises as moderate and firmly high but the differences are just in the acceptable spectrum. A selection of a flight cancelation and a plane crash may lead to different results. To further investigate the topic of apologetic message delivery it may be useful to include a victim crisis as well. By doing so all three clusters distilled by Coombs (2007) would be investigated regarding differences of message delivery. It is suggested that future research should use crises with bigger differences in the perceived corporate crisis responsibility.

Next, real life crises have been used in this study. Even though real life events and organizations offer great realism as real CEOs react to real events, self-directed video messages could have great benefits for future research. The differences in the video messages of United Airlines and Delta Airlines can be found in the background (neutral vs office), the appearance of both CEOs and how they speak. Additionally, the video message of United Airlines has been subtitled, whereas the video message of Delta Airlines did not have subtitles. These differences could have an impact on the results of this study as participants may have been differently persuaded by the CEOs. One way to counter this impact is to record own video messages. By recording video messages under controlled settings, differences in appearance, language, clothing and background settings can be controlled. In addition, the content of the apologies can be controlled and manipulated as well to lower differences between conditions as much as possible. Even though this method is more time consuming the benefits should be considered in future research.

A third limitation is the used trust scale. During confirmatory factor analysis several items were lost, and the trust scale was divided into two new components. This led to trust scales with

rather low item amounts. A different trust scale may be useful to measure the respondents trust in the organizations.

Lastly, the implementation of other variables could be interesting for future research as well. As an example, not only public responses to crisis could be investigated but the corporate image and reputation as well. A completely different aspect would be to investigate how organization could control the damage a crisis inflicts on them by using different message delivery types.

## 5.2 Practical implications

Previous crisis management literature highly suggests to identify the level of crisis responsibility perceived by the organization's stakeholders (Coombs, 2007). The three levels of crisis responsibility (low, moderate, high) have different consequences for the organization in the sense that more crisis responsibility leads to more negative public responses. This is supported by this study. It is important for crisis management to identify the crisis responsibility as fast as possible to be able to release the best suited response to limit the organizational damage inflicted by the crisis.

Secondly, this study did not find a significant effect of message delivery on the public responses. The findings suggest that crisis management should make use of different message delivery styles in order to reach the biggest audience possible with their crisis response. Both, video and print media should be used here.

Furthermore, no significant interaction effect between message delivery and crisis responsibility was found. These findings suggest that organizations do not have to worry about whether the certain crisis event calls for a specific message delivery. However, this does not imply that crisis management should take costs and other resources as primary factors to decide how the crisis response will be delivered. Crisis management should take the context of the crisis and the organizational crisis history into account. Certain situations may require a video message with an organizational spokesperson (e.g. CEO) to demonstrate that the organization takes the crisis seriously and is aware of their responsibility. On the other hand, crises with less crisis responsibility could be answered with a written statement, as these are less time consuming and expensive.

## 5.3 Conclusion

The objective of this study was to investigate the influence of different types of message delivery and crisis responsibility on public responses in the context of organizational crisis. Message delivery of the organizational crisis response was divided in delivery with low media richness (written message) and high media richness (video tape message). Furthermore, the accidental crisis cluster (moderate crisis responsibility) and the preventable crisis cluster (high crisis responsibility) were used to represent the different levels of crisis responsibility. Apology was chosen for the organizational crisis

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response. The public responses to crisis consist of public anger, negative word-of-mouth, negative impressions of the CEO and the company, trust in the company's actions and competencies and forgiveness.

This study found evidence that crisis responsibility has significant effect on the public responses in the context of organizational crisis. Higher crisis responsibility resulted in more negative public responses. No main effect was found for the influence of message delivery on public responses. Furthermore, no interaction effect between message delivery and crisis responsibility was found.

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## Appendix A: Items

*Anger (Lee & Chung, 2012)*

- To what extent do you feel the following feelings towards the company?
    - Anger
    - Madness
    - Irritation
    - Annoyance
    - Outrage

*Word-of-mouth (Coombs, 2007; Coombs & Holladay, 2008)*

- I would encourage friends or relatives <u>not</u> to buy products from the company.
- I would recommend the company's products / services to someone who asked my advice.
- I would say negative things about the company and its products to other people.

*Negative impression (De Blasio & Veale, 2009)*

- I am disappointed with the CEO.
- I evaluate the CEO negatively.
- I have a negative impression of the CEO.

- I am disappointed with the company.
- I evaluate the company negatively.
- I have a negative impression of the company.

*Trust (Hon & Grunig, 1999)*

- This company treats people like me fairly and justly.
- Whenever this company makes an important decision, I know it will be concerned about people like me.
- This company can be relied on to keep its promises.
- I believe that this company takes the opinions of people like me into account when making decisions.
- I feel very confident about this company's skills.
- This company has the ability to accomplish what it says it will do.
- Sound principles seem to guide this company's behavior.
- This company does not mislead people like me.

- I am very willing to let this company make decisions for people like me.

- I think it is important to watch this company closely so that it does not take advantage of people like me.

- This company is known to be successful at the things it tries to do.


*Forgiveness (Xi & Peng, 2009)*

- I would disapprove of this company.

- Given the company's response, I would condemn it.

- Given the company's response, I would forgive it.

- I think favorably of this company.

- I feel sympathetic towards the company.

# Appendix B: Manipulated introduction texts

*Moderate crisis responsibility introduction*

On December 17th, 2017, a fire, caused by Delta Airlines at the Hartsfield-Jackson Atlanta International Airport, <u>accidentally</u> resulted in a huge power outage which ultimately struck the entire airport leaving it without power-supply for about 11 hours. Delta Airlines invested money into backup IT-systems to prevent damage by power-outages. However, these backup systems did not take over on December 17th, 2017 resulting in the cancelation of 800 flights. Passengers were not able to reach their destinations and were uninformed for several hours during one of the biggest travelling periods of the year.

*High crisis responsibility introduction*

On April 9th, 2017, managers of United Airlines regional branch United Express offered travel vouchers to four passengers of Flight 3411 to vacate their seats to make room for airline staff which needed to be at Louisville International Airport. Flight 3411 was about to start at Chicago's O'Hare International Airport. All passengers did not accept the offer from United Express resulting in a random selection of passengers to be involuntarily removed from the flight. Among these passengers was David Dao, a pulmonologist. Dao refused to leave the airplane after airline staff insisted him to leave. Hereupon, aviation security officers were called which pulled him out of his seat. While doing so, Dao's face hit an armrest followed by Dao losing consciousness while bleeding. Officers then dragged Dao by his arms across the airplane.

## Appendix C: Video links of the video messages

*Delta Airlines video apology*

https://www.youtube.com/watch?v=-wo0iEbCbfg

*United Airlines video apology*

https://www.youtube.com/watch?v=IwSXBZqKljY