Responding in a crisis situation

The effects of crisis message timing and crisis message framing on consumers with different cultural background

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Responding in a crisis situation:
The effects of crisis message timing and crisis message framing on consumers with
different cultural background

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Abstract

Understanding crisis situations and developing appropriate crisis strategies is nowadays one of the most important actions to undertake for companies. Crises can not only affect a company's image but also its financial assets and thus its whole existence. This research investigated to what extent the timing of the communicated crisis message and the framing of the communicated crisis message, which can either be emotional or rational framed, influence the customers’ emotional response, the trust in the company, purchase intention and their word-of-mouth intentions. Another very important aspect of this research was also whether the effects were dependent on cultural differences. In this 2 x 2 experimental design with two types of participants both, 140 participants from the Netherlands and 140 participants from Germany, were exposed to four different cases in which the variables have been manipulated. The results of this study support findings of previous studies by stressing the impact and importance of the right timing and framing of a crisis response message. The findings of this study show that companies should select their response strategy carefully, especially when emotional appeals are used since an emotional framing can not only evoke positive feelings such as sympathy but also negative feelings such as anger. One explanation can be the intense emotional appeals that are used in the emotional approach which can also give the impression that a company is not showing enough strengths of handling the crisis appropriately. In addition, the study also shows that feminine and masculine cultures react often differently when it comes to crisis communication. Participants out of the feminine culture react much more intense to crisis messages both in a positive and negative way, compared to participants out of the masculine culture which can be important especially for multinational organization to take into account when formulating a crisis response message.

Keywords

Crisis communication, message framing, crisis timing, cultural impacts on crisis communication
Table of Content

1. Introduction...........................................................................................................................................6
2. Theoretical Implications ........................................................................................................................8
   2.1 Crisis Type and Crisis Severity ........................................................................................................8
   2.2 Dependent variables: emotional response, trust in the company, purchase intentions and word-of-mouth intentions ..................................................................................................................9
   2.3 Crisis Communication Timing ........................................................................................................11
   2.4 Crisis Message Framing ....................................................................................................................13
   2.5 Moderating Effect of Culture ...........................................................................................................14
   2.6 Covariates ........................................................................................................................................17
   2.7 Interaction between Message Timing and Message Framing ........................................................19
   2.8 Three-way interaction between Message Timing, Message Framing and Culture ................................19
3. Method ....................................................................................................................................................21
   3.1 Design ..............................................................................................................................................21
   3.2 Procedure .........................................................................................................................................22
   3.3 Stimuli Material ...............................................................................................................................22
   3.4 Participants ........................................................................................................................................24
   3.5 Manipulation Checks ......................................................................................................................27
   3.6 Measurements ................................................................................................................................30
4. Results ....................................................................................................................................................32
   4.1 Correlation Analysis ........................................................................................................................34
   4.2 Main Effects Timing ..........................................................................................................................36
   4.3 Main Effects Framing ........................................................................................................................37
   4.4 Interaction effects ............................................................................................................................39
      4.4.1 Interaction between Message Framing and Timing .................................................................39
      4.4.2 Interaction between Message Framing and Culture .............................................................41
      4.4.3 Interaction between Message Timing and Culture ....................................................................43
      4.4.4 Three-way interaction between Message Framing, Message Timing and Culture ..............44
5. Discussion ...............................................................................................................................................48
   5.1 Message Timing ...............................................................................................................................48
   5.2 Message Framing .............................................................................................................................50
5.3 Interaction between Message Timing and Framing .................................................50
5.4 Interaction between Message Timing and Culture ..................................................51
5.5 Interaction between Message Framing and Culture ..................................................52
5.6 Three-way interaction between Message Framing, Message Timing and Culture..............53

6. Implications .................................................................................................................55
   6.1 Theoretical Implications .....................................................................................55
   6.2 Managerial Implications ....................................................................................56

7. Limitations ....................................................................................................................58

8. Conclusion ....................................................................................................................60

9. Acknowledgements .....................................................................................................60

References .......................................................................................................................61

Appendix ...........................................................................................................................65
1. Introduction

Reacting appropriately to a crisis is one of the biggest challenges, due to the reputational and financial impact a crisis can have on a company. A crisis can both affect the brand’s consumer relationship and image as well as financial assets and the company’s existence. Therefore, understanding crises situation and developing appropriate crises strategies is of great importance for any company, especially since many crises occur without any prior notification and time to prepare. A crisis can be described as an abrupt and unexpected event that could threaten both a brand’s reputation and its financial assets (Benoit, 1997; Huang, 2006; Coombs, 2007). Several researchers have already investigated the field of crisis communication and stressed the importance that crisis communication strategies should be based on the type of crisis by which the company is affected (Cho & Gower, 2006). Companies can then adjust their crisis response according to the type of crisis which is described in the framework of Coombs (2007) such as an apology, denial or justification.

Another very important aspect in crisis communication is also the crisis message and its formulation. It not only helps to inform stakeholder and customers about the crisis but it also helps to control the damage the crisis has caused on the company (Ray, 1999; Sturges, 1994). One field of studying communication messages is the message framing which has only recently received more attention from scholars. Prior research investigated emotional versus rational message framing of crisis communication and concluded that emotional appeals were more likely to remembered (Flora & Maibach, 1990) and also more effective in changing attitudes (Rosselli, Skelly & Mackie, 1995). A rational framed statement by only focuses on the facts instead of displaying emotions “The news about crisis X are true.”. An emotional framed statement, on the other hand, appeals to the emotions of the public such as “We are deeply shocked and devastated but the news about crisis X are true!”. Communication timing also plays a very important role when it comes to crisis messages. Companies can react proactively or reactively to a crisis which can have an impact on how customers perceive a crisis and research shows that a proactive response to a crisis enhances credibility (Arpan & Pompper, 2003; Arpan & Roskos-Ewoldsen, 2005). An example of bad communication timing is Taco Bell’s E.coli that occurred 2006. Taco Bell decided for a reactive communication timing and was in general very slow in releasing relevant information to the public. This behavior was strongly critized in the media and led to a bad image for the company.
However, only little is known about whether those results of crisis communication differ when it comes to different cultures. It could be possible that a specific formulation of a crisis message is understood differently depending on the country and that a proactive communication timing or reactive communication timing in one culture leads to better results than in another when it comes to post-crisis reputation. According to Hofstede (1980) countries can be classified into the masculine and the feminine cultural dimensions. People from masculine societies can, for example, be described as more achievement orientated, whereas people from feminine societies are more relationship orientated. Those cultural differences could also play an important role when it comes to crisis communication and how customers and stakeholders perceive and evaluate the crisis related activities of a company. The role of culture is so important to consider since culture plays an important role in forming the way we think, feel and act (Hofstede, Hofstede and Minkov, 1991). Therefore, including Hofstede’s cultural dimensions into the framework of crisis communication would add a completely new aspect especially for multinational organization's and how they can plan and design their communication during crises in order to protect their company's reputation.

The problem description above leads to the following research questions:

1. To what extent do crisis communication timing and framing of the message influence emotional response, trust in the company, purchase intention and word of mouth intentions?

2. To what extent are the effects of crisis communication and framing of the message on emotional response, trust in the company, purchase intention and word-of-mouth intentions dependent on culture?
2. Theoretical framework

2.1 Crisis type and crisis severity

Crises can be described as events that can disturb an organizations operations and are a threat to the organizational reputation (Coombs & Holladay, 2002). It is also often a highly emotional event, for the victims, as well as the organization and its members involved and it hits the company mostly unexpected. (Van der Meer & Verhoeven, 2014). Therefore, it is of great importance for companies to react appropriately to the public and stakeholders in order to prevent reputational and financial damage. Crisis communication is a very important aspect in order to inform the public and stakeholders about the crisis. It can be referred to as “the collection, processing, and dissemination of information required to address a crisis situation” (Coombs, 2010, p. 20). If crisis communication is used in the right way it can help organizations to prevent any damage to their reputation (Van der Meer & Verhoeven, 2014) and, in turn, also to financial assets. In order to understand different types of crisis and to find the appropriate response in a specific crisis situation Coombs (2007) model of the “Situation Crisis Communication Theory” can be used. This framework not only offers guidelines on how to respond to a specific type of crisis and how crisis situations influence stakeholder’s crisis responsibility attribution but it also describes different crisis types and their severities with the help of a cluster (victim-, accidental- and preventable cluster). Whether a crisis is perceived as severe by customers and stakeholder depends on how the crisis is experienced and how the damage is evaluated that the crisis has caused (Fediuk, Coombs & Botero, 2010). According to Coombs (1998) this can include the number of people which were killed or harmed, the impact the crisis has on the community and environment, and also the financial loss the crisis caused. In order to examine the topic of crisis severity and to give insight into what organization’s can expect and how they can prepare for a ‘worst- case’ scenario it will be chosen for a high severity crisis in this study. A crisis with a high level of severity is largely affecting stakeholders and customers with severe potential consequences, property and injury wise (Coombs, 1998). The SCCT model of Coombs (2007) assumes that crises are a major threat to an organization’s reputation but the right strategic communicative response would be the best protection to the reputational source (Mishra, 1996). Therefore, it is of great importance for companies to understand on how to operate to prevent as much damage to the company’s reputation as possible. Additionally, this
study will also examine whether multinational companies have to adjust their crisis response depending on the country the response is released in.

In the following the four dependent variables emotional response, purchase intention, trust in the company and Word of Mouth intentions are described.

2.2 Emotional response, trust in the company, purchase intentions and word-of-mouth intentions

A company’s crisis response can not only affect how stakeholders interact with the organization (Roberts & Dowling, 2002) but it can also be a threat to its reputation which makes effective crisis management essential (Pearson & Clair, 1998). Anything a company communicates especially during a crisis will affect its public's perception and, in turn, a publics' emotional reaction on the crisis, which can be positive and negative. The right framing of the crisis response from companies is especially important since the way the crisis is framed in the media will also affect how stakeholder and the public view and evaluate the crisis.

Coombs (2007) model classified primary guidelines on how to respond to a crisis, in order to respond in a strategic manner, into three groups: deny, diminish and rebuild. When using the deny crisis response strategy a crisis frame is established that helps to prevent any connection between the company and the crisis to protect a company’s reputation. The diminish strategy tries SCCT to either reduce the connection between the company and the crisis or even tries to minimize the perceived damage the crisis has caused. The third crisis response strategy of Coombs (2007) is the rebuild strategy. This form of crisis response is taking the focus off the negative crisis and instead directs the public to more positive actions that the company is undertaking. This can, according to Coombs’ (2007) SCCT model, either be done by expressing the full responsibility of the incident and apologizing for any damage or that the company is offering compensation to victims. The model shows that there are different strategies on how to respond to a crisis which can, in turn, affect changes in emotions and behaviors. There are several emotions stakeholder and customers can experience as a result of a crisis situation and the crisis response strategy of a company since most crises incidents are emotion-laden experiences (Coombs & Holladay, 2005). People can experience the emotion of anger if the result of the crisis situation is perceived as negative and unfavorable, or sympathy if
they are pleased or satisfied with the outcomes (Coombs & Holladay, 2005). Additionally, also the perceived level of crisis responsibility can have an impact whether stakeholders will act positively or negatively towards a company. Nevertheless, the importance of the framing of the crisis response is also stressed by McDonald, Sparks and Glendon (2010). They state that positive emotions in a crisis are mostly only experienced as a result of the organization’s response and the framing of their crisis communication. As stated earlier the SCCT model (Coombs, 2007) does not only suggest that crisis response strategies, and an organizations’ way of communicating with its public, will affect its stakeholders and public’s perception on the company, but also behavior such as the willingness to purchase products from the company during or after a crisis situation. A company’s decision on how to communicate during a crisis can, therefore, have a huge impact on consumer relationships and the financial assets of an organization (Hegner, Beldad & Kamphuis op Heghuis, 2014).

The third construct in this study that is being tested and that is highly influenced by crisis response messages are the word-of-mouth intentions of respondents. Litvin, Goldsmith & Pan (2008, p.454) define WOM as the ‘the communication between consumers about a product, service, or a company in which the sources are considered independent of commercial influence’. According to Arndt (1967) and Godes and Mayzlin (2004), WOM does not only influence the purchase intentions of customers but is also one of the most important and most influential ways of communicating. Whether stakeholder talk positively or negatively about a product and company can therefore highly depend on the framing of the crisis response message.

The fourth construct which is being tested in this study and which can be affected by a crisis response of an organization, is the trust of consumers in the company during and after a crisis. Literature often uses the term trustworthiness, which is a derived term of trust. Trustworthiness can be defined as “the perceived characteristics of the trustee that serve as the primary basis on which individuals are willing to accept vulnerability” (Dirks & Skarlicki, 2009, p. 137). Previous research already investigated different aspects of trustworthiness such as Mayer, Davis and Schoorman (1995) who developed the dimensions of trustworthiness: ability, benevolence, and integrity. Those three dimensions describe attributes such as the competences and the characteristics of the trustee, the goodwill of the trustee and that the trustor has to accept the way the trustee is operating. Nevertheless, apart from focusing on the organizations attributes in a crisis other previous studies also claim that the severity of a crisis plays an important role
when it comes to trust relationships in a crisis. The higher the level of severity in a crisis, the more people assign crisis responsibility to the affected organization (Coombs, 2007; Coombs & Holladay, 2002). This also means that pressure of the public towards the company is rising concerning an appropriate crisis response. Another study of Verhoeven, van Hoof, ter Keurs and van Vuuren (2012) shows that the more severe a crisis is, the greater the threat for an organization becomes and the more corporate trust is damaged. Another factor that has a great influence on trust during a crisis is the crisis response which is communicated by the organization. Communicating a message which includes emotional appeals can increase the trustworthiness of the organization (Weiss & Cropanzano, 1969). A behavior that can be of great risk for the trust customers and stakeholder have in an organization in crisis is also to withhold information. According to Seeger (2006) is effective crisis communication honest, candid, and open. By maintaining honesty, condor and openness credibility would be fostered not only with customers and stakeholders but even with the media.

In the following the two independent variables communication timing and message framing are described and hypotheses are given.

2.3 Crisis Communication Timing

Crisis Communication timing is described as the moment an organization publishes a message about a crisis (Coombs, 2015). However, this can also cause a lot of uncertainty within a company about the right moment to release information to the public. Prior research distinguishes two types of communication timing strategies: a proactive and a reactive approach.

When an organization uses a proactive approach it is issuing information about a crisis first before any other media (Arpan & Pompper, 2003; Arpan & Roskos-Ewoldsen, 2005; Coombs, 2015). Thus, timing also pertains to the question of who discloses the crisis related information. A proactive response enables the company to distribute information before any other media, hence, they can put the crisis in a less negative light (Arpan & Pompper, 2003). This strategy is also called “stealing thunder” and describes a crisis situation strategy that is breaking the news about a crisis first, as opposed to either stonewalling or reacting to information released by the media or other parties (Arpan & Roskos-Ewoldsen, 2005). In contrast, a reactive response of an organization
occurs when for whatever reason an organization was not the first to report a crisis but instead other parties such as the media informed about the crisis first (Arpan & Pompper, 2003).

Proactive responses of organization contain usually a statement of the existence of a crisis and the admission of a failure (Arpan & Pompper, 2003). From the point of view of the media is a proactive response strategy less interesting since there is not much news value as the company itself already informed the public (Arpan & Pompper, 2003). This, in turn, is especially important for the company in a crisis since they can expect less negative news coverage in the media. From a stakeholders’ and consumers’ point of view proactive response strategies have widely proven to enhance perceived honesty, sincerity and trustworthiness (Arpan and Roskos-Ewoldsen, 2005; Arpan & Pompper, 2003). Arpan and Roskos-Ewoldsen (2005) further state that a proactive response strategy can have a positive effect on the acceptance of the message as well as how the organization in crisis is evaluated. Additionally, this would result in higher credibility rating for the organization.

A reactive response could form according to Holladay (2009) the impression that an organization is not in control of the crisis and its outcomes which could be interpreted as negative. On the other hand, gives a reactive response the organization also more time to react appropriately to a crisis and could prevent hasty decisions concerning the content of crisis messages. Nevertheless, in most of the scientific literature a proactive approach has proven as more effective when it comes to effectively protecting the reputation of an organization during a crisis. Weiner et al. (1991) examined in their study the effects of confession and timing. According to this study people evaluate a proactive response to be more trustworthy and it would evoke more positive feelings towards the organization in a crisis. The study suggests further that people also experience less feelings of anger, which is typically a feeling experienced of customers and stakeholder during a crisis. Additionally, the study of McDonald, et al. (2010) found that if a company uses a proactive communication response it reduces anger, and negative word-of mouth and increases sympathy. Therefore, it can be expected that a proactive communication timing approach has a more positive impact on the four dependent variables compared to a reactive communication timing which leads to the formulation of the following hypothesis:
**H1:** Proactive communication timing leads to (a) more positive emotional responses, (b) more trust in the company, (c) higher purchase intentions, and (d) more positive word-of-mouth intentions than reactive communication timing.

### 2.4 Crisis Message framing

When faced with a crisis situation a quick and an appropriate response is essential. An organization is selecting a crisis response strategy in order to minimize crisis responsibility and to restore a company’s image and legitimacy (An et al., 2011). According to Coombs’ (2007) SCCT model there are different ways for an organization to respond to a crisis such as denial, diminish and rebuild. However, also the framing of the crisis response can play a very important role. The framing of messages in a crisis situation can affect the consumers’ willingness to assess the content of the message (McKay-Nesbitt et al., 2011). When framing a message the company can highlight specific information and factors in the message which will then receive more attention from the customers’ and stakeholders’ (Druckman, 2001). The response which is communicated during a crisis can both be rationally or emotionally framed (Flora & Maibach, 1990).

Rational framing uses mostly factual and objective information when informing about the crisis (McKay-Nesbitt et al., 2011; Moon & Rhee, 2012). Claeys, Cauberghe and Leysen (2013) describe the rational frame as direct, straightforward and objective without referring to emotion or displaying the crisis in a dramatic manner. Emotional framing in contrast is trying to evoke positive feelings such as sympathy by using apologies regarding the crisis (Schultz, Utz & Göritz, 2011). According to Moon and Rhee (2012) a message in an emotional frame “focuses more on expressing the organization's sincere sorrow, regret, and concern for those affected by a crisis in describing how the organization is managing the crisis situation” (p. 681). Prior research suggests that in general emotional appeals are more likely to be remembered (Flora and Maibach, 1990) and also more effective when it comes to attitude changes (Rosselli, Skelly & Mackie, 1995). Most of the previous studies, however, focused more on changing or manipulating the emotional states of participants rather than exposing them to actual messages which contain either emotional or rational appeals. Nevertheless, the importance of message framing in crisis situation is an interesting topic to be
investigated further in order to help organizations to react in an appropriate manner during crises. According to Huang (2008) rationally framed messages can result in milder crisis responses from customers and stakeholders since they get informed only with facts about the crisis instead of distracting the public with an emotional appeal.

However, another study leads to the expectation that when a corporate crisis is emotionally framed customers will be more likely to accept a corporate response when the message also contains intensive emotional appeals (Cho & Gower, 2006). Schultz, Utz and Göritz (2011) describe emotional framing as the most credible as it displays sympathy and apologies to the affected consumers. This view is also supported by van der Meer and Verhoeven (2014) who argue that when using an emotional appeal, the organization also appears to be more human and, in turn, might decrease feelings of anger towards the organization. Kim and Cameron (2011) even go further and state that emotional framing has a positive effect on stakeholders’ attitudes and behavioral intentions. In this case this could be purchase intentions and word-of-mouth intentions. Moreover, an emotionally framed message during a crisis can also increase customers’ trust in the organization (Weiss & Cropanzano, 1996). Therefore, it is expected that emotional framing has a more positive effect on the dependent variables compared to rational framing which leads to the formulation of the following hypothesis:

**H2:** *Emotional framing leads to (a) more positive emotional responses, (b) more trust in the company, (c) higher purchase intentions, and (d) more positive word-of-mouth intentions than a rational crisis communication framing.*

Apart from the constructs discussed above it is also expected that the possible effects of the manipulations on the dependent variables could be moderated by culture.

### 2.5 Moderating effects of culture

As having moderating effects on the constructs in this study cultural dimensions have been chosen. According to Hofstede, Hofstede and Minkov (1991) culture consists of unwritten rules that distinguishes the members of a group or category of people from others (p.3). In addition culture would play an important role in forming the way we think, feel and act which is learned throughout our whole life. Furthermore, culture also constructs views and expectations of masculinity and femininity in a society and communication, in turn, among others is used to express and perform a specific gender (Eadie, 2009). Among a great range of different cultural studies from many different
researchers Hofstede (1980) introduced a new approach about the classification of countries into having more masculine or feminine characteristics. The masculine communication style is used to manage tasks and to put more emphasis on facts and results whereas feminine communication style puts more attentions to process and feelings.

In this study the Netherlands and Germany have been chosen to examine the moderating impact of cultural dimensions on crisis communication. Although both countries are geographically very close and in terms of economical and technological development very similar there is one very important difference between the two countries. In fact, empirical research shows that the Netherlands score much higher on the cultural dimension of feminism compared to Germany which scored much higher on the masculine dimension which is based on independent preferences for one state of affairs over another that distinguishes countries from each other, rather than individuals (Hofstede 1980, 1983).

Feminine cultures, compared to masculine cultures, are much more relationship orientated, they appreciate a balance of interests during conflicts and they prefer mediation approaches to resolve conflicts, whereas masculine cultures are known to be very achievement orientated (Hofstede 1980). In addition, the members of a feminine culture are also less likely to make use of harsh and direct forms of dispute resolutions when it comes to a conflict (Xie, Song & Stringfellow, 1998; Ting Toomey et al. 1991; Oudenhoven, Mechelse & deDreu, 1998). Eadie (2009) states further that there are traditional significant differences between masculine and feminine communication. Masculine communication is much more direct, assertive, relying on generalizations and conceptual levels of description. Furthermore, masculine communication would be very emotionally restricted and would disclose less about feelings, personal thoughts, sympathy and empathy compared to feminine communication. Although Eadie (2009) found significant differences in masculine and feminine communication he also states that there can be differences and that for example not every man has issues expressing sympathy or is very assertive. Furthermore, it would be very likely that it is not only one’s gender that plays a role when developing a communication style but also the society people grow up in. Rather than understanding feminine or masculine communication patterns as a natural outgrowth of biological sex, researchers in the 1970s and 1980s started to understand gender and its communication patterns as socially constructed (Eadie, 2009). People who grew up and were socialized in an
expressive ethnic community are very likely to pick up an expressive style of communication as well and vice versa (Eadie, 2009).

To conclude, this would mean that a more feminine and expressive style of communication is used and preferred in the Netherlands compared to the more masculine country Germany. Although different gender patterns in communication are unconsciously used every day formed by historical moments and specific cultural contexts (Eadie, 2009), there are almost no studies in the field of crisis communication which examined those patterns when it comes to crisis communication. However, culture can have a great influence on how crisis communication is interpreted and what an acceptable reaction to a specific crisis is, based on our socio-cultural environment (Azmat & Zutshi, 2012; Levine, Park & Kim, 2007). Considering the more complex nature of feminine societies, such as the Netherlands, when it comes to crisis communication it is possible that a proactive communication response leads to better results as they pay more attention to details and background information when it comes to communication and masculine cultures rely more on generalizations, as explained by Eadie (2009). On the other hand it is expected that the simpler and more achievement and factual orientated masculine culture is more interested in actual information and pay less attention to background information such as when the company in a crisis informed the public. However, since previous studies stress the positive effects of proactive message timing it is possible that although both cultures differ, a more positive effect of proactive will be expected. Based on the discussion above the following hypotheses can be formulated for the interaction effect of culture:

**H3:** Proactive communication timing has a more positive effect on Dutch and on German people when it comes to (a) more positive emotional responses, (b) more trust in the company, (c) higher purchase intentions, and (d) more positive word-of-mouth intentions.

**H4:** Emotional framing has a more positive effect on Dutch people than on German people but on German people rational framing works better when it comes to (a) more positive emotional responses, (b) more trust in the company, (c) higher purchase intentions, and (d) more positive word-of-mouth intentions.
2.6 Covariates

In addition to the four dependent variables this study also included two covariates health and product involvement. The two covariates have been chosen because the interest of participants in their health and in the product that is used in this study can be of great importance when analyzing the results. This stimuli material of this study consists of a crisis case in which health threatening substances are found in a food product. Participants who are concerned about their health will therefore be highly affected by the incident. However, it is possible that when participants care less about the health they will also react differently which will be displayed in their results.

A similar effect can occur when participants are not that interested in the product which is used in the stimuli material. If participants are not using the product at all or if in general their interest in the product is low this will also affect the answers the participants give about the case presented in the stimuli material. This could especially affect constructs such as purchase intentions and emotional responses as the participants also did not purchase the product before and are additionally less affected by negative or positive feelings when being presented with the stimuli material.

In the following the conceptual model is presented:
Figure 1. Conceptual model
2.7 Interaction between crisis message timing and crisis message framing

This study also investigates the interplay of message timing and message framing. When designing a crisis response an organization can normally choose whether to use a proactive or a reactive approach and whether to make use of an emotional or rational framed message or even to make use of both. Claeys, Cauberghe and Leysen (2013) suggest that when using a proactive response an emotional frame is best to use, as it would result in a much more positive post-crisis reputation and higher post-crisis trust. In addition, a proactive response enables the company to distribute information before any other media, hence, they can put the crisis in a less negative light (Arpan & Pompper, 2003). Moreover, emotional framing has a positive effect on stakeholders attitudes and behavioral intentions (Kim & Cameron, 2011) and emotional framed message in a crisis also increase the perceived trust in the organization (Weiss & Cropanzano, 1996). Considering the positive influence of proactive communication timing and emotionally framed messages, mentioned in the research above, the following hypothesis has been formulated:

**H5: A proactive response in combination with an emotional frame has a more positive effect on (a) more positive emotional responses, (b) more trust in the company, (c) higher purchase intentions, and (d) more positive word-of mouth intentions compared to the combinations of a proactive-rational-, reactive-emotional- and reactive-rational approach.**

2.8 Three-way interaction

In order to answer RQ3 and to examine whether the two-way interaction of message timing and message framing varies across levels of cultural dimension, according the framework introduced by Hofsted (1980), a three-way interaction will be conducted. Unfortunately, there has not been any research done when it comes to examining the three-way interaction of message timing, message framing and cultural dimensions.

Therefore, an exploratory research question will be formulated:
**RQ 3:** To what extent has a proactive versus a reactive crisis response in combination with an emotional message framing and a rational message framing for Dutch consumers compared to German consumers a more positive impact on (a) more positive emotional responses, (b) more trust in the company, (c) higher purchase intentions, and (d) more positive word-of-mouth intentions.
3. Method

3.1 Research Design

In order to answer the research question a 2 x 2 experimental design was constructed with two types of respondents. To measure the four dependent variables an online questionnaire was used. The four dependent variables are the emotional response (anger vs. sympathy), purchase intention, trust in the company and word-of-mouth intentions (positive vs. negative). The two independent variables were the timing of the message (proactive vs. reactive) and the framing of the crisis response (emotional vs. rational). The participants will be exposed to a case of a company in a crisis and its crisis response message including statements to test the constructs. The answers of the participants will be assessed by using a 5-point Likert scale (from 1 'strongly disagree to 5 ' strongly agree'). Additionally, there were also two Covariates in this study, product involvement and health involvement, that have not been manipulated but which were expected to have an influence on the dependent variables. The participants of the study were divided into four categories and separated based on their nationality (German vs. Dutch). Table 1 shows the four categories and the distribution of participants.

Table 1

*Distribution of participants per category*

<table>
<thead>
<tr>
<th>Framing emotional + Proactive Communication</th>
<th>Framing emotional + Reactive Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 Dutch / 35 German</td>
<td>35 Dutch / 35 German</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Framing Rational + Proactive Communication</th>
<th>Framing Rational + Reactive Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 Dutch / 35 German</td>
<td>35 Dutch / 35 German</td>
</tr>
</tbody>
</table>
3.2 Procedure

The participants of this online survey were mainly be reached via social media and the university platform sona-systems. It was chosen for an online study since it gave participants the time to fill in the questionnaire in their own chosen environment and time. Moreover, the study was also designed as an online study to be able to present the crisis response in a realistic environment since most of the communication nowadays is distributed via the internet. When participants opened the link to the questionnaire they were first of all asked to indicate what their mother tongue is (Dutch vs. German) to direct them to the right set of questionnaires which were either in German or Dutch. Furthermore, the participants were based on their mother tongue also randomly assigned to one of the four conditions (see Table 1. above). Before starting the survey an introduction to the research and privacy information were displayed. The first questions in the questionnaire were manipulation checks and questions about the participants involvement with the product (deepfrozen pizza) and their health involvement, which they had to answer before being exposed to the scenario. Subsequently, the participants were exposed to one of the four different scenario’s which was followed by statements about the scenario and how participants perceived the crisis response.

The items included manipulation checks as well as statements about the emotion towards the company, the perceived trustworthiness of the company, the purchase intentions and the Word of Mouth intentions after being exposed to the crisis response. The questionnaire finished with a few demographic questions about the participants such as their age, gender and education. To conclude, a thank you note was shown to the participants to thank them for their participation.

3.3 Stimuli Material

The stimuli material consisted of either an emotionally framed message, with an apology and emotionally laden reaction to the crisis (e.g. “we are terribly sorry”). According to Claeys, Cauberghe and Leysen (2013) is an emotional frame emphasizing more subjective an evaluative properties. The most dominant emotion in the emotionally framed conditions was that the company is shocked and sad about the incident (e.g. “We are shocked and devastated.”). Rational framing, on the other hand, uses mostly factual and objective information when informing about the crisis (McKay-Nesbitt et al., 2011;
Moon & Rhee, 2012). Therefore, the neutrally framed messages in this study included objective information about what has happened and how the company wants to proceed (e.g. as soon as we have more information we will inform the consumers.

Additionally, the stimuli material also included either a proactive communication timing or a reactive communication timing. In one case the participants were exposed to a message which was released prior to any other party or media and in the other case the media was the first to report the crisis. The article was divided into two short paragraphs. The first paragraphs always gave a short introduction into the incident such as what happened and which product was affected and if it was either Dr.Oetkers initiative to come forward about the crisis (proactive communication timing) or whether it was a food inspection authority. The second paragraph of the article was showing the reaction of the organization and was displayed in form of a quotation of the affected company’s spokesman. The crisis responses were presented to the participants in form of a newspaper article. The article showed the newspapers’ logo the crisis response message was released in followed by the article. The choice for the newspaper for the Dutch (deVolkskrant) and for the German (Süddeutsche Zeitung) versions of the questionnaires was based on a preliminary test. The company in crisis used in this research was DrOetker since it is one of the biggest and known producer of frozen pizza both in the Netherland and Germany. The choice of the product, a frozen pizza, was based on a preliminary test in which ten participants were asked which product they would consume regularly and frequently which will further be described later in this chapter.
Bielefeld – vandaag wordt in een persconferentie, georganiseerd van DrOetker, bekend dat in sommige van DrOetkers tomatensauzen sporen van rattengif zijn gevonden. Het gaat om sauzen die voor het aanmaken van diepvries pizza’s in heel Nederland zijn worden gebruikt. Van het gif worden alleen sporen in de sauzen gevonden maar ze kunnen desondanks tot maag- en darmklachten, duizeligheid, zichtstoringen en in het ergste geval zelfs tot het overlijden voeren, als een te grote hoeveelheid wordt ingenomen.

Tijdens de persconferentie verklaart de woordvoerder: „Het spijt ons verschrikkelijk en we schrokken enorm toen we erachter kwamen. De sporen van het rattengif zijn tijdens een routinesteekproef door een van onze eigen controleurs ontdekt. We zijn verbijsterd en bedroefd maar wij hopen de oorzaak van het voorval zo snel mogelijk te achterhalen. We voelen mee met getroffen consumenten en bieden onze oprechte excuses aan. We zullen ontzettend ons best blijven doen om dergelijke fouten in de toekomst te voorkomen.”

3.4 Participants

The participants of this study were 280 female and male individuals between the age of 18 and 35 living in the Netherlands and Germany. The exact distribution can be found in tables 2, 3 and 4. It was chosen for this age group since it is expected that younger adults react more similar to the stimuli material compared to older age groups. This group of participants was best approached via the internet and it was also expected that they were familiar with the chosen product in the stimulus material. The questionnaires were available both in Dutch and German to make sure the participants understood the case and the questions correctly. In order to have a large distribution and to enhance the reliability of the study it was tried to contact individuals of different age and gender groups and additionally to make sure that there is an even distribution of Dutch and German participants. In total 398 participants took part in the study. However, due to often only partial completion of the questionnaires a number of participants had to be removed. Additionally, the answers of five participants had to be removed due to their age as they were not within the age marging between 18 and 35 years old and because
they did not answer the manipulation checks correctly. The manipulation checks consisted of two questions examining whether the participants were able to notice the correct communication timing (proactive or reactive) and the correct message framing (rational or emotional). Participants who did not answer the manipulation checks correctly were removed from the results. From the 398 participants who took part in this study the results of 280 participants were used for the results.
Table 2

**Characteristics of participants**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch</td>
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<td>39</td>
<td>112</td>
</tr>
<tr>
<td>German</td>
<td>67</td>
<td>101</td>
<td>168</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>140</td>
<td>280</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Dutch</th>
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<th>Total</th>
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</thead>
<tbody>
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<td>8</td>
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</tr>
<tr>
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</tr>
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<td>32</td>
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<td>1</td>
<td>2</td>
</tr>
<tr>
<td>35</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>140</td>
<td>280</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of education</th>
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<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Lower secondary education</td>
<td>8</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Upper secondary education</td>
<td>32</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>University degree</td>
<td>80</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Vocational education</td>
<td>20</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>140</td>
<td>280</td>
</tr>
</tbody>
</table>
Table 3

_Distribution of participants per condition and gender_

<table>
<thead>
<tr>
<th></th>
<th>Dutch</th>
<th></th>
<th>German</th>
<th></th>
<th></th>
<th>Total</th>
<th></th>
<th>Total</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reactive-Rational</strong></td>
<td>19</td>
<td>16</td>
<td>35</td>
<td>11</td>
<td>24</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proactive-Rational</strong></td>
<td>13</td>
<td>22</td>
<td>35</td>
<td>9</td>
<td>26</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reactive-Emotional</strong></td>
<td>24</td>
<td>11</td>
<td>35</td>
<td>9</td>
<td>26</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proactive-Emotional</strong></td>
<td>17</td>
<td>18</td>
<td>35</td>
<td>10</td>
<td>25</td>
<td>35</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

3.5 Manipulation Checks

_Preliminary test_

To enhance the validity of the study and to prevent any misunderstanding there have been three preliminary tests before starting to collect data for the main study. The three preliminary study consisted of German (n=10) and Dutch (n=10) participants, all students at the University of Twente.

The first preliminary study was used to find the right product crisis for the study by listing fourty different products and ask participants to answer question concerning their involvement with the product and whether they frequently use the presented products. The first preliminary study was followed by a second pre-study which presented twenty products out of the first pre-study which received the highest involvement and use ratings from the participants. However, this time the products were linked to a product crisis. The product crises used for the products were all realistic incidents that have occured before to ensure a realistic design of the study such as an air freshener which contains toxic fumes or a shampoo that contains toxic ingrediants that might damage hair and skin. The results of the pre-test showed that unlike other products and crisis situations a frozen pizza containing rat poisen was
rated as a highly severe crisis by all respondents (response rate 100%), thus this product crisis was used for the main study.

Moreover, another preliminary study has been used to distinguish the right newspaper the crisis response would be released in. In order to find the right credible German and Dutch newspaper for the study first of all online rankings of different online platforms have been taken into account. Based on the newspapers shown in the online rankings another preliminary study has been designed. There were two versions of the study, one for German participants and one for Dutch participants. In both questionnaires ten newspapers with the highest circulation rate in Germany or in the Netherlands were listed and the participants had to indicate whether they rated the newspapers as credible or less credible, based on a five-point Likert scale (from 1 very credible – 5 not credible at all). The results showed that for the Dutch newspaper deVolkskrant was rated as the most credible and for the German newspaper the Süddeutsche Zeitung was rated as the most credible.
### Table 4

**Results of the preliminary test for the Dutch and German newspapers in percentage**

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Highly credible</th>
<th>Very credible</th>
<th>Credible</th>
<th>Not credible</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dutch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>De Telegraaf</td>
<td>30%</td>
<td>65%</td>
<td>5%</td>
<td>-</td>
</tr>
<tr>
<td>Algemeen Dagblad</td>
<td>5%</td>
<td>75%</td>
<td>20%</td>
<td>-</td>
</tr>
<tr>
<td>De Volkskrant</td>
<td>65%</td>
<td>35%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NRC</td>
<td>-</td>
<td>65%</td>
<td>35%</td>
<td>-</td>
</tr>
<tr>
<td>Trouw</td>
<td>-</td>
<td>65%</td>
<td>35%</td>
<td>-</td>
</tr>
<tr>
<td>Het Parool</td>
<td>-</td>
<td>40%</td>
<td>60%</td>
<td>-</td>
</tr>
<tr>
<td>Nrx.next</td>
<td>-</td>
<td>60%</td>
<td>40%</td>
<td>-</td>
</tr>
<tr>
<td>Het Financieele Dagblad</td>
<td>-</td>
<td>70%</td>
<td>30%</td>
<td>-</td>
</tr>
<tr>
<td>Reformatorisch Dagblad</td>
<td>-</td>
<td>85%</td>
<td>15%</td>
<td>-</td>
</tr>
<tr>
<td>Nederlands Dagblad</td>
<td>5%</td>
<td>80%</td>
<td>15%</td>
<td>-</td>
</tr>
<tr>
<td><strong>German</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bild</td>
<td>-</td>
<td>55%</td>
<td>40%</td>
<td>5%</td>
</tr>
<tr>
<td>Süddeutsche Zeitung</td>
<td>55%</td>
<td>45%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Die Welt</td>
<td>5%</td>
<td>75%</td>
<td>20%</td>
<td>-</td>
</tr>
<tr>
<td>Handelsblatt</td>
<td>-</td>
<td>45%</td>
<td>55%</td>
<td>-</td>
</tr>
<tr>
<td>TAZ</td>
<td>-</td>
<td>45%</td>
<td>55%</td>
<td>-</td>
</tr>
<tr>
<td>Neues Deutschland</td>
<td>-</td>
<td>30%</td>
<td>60%</td>
<td>10%</td>
</tr>
<tr>
<td>FAZ</td>
<td>10%</td>
<td>75%</td>
<td>15%</td>
<td>-</td>
</tr>
<tr>
<td>Der Tagesspiegel</td>
<td>-</td>
<td>45%</td>
<td>55%</td>
<td>-</td>
</tr>
<tr>
<td>Die Zeit</td>
<td>-</td>
<td>65%</td>
<td>35%</td>
<td>-</td>
</tr>
<tr>
<td>WAZ</td>
<td>15%</td>
<td>70%</td>
<td>15%</td>
<td>-</td>
</tr>
</tbody>
</table>

Additionally, an extra preliminary test was conducted to enhance the validity of this study in order to improve the questionnaires such as to make sure that there was no misunderstanding whether a message was emotionally or neutrally framed and the crisis responses used in the stimuli material were clear. In this study 10 German and Dutch participants who were all students of the University of Twente were asked to read through the four texts (either in German or Dutch) and to give feedback whether they understood the questionnaires and the stimuli material and especially to indicate whether they would rate a crisis response as emotional or rational. The results showed that there were a few issues with the stimuli material and with the instructions in the
questionnaires. Those issues were resolved afterwards to be able to expect a high validity of the questionnaires.

3.6 Measurements
The scales which have been used in order to measure the dependent variables purchase intentions, trust in the company and the emotional response were taken from existing scales. The questionnaire which was used for this study also included a scale measuring the positive and negative word of mouth intentions. In the following an overview over the four dependent measures is given.

*Emotional response.* The construct Emotional response was divided into anger and sympathy. Both anger and sympathy were tested with four statements based on McDonald, Sparks and Glendon (2010) such as „I feel annoyed at the company.“ for anger and „I feel compassion for the company.“ in order to test the level of sympathy. The scale proved to be reliable for anger for both the Dutch group (α = .788) and the German group (α = .814). Reliability could also be proven for sympathy in both Dutch (α = .696) and German (α = .713) groups.

*Trust in the company.* In order to test the trust in the company three different scales were used testing the ability, benevolence and integrity. The statements used to measure this construct were based on Mayer and Davis (1999). For the construct of ability six items have been used such as “DrOetker is very capable of performing its job.”. For benevolence and integrity each five items such as „DrOetker is very concerned about my welfare.“ for benevolence or “DrOetker has a strong sense of justice.“ in order to measure integrity. To measure the three constructs a 5 – point Likert scale ranging from 1 – strongly disagree to 5 – strongly agree was used. All three scales proved to be reliable within the Dutch group: ability (α = .775), benevolence (α = .812) and integrity (α=.604). Reliability could also be proven for the three scales within the German group: ability (α=.838), benevolence (α=.820) and integrity (α=.676).

*Purchase Intentions.* The purchase intentions of the respondents were measured using four different statement based on Lin, Chen and Lee (2011) such as „It is likely that I will buy products from DrOetker in the near future.“. The statements were displayed using a 5 – point Likert scale ranging from 1 – strongly disagree to 5 – strongly agree. The construct proved to be reliable in the Dutch group (α = .875) as well as in the German group (α=918).

*Word of Mouth intentions.* The construct measuring the word of mouth intentions
was divided into measuring the positive and the negative word of mouth intentions of the participants after being exposed to the stimuli material. Both construct consisted of each three statements based on Coombs and Holladay (2008). The negative word-of-mouth was tested with an item such as “Warn my friends and relatives not to buy this brand.” and the positive word-of mouth with an item such as „I would recommend this brand to others.” For this construct a 5 – point Likert scale ranging from 1 – very unlikely to 5 – very likely has been used. The construct measuring the negative word of mouth intentions proved to be reliable in both the Dutch (α = .758) as well as in the German participants group (α = .875). Reliability could also be proven for the construct positive word-of mouth in the Dutch groups (α = .838) and also in the German groups (α = .863).

Covariates. In addition to the four dependent variables, the questionnaire also tested the two covariates, involvement with health and involvement with the product. The construct involvement with health was tested using two statements “ I am aware of my health” and “I find my health important”. The involvement with the product was tested using four statements “I like to eat pizza” and “Pizza are an important part of my diet“. The same statements have also been used to examine the involvement of the participants with frozen pizza “I like to eat frozen pizza” and “Frozen Pizza’s are an important part of my diet”. The six items have been measure using a 5 – point Likert scale ranging from 1 – strongly disagree to 2 – strongly agree. Within the Dutch groups the construct involvement with product proved to be reliable (α = .713) as well as the construct involvement with health (α = .720). Reliability for the constructs health involvement (α = .674) and product involvement (α = .738) could also be proven within the German group.
4. Results

In order to test the hypotheses for this study a MANOVA and MANCOVA analysis was conducted, in order to compare the outcomes on the four dependent variables emotional response, trust in the company, purchase intentions and word-of-mouth intentions. The analysis was performed with the help of SPSS GLM which enables a multivariate analysis by examining between-subjects effects and offers also the possibility to take covariates into account.

This chapter includes a discussion of the main effects and the interaction effects of the variables. The interaction effects section is further divided into the two-way interaction effects and the three-way interaction effects. First of all the results of the MANOVA's will be discussed, followed by the analysis of the MANCOVA's.

The results of the MANOVA and MANCOVA analysis for crisis communication timing and message framing can be found in table 5. In table 7 the MANOVA and MANCOVA results for timing and framing can be found when culture was included as a moderator. However, in order to proceed with further analyses concerning the moderator culture, a correlation analysis was conducted.
Table 5

Results of the MANOVA and MANCOVA (including involvement with health and involvement with the product as covariates) for the factors timing, framing on the dependent variables

<table>
<thead>
<tr>
<th>Method</th>
<th>Timing</th>
<th>Framing</th>
<th>Product Involvement</th>
<th>Health Involvement</th>
<th>Timing* Framing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
</tr>
<tr>
<td>Anger</td>
<td>MANOVA 2.46(.12) 11.29(.001) - - 0.01(.94)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MANCOVA 2.99(.08) 11.78(.001) 4.69(.03) 0.10(.75) 0.02(.89)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sympathy</td>
<td>MANOVA 0.19(.66) 24.0(&lt;.001) - - 1.79(.18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MANCOVA 0.19(.66) 24.1(&lt;.001) 0.58(.45) 3.75(.05) 1.76(.19)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability</td>
<td>MANOVA 0.50(.48) 2.55(.11) - - 0.79(.37)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MANCOVA 0.68(.41) 2.41(.12) 2.09(.15) 0.003(.95) 0.71(.40)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benvolence</td>
<td>MANOVA 0.10(.75) 0.41(.52) - - 5.08(.02)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MANCOVA 0.15(.70) 0.44(.51) 0.75(.39) 0.06(.81) 5.15(.02)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrity</td>
<td>MANOVA 1.37(.24) 2.54(.11) - - 0.01(.91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MANCOVA 1.32(.25) 2.52(.11) 0.14(.71) 0.27(.60) 0.01(.95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Intentions</td>
<td>MANOVA 2.16(.14) 1.18(.28) - - 3.43(.06)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MANCOVA 3.31(.07) 1.03(.31) 19.94(&lt;.001) 1.64(.20) 3.25(.07)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pos. Word-of-mouth</td>
<td>MANOVA 0.13(.72) 0.86(.35) - - 11.25(.001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MANCOVA 0.98(.75) 0.87(.35) 2.49(.12) 6.27(.13) 11.46(.001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neg. word-of-mouth</td>
<td>MANOVA 3.26(.07) 7.54(.006) - - 1.32(.25)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MANCOVA 3.50(.06) 7.66(.006) 2.22(.14) 2.76(.09) 1.30(.26)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Note: significant at the .05 level, marginal effect at the .10 level)
4.1 Correlation analysis

In order to further study the effects of the moderator culture, a correlation analysis was conducted. The results can be found in table 8.

Table 6

Results of the correlation analysis between culture and the dependent variables

<table>
<thead>
<tr>
<th>Construct</th>
<th>Culture (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>.94</td>
</tr>
<tr>
<td>Sympathy</td>
<td>.79</td>
</tr>
<tr>
<td>Ability</td>
<td>.01*</td>
</tr>
<tr>
<td>Benevolence</td>
<td>&lt;.000**</td>
</tr>
<tr>
<td>Integrity</td>
<td>.004**</td>
</tr>
<tr>
<td>Purchase Intentions</td>
<td>&lt;.000**</td>
</tr>
<tr>
<td>Neg. Word-of mouth</td>
<td>.77</td>
</tr>
<tr>
<td>Pos. Word-of mouth</td>
<td>.53</td>
</tr>
</tbody>
</table>

(Note: * significant at 0.05 (two-tailed), ** significant at 0.01 (two-tailed))

The results suggest that four out of eight correlations are statistically significant. The correlation for ability is significant at the .05 (two-tailed) level ($r(278)=-.15, p=.01$). In addition, the results show that a statistical significance could be found for benevolence ($r(278)=-.31, p<.000$), integrity ($r(278)=-.17, p=.004$) and for the construct
purchase intentions ($r(278)=-.24, p<.000$).

Considering the presented correlation in table 7 a basic assumption is fulfilled to further proceed and explore, with the help of a MANOVA and MANCOVA analysis, in what way culture is related to the dependent factors in this study and in what way this relationship is influenced by the other independent factors.
Table 7

Results of MANOVA and MANCOVA (including involvement with health and product, as well as culture) for the factors timing and framing

<table>
<thead>
<tr>
<th>Construct</th>
<th>Method</th>
<th>Timing</th>
<th>Framing</th>
<th>Culture</th>
<th>Product Involvement</th>
<th>Health Involvement</th>
<th>Timing* Framing</th>
<th>Framing* Culture</th>
<th>Timing* Culture</th>
<th>Framing* Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
<td>F(P-value)</td>
</tr>
<tr>
<td>Anger</td>
<td>MANOVA</td>
<td>2.48(.12)</td>
<td>11.38(.001)</td>
<td>0.06(.94)</td>
<td>-</td>
<td>-</td>
<td>0.006(.94)</td>
<td>4.09(.04)</td>
<td>0.006(.94)</td>
<td>2.03(.15)</td>
</tr>
<tr>
<td></td>
<td>MANCOVA</td>
<td>3.01(.08)</td>
<td>11.86(.001)</td>
<td>0.00(.98)</td>
<td>4.53(.03)</td>
<td>0.09(.76)</td>
<td>0.02(.89)</td>
<td>4.43(.04)</td>
<td>0.01(.91)</td>
<td>11.50(.22)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>MANOVA</td>
<td>0.20(.65)</td>
<td>24.65(&lt;.001)</td>
<td>0.73(.79)</td>
<td>-</td>
<td>-</td>
<td>1.84(.18)</td>
<td>1.93(.18)</td>
<td>3.59(.06)</td>
<td>5.94(.02)</td>
</tr>
<tr>
<td></td>
<td>MANCOVA</td>
<td>0.19(.66)</td>
<td>24.58(&lt;.001)</td>
<td>0.07(.93)</td>
<td>0.31(.58)</td>
<td>3.54(.06)</td>
<td>1.79(.18)</td>
<td>1.50(.22)</td>
<td>2.76(.09)</td>
<td>6.68(.01)</td>
</tr>
<tr>
<td>Ability</td>
<td>MANOVA</td>
<td>0.54(.46)</td>
<td>2.75(.09)</td>
<td>6.66(.01)</td>
<td>-</td>
<td>-</td>
<td>0.85(.36)</td>
<td>9.82(.002)</td>
<td>2.17(.14)</td>
<td>7.65(.01)</td>
</tr>
<tr>
<td></td>
<td>MANCOVA</td>
<td>0.76(.38)</td>
<td>2.58(.11)</td>
<td>6.70(.01)</td>
<td>2.35(.13)</td>
<td>0.19(.66)</td>
<td>0.76(.38)</td>
<td>9.09(.003)</td>
<td>2.00(.16)</td>
<td>8.75(.003)</td>
</tr>
<tr>
<td>Benvolence</td>
<td>MANOVA</td>
<td>0.12(.74)</td>
<td>0.46(.49)</td>
<td>29.59(&lt;.000)</td>
<td>-</td>
<td>-</td>
<td>5.66(.02)</td>
<td>0.00(1.00)</td>
<td>0.46(.49)</td>
<td>5.66(.02)</td>
</tr>
<tr>
<td></td>
<td>MANCOVA</td>
<td>0.15(.70)</td>
<td>0.49(.48)</td>
<td>29.21(&lt;.000)</td>
<td>0.19(.67)</td>
<td>0.21(.65)</td>
<td>5.73(.02)</td>
<td>0.003(.98)</td>
<td>0.38(.54)</td>
<td>5.05(.02)</td>
</tr>
<tr>
<td>Integrity</td>
<td>MANOVA</td>
<td>1.41(.24)</td>
<td>2.63(.12)</td>
<td>8.52(.004)</td>
<td>-</td>
<td>-</td>
<td>0.12(.91)</td>
<td>1.41(.24)</td>
<td>2.63(.12)</td>
<td>0.57(.45)</td>
</tr>
<tr>
<td></td>
<td>MANCOVA</td>
<td>1.38(.24)</td>
<td>2.62(.11)</td>
<td>9.19(.003)</td>
<td>0.24(.63)</td>
<td>0.78(.38)</td>
<td>0.01(.92)</td>
<td>1.28(.26)</td>
<td>2.25(.13)</td>
<td>0.64(.42)</td>
</tr>
<tr>
<td>Purchase</td>
<td>MANOVA</td>
<td>2.27(.13)</td>
<td>1.24(.27)</td>
<td>17.00(&lt;.000)</td>
<td>-</td>
<td>-</td>
<td>3.60(.06)</td>
<td>0.04(.84)</td>
<td>0.72(.39)</td>
<td>0.04(.84)</td>
</tr>
<tr>
<td>Intentions</td>
<td>MANCOVA</td>
<td>3.51(.06)</td>
<td>1.05(.31)</td>
<td>16.17(&lt;.000)</td>
<td>18.88(&lt;.001)</td>
<td>0.15(.69)</td>
<td>3.37(.07)</td>
<td>0.000(.98)</td>
<td>0.68(.41)</td>
<td>0.38(.54)</td>
</tr>
<tr>
<td>Neg. word-of</td>
<td>MANOVA</td>
<td>0.13(.72)</td>
<td>0.86(.35)</td>
<td>0.41(.52)</td>
<td>-</td>
<td>-</td>
<td>11.25(.001)</td>
<td>3.18(.08)</td>
<td>0.05(.83)</td>
<td>0.41(.52)</td>
</tr>
<tr>
<td>mouth</td>
<td>MANCOVA</td>
<td>0.11(.74)</td>
<td>0.90(.34)</td>
<td>1.42(.24)</td>
<td>2.28(.13)</td>
<td>8.27(.004)</td>
<td>11.61(.001)</td>
<td>3.86(.05)</td>
<td>0.02(.89)</td>
<td>0.68(.41)</td>
</tr>
<tr>
<td>Pos. Word-of</td>
<td>MANOVA</td>
<td>3.59(.06)</td>
<td>7.62(.006)</td>
<td>3.29(.07)</td>
<td>-</td>
<td>-</td>
<td>1.34(.25)</td>
<td>3.19(.08)</td>
<td>0.04(.83)</td>
<td>0.50(.48)</td>
</tr>
<tr>
<td>mouth</td>
<td>MANCOVA</td>
<td>3.50(.06)</td>
<td>7.77(.006)</td>
<td>2.37(.13)</td>
<td>2.33(.13)</td>
<td>1.41(.24)</td>
<td>1.20(.26)</td>
<td>3.10(.08)</td>
<td>0.12(.72)</td>
<td>0.52(.47)</td>
</tr>
</tbody>
</table>

(Note: significant at the .05 level, marginal effect at the .10 level)
4.2 Main effects of message timing

The main effects for message timing were examined both with and without the inclusion of the covariates. Without including the covariates there was a marginal effect found for positive word-of-mouth intentions ($F(1.276)=3.26, p=.07$). The results of table 10 show that participants in the proactive condition scored higher ($M=3.44, SD=1.64$) in their positive word-of-mouth intentions than participants in the reactive response condition ($M=3.12, SD=1.44$). For the other constructs no significant effect were found in this study. Consequently, this leads to the rejection of hypothesis 1 a, b, c. Hypothesis 1 d is only slightly supported since only marginal effects could be found for positive word-of-mouth intentions and the effects were also not statistically significant.

When the covariates were included into the calculations marginal effects could be found for anger ($F(1.276)=2.99, p=.08$), buying intentions ($F(1.276)=3.31, p=.07$) and for positive word-of-mouth intentions ($F(1.276)=3.50, p=.06$). Therefore, hypothesis 1 can be slightly supported for its part c and d. The purchase intentions of the participants were higher in the proactive conditions ($M=3.37, SD=1.01$). However, although in hypothesis 1 a it was expected that proactive communication would lead to a more positive emotional response, the result showed that participants in the proactive conditions scored slightly higher ($M=3.21, SD=1.81$) on anger compared to participants in the reactive condition ($M=3.06, SD=1.81$). Therefore, hypothesis 1 a can not be supported.

When adding the moderator variable culture to the calculations significant effects could be found for positive word of mouth intentions ($F(1.277)=3.59, p=.06$). However, it has to be stated that the inclusion of culture did not change the effects drastically.
Table 8

Descriptive statistics for the dependent variables

<table>
<thead>
<tr>
<th>Construct</th>
<th>Proactive M(SD)</th>
<th>Reactive M(SD)</th>
<th>Rational M(SD)</th>
<th>Emotional M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>3.21(.81)</td>
<td>3.06(.81)</td>
<td>2.98(.79)</td>
<td>3.30(.81)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>2.78(.74)</td>
<td>2.75(.66)</td>
<td>2.57(.75)</td>
<td>2.96(.58)</td>
</tr>
<tr>
<td>Trust Ability</td>
<td>3.31(.69)</td>
<td>3.26(.66)</td>
<td>3.35(.69)</td>
<td>3.22(.65)</td>
</tr>
<tr>
<td>Trust Benevolence</td>
<td>3.11(.73)</td>
<td>3.08(.76)</td>
<td>3.07(.75)</td>
<td>3.13(.74)</td>
</tr>
<tr>
<td>Trust Integrity</td>
<td>2.88(.52)</td>
<td>2.81(.59)</td>
<td>2.79(.57)</td>
<td>2.90(.55)</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>3.37(1.01)</td>
<td>3.21(.87)</td>
<td>3.35(.94)</td>
<td>3.22(.95)</td>
</tr>
<tr>
<td>Negative word-of mouth</td>
<td>2.63(.88)</td>
<td>2.60(.82)</td>
<td>2.57(.85)</td>
<td>2.66(.85)</td>
</tr>
<tr>
<td>Positive word-of mouth</td>
<td>3.44(1.64)</td>
<td>3.12(1.44)</td>
<td>3.03(1.46)</td>
<td>3.53(1.60)</td>
</tr>
</tbody>
</table>

4.3 Main effects of message framing
When excluding the covariates significant effects of message framing could be found for anger (F(1.276)=11.29,p=.001), sympathy (F(1.276)=24.00,p=<.001) and for positive word-of mouth intentions (F(1.276)=7.54,p=.006). The participants in the rationally framed conditions scored much lower on anger (M=2.98, SD=.79) compared to participants in the emotionally framed conditions (M=3.30, SD=.81). Nevertheless, the scores of the two framing conditions also differ when it comes to sympathy. In the emotionally framed conditions participants felt much more sympathy (M=2.96, SD=.58) compared to participants in the rationally framed conditions (M=2.57, SD=.75).
The positive effects of emotionally framed messages could also be found when it comes to positive word-of mouth intentions. Participants in the emotionally framed conditions scored much higher (M=3.53, SD=1.60) on positive word-of mouth intentions than participants in the rationally framed condition (M=3.03, SD=1.46). Therefore, hypothesis
2 d can be supported. For the parts b and c of hypothesis 2, no support can be given. Moreover, for hypothesis 2 a only partly support can be given since proactive communication highered both anger but also the scores for sympathy.

When including the covariates significant effects similar to the effects when excluding the covariates could be found for anger (F(1.276)=11.78,p=.001), sympathy (F(1.276)=24.01,p=<.001) and for positive word-of mouth intentions (F(1.276)=7.66,p=.006).

When adding the moderator variable culture to the calculations it shows that the results could be slightly strengthened especially for trust ability which changed from showing no statistical significance (F(1.276)=2.55,p=.11), to having a marginal effect (F(1.276)=2.75,p=.09). Consequently, it can be concluded that culture has a moderating effect on the dependent variable ability.
4.4 Interaction effects
In the following the two-way interactions between message framing and message timing, message framing and culture and message timing and culture are examined, as well as the three-way interaction between crisis message framing, crisis communication timing and culture. The descriptive statistics can be found in tables 9, 10, 11 and 12.

Table 9
Descriptive statistics for the interaction effects between timing and framing

<table>
<thead>
<tr>
<th>Construct</th>
<th>Rational-Reactive</th>
<th>Rational-Proactive</th>
<th>Emotional-Reactive</th>
<th>Emotional-Proactive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>Anger</td>
<td>2.90(.74)</td>
<td>3.06(.83)</td>
<td>3.23(.85)</td>
<td>3.37(.76)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>2.50(.67)</td>
<td>2.64(.82)</td>
<td>3.00(.54)</td>
<td>2.93(.62)</td>
</tr>
<tr>
<td>Trust Ability</td>
<td>3.35(.70)</td>
<td>3.34(.69)</td>
<td>3.16(.60)</td>
<td>3.28(.68)</td>
</tr>
<tr>
<td>Trust Benevolence</td>
<td>2.96(.67)</td>
<td>3.18(.82)</td>
<td>3.21(.83)</td>
<td>3.04(.62)</td>
</tr>
<tr>
<td>Trust Integrity</td>
<td>2.76(.60)</td>
<td>2.83(.54)</td>
<td>2.86(.59)</td>
<td>2.94(.51)</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>3.37(.80)</td>
<td>3.33(1.06)</td>
<td>3.04(.91)</td>
<td>3.41(.95)</td>
</tr>
<tr>
<td>Negative word-of mouth</td>
<td>2.38(.76)</td>
<td>2.76(.89)</td>
<td>2.81(.82)</td>
<td>2.51(.86)</td>
</tr>
<tr>
<td>Positive word-of mouth</td>
<td>2.97(1.41)</td>
<td>3.09(1.51)</td>
<td>3.26(1.46)</td>
<td>3.80(1.69)</td>
</tr>
</tbody>
</table>

4.4.1 Interaction effects between crisis communication timing and crisis message framing
Without including the covariates and the moderator significant interactions effects between message framing and message timing could be found for benevolence (F(1.276)=5.08,p=.02), negative word-of mouth (F(1.276)=11.25,p=.001) and marginal effects for purchase intentions (F(1.276)=3.43,p=.06). In the rational conditions for
benevolence a proactive approach compared to a reactive timing seemed to work best (M=3.18, SD=.82) whereas for an emotional approach reactive communication timing scored higher (M=3.21, SD=.83) and vice versa. The emotional-reactive approach also received the highest scores in total when it came to benevolence. For negative word-of-mouth intentions the conditions in which a rational and proactive approach (M=2.76, SD=.89) and an emotional and reactive approach (M=2.81, SD=.82) were used, scored the highest. However, for buying intentions participants in the rational-reactive (M=3.37, SD=.80) and in the emotional- proactive group (M=3.41, SD=.95) scored high. Consequently, this means that hypothesis 5 is only marginally supported for c but not supported for a, b and d.

When including the covariates similar effects could be found for benevolence (F(1.274)=5.15, p=.02), negative word-of-mouth intentions (F(1.274)=11.46, p=.001) and marginal effects for buying intentions (F(1.274)=3.25, p=.07). The scores for the different condition are also similar to the scores which did not include the covariates. Therefore, when the covariates are included only hypotheses 5 c is marginally supported and 5 a,b and d are rejected.

The scores only slightly change when the moderating variable culture is included. Therefore, no moderating effect of culture can be stated when it comes to the interaction of message timing and message framing.

Figures 3 and 4. Graphs for interaction effects between timing and framing on purchase intentions and benevolence.
Figures 5. Graph for interaction effects between timing and framing on negative WOM

4.4.2 Interaction effects between crisis message framing and culture

Table 10

Descriptive statistics of the interaction effects between framing and culture

<table>
<thead>
<tr>
<th>Construct</th>
<th>Dutch Rational</th>
<th>Dutch Emotional</th>
<th>German Rational</th>
<th>German Emotional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>Anger</td>
<td>2.89(0.83)</td>
<td>3.40(0.77)</td>
<td>3.07(0.75)</td>
<td>3.20(0.84)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>2.53(0.74)</td>
<td>3.03(0.38)</td>
<td>2.61(0.77)</td>
<td>2.90(0.73)</td>
</tr>
<tr>
<td>Trust Ability</td>
<td>3.57(0.63)</td>
<td>3.20(0.58)</td>
<td>3.13(0.70)</td>
<td>3.24(0.71)</td>
</tr>
<tr>
<td>Trust Benevolence</td>
<td>3.30(0.73)</td>
<td>3.36(0.61)</td>
<td>2.84(0.71)</td>
<td>2.90(0.78)</td>
</tr>
<tr>
<td>Trust Integrity</td>
<td>2.93(0.43)</td>
<td>2.96(0.49)</td>
<td>2.66(0.66)</td>
<td>2.84(0.61)</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>3.59(0.82)</td>
<td>3.44(0.75)</td>
<td>3.11(0.99)</td>
<td>3.01(1.07)</td>
</tr>
<tr>
<td>Negative word-of mouth</td>
<td>2.51(0.85)</td>
<td>2.78(0.69)</td>
<td>2.63(0.85)</td>
<td>2.54(0.97)</td>
</tr>
<tr>
<td>Positive word-of mouth</td>
<td>3.03(1.43)</td>
<td>3.86(1.48)</td>
<td>3.03(1.49)</td>
<td>3.20(1.66)</td>
</tr>
</tbody>
</table>
The results for the interaction effects between message framing and culture show that there are significant effects for anger \( F(1.270)=4.09, p=.04 \), trust ability \( F(1.270)=9.82, p=.002 \) and marginal effects for negative word-of-mouth \( F(1.270)=3.18, p=.08 \) and positive word-of-mouth \( F(1.270)=3.19, p=.08 \). When it comes to feeling the emotion of anger Dutch and German participants score higher on emotionally framed messages compared to rationally framed messages. However, Dutch participants score even higher on anger in emotionally framed messages \( M=3.40, SD=.77 \) than German participants \( M=3.20, SD=.84 \). For the construct trust ability German participants scored higher when an emotional frame was used \( M=3.24, SD=.71 \), whereas Dutch participants gave better scores when a rational frame was presented in the stimuli material \( M=3.57, SD=.63 \). When taking a look at the word-of-mouth intentions it becomes clear that the positive word-of-mouth intentions for both Dutch \( M=3.86, SD=1.48 \) and German \( M=3.20, SD=1.66 \) participants scored highest when an emotional frame was used. Hence, it is noticeable that again Dutch participants gave in general higher ratings compared to German participants. Nevertheless, the results differ when it comes to the negative word-of-mouth intentions. German participants scored higher when a rational frame was used \( M=2.63, SD=.85 \) and Dutch participants \( M=2.78, SD=.69 \) when an emotional frame was used. Consequently, hypothesis 4 can only be partly supported for a and d. Emotional framing seems to higher the emotion of anger of German respondents but also for Dutch respondents, which was not expected. Hypothesis 4 d is only partly and marginally supported since emotional framing in fact increases the scores of Dutch participants on positive word-of-mouth intentions. However, emotional framing seems also to better suited for German participants when it comes to positive word-of-mouth intentions. Nevertheless, since the significance level is marginally higher that .05 no statistically significance can be stated.

When the covariates were included almost similar results could be found for positive word-of-mouth intentions \( F(1.279)=3.10, p=.08 \), ability \( F(1.279)=9.09, p=.003 \) and anger \( F(1.279)=4.43, p=.04 \). However, for the negative word-of-mouth intentions the results could even be strengthened \( F(1.279)=3.86, p=.05 \).
4.4.3 Interaction effects between message timing and culture

When it comes to the interaction effects between message timing and culture only marginal effects could be found for sympathy (F(1.270)=3.59, p=.06). The mean scores show that Dutch participants score the highest when a proactive communication timing was used (M=22.87, SD=.64), whereas the German participants score the highest on sympathy when a reactive framing was used (M=2.81, SD=.69).

In addition, the results also show that in almost all cases the Dutch participants gave higher ratings on the dependent variables compared to the German participants. Consequently, hypothesis 3 can only be partly and marginally supported for a, since significant effects could only be found for sympathy on Dutch participants when a proactive communication timing was used.

The inclusion of the covariates slightly lessens the interaction effect of sympathy (F(1.270)=2.76, p=.09) between culture and the communication timing.

Table 11

Descriptive statistics of the interaction effects between timing and culture

<table>
<thead>
<tr>
<th>Construct</th>
<th>Dutch Reactive</th>
<th>Dutch Proactive</th>
<th>German Reactive</th>
<th>German Proactive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>Anger</td>
<td>3.07(.87)</td>
<td>3.21(.79)</td>
<td>3.06(.76)</td>
<td>3.21(.83)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>2.69(.63)</td>
<td>2.87(.64)</td>
<td>2.81(.69)</td>
<td>2.70(.82)</td>
</tr>
<tr>
<td>Trust Ability</td>
<td>3.41(.63)</td>
<td>3.36(.64)</td>
<td>3.10(.66)</td>
<td>3.27(.74)</td>
</tr>
<tr>
<td>Trust Benevolence</td>
<td>3.34(.66)</td>
<td>3.31(.69)</td>
<td>2.83(.78)</td>
<td>2.91(.72)</td>
</tr>
<tr>
<td>Trust Integrity</td>
<td>2.96(.52)</td>
<td>2.93(.39)</td>
<td>2.66(.63)</td>
<td>2.84(.63)</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>3.39(.73)</td>
<td>3.64(.83)</td>
<td>3.03(.96)</td>
<td>3.10(1.09)</td>
</tr>
<tr>
<td>Negative word-of mouth</td>
<td>2.64(.78)</td>
<td>2.66(.79)</td>
<td>2.56(.86)</td>
<td>2.61(.97)</td>
</tr>
<tr>
<td>Positive word-of mouth</td>
<td>3.30(1.39)</td>
<td>3.59(1.61)</td>
<td>2.93(1.47)</td>
<td>3.30(1.67)</td>
</tr>
</tbody>
</table>
4.4.4 Three-way interaction between communication timing, message framing and culture

In the following an overview over the three-way interaction of message timing, message framing and culture will be given. The descriptive statistics can be found in table 14.

Table 12

*Descriptive statistics of the three-way interaction between timing, framing and culture*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Culture</th>
<th>Timing</th>
<th>Framing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Rational-Proactive</td>
<td>Rational-Reactive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>Anger</td>
<td>Dutch</td>
<td>3.03(.86)</td>
<td>2.74(.78)</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>3.09(.82)</td>
<td>3.06(.68)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>Dutch</td>
<td>2.77(.77)</td>
<td>2.28(.62)</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>2.51(.85)</td>
<td>2.71(.67)</td>
</tr>
<tr>
<td>Trust Ability</td>
<td>Dutch</td>
<td>3.40(.69)</td>
<td>3.74(.50)</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>3.28(.71)</td>
<td>2.97(.66)</td>
</tr>
<tr>
<td>Trust Benevolence</td>
<td>Dutch</td>
<td>3.48(.78)</td>
<td>3.11(.63)</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>2.88(.76)</td>
<td>2.80(.67)</td>
</tr>
<tr>
<td>Trust Integrity</td>
<td>Dutch</td>
<td>2.88(.40)</td>
<td>2.97(.45)</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>2.77(.64)</td>
<td>2.54(.66)</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>Dutch</td>
<td>3.60(.98)</td>
<td>3.57(.65)</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>3.06(1.08)</td>
<td>3.17(.89)</td>
</tr>
<tr>
<td>Negative word-of mouth</td>
<td>Dutch</td>
<td>2.66(.91)</td>
<td>2.37(.77)</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>2.86(.88)</td>
<td>2.40(.77)</td>
</tr>
<tr>
<td>Positive word-of mouth</td>
<td>Dutch</td>
<td>3.01(1.34)</td>
<td>3.06(1.53)</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>3.17(1.67)</td>
<td>2.88(1.30)</td>
</tr>
</tbody>
</table>
When the covariates were excluded a three-way interaction effect was found for sympathy (F(1,272)=5.94, p=.02), trust ability (F(1,272)=7.65, p=.01) and for trust benevolence (F(1,272)=5.66, p=.02). The results show that the scores for both Dutch (M=3.08, SD=.28) and German (M=2.91, SD=.70) participants on sympathy were the highest in the emotionally framed condition in combination with a reactive communication timing. However, also the emotional frame in combination with a proactive communication timing scored fairly high for Dutch (M=2.97, SD=.45) and for German (M=2.88, SD=.76) participants when it came to sympathy. When a rational frame was used the results were not that even. Dutch participants scored higher on a proactive timing (M=2.77, SD=.77) and German participants scored higher (M=2.71, SD=.67) when a reactive compared to a proactive communication timing was used. The scores for ability also differed within both cultural groups. The highest scores were given for the message which was rationally framed. However, Dutch participants scored higher for the rational frame in combination with a reactive timing (M=3.74, SD=.50) and German participants in combination with a proactive timing (M=3.28, SD=.71).

When it comes to benevolence Dutch participants scored the highest in the emotional-reactive condition (M=3.57, SD=.55) and German participants in the emotional-proactive condition (M=2.94, SD=.68).

The results were almost similar when the covariates were included. Significant effects could be found for sympathy (F(1,270)=6.68, p=.01), trust ability (F(1,270)=8.75, p=.003) and for trust benevolence (F(1,270)=5.05, p=.02).

Figures 6 and 7. Graphs for three way interaction effects between timing, framing and culture on ability.
Figures 8 and 9. Graphs for three way interaction effects between timing, framing and culture on benevolence

Figures 10 and 11. Graphs for three way interaction effects between timing, framing and culture on sympathy
The following table 14 gives an overview over the supported and not supported hypothesis of this study based on the results discussed above:

Table 13

*Overview over supported and not supported hypotheses*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported</th>
<th>Not supported</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1 Positive effect of proactive communication timing</strong></td>
<td>$d, (c^<em>), d^</em>$</td>
<td>$a$</td>
</tr>
<tr>
<td><strong>H2 Positive effect of emotional message framing</strong></td>
<td>$a^{**}, d$</td>
<td>$b, c$</td>
</tr>
<tr>
<td><strong>H3 Positive effect of proactive communication timing on both Dutch and Germans</strong></td>
<td>$(a^{**})$</td>
<td>$b, c, d$</td>
</tr>
<tr>
<td><strong>H4 Positive effect of emotional message framing on both Dutch and Germans</strong></td>
<td>$a^{<strong>}, d^{</strong>}$</td>
<td>$b, c$</td>
</tr>
<tr>
<td><strong>H5 Positive effects of the combination of a proactive timing and emotional framing</strong></td>
<td>$b^{<strong>}, d^{</strong>}, (c)$</td>
<td>$a$</td>
</tr>
</tbody>
</table>

Note: (a) emotional responses, (b) trust in the company, (c) purchase intentions (d) word-of-mouth intentions
* when covariates were included, ** only partly support can be given, () only marginal effects could be found
5. Discussion

This study investigated the interplay of crisis communication timing and crisis message framing of company’s in a crisis, and the impact those two constructs have on consumers emotions, trust in the company, purchase intentions and word-of-mouth intentions. The results of this study support previous research in the field of message timing and framing, yet also add new knowledge to the field, especially whether the results of message timing and message framing differ when it comes to feminine or more masculine cultures. This study also examined the effects of two covariates, product and health involvement, on the dependent variables. However, the results showed that when including the covariates into the calculations the effects were often very similar to the results when the covariates were excluded. Only the main effects of message timing on anger, positive word-of-mouth and purchase intentions could be strengthened when the covariates were included. Therefore, it can be concluded that the covariates health and product involvement are no important predictors of the main effects of message framing as well as the interaction effects between communication timing, communication framing and culture.

5.1 Message Timing

Based on previous studies and literature it was expected that a proactive communication timing would lead to a more positive effect on emotional responses, trust in the company, purchase intentions and word-of-mouth intentions, than a reactive communication timing. However, when conducting the calculations only a marginal effect could be found for positive word-of-mouth intentions. Participants in the proactive conditions had higher positive word-mouth intentions compared to the participants in the reactive conditions. Only when the covariates were included the effects could be marginally strengthened also for purchase intentions, anger and for positive word-of mouth which all seem to score the highest when a proactive communication timing was used. This result is also supported by McDonald, Sparks and Glendon (2010) as well as by Weiner et al. (1991) who state that a proactive communication timing will enhance positive-word-of mouth intentions. Surprisingly, there could not be found any significant effects on the other constructs. As stated above, when including the covariates the effects of message timing could be strengthened for anger. Participants in the proactive
conditions scored higher both on anger, purchase intentions as well as positive word-of-mouth intentions compared to the reactive response condition. Those results do not support the finding of Weiner et al. (1991) who claimed that a proactive communication timing would reduce feelings of anger. Nevertheless, Arpan and Roskos-Ewoldsen (2005) state that a proactive response strategy can have a positive effect on the acceptance of the message as well as how the organization in crisis is evaluated. Interesting is here that although the participants score significant higher on the emotion of anger, they also have high purchase and positive word-of-mouth intentions. According to literature is the emotion of anger experienced when the result of the crisis situation is perceived as negative and unfavorable (Coombs & Holladay, 2005), which was most likely also the case when the participants were exposed to the crisis situation described in the stimuli material of this study. Nevertheless, according to Arpan and Roskos-Ewoldsen (2005) is also the perceived level of crisis responsibility important to take into account when analyzing the emotions felt by customers after a crisis. It is possible that the participants felt the emotions of anger due to the crisis situation they were exposed to. Yet, it is possible that because of the open and early press release of the company they were still more willing to purchase the product and to distribute positive feedback about the brand and product compared to participants in the reactive condition. Another possible explanation could also be that instead of expecting that it is either possible to feel the emotion of anger or sympathy separately, it is also possible to feel both emotions at the same time. In fact, due to the high severe crisis participants were exposed to it is even very unlikely that they would feel no negative feelings at all. Thus, instead of focusing either on anger and sympathy separately, the focus could be shifted to the extent to which participants were despite feeling the emotion of anger, due to the severe crisis situation, still able to feel sympathy. The emotion of sympathy, in turn, could be a result of the crisis communication message that was used in this study. However, this is only one possible explanation and would have to be tested thoroughly in future studies.

When including the moderator culture to the calculations it becomes clear that the scores show no major changes. Both nationalities score the highest in the proactive conditions. Thus, no important moderating effects of culture could be found when it comes to crisis message timing.
5.2 Message Framing
In this study it was expected that emotional framing would enhance more positive emotional responses, the trust in the company, higher purchase intentions and more positive word-of-mouth intentions compared rationally framed messages. Significant effects could be found for anger, sympathy and positive word-of-mouth intentions. In general it can be said that the scores for anger were higher than to the scores for sympathy. However, participants in the rational conditions scored lower on anger compared to participants in the emotional framed condition. An explanation why the scores for anger are lower in the rational framed condition could be that in general when using a rational frame less feelings are evoked as the formulation of the text are more focused on factual information. Claeys, Cauberghe and Leysen (2013) describe the rational frame as direct, straightforward and objective without referring to emotion or displaying the crisis in a dramatic manner. Thus, when using the rational frame less negative but also less positive feelings are evoked, due to the design of the text, compared to the use of an emotional frame. Another explanation could be that when using an emotional frame the organization appears as more human (Van der Meer & Verhoeven, 2014), independently of the timing of the response, and positive emotions are evoked. Additionally, the scores for sympathy were higher in the emotionally framed condition as well the scores for positive word-of-mouth intentions. The positive effect of emotional framing on stakeholder’s attitudes and behavioral intentions such as word-of-mouth intentions is also supported by previous research of Kim and Cameron (2011), Coombs (2007) and Kotler and Armstrong (1994). When the moderator culture was included into the calculation the effects of trust - ability could even be strengthened, although the effects were only marginal, thus not statistically significant.

5.3 Interaction effects between timing and framing
For the interaction effect between message framing and message timing it was expected that a proactive response in combination with an emotional frame had a more positive effect on emotional responses, trust in the company, purchase intentions and the word-of-mouth intentions, compared to the combinations of a proactive-rational-, reactive-emotional- and reactive-rational approach. When looking at the interaction effects of message timing and message framing significant effects could be found for benevolence and negative word-of-mouth intentions. Additionally, a marginal effect could be found
for purchase intentions. For benevolence an emotional frame in combination with a reactive communication timing scored highest followed by a rational frame in combination with a proactive response. This contradicts findings of previous research of Claey, Caubergh and Leysen (2013) who claim that an emotional frame in combination with a proactive approach is best to use when post-crisis trust should be increased. Moreover, the results of this study also indicate that the scores for negative word-of-mouth intentions are the lowest in the rational-reactive condition which contradicts a study of Kim and Cameron (2011) who state that emotional framing has a positive effect on stakeholder's attitudes and behavioral intentions. However, in order to higher purchase intentions the results of this study suggest to make use of either an emotional-proactive frame or a rational-reactive frame. The results of this study suggest that consumers can react very differently when it comes to combining crisis message timing and framing together. However, it also has to be stated that many results of the interaction analysis between crisis message timing and framing lay very close together. Thus, it is possible that a greater sample size would distinguish the result more.

5.4 Interaction effects between timing and culture
For the interaction effect between culture and communication timing it was expected that both nationalities would score more positively on a proactive communication approach. However, the results show that only marginal effects could be found for sympathy. The Dutch participants of this study seemed to score higher on sympathy when a proactive communication timing was used. This is also supported by previous researchers who state that proactive communication would enhance sympathy (Weiner et al. 1991; McDonald et al. 2010). In contrast, the German participants of this study scored higher on sympathy when a reactive approach was used. For an organization a reactive communication approach has the advantage that it allows an organization to think and plan the crisis communication carefully. However, according to Holladay (2009) could a reactive approach also form the impression that the organization is not in control of the crisis. In addition, a reactive approach would also be a risk as it gives the media the chance to present the crisis in a very different light as intended by the affected organization which, in turn, could have severe reputational consequences. Despite all the negative aspects of a reactive communication timing and despite of previous research which claim that reactive communication timing has a negative
impact on sympathy, the result for the German participants of this study show that consumers can react very differently and against all expectations. Nevertheless, the results show that Dutch and German participants scored differently in many cases. A possible explanation could be the different cultural background. Eadie (2009) describes a feminine style of communication as more complex and it would pay more attention to details and background information. A masculine style of communication is described as more factual and more achievement orientated (Eadie, 2009). Thus, it is possible that the more feminine Dutch culture has a preference for a proactive communication style, since the details such as when the crisis message was released play a more important role than for the more masculine German culture, which also score high on sympathy when a reactive timing was used.

5.5 Interaction effects between framing and culture
For the interaction effects of crisis message framing and culture it was expected that emotional framing would receive the highest results on both Dutch and German participants. The expectations seemed to be correct when it comes to the emotion of anger for which emotional framing received the highest scores. However, it was expected that an emotional framing would enhance positive feelings such as sympathy but not the feeling of anger. Nevertheless, also when looking at the main effects of message framing the results indicated that an emotional framing would enhance feelings of anger. The result of the interaction effects between message framing and culture show that both cultural groups score high on anger in the emotional conditions. An explanation why the scores for anger are lower in the rational framed condition could be that in general when using a rational frame less feelings are evoked, since the formulation of the text is more focused on factual information, as already explained when it came to the main effects of framing. Additionally, it is possible that when using emotional appeals in a text, the company itself can creat the impression of taking over the victim role. This, in turn, can result in negative feelings such as anger since stakeholders have the impression the company in the crisis is not taking full responsibility and might not even be able to handle the crisis. The results for ability show that in fact German participants scored higher when an emotional frame was used whereas the Dutch participants show a preference for a rational frame. Ability, in the context of trustworthiness, describes the competences and the characteristics of the
organization (Mayer, Davis & Schoorman, 1995) perceived by the participants of this study. It is possible that the straightforward and objective nature of the rational frame enhanced the perceived competences and characteristics of the organization in crisis for the Dutch participants. The German participants seemed to be distracted by the emotional framing. An explanation could be that since more feminine cultural societies, such as the Netherlands, pay more attention to detail as described by Eadie (2009). Although feminine societies often prefer a more complex style of communication, it is possible that when it comes to trust-ability emotional framing would rather be distracting with emotional appeals, whereas rational framing would stress the competences and characteristics of the company in a crisis. According to Hofstede (1980) could the more masculine society such as Germany, in turn, pay less attention to details and therefore also not be distracted by emotional appeals. However, further studies would be needed to test the explanation.

5.6 Three-way interaction
In order to investigate the three-way interaction between message timing, message framing and culture an explorative research question has been formulated since not much was known especially about the three-way interaction between culture, timing and framing. Significant effects were found for sympathy, ability and benevolence. For sympathy both cultures scored the highest when an emotional framing was used in combination with a reactive communication timing, followed by an emotional approach with a proactive timing. For the construct trust-ability the results in among the Dutch and German participants were not that similar. For both cultures the rational framing resulted in higher scores. However, for Dutch participants a combination with a reactive communication timing worked best as opposed to the German participants who scored higher on a proactive communication timing. Independently of the communication timing it is possible that when it comes to trust-ability, it is important to stress a company’s competences with rational reasoning instead of using distracting emotional appeals. For the construct trust benevolence an emotional framing in combination with a reactive communication timing received the highest score among Dutch participants whereas German participants scored higher on a rational framing also in combination with a reactive communication timing.
Although the results are not that simple to generalize it is noticeable that Dutch participants score higher in reactive communication timing conditions although this contradicts findings such as of the interaction effects between communication timing and culture (see 5.4). The results also show that Dutch participants score higher on an emotional style of communication both when it comes to sympathy and when it comes to benevolence whereas German participants only score higher on an emotional style of communication when it comes to sympathy. For the constructs ability and benevolence German participants prefer a more factual and rational style of communication. Consequently, these results show that there are differences in the preference of communication when comparing a more feminine and a more masculine country although the results also show that it is difficult to conclude one strategy that would work best.

Furthermore, it also becomes clear that Dutch participants give almost all the time much higher scores than German participants. Even when both cultural groups prefer the same communication timing or framing, the Dutch scores are almost all the time higher for both positive and negative constructs. Thus, the German participants might tend to me more modest when reacting to a crisis with both negative and positive reactions whereas Dutch participants might experience and rate a crisis more intense. These results are also supported by Eadie (2009) who stated that masculine communication would be less expressive and would be more assertive. Furthermore, masculine communication would be very emotionally restricted and would disclose less about feelings, personal thoughts, sympathy and empathy compared to feminine communication. Therefore, companies could expect more extreme reactions from Dutch consumers compared to German consumers according to the results of this study.
6. Implications

6.1 Theoretical implications
The aim of the study was to give insight into crisis communication and more specifically into the interplay of crisis message timing and crisis message framing by adding new knowledge to previous research such as the study of Claeys, Cauberghe and Leysen (2013). An interesting outcome of this study is that emotionally framed messages enhance both anger and sympathy at the same time. When using an emotional frame intensive emotional appeals are used (Cho & Gower, 2006) which sometimes not only affects the emotions in a positive but also in a negative way. Hence, according to Huang (2008) rational framed messages can result in milder crisis responses from customers and stakeholders since they get informed only with facts about the crisis instead of distracting the public with an emotional appeal. However, this study also shows that although the emotion of anger might be enhanced when using an emotional framing, at the same time the participants also experience sympathy. Prior research also stress that in general emotional appeals are more likely to be remembered (Flora and Maibach, 1990) and also more effective when it comes to attitude changes (Rosselli, Skelly & Mackie, 1995).

In addition, this study also added a very new aspect to the field of crisis communication by investigating the effect of cultural differences according to the cultural classifications by Hofstede (1980). Cultural differences have already been examined when it comes to communication in general but no research investigated its impact on how crisis communication can be perceived in different cultural societies. Although the results of this study could not find distinct differences on every construct which was tested, it still became clear that there are differences existing and Dutch and German participants often have different preferences for crisis communication timing or framing. Besides, Dutch participants tend to react much more intense with both positive and negative reactions to a crisis situation compared to German participants. This could be a result of the much more feminine informed Dutch culture who is compared to the masculine culture not emotionally restricted and discloses more about feelings, personal thoughts, sympathy and empathy (Eadie, 2009).
6.2 Managerial implications

When an organization is hit by a crisis quick and appropriate crisis communication is important to prevent as much damage as possible. The first step for an organization to undertake should be a thorough analysis of the crisis situation. This is of importance in order to be prepared to choose the right communication strategy and to distribute the right information in the most favourable way regarding the company in crisis. The results of this study show that for timing of the message only a marginally main effect could be found for positive word-of-mouth intentions. This leads to the conclusion that organizations should not rely too much only on the communication timing but should make sure that other strategies are used in combination with message timing which reassure the effectiveness of a company’s crisis communication. However, the results of the main effects also show that when including the covariates, health and product involvement, significant effects could be found for purchase intentions, positive word-of-mouth and marginal effects for anger. All three constructs both negative constructs such as anger, and more positive constructs such as positive word-of-mouth, scored higher in the proactive conditions of the questionnaires. Similar results were also found when analyzing the main effects of message framing. Significant effects could be found on anger, sympathy and positive word-of-mouth which scored highest when an emotional frame was used. Although, previous research recommended a proactive message timing and an emotional message framing as the most effective in crisis communication the results of this study show that the use choice of an approach should be made carefully. When using an emotional crisis communication approach, organizations need to take into account that by using intense emotional appeal the crisis situation can also be dramatized and it can seem to the stakeholders that an organization is taking over the role of the victim instead of handling the situation direct and with facts. Consequently, when using an emotional approach organization should pay special attention into the formulation of the crisis response message and make sure that although an emotional framing has been chosen the company also shows its strengths and the competence to handle the crisis instead of taking over the victim role. Furthermore, the three-way interaction between timing, framing and the either Dutch or German cultural background showed that when it came to ability both nationalities scored higher in the rationally framed condition which supports the importance of displaying competence without distracting through too many emotions when it comes to trust in the company.
However, Dutch participants scored both higher on sympathy and benevolence when an emotional frame was used, whereas the German participants only preferred an emotional frame for sympathy and had chosen for both ability and benevolence a rational frame. Although significant effects could only be found for three constructs the results still support the hypothesis that Dutch people might prefer a more feminine style of communication and German people a bit more factual and masculine style when it comes to crisis communication. Additionally, this study also showed that in general Dutch people tend to give higher scores in the questionnaires both on negative and positive constructs compared to the scores of the German participants, which could be explained with the masculine and feminine styles of communication described by Eadie (2009). This would mean that in the Netherlands a more feminine and emotionally open approach that expresses more about feelings and sympathy is effective, which is displayed by the high scores, whereas in German a more masculine disclosed and assertive style of crisis communication could be successful, which is displayed by the lower scores of the German participants.

Therefore, and implication for organization in crisis is to first thoroughly analyze the crisis situation and their stakeholders. When choosing an emotional approach it should taken into account that although the message is emotionally appealing it is also referring to the strength of the company to handle the situation, in order to minimize negative feelings of stakeholders. Additionally, multinational organizations should take into account that Dutch stakeholders could react much more intense both negatively and positively whereas German stakeholders tend to be a bit more assertive. Nevertheless, although it is hard to find the strategically best crisis response timing and framing the most damaging situation for an organization is to not communicate at all and not to take the chance to put the crisis in a more positive light than the media might put it.
7. Limitations

In the following limitations of this study are being discussed especially to give new ideas to future research. One limitation of this study was the choice of crisis. It was chosen for a high severe crisis whose product brand was chosen as a result of a preliminary test. However, it is possible that participants would react differently to different company's or products in crisis. Participants could for example have a previous opinion about the brand or product which affected the results. Further studies with different kind of products and brands could give insight into whether the results differ based on the crisis which was chosen for this study.

Another limitation could be the sampling of the questionnaires in this study. The participants of this study were reached by placing the link on different university platforms and by using social media. However, the results showed that most of the participants were students, thus highly educated. Participants who are highly educated might be more capable of understanding and process information compared to lower educated participants. Moreover, when analyzing the data it also became clear that a very high percentage of the participants were females thus it had to be checked whether the gender of the participants influenced the results. However, the analysis showed no significant results. Nevertheless, the participants of this study make it hard to generalize the results of this study among age groups, gender and educational levels. Further studies would be needed to test whether the results differ when more diverse participants are taking part. Moreover, it is also possible that some results of this study show no clear conclusion on which communication timing or framing would be best to use, due to the sample size. A larger number of participants might also show clearer results if there is a specific combination of framing or timing which works best.

Another limitation of this study could be the crisis response formulation. Although it was tried to base the formulation on previous research on framing and message timing, there are still different ways to respond to a crisis both in a rational and emotional way. The SCCT-model of Coombs (2007) introduces three different groups to respond to a crisis: deny, diminish and rebuild. The model shows that there are different strategies on how to respond to a crisis which can, in turn, affect changes in emotions and behaviors. Thus, the formulation of the crisis responses used in this study could be changed in order to see if the results differ compared to the results of this study.
When it comes to the validity of the study also the items used to measure the constructs could have affected the results. At first there was a factor analysis used in order to test the validity of the items. However, the factor analysis did not show clear results and therefore it was chosen only to test the reliability with cronbach's alpha since the items used to test the constructs were taken from previous studies in which they had been validated already.

In addition, future studies could also examine if the results differ when other cultures than the Netherlands and Germany are used for the study. The choice of culture could be again based on Hofstede’s (1980) cultural dimensions who classified very many different countries into the feminine or masculine dimensions. The future studies would examine whether other feminine or masculine countries react similar to crisis communication than the two countries used for this study.

Consequently, it can be stated that this study was a good starting point to investigate crisis communication messages and to examine cultural differences. Future studies can use the results and limitation of this study to further investigate the field of crisis communication and to help organization to prevent reputational and financial damage in crises situations.
8. Conclusion

The results of this study support findings of previous studies by stressing the impact and importance of the right timing and framing of a crisis response message. The findings of this study show that companies should select their response strategy carefully especially also when emotional appeals are used. Although a proactive timing and an emotional framing have widely proven to have a positive impact on post-crisis reputations this study also stresses an issue that can occur. In fact, especially an emotional framing can not only evoke positive feelings such as sympathy but also negative feelings such as anger. One explanation can be the intense emotional appeals that are used in the emotional approach which can also give the impression that a company is not showing enough strengths of handling the crisis appropriately and is even acting more like a victim itself. Therefore, when a proactive and emotional approach is used it is of great importance to stress the company’s competences to handle the crisis and to formulate a message which is still emotional but does not evoke the impression that the company feels more sorry for itself than for the stakeholders which are affected by the crisis. In addition, the study also shows that feminine and masculine cultures react often differently when it comes to crisis communication. Participants out of the feminine culture react much more intense to crisis messages both in a positive and negative way, compared to participants out of the masculine culture which can be important especially for multinational organization to take into account when formulating a crisis response message.

9. Acknowledgements

First of all I would like to thank my supervisor Ardion Beldad for his helpful feedback and enthusiasm during the meetings. He was a great support and always very motivated to provide me with useful tips, whether it was in our meetings or via e-mail. In addition, I would also like to thank my second supervisor Mark Tempelman who helped me especially during the final part of my thesis.
References:


## Appendix A

<table>
<thead>
<tr>
<th>Construct</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anger</strong></td>
<td>I feel angry at the company. I feel disgusted at the company. I feel annoyed at the company. I feel outraged at the company.</td>
</tr>
<tr>
<td><strong>Sympathy</strong></td>
<td>I feel sympathetic towards the company. I feel sorry for the company. I feel compassion for the company. I feel empathetic for the company.</td>
</tr>
<tr>
<td><strong>Trust Ability</strong></td>
<td>DrOetker is very capable of performing its job. DrOetker is known to be successful at the things it tries to do. DrOetker has much knowledge about the work that needs done. I feel very confident about DrOetker's skills. DrOetker has specialized capabilities that can increase our performance. DrOetker is well qualified.</td>
</tr>
<tr>
<td><strong>Trust Benevolence</strong></td>
<td>DrOetker is very concerned about my welfare. My needs and desires are very important to DrOetker. DrOetker would not knowingly do anything to hurt me. DrOetker really looks out for what is important to me. DrOetker will go out of its way to help me.</td>
</tr>
<tr>
<td><strong>Trust Integrity</strong></td>
<td>DrOetker has a strong sense of justice. I never have to wonder whether DrOetker will stick to its word. DrOetker tries hard to be fair in dealings with others. DrOetker's actions and behaviors are not very consistent. Sound principles seem to guide DrOetker's behavior.</td>
</tr>
<tr>
<td><strong>Purchase Intentions</strong></td>
<td>Given the chance, I intend to purchase from DrOetker. Given the chance, I predict that I should purchase from DrOetker in the future. It is likely that I will buy products from DrOetker in the near future. I expect to purchase from DrOetker in the near future.</td>
</tr>
<tr>
<td><strong>Negative Word of Mouth</strong></td>
<td>Warn my friends and relatives not to buy this brand. Complain to my friends and relatives about this brand. Say negative things about this brand to other people.</td>
</tr>
<tr>
<td><strong>Involvement Product</strong></td>
<td>I like to eat a Pizza. I like to eat frozen pizza. Pizzas are an important part of my diet. Frozen Pizzas are an important part of my diet.</td>
</tr>
</tbody>
</table>
Beste deelnemer,

Ten eerste wil ik u hartelijke danken voor uw deelname aan dit onderzoek in het kader van mijn master thesis. Deze vragenlijst is onderdeel van mijn master thesis voor de opleiding Communication Studies aan de Universiteit Twente. Het onderzoek richt zich op de communicatie van een organisatie in een bepaalde situatie. U krijgt straks een krantenartikel over een organisatie en hun product te zien en de reactie van de organisatie. Er wordt alleen naar uw mening gevraagd, er zijn geen goede of foute antwoorden! Aan het begin van de vragenlijst worden er een aantal demografische gegevens gevraagd. Het onderzoek zal ongeveer 10 minuten in beslag nemen.

De resultaten van deze vragenlijst zullen anoniem verwerkt worden en u heeft bovendien de mogelijkheid om tussentijds uw deelname af te breken. Voor vragen of opmerkingen kunt u een e-mail sturen naar a.l.brackhane@student.utwente.nl

Nogmaals hartelijk dank voor uw medewerking!

Met vriendelijke groeten,

Amelie Brackhane
Student Master Communication Studies, Universiteit Twente

---

Ik verklaar de bovenstaande informatie gelezen en begrepen te hebben!

---

1. Wat is uw geslacht?
   - Man
   - vrouw

2. Wat is uw leeftijd?

3. Wat is uw hoogst genoteerde opleiding?
   - Basisonderwijs
   - Vmbo
   - Havo
   - Vwo
   - Middelbaar beroepsonderwijs
   - Hoger beroepsonderwijs
   - Universitair onderwijs

---

Table 5 The constructs and their measurement items

Appendix B: Questionnaire for Dutch participants
In het volgende krijgt u een aantal algemene stellingen te zien. Geef aan in hoeverre u het eens of oneens bent:

Antwoordschaal:

I. Heel erg mee oneens  
II. Mee oneens  
III. Noch oneens, noch eens  
IV. Mee eens  
V. Heel erg mee eens  

- Ik eet graag een pizza.  
- Pizza's zijn een belangrijk onderdeel van mijn eetpatroon.  

- Ik eet graag diepvries pizza.  
- Diepvries pizza is een belangrijke onderdeel van mijn eetpatroon.  

- Ik ben memij bewust van mijn gezondheid.  
- Ik vind mijn gezondheid belangrijk.  

In het volgende wordt u gevraagd een aantal stellingen over het merk DrOetker te beantwoorden. Geef aan in hoeverre u het eens of oneens bent met de onderstaande stellingen:

Ik zou DrOetker als een goed merk beschrijven  

- Heel erg mee oneens  
- Mee oneens  
- Noch oneens, noch eens  
- Mee eens  
- Heel erg mee eens  

Ik heb een positieve houding tegenover het merk DrOetker  

- Heel erg mee oneens  
- Mee oneens  
- Noch oneens, noch eens  
- Mee eens  
- Heel erg mee eens  

Ik zou het merk DrOetker als een fijn merk beschrijven  

- Heel erg mee oneens  
- Mee oneens
Op de volgende pagina ziet u een krantenartikel uit de Volkskrant. In het artikel wordt een situatie van het merk DrOetker beschreven. Lees het artikel en beantwoord daarna de vragen op de volgende pagina's.

---

Scenario's

De reactie van de woordvoerder van DrOetker is...

Emotioneel - - - - - rationeel

De reactie van de woordvoerder van DrOetker is rationeel- objectief?

Subjectief - - - - - objectief

Wie berichtte het eerst over de situatie bij DrOetker?

Een woordvoerder van DrOetker

- Heel erg mee oneens
- Mee oneens
- Noch oneens, noch eens
- mee eens
- heel erg mee eens

De Nederlandse Voedsel- en Warenautoriteit

- Heel erg mee oneens
- Mee oneens
- Noch oneens, noch eens
- mee eens
- heel erg mee eens

DrOetker heeft het publiek over het voorval geïnformeerd zodra ze op de hoogte ervan waren
Droetker was al eerder op de hoogte van het voorval en heeft het publiek pas later geïnformeerd

Geef bij elk van de onderstaande stellingen aan in hoeverre u het eens of oneens bent ten opzichte van de beschreven situatie van DrOetker in het artikel:

Antwoordschaal:

I. Heel erg mee oneens
II. Mee oneens
III. Noch oneens, noch eens
IV. Mee eens
V. Heel erg mee eens

Ik ben boos.
Ik voel walging.
Ik ben geërgerd.
Ik ben diep verontwaardigd.
Ik voel sympathie.

Ik ben bedroefd.
Ik heb mededogen.
Ik voel empathie.

De situatie van DrOetker die in het artikel beschreven wordt is heel ernstig.

- Heel erg mee oneens
- Mee oneens
- Noch oneens, noch eens
- Mee eens
- Heel erg mee eens

De situatie zal consumenten van DrOetker schade toebrengen.

- Heel erg mee oneens
- Mee oneens
- Noch oneens, noch eens
- Mee eens
- Heel erg mee eens

De situatie kan ernstige consequenties voor consumenten van DrOetker hebben.

- Heel erg mee oneens
- Mee oneens
- Noch oneens, noch eens
- Mee eens
- Heel erg mee eens

Geef bij elk van de onderstaande stellingen aan in hoeverre u het eens of oneens bent met de volgende stellingen na het lezen van het artikel:

Antwoordschaal:

I. Heel erg mee oneens
II. Mee oneens
III. Noch oneens, noch een
IV. Mee eens
V. Heel erg mee eens

Dr Oetker is zeer nauwkeurig in het uitvoeren van zijn werk.
Dr Oetker staat bekend succesvol te zijn in de dingen die ze doen.
Dr Oetker heeft veel verstand van het werk dat gedaan moet worden.
Ik heb vertrouwen in de kwaliteiten van Dr Oetker.
Dr Oetker heeft speciale vaardigheden die hun prestaties verbeteren.
Dr Oetker is goed gekwalificeerd voor hun werk.

Geef bij elk van de onderstaande stellingen aan in hoeverre u het eens of oneens bent met de volgende stellingen na het lezen van het artikel:

Antwoordschaal:
I. Heel erg mee oneens
II. Mee oneens
III. Noch oneens, noch een
IV. Mee eens
V. Heel erg mee eens

Dr Oetker is bezorgd om mijn welzijn.
Mijn behoeften zijn belangrijk voor Dr Oetker.
Dr Oetker zou mij niet opzettelijk willen kwetsen.
Dr Oetker let op naar wat belangrijk is voor mij.
Dr Oetker heeft aandacht voor wat belangrijk is voor mij.
Dr Oetker zal er alles aan doen om mij te helpen.

Geef bij elk van de onderstaande stellingen aan in hoeverre u het eens of oneens bent na het lezen van het artikel:

Antwoordschaal:
I. Heel erg mee oneens
II. Mee oneens

III. Noch oneens, noch eens

IV. Mee eens

V. Heel erg mee eens

Dr Oetker heeft een sterk gevoel voor rechtvaardigheid.

Ik hoef mij nooit zorgen te maken of Dr Oetker zich aan zijn woord houdt.

Dr Oetker probeert altijd eerlijk te zijn tegenover anderen.

Dr Oetker's acties en gedrag zijn niet erg consistent.

Gezonde principes lijken het gedrag van Dr Oetker te leiden.

----------------------------------------------------------------------------------------------------------------

Geef bij elk van de onderstaande stellingen aan in hoeverre u het eens of oneens bent met de volgende stellingen na het lezen van het artikel:

Antwoordschaal:

I. Heel erg mee oneens

II. Mee oneens

III. Noch oneens, noch eens

IV. mee eens

V. heel erg mee eens

Als ik de kans krijg, zou ik de producten van Dr Oetker kopen.

Als ik de kans krijg, voorspel ik dat ik in de toekomst producten koop van Dr Oetker.

Het is aannemelijk dat ik in de nabije toekomst producten koop van Dr Oetker.

Ik verwacht in de nabije toekomst producten te kopen van Dr Oetker.

------------------------------------------------------------------------------------------------------------
Geef bij elk van de onderstaande stellingen aan in hoeverre het waarschijnlijk of onwaarschijnlijk is de volgende acties uit te voeren ten opzichte van het merk DrOetker na het lezen van het artikel:

Antwoordschaal:

I. Zeer onwaarschijnlijk
II. Onwaarschijnlijk
III. Niet onwaarschijnlijk, niet waarschijnlijk
IV. Waarschijnlijk
V. Zeer waarschijnlijk

Iets positiefs zeggen over producten van DrOetker.
Producten van DrOetker aanbevelen aan anderen.
Producten van DrOetker aanbevelen aan iemand die mij om advies vraagt.

Mijn vrienden en familie waarschuwen producten van DrOetker niet te kopen.
Tegen mijn vrienden en familie klagen over producten van DrOetker.
Negatieve dingen zeggen tegen andere mensen over producten van DrOetker.

-----------------------------------------------------------------------------------------------------------------
U hebt het einde van de vragenlijst bereikt.

Er wordt met nadruk op gewezen dat het scenario en het krantenartikel die voor dit vragenlijst wordt gebruik fictief is en niet op een bestaande situatie van DrOetker of een product van DrOetker is gebaseerd!

o Ik verklaar de bovenstaande informatie gelezen en begrepen te hebben!

-----------------------------------------------------------------------------------------------------------------

Bedankt voor uw medewerking!

Voor vragen of opmerkingen kunt u een e-mail naar het volgende adres sturen:
Appendix C: Stimuli material

Dutch proactive-emotional

**De Volkskrant**

Bielefeld – vandaag wordt in een persconferentie, georganiseerd van DrOetker, bekend dat in sommige van DrOetkers tomatensauzen sporen van rattengif zijn gevonden. Het gaat om sauzen die voor het aanmaken van diepvries pizza’s in heel Nederland zijn worden gebruikt. Van het gif worden alleen sporen in de sauzen gevonden maar ze kunnen desondanks tot maag- en darmklachten, duizeligheid, zichtstoringen en in het ergste geval zelfs tot het overlijden voeren, als een te grote hoeveelheid wordt ingenomen.

Tijdens de persconferentie verklaart de woordvoerder: „Het spijt ons verschrikkelijk en we schrokken enorm toen we erachter kwamen. De sporen van het rattengif zijn tijdens een routinesteekproef door een van onze eigen controleurs ontdekt. We zijn verbijsterd en bedroefd maar wij hopen de oorzaak van het voorval zo snel mogelijk te achterhalen. We voelen mee met getroffen consumenten en bieden onze oprechte excuses aan. We zullen ontzettend ons best blijven doen om dergelijke fouten in de toekomst te voorkomen.”

Dutch reactive-rational

**De Volkskrant**

Bielefeld – vandaag reageerde de woordvoerder van DrOetker in een persconferentie op een bericht van de Nederlandse Voedsel- en Warenautoriteit (NVWA) dat in sauzen van Dr Oetker rattengif wordt ontdekt. De NVWA meldde darin dat het gaat om sauzen die voor het aanmaken van diepvries pizza’s in heel Nederland zijn gebruikt. Van het gif worden alleen sporen in de sauzen gevonden maar ze kunnen desondanks tot maag- en darmklachten, duizeligheid, zichtstoringen en in het ergste geval zelfs tot het overlijden voeren als een te grote hoeveelheid wordt ingenomen. Hoewel er al eerder geruchten over een besmetting met rattengif in omloop zijn geweest, reageerde DrOetker pas nu.

In de persconferentie verklaart de woordvoerder: “Het bericht van de NVWA klopt. De sporen van het rattengif zijn tijdens een routinesteekproef door een van onze eigen controleurs ontdekt. De oorzaak is nog onbekend maar vermoed wordt dat een menselijke fout in de productiehal hiervoor verantwoordelijk is. De producten zijn zo snel mogelijk uit alle supermarkten teruggeroepen. Wij hopen de oorzaak van het voorval zo snel mogelijk te achterhalen. Zodra wij meer informatie over de oorzaak hebben zullen wij de consumenten informeren.”
Dutch reactive-emotional

Bielefeld – vandaag reageerde de woordvoerder van Dr Oetker in een persconferentie op een bericht van de Nederlandse Voedsel- en Warenautoriteit (NVWA) dat in sauzen van Dr Oetker rattengif wordt ontdekt. De NVWA meldde darin dat het gaat om sauzen die voor het aanmaken van diepvries pizza’s in heel Nederland zijn gebruikt. Van het gif worden alleen sporen in de sauzen gevonden maar ze kunnen desondanks tot maag- en darmklachten, duizeligheid, zichtstoringen en in het ergste geval zelfs tot het overlijden voeren, als een te grote hoeveelheid wordt ingenomen. Hoewel er al eerder geruchten over een besmetting met rattengif in omloop zijn geweest, reageerde Dr Oetker pas nu.

In de persconferentie verklaart de woordvoerder: “Het spijt ons verschrikkelijk en we schrokken enorm toen we erachter kwamen, maar helaas klopt het bericht van de NVWA. De sporen van het rattengif zijn tijdens een routinesteekproef door een van onze eigen controleurs ontdekt. We zijn verbijsterd en bedroefd maar wij hopen de oorzaak van het voorval zo snel mogelijk te achterhalen. We voelen mee met getroffen consumenten en bieden onze oprechte excuses aan. We zullen ontzettend ons best blijven doen om dergelijke fouten in de toekomst te voorkomen.”

Dutch proactive-rational

Bielefeld – vandaag wordt in een persconferentie, georganiseerd door Dr Oetker, bekend dat in sommige tomatensauzen sporen van rattengif zijn gevonden. Het gaat om sauzen die voor het aanmaken van diepvries pizza’s in heel Nederland worden gebruikt. Van het gif worden alleen sporen in de sauzen gevonden maar ze kunnen desalniettemin maag- en darmklachten, duizeligheid, zichtstoringen en in een extreme gevallen zelf tot het overlijden van de gebruiker leiden, als een te grote hoeveelheid wordt ingenomen.

Tijdens de persconferentie verklaart de woordvoerder: „De sporen van het rattengif zijn tijdens een routinesteekproef van een van onze eigen controleurs ontdekt. De oorzaak is nog onbekend maar vermoed wordt dat een menselijke fout in de productiehal hiervoor verantwoordelijk is. De producten zijn zo snel mogelijk uit alle supermarkten teruggeroepen. Wij hopen de oorzaak van het voorval zo snel mogelijk te achterhalen. Zodra wij meer informatie over de oorzaak hebben zullen wij de consumenten informeren.”

German reactive-emotional

Süddeutsche Zeitung

Der Pressesprecher von DrOetker erklärte während der Pressekonferenz: "Wir bedauern den Vorfall sehr und waren schockiert als wir davon erfahren haben, aber leider stimmt der Bericht des BVL. Die Spuren von dem Rattengift wurden in einer unserer Routineuntersuchungen von einem unserer eigenen Kontrolleure entdeckt. Wir sind bestürzt und traurig, aber wir hoffen die Ursache des Vorfalls so schnell wie möglich aufzudecken. Wir fühlen mit den betroffenen Konsumenten und entschuldigen uns aufrichtig. Wir werden weiterhin alles tun damit derartige Vorfälle in der Zukunft nicht mehr vorkommen!"

German proactive-emotional

Süddeutsche Zeitung

Bielefeld – In einer Pressekonferenz, organisiert auf Initiative der Firma DrOetker, wurde heute bekannt, dass in einem ihrer Produkte Spuren von Rattengift entdeckt wurden. Bei dem Produkt handelt es sich um Soßen die für das Zubereiten von Tiefkühlpizzen gebraucht werden und in ganz Deutschland verarbeitet wurden. Von dem Gift wurden nur Spuren gefunden, jedoch können auch diese schon zu Magen-Darmbeschwerden, Schwindel, Sehstörungen und im schlimmsten Fall sogar zum Tod führen, wenn eine größere Menge konsumiert wird.


German reactive-rational


German proactive-rational

Bielefeld – In einer Pressekonferenz, organisiert auf Initiative der Firma DrOetker, wurde heute bekannt, dass in einem ihrer Produkte Spuren von Rattengift entdeckt wurden. Bei dem Produkt handelt es sich um Soßen die für das Zubereiten von Tiefkühlpizza gebraucht werden und in ganz Deutschland verarbeitet wurden. Von dem Gift wurden nur Spuren gefunden, jedoch können auch diese schon zu Magen-Darmbeschwerden, Schwindel, Sehstörungen und im schlimmsten Fall sogar zum Tod führen, wenn eine größere Menge konsumiert wird.