



# The Janus head of a Crisis Message:

## Two Distinct Faces Altering Perceptions and Behaviour

*Master Thesis*

### UNIVERSITY OF TWENTE.

*Faculty of Behavioural Sciences*

#### **ABSTRACT**

In times of high-impact organizational crises, an organization in crisis may choose to spread its crisis message on forehand. This reduces negative impacts on the organizational credibility. Social media can be a helpful tool for an organization to spread the crisis message. In addition, peer reactions through social media during a risk situation help to convince citizens whether to engage in self-protective behaviour or not. This research strived to determine the effects of peer feedback and crisis timing strategy on (1) self-protective behaviour, (2) secondary crisis reactions, (3) risk perception and (4) organizational credibility among consumers. In this study, a 2 (crisis timing strategy: stealing thunder vs. thunder) x 2 (peer feedback: supporting vs. opposing) between subjects experimental design was used (N = 184). Results showed that organizational credibility mediates the interplay of crisis timing strategy and peer feedback on both self-protective behaviour and secondary crisis reactions. Finally, implications for organizational crisis communication and future research are discussed.

**Keywords:** Crisis Communication; Organizational Credibility; Risk Communication; Social Media; Stealing Thunder.

*“The easiest period in a crisis situation is actually the battle itself. The most difficult is the period of indecision – whether to fight or run away. And the most dangerous period is the aftermath.”*

– Richard M. Nixon.

Dennis Tigchelovend,  
S1246828

D.Tigchelovend@student.utwente.nl  
30 April 2014

First Supervisor: dr. ir. P. W. de Vries  
Second Supervisor: dr. J. M. Gutteling

## 1. INTRODUCTION

An organizational crisis can be described as a major, unpredictable event that has the potential to do a lot of damage to an organization and its stakeholders (Coombs, 1995). Therefore, being involved in an organizational crisis can be a living nightmare for every organizational member. Organizational crises are likely to influence consumers' behavioural intentions (also called 'secondary crisis reactions') and evaluations of the organization in a negative way (Cialdini, 2009; Schultz, Utz & Göritz, 2011). Organizational crises may damage the image and reputation of an organization as well (Coombs, 2007; Sapriel, 2003). As a result, the integrity or even the survival of the organization become endangered.

Organizational crises may occur in many different forms. For instance, production errors, the escape of dangerous substances or financial scandals. An example of a real-life organizational crisis is the Sanlu Group food safety scandal in China. The Sanlu Group contaminated its raw milk supply with melamine. The company seemed to receive complaints of children becoming ill after drinking its milk in December 2007. However, they only stopped the production when Fonterra (which owned 43% of the company) blew the whistle in September 2008. Another example of an organizational crisis is the BP oil spill in 2010, which is considered as one of the worst oil spills in history. This disaster took place after an explosion occurred on an oil rig in the Gulf of Mexico. This negatively affected the environment, economy and health in the area.

Usually, an organization in crisis is aware of the negative events before they are being spread to the general public. In that case, the organization has two options to decide which crisis timing strategy it will use. The first option is to self-disclose the negative information on forehand. Self-disclosing the negative information at an earlier stage can be referred to as 'stealing thunder' (Arpan & Pompper, 2003). It is said that stealing thunder reduces the negative impacts on the organization by crises, such as damage to the organizational reputation and credibility, bad company evaluations and unfavourable secondary crisis reactions among the public (Arpan & Pompper, 2003; Arpan & Roskos-Ewoldsen, 2005; Cialdini, 2009; Dolnik, Case & Williams, 2003; Fennis & Stroebe, 2013; O'Keefe, 2002; Schultz et al., 2011). The second option for the organization is not to disclose the crisis information to the outside world. Choosing not to do so, the organization will risk the probability that the negative event will be discovered by a third party (e.g., the media). In this situation, organizations are waiting to respond to inquiries from the media or other third parties, which lead to more negative impacts (Mauet, 2007). Therefore, this option can be referred to as 'thunder'.

Regarding the possibilities to self-disclose the crisis information or not, it becomes more important for organizations in crisis to take the growing importance of social media in perspective. Since the use of social media has made a great upswing, social media have gained importance as a news source for large groups within the public (Palen & Liu, 2007). Crisis information is likely to be distributed very swiftly, almost providing real-time information about current situations (Mileti et al., 2006; Palen, Vieweg, Liu & Hughes, 2009;

Yates & Paquette, 2011). This phenomenon increases both the probability of discovery as the rapidness of the distribution of the negative news by third parties. Previous research by Starbird, Palen, Hughes and Vieweg (2010) studied social media usage during the Red River Valley flood, which affected several states in the U.S. and Canada. Their study indicated that crisis events can result in a rapid generation of social media communications by numerous sources. Especially within the landscape of Twitter, new information is spread through activities of directing, synthesizing, relaying, and redistributing relevant messages (Starbird et al., 2010).

Furthermore, not all organizational crises are alike. Organizational crises do always differ in which parties are to suffer and the potential damage they are exposed to. For instance, there are forms of organizational crises whereby citizens are victimized by the negative events. This may lead these citizens into hazardous situations.

Crisis communication messages may advise citizens which precautions to take when facing a risk (this is sometimes called risk communication as well). Hence, it is crucial that crisis messages in the 'hot phase' inform the public what to do. These precautions inform citizens about how to act when they are threatened by a crisis-related risk, eventually motivating them to engage in self-protective behaviour (Verroen, Gutteling & De Vries, 2013). Eventually, self-protective behaviour helps to reduce the risks citizens are facing.

As discussed earlier, social media help citizens to stay informed about crisis-related events. Additionally, social media allow the public to obtain information and feedback by peers. According to Shklovski, Palen and Sutton (2008), public members judge such responses as valid. Consequently, relevant feedback messages from peers help to convince citizens how to act during a risk situation (Shklovski et al., 2008; Verroen et al., 2013).

Moreover, Kievik and Gutteling (2011) showed that higher levels of risk perception stimulate people's intentions to engage in self-protective behaviour more than lower levels do. For this reason, citizens perceive a risk as serious when they intend to engage in self-protective behaviour.

To sum up, it is essential for an organization in crisis when and what to communicate to prevent any form of potential damage to both the public and itself. However, it is still unclear how the effects of peer feedback (especially through social media) are contingent upon crisis timing strategies. Therefore in this study, an online survey with an experimental design will be used to study how the interplay of these variables is affecting (1) self-protective behaviour, (2) secondary crisis reactions, (3) risk perception and (4) organizational credibility.

### *1.1. Self-Protective Behaviour*

During risk situations, precautionary measures are communicated and redistributed by social media (Starbird et al., 2010). Citizens perceive crisis related messages and feedback from other social media users as reliable and usable, especially through Twitter (Vieweg, Hughes, Starbird and Palen, 2010). As a result, people can learn how peers are dealing with a

particular risk situation. Social media help citizens to receive clear guidelines about how to act to protect oneself (Verroen et al., 2013; Vieweg et al., 2010), convincing citizens to take self-protective measures or seek additional information. To engage in these actions, referred to as self-protective behaviour, reduce the risks citizens are facing.

A study by Verroen et al. (2013) showed that feedback by peers through social media influences citizens' intentions to engage in self-protective behaviour. The likelihood to protect oneself reduces when exposed to peer feedback which opposes the official crisis message, when it is not stated that the mentioned precautions are proven to be effective. However, when it is stated that the precautions are proven to be as most effective, the intentions to engage in these tasks do not differ whether peer feedback is supporting or opposing (Verroen et al., 2013).

Furthermore, earlier research indicated that someone's decision-making behaviour in times of risk and uncertainty is directly related to the perception of risk (Arrow, 1971; Pennings & Grossman, 2008; Pennings & Wansink, 2004; Pratt, 1964). Risk perception has become a central concept in scientific field of crisis communication. It determines which decision to make when one is being exposed to a risk. Perception of risk can be identified by two dimensions (Arrow, 1971; Freudenburg, 1988; MacCrimmon & Wehrung, 1986; Pennings & Grossman, 2008; Pennings & Wansink, 2004; Pratt, 1964; Slovic, 1987). The first dimension is the probability of occurrence of any incidents. Second dimension is the severity of the consequences when an incident may occur. For instance, the possibility of getting ill after eating contaminated food products is higher than a nuclear attack by terrorists. On the other hand, the consequences of a possible nuclear attack by terrorists will be perceived as more severe than getting ill after eating contaminated food products. In short, in order to enhance self-protectiveness through crisis communication, consumers should perceive (1) the probability of the risk as high and (2) the severity of the risk as serious.

To conclude, peer feedback is able to convince people how (or not) to act during a risk situation (Shklovski et al., 2008; Verroen et al., 2013). Furthermore, self-protectiveness is enhanced by one's perception of risk (Arrow, 1971; Pennings & Grossman, 2008; Pennings & Wansink, 2004; Pratt, 1964). Therefore, we presume that peer feedback in times of risk has an impact on receivers' risk perception. In other words, citizens who receive advice from others to perform self-protective behaviour will perceive risks as more probable and severe. As a result, it is expected that risk perception has a mediating role between the effects of peer feedback on one's intentions perform any form of self-protective behaviour.

**H1.** Risk perception mediates the effects of peer feedback on self-protective behaviour.

However self-protective measures are communicated and redistributed through social media such as Twitter, the credibility of that information may still be perceived as questionable (Sutton, Palen, & Shklovski, 2008). O'Keefe (2002) defines credibility as "judgments made by a perceiver concerning the believability of a communicator" (p. 181). While there is still debate about distinct dimensions of perceived credibility, which has been

shown to vary from context to context (Cronkhite & Liska, 1976), perceived credibility is constructed of three general dimensions (McCrosky & Teven, 1999; O'Keefe, 2002). The first dimension is competence/expertise (i.e., the degree to which a perceiver believes the organization knows the truth). The second dimension is trustworthiness (i.e., the degree to which a perceiver believes the organization tells the truth). Last dimension is goodwill (i.e., the degree to which a perceiver believes the organization interests at heart).

According to Smith (2010), the redistribution of a crisis message on social media enhances credibility of the message. However, it is not exactly clear whether the nature of peer feedback (in line or not in line with the official crisis message) influences the credibility of an organization in crisis. In a study by Laroche, Habibi and Richard (2012) was found that favourable messages through social media about an organization have a positive effect on one's perception of that organization regarding brand trust. In addition, we presume that when a receiver is exposed to peer feedback which opposes the official crisis message, the receiver's judgments concerning the credibility may reduce. Therefore, it is expected that opposing feedback has a negative effect on organizational credibility, whereas supporting feedback has a positive effect.

Earlier research showed that source credibility is able to affect people's decision-making. Many studies have found that information spread by credible sources results in stronger persuasion and decision-making than less credible sources (Eagly, Wood & Chaiken, 1978; Petty and Wegener, 1998; Pornpitakpan, 2004; Xie, Miao, Kuo & Lee, 2014). Therefore, it is expected that organizational credibility is positively related to intentions to perform self-protective measures communicated by the organization in crisis.

When communicating an organizational crisis message, it is not only important to inform consumers how to act in times of risk. Organizations must also decide when to release the crisis message when an incident is occurring. When an organizational crisis threatens an organization, the organization in question can choose whether to steal thunder or not. When a crisis threatens an organization to damage its credibility, it will be helpful to steal thunder. As mentioned before, the main goal of stealing thunder is to reduce crisis damage (Dolnik et al., 2003). Furthermore, previous research showed that organizations which are stealing thunder are rated as more credible than organizations which do not (Arpan & Pompper, 2003; Arpan & Roskos-Ewoldsen, 2005).

Building on this, we expect that the credibility of an organization will be maintained when it steals thunder. Therefore, we presume that peer feedback which opposes the official crisis message does not have an impact on the credibility when an organization steals thunder. In other words, it is expected that the effect of peer feedback on organizational credibility and self-protective behaviour is moderated by crisis timing strategy. Taking these ideas in perspective, the combined effects of crisis timing strategies needs to be analyzed more detailed.

**H2.** Crisis timing strategy moderates the effect of peer feedback on self-protective behaviour, and organizational credibility mediates that effect.

### *1.2. Secondary Crisis Reactions*

Besides studying the effects on self-protective behaviour, researchers have also been exploring behavioural intentions by consumers during organizational crises, which have a negative impact on the organization (Coombs & Holladay, 2007; Schultz et al., 2011; Tucker & Melewar, 2005). These so called secondary crisis reactions are constructed of three general dimensions (Schultz et al., 2011). These dimensions are reducing purchase intentions, the intentions to spread the crisis message (e.g., tell other persons about the crisis, share crisis on social media) and negative word-of-mouth intentions about the organization itself (e.g., tell other persons the company is bad or does bad things).

Earlier research on consumer behaviour has indicated that intentions to purchase a given product are higher when organizational credibility is high than when the credibility is low (Gefen & Straub, 2004; Lafferty & Goldsmith, 1999). Additionally, information provided by a credible source is perceived to be more reliable and useful, thereby facilitating positive knowledge transfers between individuals (Ko, Kirsch & King, 2005). Building on this, we expect that organizational credibility is positively related to secondary crisis reactions.

Many of studies have investigated the effects of crisis on behavioural intentions (Coombs & Holladay, 2007; Lafferty & Goldsmith, 1999; Schultz et al., 2011). However, limited research is done to examine the role peer feedback has in the context of affecting secondary crisis reactions. Yet, it is shown that peer feedback is able to convince people to take action during risk-related events (Shklovski et al., 2008; Verroen et al., 2013). Therefore, we expect that consumers' intentions to act in forms of secondary crisis reactions (e.g., spreading the message) during a crisis is determined by peer feedback as well.

In addition, research has indicated that stealing thunder is related to both organizational credibility (see 1.1.) and secondary crisis reactions (Arpan & Pompper, 2003; Arpan & Roskos-Ewoldsen, 2005, Coombs & Holladay, 2007; Schultz et al., 2011). Furthermore, we have discussed earlier that the effect of peer feedback on self-protective behaviour is moderated by the type of crisis timing strategy, and mediated by organizational credibility (see 1.1.). Building on these ideas, we presume that the same effect takes place on secondary crisis reactions. In other words, organizational credibility mediates the combined effects of peer feedback and crisis timing strategy on secondary crisis reactions.

**H3.** Crisis timing strategy moderates the effect of peer feedback on secondary crisis reactions, and organizational credibility mediates that effect.

### *1.3. This study*

To collect data for this study, an online survey was used to test the effects of crisis timing strategy and peer feedback through social media on the participants. Participants were exposed to a scenario of a both realistic and recent high-impact incident of an organizational crisis. In this scenario, they read an online newspaper article first. The article contained a

crisis communication message, which determined whether the organization stole thunder or allowed a third party to spread a crisis message. Afterwards, the participants were exposed to Twitter messages, which supported or opposed the self-protective measures communicated in the newspaper article. Finally, participants' intentions to engage in self-protective behaviour, risk perception, attitude towards organizational credibility and secondary crisis reactions risk were measured (see Figure 1).

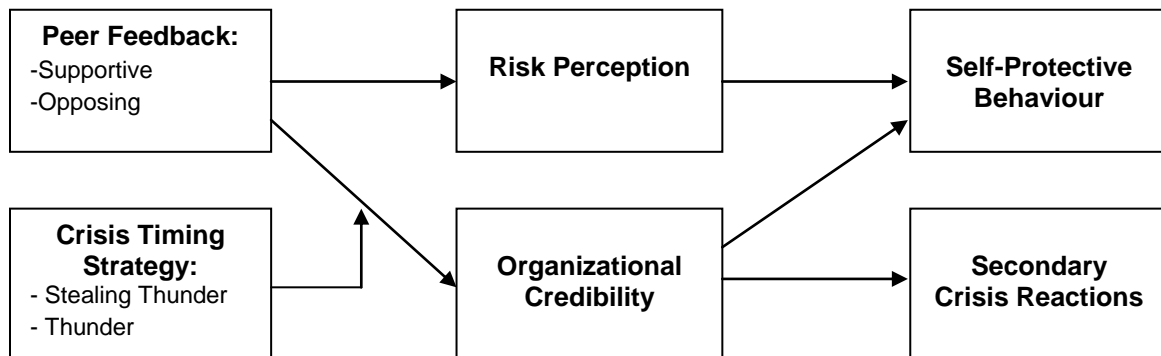


Figure 1. Conceptual model

## 2. METHOD

### 2.1. Design and Participants

The study has a 2 (Crisis Timing Strategy: thunder versus stealing thunder) × 2 (Peer Feedback: supporting versus opposing) between-subjects experimental design. In December 2013, Dutch citizens were approached by Facebook, Twitter, e-mail and forums to participate in the study. The total of 210 participants were randomly assigned to the different experimental conditions.

At the end of the online survey, the extent to which participants remembered the information from the scenarios was assessed using a small ten-item (true vs. false) information retention test (e.g., “In the newspaper article, an image of a mobile phone was displayed”). Since 46.2% filled in the wrong answer at one single item of this test, this item seemed to be too difficult to be recalled. Therefore, this item was not included to analyse the memory of the participants. On average, participants remembered 80.6% of the presented information. Unfortunately, 26 of 210 participants who took part in the study did not fill in the survey completely, or did not remember more than 50% of the information presented in the scenarios. As a result, only the data from the remaining 184 participants was used to increase the reliability of the study.

Of 184 participants (47.8% males, 52.2% females) the average age was 24 years ( $M = 24.29$ ,  $SD = 6.66$ ). Furthermore, 74.5% of the participants did follow or complete higher education and 87.5% tertiary education. The mean of social media activity among participants was above average ( $M = 3.64$ ,  $SD = .99$ ), and 11.4% claimed not to be familiar

with Twitter. The intention to use social media during crises was measured using a six-item five-point Likert-scale at the end of the survey (e.g., “Messages on social media give me an insight into the severity of a crisis.”). The participants’ intention to use social media during crises seemed to be above average ( $M = 3.13$ ,  $SD = .83$ ). This scale had a reliability of  $\alpha = .82$ .

## 2.2. Procedure

Participants were asked to fill in an online survey which measured perceptions and behaviour during an organizational crisis. First, the participants needed to select the manufacturer of their mobile phone using a complete multiple-choice list of mobile phone manufacturers. The survey was designed to automatically allocate the selected phone manufacturer as the organization in crisis within the scenario. This was done to realize involvement among participants, since more than 96% of the Dutch citizens between 12 and 75 years old in 2012 was in possession of a mobile phone (CBS, 2012). Therefore, the survey was applicable to the majority of the Dutch citizens.

### 2.2.1. Manipulating Crisis Timing Strategy

The participants were asked to read an online newspaper article about an organizational crisis. The mobile phone manufacturer selected earlier by the participant was displayed as the organization in crisis. It was described that there was a chance that mobile phone batteries produced by the manufacturer may explode due to a manufacturing error. To ensure that this risk was applicable to all participants, it was told that all the manufacturer’s types of mobile phones had the same issue. It was mentioned that the problem was caused by the electronic parts in the battery, which were produced by an external supplier.

The newspaper article was written in two versions. Both versions contained information about the organizational crisis, followed by a small number of advisable self-protective actions (see Appendices A and B). Half of the participants received an article with verbal cues which showed the mobile phone manufacturer chose to steal thunder (e.g., “There is a chance that the devices of the brand may explode violently due to a manufacturing error. That is what *\*selected phone manufacturer\** revealed yesterday during a press conference.”). Both newspaper articles stated that the organization in crisis advised to stop using the device and not to charge the battery in the meantime. Consumers were able to contact the phone manufacturer by its website or through their mobile phone provider in order to inspect their mobile phone and, if necessary, to repair it. Furthermore, the newspaper article did not explicitly state that the mentioned precautions are proven as effective. When precautions were stated as proven to be effective, it was expected that intentions to engage self-protective behaviour will not differ between distinct conditions (Verroen et al., 2013).

The other half of the participants were assigned to the thunder condition. They received an article which described that the mobile phone manufacturer did not steal thunder. As a result, the Association of Consumers was the third party to reveal the crisis information.



However the mobile phone manufacturer advised the same self-protective measures as in the stealing thunder condition, it was mentioned that they could not be reached for further comments.

The newspaper article was designed as if it was written by “De Volkskrant”, a national newspaper from the Netherlands. The crises described in the newspaper articles were based on the mobile phone incidents during the period around December 2013.

The manipulation of the Crisis Timing Strategy was pretested. Three items were used to check if the participants judged if the manufacturer took any measures to inform the consumers about the crisis ( $\alpha = .95$ ). Results of the pre-test showed that when an organization chose to steal thunder, participants were significantly more likely to think the manufacturer took action itself to inform their consumers than when the organization did not ( $F(1, 21) = 12.67, p < .05$ ).

### 2.2.2. *Manipulating Peer Feedback*

After reading the online newspaper article, the participants were asked to read a selection of eight Twitter messages (or ‘tweets’). These tweets were related to the organizational crisis described in the newspaper article. All the tweets in both conditions were seemingly written by (fictitious) peers (see Appendices C and D).

Half of the participants were shown a list of predominantly supporting tweets regarding the self-protective actions which were advised earlier in the newspaper article (supporting Peer Feedback). The other half of the participants were exposed to tweets which were predominantly opposing the communicated precautions (opposing Peer Feedback).

Six out of eight tweets in both Peer Feedback conditions were stated as supporting or opposing from a peer’s perspective on the self-protective measures. On the other hand, two of eight tweets were neutral regarding any advice to perform self-protective behaviour. It was expected that this would increase realism among participants (Verroen et al., 2013).

The selection of tweets were incorporated in the online questionnaire. In both Peer Feedback conditions, all of the eight tweets were simultaneously shown on screen. For instance, in the supportive Peer Feedback condition, clear feedback was given to support any type of earlier mentioned self-protective actions (e.g., “I’ll send my phone back quickly, means I have no more trouble of any dangers.”). In the opposing supportive Peer Feedback condition, the feedback reflected reactions from persons who found it hard to participate to the action perspective: “Sending my phone back? No way! I really can't do without it for that long!”.

The manipulation of Peer Feedback on Twitter was pretested as well. Three items were used to measure if the Peer Feedback was judged as encouraging, taking the self-protective actions mentioned in the newspaper article in perspective ( $\alpha = .93$ ). Results of the pre-test showed that participants in the supportive Peer Feedback condition assessed the feedback as more encouraging than the opposing Peer Feedback condition did ( $F(1, 21) = 26.93, p < .00$ ).

### 2.3. Measures

After participants were exposed to the online newspaper article and the list of tweets, they were asked to fill in a questionnaire (see Appendix E). This questionnaire consisted of Likert-scaled questions, mostly in the shape of “I strongly disagree” to “I strongly agree”, unless indicated otherwise.

#### 2.3.1. Self-Protective Behaviour

The intention to engage in any forms of self-protective behaviours was measured using a six-item list of questions. These items measured the intentions to perform the advices which were mentioned earlier in the online newspaper article ( $\alpha = .88$ ). In short, items were focusing on intentions to follow instructions, seek for additional information, warn other users, not to use the mobile phone anymore, etc.

#### 2.3.2. Secondary Crisis Reactions

In line with Schultz et al. (2011), three dimensions of secondary crisis reactions were used to measure secondary crisis reactions ( $\alpha = .80$ ). Participants needed to answer on a scale ranging from “very unlikely” to “very likely”. In the questionnaire was asked if the participant had (1) negative word-of-mouth intentions about the mobile phone manufacturer (three-item list), (2) unfavourable purchase intentions to buy the same type of product from the mobile phone manufacturer (three-item list), (3) intentions to spread the news about the organizational crisis (four-item list).

#### 2.3.3. Risk Perception

The items which measured risk perception were based on a questionnaire by Verroen et al. (2013). The list of items was adapted to the particular context of this study. The items measured both probability and severity of exploding mobile phones as perceived by the participants. In total, a seven-item list of questions was used to measure the perceived risk perception of the participants. This scale had a reliability of  $\alpha = .77$ . Separately, the seven-item list of questions existed of a four-item list of questions about the probability of an occurrence first (e.g., how likely they thought it would be that the participant would be confronted with an exploding mobile phone and how likely the participant thought an accident with an exploding mobile phone would be). And second, of a three-item list of questions about the severity of an occurrence (e.g., how risky and how serious they thought an accident with an exploding mobile phone would be).

#### 2.3.4. Organizational Credibility

Participants' attitude towards organizational credibility was measured using a scale designed by Beltramini (1982). Officially, this is a ten-item semantic differential scale.

However, the translations for two the items from English to Dutch seemed to be identical. Therefore, the number of items was reduced to nine. This scale was highly reliable ( $\alpha = .91$ ). The items which were included in the questionnaire are incredibility vs. credibility; unreliability vs. reliability; not convincing vs. convincing; unreasonable vs. reasonable; unfair vs. fair; doubtful vs. not doubtful; undecided vs. decisive; not authentic vs. authentic; likely vs. unlikely.

### 3. RESULTS

#### 3.1. Background

No differences were found between the groups in gender distribution ( $\chi^2 (3) = 7.44, n.s.$ ), mobile phone manufacturer ( $\chi^2 (27) = 4.79, n.s.$ ), age ( $F (3, 182) = .55, n.s.$ ), education ( $\chi^2 (18) = 15.53, n.s.$ ), social media usage ( $F (3, 183) = .60, n.s.$ ), familiarity with Twitter ( $\chi^2 (3) = 1.26, n.s.$ ), intentions to use social media during crises ( $F (3, 183) = .32, n.s.$ ).

#### 3.2. Effects of Crisis Timing Strategy and Peer Feedback on Self Protective Behaviour

A two-way ANOVA was used to test the effects of Crisis Timing Strategy and Peer Feedback on the intentions to engage in self-protective behaviour. Means and standard deviations are displayed in Table 1. First, a main effect of Peer Feedback on self-protective behaviour was found ( $F (1, 180) = 8.70, p < .05$ ). Participants showed stronger intentions to engage in self-protective behaviour when allocated to supportive Peer Feedback condition.

Second, results showed that Crisis Timing Strategy has a main effect on the intentions to engage in self-protective behaviour ( $F (1, 180) = 1.08, p < .01$ ). Participants in the stealing thunder condition showed stronger intentions to engage in self-protective behaviour than participants in the thunder condition.

Peer Feedback	Crisis Timing Strategy								
	Stealing Thunder			Thunder			Total		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
Supporting	3.11	.94	45	2.51	.74	46	2.81	.89	91
Opposing	2.54	1.01	48	2.27	1.00	45	2.41	1.01	93
Total	2.82	1.01	93	2.39	.88	91	2.61	.97	184

Table 1. Intention to engage in Self-Protective Behaviour as a result of both Crisis Timing Strategy and Peer Feedback (five-point scale; higher scores indicate stronger intentions).

#### 3.3. Effects of Crisis Timing Strategy and Peer Feedback on Secondary Crisis Reactions

In this study, the construct of secondary crisis reactions consisted out of several dimensions (i.e., negative word-of-mouth intentions, purchase intentions, intentions to spread the crisis news). A two-way MANOVA was used to test the effects of Crisis Timing Strategy and Peer

Feedback on all dimensions independently. Table 2 displays these results. Contrary to the expectations, no main effects or interaction effects were found.

Independent variable	Crisis timing strategy		Peer feedback		Crisis timing strategy * Peer feedback	
	F	<i>p</i>	F	<i>p</i>	F	<i>p</i>
Secondary crisis reactions	2.00	.16	.19	.67	.10	.75
(1) Negative word-of-mouth	.15	.70	.73	.39	.14	.71
(2) Buy intentions	.33	.57	.04	.85	1.05	.31
(3) Intentions to leave message	3.12	.08	.00	.98	.23	.64

Table 2. Results of testing effects of both Crisis Timing Strategy and Peer Feedback on dimensions of secondary crisis reactions using a two-way ANOVA-test.

### 3.4. Effects of Crisis Timing Strategy and Peer Feedback on Risk Perception

Risk perception also was constructed out of multiple dimensions (i.e., risk probability, risk severity). To test the effects of Crisis Timing Strategy and Peer Feedback on both dimensions of risk perception, a two-way MANOVA was used (see Table 3). Yet, no main- or interaction effects were found.

Independent variable	Crisis timing strategy		Peer feedback		Crisis timing strategy * Peer feedback	
	F	<i>p</i>	F	<i>p</i>	F	<i>p</i>
Risk perception	.44	.51	2.44	.12	.68	.41
(1) Risk probability	.96	.33	2.20	.14	.18	.67
(2) Risk severity	.01	.94	.85	.36	.65	.42

Table 3. Results of testing effects of both Crisis Timing Strategy and Peer Feedback on dimensions of risk perception using a two-way ANOVA-test.

### 3.5. Effects of Crisis Timing Strategy and Peer Feedback on Organizational Credibility

A two-way ANOVA was used to test the impact of Crisis Timing Strategy and Peer Feedback on organizational credibility. Contrary to the expectations of H4, the results did not show any significant main effects of both Crisis Timing Strategy ( $F(1, 180) = 2.01, n.s.$ ) and Peer Feedback ( $F(1, 180) = .94, n.s.$ ) on organizational credibility. However, the interaction of both independent variables on organizational credibility was significant ( $F(1, 180) = 4.01, p < .05$ ) (see Figure 2). Means and standard deviations are displayed in Table 4.

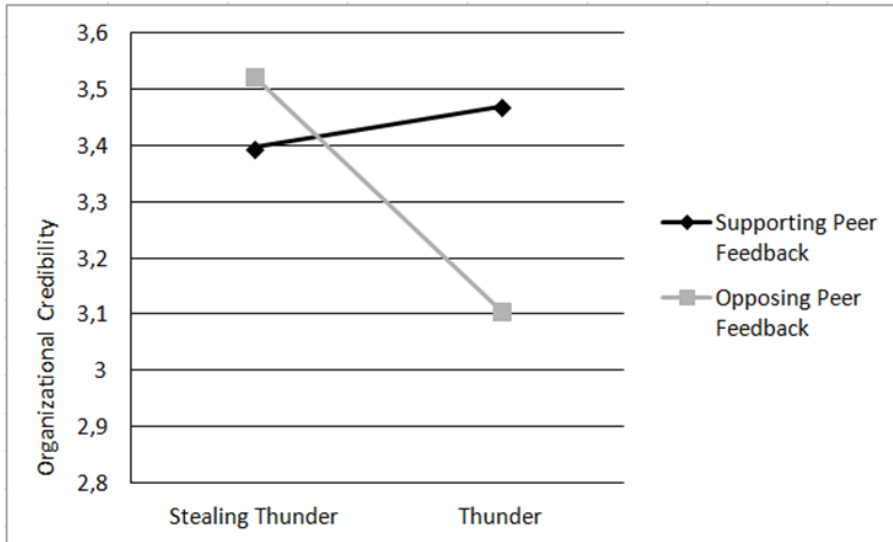


Figure 2. Interactions of Crisis Timing Strategy and Peer Feedback on organizational credibility (five-point scale; higher scores indicate a higher credibility).

Paired comparisons showed that in the stealing thunder condition, participants did not respond to differences in Peer Feedback ( $F(1, 91) = .56, n.s.$ ), whereas in the thunder condition, the difference between the Peer Feedback conditions was significant ( $F(1, 89) = 4.43, p < .05$ ). Apparently, the effect of Peer Feedback on organizational credibility is stronger when a third party spread the crisis news than when the organization stole thunder.

Peer Feedback	Crisis Timing Strategy						Total		
	Stealing Thunder			Thunder			M	SD	N
	M	SD	N	M	SD	N			
Supporting	3.4	.71	45	3.47	.72	46	3.43	.71	91
Opposing	3.52	.87	48	3.11	.96	45	3.32	.93	93
Total	3.46	.80	93	3.29	.86	91	3.38	.83	184

Table 4. Ratings of organizational credibility as a result of both Crisis Timing Strategy and Peer Feedback (five-point scale; higher scores indicate a higher credibility).

### 3.6. Hypotheses Testing

#### 3.6.1. Effects of Peer Feedback on Self-Protective Behaviour

To assess whether risk perception is mediating the effect of Peer Feedback on self-protective behaviour, multiple regression analyses were conducted. First, it was found that supportive Peer Feedback has a positive effect on self-protective behaviour ( $\beta = .21, t(182) = 2.82, p < .05$ ). Second, it was shown that risk perception (the mediator) was positively related to self-protective behaviour ( $\beta = .52, t(182) = 5.20, p < .001$ ). However, the effect of Peer Feedback on risk perception did not seem to be significant ( $\beta = .07, t(182) = 1.54, n.s.$ ). To conclude, no statistical evidence was found to suggest that risk perception mediates the

effects of Peer Feedback on self-protective behaviour. This means H1 is not accepted. Figure 4 displays these results.

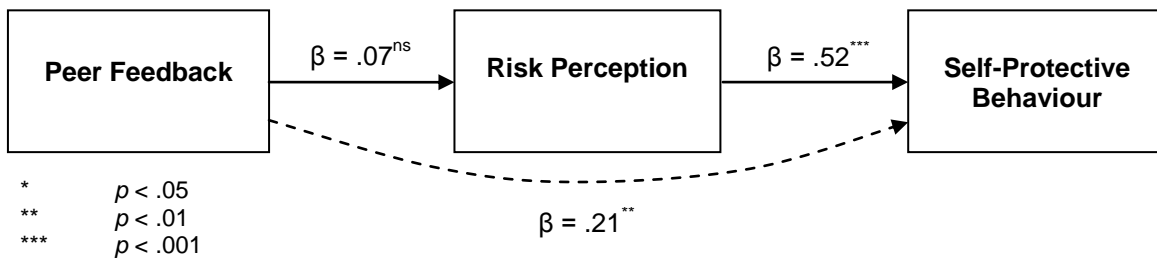


Figure 4. Analysis of risk perception as a mediator for the effect of Peer Feedback on self-protective behaviour.

### 3.6.2. Effects of Peer Feedback and Crisis Timing Strategy on Self-Protective Behaviour

Multiple regression analyses were conducted to assess each component of the proposed mediation model. First, combined effects of Peer Feedback and Crisis Timing Strategy on self-protective behaviour revealed to be non-significant ( $\beta = -.08$ ,  $t(182) = -1.16$ , n.s.). However, results showed that combined effects of Peer Feedback and Crisis Timing Strategy were positively related to organizational credibility (the mediator) ( $\beta = .12$ ,  $t(182) = 2.02$ ,  $p < .05$ ). Furthermore, results indicated that organizational credibility was positively associated with self-protective behaviour ( $\beta = .32$ ,  $t(182) = 3.75$ ,  $p < .001$ ). In addition, results showed that the direct effects of Peer Feedback and Crisis Timing Strategy on self-protective behaviour appeared to be non-significant ( $\beta = -.12$ ,  $t(182) = -1.75$ , n.s.) when controlling for organizational credibility. Figure 5 displays these results.

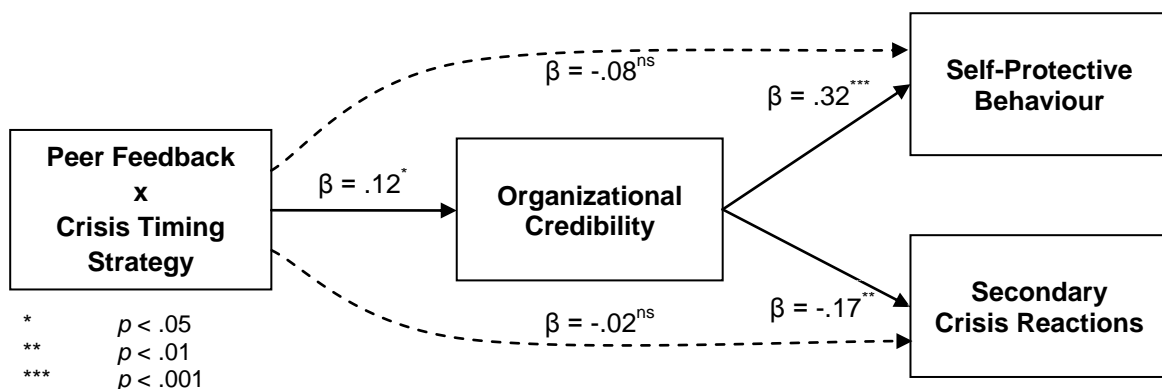


Figure 5. Analysis of organizational credibility as a mediator for the effect of Peer Feedback and Crisis Timing Strategy on self-protective behaviour and secondary crisis reactions.

Results indicated that both indirect paths were significant. Therefore, these mediation analyses were tested using a bootstrapping method, including bias-corrected confidence estimates (MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004). In this study, the 95% confidence interval of the indirect effects were obtained with a 5000 bootstrap resample (Preacher & Hayes, 2008). This verified the mediating role of organizational

credibility in the relation between Peer Feedback, Crisis Timing Strategy and self-protective behaviour ( $\beta = .04$ ; CI = .003, .10). This means H2 is confirmed.

### 3.6.3. *Effects of Peer Feedback and Crisis Timing Strategy on Secondary Crisis Reactions*

Multiple regression analyses were conducted to assess the effects on secondary crisis reactions within the proposed mediation model. The combined effects of Crisis Timing Strategy and Peer Feedback on secondary crisis reactions did not reveal to be significant ( $\beta = -.02$ ,  $t(182) = -.31$ , n.s.). However, the effects of Crisis Timing Strategy and Peer Feedback seemed to have a significant effect on organizational credibility ( $\beta = .12$ ,  $t(182) = 2.02$ ,  $p < .05$ ). Furthermore, results indicated that organizational credibility has a negative effect on secondary crisis reactions ( $\beta = -.17$ ,  $t(182) = -2.61$ ,  $p < .01$ ). In addition, results showed that the direct effects of Peer Feedback and Crisis Timing Strategy on secondary crisis reactions was non-significant ( $\beta = .00$ ,  $t(182) = .08$ , n.s.) when controlling for organizational credibility.

The results showed that both the indirect paths were significant. Subsequently, these results were analysed using a bootstrapping method as well, including bias-corrected confidence estimates (95% confidence interval, 5000 bootstrap resample) (MacKinnon et al., 2004; Preacher & Hayes, 2004, 2008). As a result, the mediating role of organizational credibility in the relation between Peer Feedback, Crisis Timing Strategy and secondary crisis reactions was verified ( $\beta = .02$ ; CI = -.07, -.001), meaning H3 is confirmed.

## 4. CONCLUSIONS & DISCUSSION

### 4.1. *Conclusion*

This study tried to gain insights into citizens' intentions to engage in self-protective behaviour and secondary crisis reactions when both crisis message and peer reactions are presented simultaneously. This was done by manipulating the timing of the crisis message through a online newspaper article and providing peer reactions by Twitter. These peer reactions reflected supporting- or opposing feedback towards the self-protective measures mentioned in the newspaper article.

As expected, statistical evidence was found to suggest that the combined effects of both crisis timing strategy and peer feedback on self-protective behaviour and secondary crisis reactions is mediated by organizational credibility (H2 and H3). The results show an interaction effect of crisis timing strategy and peer feedback on organizational credibility. This reveals that when an organization steals thunder, the influence of peer feedback on the organizational credibility will reduce. Based on these findings, we argue that stealing thunder safeguards the organizational credibility. In others words, stealing thunder confines the negative impact on the organizational credibility when one is exposed to peer feedback which opposes the self-protective measures communicated by the organization. On the other hand, opposing peer feedback decreases the organizational credibility when another party spreads the crisis news.

Furthermore, results showed that when the organizational credibility decreases, this will stimulate unfavourable secondary crisis reactions among the public. This is in line with previous studies on consumer behaviour (Gefen & Straub, 2004; Ko et al., 2005; Lafferty & Goldsmith, 1999). These studies have shown that when organizational credibility is high, intentions to purchase a given product or to facilitate positive knowledge transfers between individuals are higher than when its credibility is low.

Moreover, this study revealed that a reduction of the organizational credibility reduces citizens' intentions to engage in self-protective behaviour as well. This is keeping with earlier studies (i.e., Eagly, Wood & Chaiken, 1978; Petty and Wegener, 1998; Pornpitakpan, 2004; Xie, Miao, Kuo & Lee, 2014) which showed that a higher source credibility results in stronger persuasion and decision-making than less credible sources do. The results from our study suggest that this also applies to one's self-protectiveness. In addition, the results indicated that the type of crisis timing strategy has a main effect on intentions to engage in self-protective behaviour. In other words, citizens are more likely to engage in self-protective behaviour when an organization chose to steal thunder, regardless of whether peer feedback is in line with the official crisis message or not.

Furthermore, the results show that peer feedback influences the intentions to engage in self-protective behaviour, regardless of when the crisis message was timed. When one is exposed to supportive peer feedback messages, the intentions to engage in self-protective behaviour are higher than when exposed to opposing peer feedback. This can be explained by Vieweg et al. (2010), which have argued that citizens perceive peer feedback messages on social media as reliable and usable. Furthermore, this is in keeping with an earlier study by Verroen et al. (2011), which showed that peer feedback convinces citizens whether to engage in self-protective behaviour or not when it is not explicitly stated that the mentioned precautions are proven as effective.

However, the results did not support our expectation that risk perception mediates the relationship between peer feedback and self-protective behaviour (H1), since no evidence was found to suggest that peer feedback has an effect on risk perception. This findings may suggest that supporting or opposing peer feedback does not affect one's risk perception during crises.

On the other hand, this can be explained by the rather low average score on risk probability. Perhaps participants thought it was unlikely that the scenario of exploding mobile phones actually will take place in the reality. However the scenario used in this study was based on the mobile phone incidents around December 2013, most participants may have known that the situation was fictitious.

#### *4.2. Limitations*

Some procedural limitations within this study have to be mentioned. No statistical evidence was found to suggest that stealing thunder and peer feedback have an effect on risk perception. As mentioned earlier (see 4.1.), the low average of risk perception indicates



that participants did not perceive the risk of exploding mobile phones as a potential threat to them. This implies that the chosen crisis situation was not factual or alarming enough to reach a high level of risk perception among participants. It is possible that a higher perception of risk may have led to a mediating effect between peer feedback and self-protective behaviour instead. Therefore, in future crisis communication research it may be advised to use another manipulation or risk topic that might realize higher risk perception levels among participants.

#### *4.3. Practical Implications*

The results from this study have important practical implications for organizations and other instances who desire to ensure the safety of all citizens. Building on the results of an earlier study by Verroen et al. (2011), organizations in crisis should make sure that self-protective measures are clearly communicated and stated as uncomplicated to perform. This strengthens the perception of citizens that these self-protective measures will be effective and easy.

The results from this study also have practical implications for organizations in crisis who desire to safeguard their own organizational credibility. When an organization in crisis chooses to let the crisis news being discovered and spread by a third party, the organizational credibility among citizens will decrease when they are exposed to peer feedback which opposes the feedback of the original crisis message. However, when an organization in crisis chooses to steal thunder, the reducing effect on the organizational credibility will be constrained, no matter if exposed to supporting or opposing peer feedback. In turn, higher credibility ratings lead to (1) higher levels of self-protectiveness among citizens and (2) less unfavourable secondary crisis reactions.

#### *4.4. Future Research*

The presented study focused on the combination of stealing thunder and peer feedback affecting citizens' perceptions and behaviour, while taking organizational credibility into account. Although organizational credibility seems to affect citizens' intentions to engage in self-protective behaviour, we feel that the concept of organizational credibility in combination with crisis-related messages deserves to be explored further.

Future research may focus on the effects of organizational credibility, affecting the credibility of the official crisis message itself. Taking this link in perspective, the medium used to communicate a crisis message might play a role as well. Organizational communication through traditional media might be perceived as more representative, believable and reliable, when communicating an official crisis message than through social media. A future study may focus on the effects of both organizational credibility and the medium on the credibility of the crisis message, for example.

In addition, the effects of organizational credibility on the credibility of opposing peer messages during crisis incidents can be explored further as well. For instance, future

research may study the effects on the credibility of opposing peer messages, if the credibility of the official crisis message or the organization itself decreases.

## REFERENCES

- Arpan, L. M., & Pompper, D. (2003). Stormy weather: Testing “stealing thunder” as a crisis communication strategy to improve communication flow between organizations and journalists. *Public Relations Review*, 29(3), 291-308.
- Arpan, L. M., & Roskos-Ewoldsen, D. R. (2005). Stealing thunder: Analysis of the effects of proactive disclosure of crisis information. *Public Relations Review*, 31(3), 425-433.
- Arrow, K.J. (1971). *Essays in the Theory of Risk Bearing*. Markham Publishing Company, Chicago.
- Beltramini, R. F. (1982). Advertising perceived believability scale. Proceedings of the Southwestern Marketing Association, 1-3.
- CBS. (2012). Verdere groei mobiel internetgebruik 2012 (Further growth mobile Internet usage in 2012). Persbericht PB12-06, 23 oktober 2012. Statistics Netherlands, Voorburg/Heerlen.
- Cialdini, R. B. (2009). *Influence: Science and practice* (5th ed.). Boston: Allyn and Bacon.
- Coombs, W. T. (1995). Choosing the Right Words The Development of Guidelines for the Selection of the “Appropriate” Crisis-Response Strategies. *Management Communication Quarterly*, 8(4), 447-476.
- Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10(3), 163-176.
- Coombs, W. T., & Holladay, S. J. (2007). The negative communication dynamic: Exploring the impact of stakeholder affect on behavioral intentions. *Journal of Communication Management*, 11(4), 300-312.
- Cronkhite, G., & Liska, J. (1976). A critique of factor analytic approaches to the study of credibility. *Communications Monographs*, 43(2), 91-107.
- Dolnik, L., Case, T. I., & Williams, K. D. (2003). Stealing thunder as a courtroom tactic revisited: Processes and boundaries. *Law and Human Behavior*, 27(3), 267-287.
- Eagly, A. H., Wood, W., & Chaiken, S. (1978). Causal inferences about communicators and their effect on opinion change. *Journal of Personality and social Psychology*, 36(4), 424-435.
- Fennis, B. M., & Stroebe, W. (2013). Softening the Blow: Company Self-Disclosure of Negative Information Lessens Damaging Effects on Consumer Judgment and Decision Making. *Journal of Business Ethics* 120(1), 109-120.
- Freudenburg, W. R. (1988). Perceived risk, real risk: Social science and the art of probabilistic risk assessment. *Science*, 242(4875), 44-49.

- Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-commerce and the importance of social presence: experiments in e-products and e-services. *Omega*, 32(6), 407-424.
- Kievik, M., & Gutteling, J. M. (2011). Yes, we can: motivate Dutch citizens to engage in self-protective behavior with regard to flood risks. *Natural hazards*, 59(3), 1475-149.
- Ko, D. G., Kirsch, L. J., & King, W. R. (2005). Antecedents of knowledge transfer from consultants to clients in enterprise system implementations. *MIS quarterly* 29(1), 59-85.
- Lafferty, B. A., & Goldsmith, R. E. (1999). Corporate credibility's role in consumers' attitudes and purchase intentions when a high versus a low credibility endorser is used in the ad. *Journal of business research*, 44(2), 109-116.
- Laroche, M., Habibi, M. R., Richard, M. O., & Sankaranarayanan, R. (2012). The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty. *Computers in Human Behavior*, 28(5), 1755-1767.
- MacCrimmon, K.R. and D.A. Wehrung (1986). *Taking Risks: The Management of Uncertainties*. Free Press, New York.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate behavioral research*, 39(1), 99-128.
- Mauet, T. A. (2007). *Trial techniques* (7th ed.). New York: Aspen Publishers.
- McCroskey, J. C., & Teven, J. J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communications Monographs*, 66(1), 90-103.
- Mileti, D., Bandy, R., Bourque, L.B., Johnson, A., Kano, M., Peek, L., Sutton, J.N. & Wood, M. (2006). *Annotated Bibliography for Public Risk Communication on Warnings for Public Protective Actions Response and Public Education*.  
<http://www.colorado.edu/hazards/publications/informer/infrmr2/pubhazbibann.pdf>  
Retrieved on 12/1/2013
- O'Keefe, D. J. (2002). *Persuasion: Theory and research* (Vol. 2). Sage Publications, Incorporated.
- Palen, L., & Liu, S. B. (2007). Citizen communications in crisis: anticipating a future of ICT-supported public participation. In *Proceedings of the SIGCHI conference on Human factors in computing systems*, 727-736. ACM.
- Palen, L., Vieweg, S., Liu, S. B., & Hughes, A. L. (2009). Crisis in a networked world features of computer-mediated communication in the April 16, 2007, Virginia Tech Event. *Social Science Computer Review*, 27(4), 467-48.
- Pennings, J. M., & Grossman, D. B. (2008). Responding to crises and disasters: the role of risk attitudes and risk perceptions. *Disasters*, 32(3), 434-448.
- Pennings, J. M., & Wansink, B. (2004). Channel contract behavior: The role of risk attitudes, risk perceptions, and channel members' market structures. *The journal of business*, 77(4), 697-724.

- Petty, R. E., & Wegener, D. T. (1998). Matching versus mismatching attitude functions: Implications for scrutiny of persuasive messages. *Personality and Social Psychology Bulletin*, 24(3), 227-240.
- Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology*, 34(2), 243-281.
- Pratt, J.W. (1964). Risk aversion in the small and in the large. *Econometrica*, 32, 122–136.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.
- Schultz, F., Utz, S., & Göritz, A. (2011). Is the medium the message? Perceptions of and reactions to crisis communication via twitter, blogs and traditional media. *Public relations review*, 37(1), 20-27.
- Shklovski, I., Palen, L., & Sutton, J. (2008). Finding community through information and communication technology in disaster response. In *Proceedings of the 2008 ACM conference on Computer supported cooperative work*, 127-136. ACM.
- Slovic, P. (1987). Perception of risk. *Science*. 236(4799), 280-285.
- Smith, B. G. (2010). Socially distributing public relations: Twitter, Haiti, and interactivity in social media. *Public Relations Review*, 36(4), 329-335.
- Starbird, K., Palen, L., Hughes, A. L., & Vieweg, S. (2010). Chatter on the red: what hazards threat reveals about the social life of microblogged information. In *Proceedings of the 2010 ACM conference on Computer supported cooperative work*, 241-25. ACM.
- Sutton, J., Palen, L., & Shklovski, I. (2008). Backchannels on the front lines: Emergent uses of social media in the 2007 southern California wildfires. In *Proceedings of the 5th International ISCRAM Conference*, 624-632. Washington, DC.
- Tucker, L., & Melewar, T. C. (2005). Corporate reputation and crisis management: The threat and manageability of anti-corporatism. *Corporate reputation review*, 7(4), 377-387.
- Verroen, S., Gutteling, J. M., & De Vries, P. W. (2012). Enhancing Self-Protective Behavior: Efficacy Beliefs and Peer Feedback in Risk Communication. *Risk analysis*, 33(7), 1252-1264
- Vieweg, S., Hughes, A. L., Starbird, K., & Palen, L. (2010). Microblogging during two natural hazards events: what twitter may contribute to situational awareness. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 1079-1088. ACM.
- Xie, H., Miao, L., Kuo, P. J., & Lee, B. Y. (2011). Consumers' responses to ambivalent online hotel reviews: The role of perceived source credibility and pre-decisional disposition. *International Journal of Hospitality Management*, 30(1), 178-183.
- Yates, D., & Paquette, S. (2011). Emergency knowledge management and social media technologies: A case study of the 2010 Haitian earthquake. *International Journal of Information Management*, 31(1), 6-13.

## APPENDIX A: ONLINE NEWSPAPER ARTICLE – STEALING THUNDER (IN DUTCH)

WOENSDAG 11 DECEMBER 2013

 | [WEER](#) | [BEURS](#) | [VIDEO](#) | [FOTO](#) | [BANEN](#)

# Volkskrant.nl

HOME NIEUWS POLITIEK OPINIE BUITENLAND SPORT **TECH & MEDIA**

Door: Gerard Kampman – 11/12/13, 14:51

### Ontploffingsgevaar door productiefout \*naam telefoonproducent\*

Uit een recent productonderzoek van **\*naam telefoonproducent\*** is gebleken dat consumenten met een mobiele telefoon van **hetzelfde** merk moeten oppassen. Er bestaat namelijk een kans dat de apparaten van het merk hevig kunnen ontploffen door toedoen van een productiefout. Dat maakte **\*naam telefoonproducent\*** gisteren **tijdens een persconferentie** bekend.

Het productonderzoek van **\*naam telefoonproducent\*** vond plaats naar aanleiding van enkele meldingen van schade door gebruikers, en reacties die daarop volgden via sociale netwerken als Twitter en Facebook.

De productiefout heeft niet alleen betrekking op de productie van één enkel type telefoon, het gaat om alle modellen die geproduceerd zijn door **\*naam telefoonproducent\***. Het defect wordt veroorzaakt door een elektronisch onderdeel in de accu, die wordt geproduceerd door een externe leverancier.

**\*naam telefoonproducent\*** heeft er over de gehele wereld verspreid talloze miljoenen van verkocht, onder meer in Nederland en de overige landen van de EU.

Naar aanleiding van de resultaten van het onderzoek geeft **\*naam telefoonproducent\*** haar consumenten de mogelijkheid om de telefoons kosteloos na te laten kijken en eventueel te laten repareren. Ook raden zij aan om het apparaat in de tussentijd niet meer te gebruiken en de accu niet meer op te laden. **\*naam telefoonproducent\* gaf aan er alles aan te doen om de consumenten zo goed mogelijk van dienst te zijn.**


Gebruikers van mobiele telefoons van dit merk kunnen eventueel via internet contact opnemen met **\*naam telefoonproducent\*** via [www.\\*naam telefoonproducent\\*.nl](http://www.*naam telefoonproducent*.nl) of via hun telefoonprovider.

[\\* Volg de Volkskrant op Twitter](#)

[\\* Word vriend van de Volkskrant op Facebook](#)

## APPENDIX B: ONLINE NEWSPAPER ARTICLE – THUNDER (IN DUTCH)

WOENSDAG 11 DECEMBER 2013

 | [WEER](#) | [BEURS](#) | [VIDEO](#) | [FOTO](#) | [BANEN](#)

# Volkskrant.nl

HOME NIEUWS POLITIEK OPINIE BUITENLAND SPORT **TECH & MEDIA**

Door: Gerard Kampman – 11/12/13, 14:51

### Ontploffingsgevaar door productiefout \*naam telefoonproducent\*

Uit een recent productonderzoek is gebleken dat consumenten met een mobiele telefoon van **het merk \*naam telefoonproducent\*** moeten oppassen. Er bestaat namelijk een kans dat de apparaten van het merk hevig kunnen ontploffen door toedoen van een productiefout. Dat maakte **de Consumentenbond** gisteren bekend.

Het onderzoek van **de Consumentenbond** vond plaats naar aanleiding van enkele meldingen van schade door gebruikers, en reacties die daarop volgden via sociale netwerken als Twitter en Facebook.

De productiefout heeft niet alleen betrekking op de productie van één enkel type telefoon, het gaat om alle modellen die geproduceerd zijn door \*naam telefoonproducent\*. Het defect wordt veroorzaakt door een elektronisch onderdeel in de accu, die wordt geproduceerd door een externe leverancier.

\*naam telefoonproducent\* heeft er over de gehele wereld verspreid talloze miljoenen van verkocht, onder meer in Nederland en de overige landen van de EU.

Naar aanleiding van de resultaten van het onderzoek geeft \*naam telefoonproducent\* haar consumenten de mogelijkheid om de telefoons kosteloos na te laten kijken en eventueel te laten repareren. Ook raden zij aan om het apparaat in de tussentijd niet meer te gebruiken en de accu niet meer op te laden.

Gebruikers van mobiele telefoons van dit merk kunnen eventueel via internet contact opnemen met \*naam telefoonproducent\* via [www.\\*naam telefoonproducent\\*.nl](http://www.*naam telefoonproducent*.nl) of via hun telefoonprovider.

**Ondanks dat \*naam telefoonproducent\* alvast deze maatregelen heeft genomen waren ze nog niet direct bereikbaar voor commentaar.**

\* [Volg de Volkskrant op Twitter](#)

\* [Word vriend van de Volkskrant op Facebook](#)

## APPENDIX C: LIST OF TWEETS – SUPPORTIVE PEER FEEDBACK (IN DUTCH)



**Samantha Achterberg** @Samantha  
leeeh! Telefoon maar gauw opgestuurd. Van dat gevaar heb ik geen last meer! :(  
Expand      Reply   Retweet   Favorite   More

**Henk-Maarten Chin** @henkmaarten  
Hahah, ontploffingsgevaar in telefoonaccu's.. Boeeemmm!  
Expand      Reply   Retweet   Favorite   More

**Martijn Hendriks** @hendriks  
Kan het nog slechter? #Productiefout in mijn telefoon.. Moet niet gekker worden! Toch maar opsturen dat ding!  
Expand      Reply   Retweet   Favorite   More

**Jesse Colombo** @TheBubble  
Volg het laatste nieuws over de productiefout van mobiele telefoons op [www.crisisnieuws.nl](http://www.crisisnieuws.nl) #telefoons #productiefout  
Expand      Reply   Retweet   Favorite   More

**Leah Van Damme** @LeahVanDam  
Dikke #fail! #Productiefout in mijn telefoon. Gauw dat apparaat opsturen!  
Expand      Reply   Retweet   Favorite   More

**Kevin Kampman** @KevinKampmanWS  
Just collected some more information about the production errors in phone batteries, you'll never know what happens!  
Expand      Reply   Retweet   Favorite   More

**Paige Frederiksen** @P\_Frederikse  
Koos Mobielloos #accu #productiefout #telefoon  
Expand      Reply   Retweet   Favorite   More

**Charlie Janssen** @Charlie\_Jansse  
Net info gezocht over de telefooncrisis @ [www.crisisnieuws.nl](http://www.crisisnieuws.nl). Staat precies wat we moeten doen!  
Expand      Reply   Retweet   Favorite   More

## APPENDIX D: LIST OF TWEETS – OPPOSING PEER FEEDBACK (IN DUTCH)



**Samantha Achterberg** @Samantha  
leeh! Mijn telefoon opsturen? Gaat niet door, zo lang kan ik echt niet zonder! :(  
Expand   Reply   Retweet   Favorite   More

**Henk-Maarten Chin** @henkmaartench  
Hahah, ontplofingsgevaar in telefoonaccu's.. Boeeemmm!  
Expand   Reply   Retweet   Favorite   More

**Martijn Hendriks** @hendriks  
Kan het nog slechter? #Productiefout in mijn telefoon.. Moet niet gekker worden! Ik stuur dat ding echt niet op.  
Expand   Reply   Retweet   Favorite   More

**Jesse Colombo** @TheBubble  
Volg het laatste nieuws over de productiefout van mobiele telefoons op [www.crisisnieuws.nl](http://www.crisisnieuws.nl) #telefoons #productiefout  
Expand   Reply   Retweet   Favorite   More

**Leah Van Damme** @LeahVanDam  
Dikke #fail! #Productiefout in mijn telefoon. Apparaat opsturen? Echt niet!  
Expand   Reply   Retweet   Favorite   More

**Kevin Kampman** @KevinKampmanW  
Why would I search for some more information about the errors in phones batteries? Guess the chance it would explode is too small.  
Expand   Reply   Retweet   Favorite   More

**Paige Frederiksen** @P\_Frederiks  
Koos Mobielloos? Don't think so! #accu #productiefout #telefoon  
Expand   Reply   Retweet   Favorite   More

**Charlie Janssen** @Charlie\_Janss  
Info gezocht over de telefooncrisis @ [www.crisisnieuws.nl](http://www.crisisnieuws.nl).  
Wat onduidelijk aangegeven allemaal!  
Expand   Reply   Retweet   Favorite   More



## APPENDIX E: ONLINE QUESTIONNAIRE (DUTCH QUESTIONS)

### *Demographics*

Welk merk mobiele telefoon gebruikt u momenteel?

- Acer
- Alcatel
- Apple
- Archos
- Asus
- Bea-fon
- Blackberry
- Emporia
- Fysic
- Google
- HTC
- Huawei
- KPN
- LG
- Motorola
- Nokia
- Profoon
- Samsung
- Sony
- Sony Ericsson
- Swisschoice
- Tele2
- Telfort
- Tiptel
- T-Mobile
- Vodafone
- Wolfgang
- Xtreamer
- Yarvik

Wat is uw geslacht?

- Man
- Vrouw

Wat is uw leeftijd? \_\_\_\_\_

Wat is de hoogst genoten opleiding die u volgt of heeft afgerond?

- Basisonderwijs
- Lager beroepsonderwijs
- Voorbereidend middelbaar beroepsonderwijs (VMBO)
- Middelbaar voortgezet onderwijs (Mavo, MULO)
- Middelbaar beroepsonderwijs (MBO)
- Hoger voortgezet onderwijs (Havo, VWO)
- Hoger beroepsonderwijs (HBO)
- Wetenschappelijk onderwijs
- Anders, namelijk: \_\_\_\_\_

Hoe actief bent u op social media netwerken zoals Facebook of Twitter?

Zeer actief				Helemaal niet actief
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Bent u bekend met Twitter?

- Ja
- Nee

### *Risk Perception*

Zou u kunnen aangeven hoe u denkt over kans op een ongeluk door het ontploffen van mobiele telefoons?

	Zeer klein				Zeer groot
Hoe groot acht u de waarschijnlijkheid dat er een ongeluk kan plaatsvinden door het ontploffen van een mobiele telefoon?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De kans dat er een ongeluk plaatsvindt door het ontploffen van een mobiele telefoon acht ik	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De kans dat ik schade oploep door het ontploffen van een mobiele telefoon acht ik	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De kans dat ik zelf te maken krijg met een ongeluk door het ontploffen van een mobiele telefoon acht ik	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Zou u kunnen aangeven hoe u denkt over de gevolgen van een ongeluk met het ontploffen van mobiele telefoons?

	Helemaal niet mee eens				Helemaal mee eens
Een ongeluk door het ontploffen van een mobiele telefoon, zal het leven van slachtoffers enorm ontwrichten.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De ongelukken door het ontploffen van een mobiele telefoon hebben een grote impact op deze mensen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Als mij een ongeluk overkomt door het ontploffen van een mobiele telefoon, ondervind ik hier zeker hinder van.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Self-Protective Behaviour*

Kunt u aangeven in hoeverre u het eens bent met onderstaande stellingen?

Op basis van de crisissituatie met betrekking tot het ontplofingsgevaar van mobiele telefoons zal ik...

	Helemaal niet mee eens				Helemaal mee eens
De genoemde adviezen opvolgen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informatie zoeken via radio, televisie of internet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn mobiele telefoon niet meer gebruiken.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De mensen met wie ik om ga waarschuwen voor de ramp.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De accu van mijn telefoon niet meer opladen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn mobiele telefoon opsturen voor controle en eventueel voor reparatie.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Secondary Crisis Reactions*

Geef van de volgende situaties aan hoe aannemelijk ze zijn naar aanleiding van de crisissituatie:

	Erg onaannemelijk				Erg aannemelijk
Ik zou negatieve dingen gaan zeggen over *naam telefoonproducent*.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou mijn vrienden aanraden om mobiele telefoons van *naam telefoonproducent* te kopen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou negatieve dingen gaan vertellen over de mobiele telefoons van *naam telefoonproducent*.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou nog steeds geneigd zijn om mobiele telefoons van *naam telefoonproducent* te kopen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De kans dat ik nog mobiele telefoons van *naam telefoonproducent* zou kopen is:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou nooit meer een mobiele telefoon kopen van *naam telefoonproducent*.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Als ik een bericht over deze crisis op Facebook zou lezen zou ik hem delen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Als ik een bekende zou spreken, zou ik hem op de hoogte brengen van de crisis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Als ik een bericht over deze crisis op Twitter zou zien zou ik hem retweeten.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zou mijn vrienden op de hoogte brengen van de crisis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Organizational Credibility

Gelieve hieronder de kenmerken aan te kruisen die volgens u het best passen bij het bedrijf

\*naam telefoonproducent\* naar aanleiding van de situatie.

	1	2	3	4	5	
Ongeloofwaardig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Geloofwaardig
Onbetrouwbaar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Betrouwbaar
Overtuigend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Niet overtuigend
Onredelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Redelijk
Oneerlijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Eerlijk
Twijfelachtig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Niet twijfelachtig
Onbeslissend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Beslissend
Authentiek	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Niet authentiek
Onwaarschijnlijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Waarschijnlijk

### Social Media Usage During Crises

In tijden van een crisis maken mensen steeds vaker gebruik van social media zoals Facebook, Twitter of Hyves. Dit kunnen zij bijvoorbeeld doen om informatie te lezen van anderen, of om informatie te delen over de crisis.

Wat zijn voor u de belangrijkste redenen om gebruik te maken van social media zoals Facebook of Twitter in tijden van een crisis? Kunt u aangeven in hoeverre u het eens bent met de onderstaande stellingen?

	Helemaal niet mee eens				Helemaal mee eens
De informatie van andere betrokkenen kan mij helpen om te gaan met de gevolgen van de crisis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik krijg snelle updates over de crisis via social media.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind het belangrijk om informatie van andere betrokkenen te krijgen wanneer er een crisis plaatsvindt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zoek geruststelling bij medebetrokkenen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De berichten geven mij inzicht in de omvang van de crisis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik kan zelf actief meedoen binnen de discussie over de crisis (vragen stellen, vragen beantwoorden).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*Knowledge test*

Geef van volgende stellingen aan of ze juist of onjuist zijn:

	Juist	Onjuist
Het eventuele risico dat u loopt heeft betrekking op een productiefout in de mobiele telefoons van *naam telefoonproducent*.	<input type="radio"/>	<input type="radio"/>
Volgens de tekst was er een verwijzing naar <a href="#">www.*naam telefoonproducent*.nl</a> . (Deleted item)	<input type="radio"/>	<input type="radio"/>
In het krantenbericht was er een afbeelding van een telefoon te zien.	<input type="radio"/>	<input type="radio"/>
In het krantenbericht werd niet verteld wat voor een maatregelen u kunt treffen als u een telefoon van *naam telefoonproducent* bezit.	<input type="radio"/>	<input type="radio"/>
De berichten op Twitter hadden betrekking op het eerder getoonde krantenbericht.	<input type="radio"/>	<input type="radio"/>
Volgens het krantenbericht lag het probleem aan een productiefout van de accu.	<input type="radio"/>	<input type="radio"/>
Een van de adviezen luidde dat u uw mobiele telefoon weg moest gooien.	<input type="radio"/>	<input type="radio"/>
In het krantenbericht stond dat de productiefout kwam door een externe leverancier.	<input type="radio"/>	<input type="radio"/>
In het krantenbericht stond dat telefoons van *naam telefoonproducent* kosteloos nagekeken en gerepareerd kon worden.	<input type="radio"/>	<input type="radio"/>
In de berichten op Twitter werd gesproken over <a href="#">www.crisisnieuws.nl</a>	<input type="radio"/>	<input type="radio"/>