



Does Framing a Crisis to Your Stakeholders Matter?

How an organizational crisis response strategy affects media coverage

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Abstract

An organizational crisis threatens the reputation of the organization. To protect its reputation, organizations can frame and define the crisis to the media. This study examines how an organizational crisis response strategy affects media coverage. By means of a content analysis, media coverage involving an organization with a passive crisis response strategy and media coverage involving an organization with an active crisis response strategy is analysed and compared. In total, 446 newspaper articles have been analysed. Also, corporate communication coverage regarding the organization with the active crisis response strategy (n=24 news articles) is analysed and compared with media coverage. Examined was how media coverage and corporate coverage is framed in terms of the five most common news frames (i.e. human-interest, conflict, responsibility, economic consequences and morality) and tone-of-voice toward relevant stakeholders.

Findings indicate that media coverage involving organizations with opposite crisis response strategies differ somewhat in how they frame a crisis. In terms of news frames, both crises are framed in the same order of news frames. However, the tone-of-voice toward internal and external stakeholders significantly differed. Internal stakeholders are covered significantly more negative in media coverage involving an organization with an active crisis response strategy, than in media coverage involving an organization with a passive crisis response strategy. In contrast, external stakeholders are covered significantly more negative in media coverage an organization with a passive crisis response strategy, than in media coverage involving an organization with an active crisis response strategy.

Where the media to some extent differ in how they frame a crisis, results show that the media significantly reframe an organization's crisis response. First, the media frame a crisis significantly more in terms of conflict, responsibility and economic consequences, than corporate coverage. However, corporate communication was not framed in terms of responsibility and morality at all. Also, the media have framed the crisis in terms of economic consequences before the organization has. The media also reframed an organization's crisis response in terms of tone-of-voice toward relevant stakeholders. All stakeholders are covered significantly more negative in media coverage, than in corporate coverage. Furthermore, the media has covered more stakeholders than the organization in crisis (i.e. local government and national government were covered in media coverage and not in corporate communication coverage).

Keywords

Crisis communication; crisis response strategy; framing

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1. Introduction

1.1 Purpose of the research

The media play a prominent role during crises. Stakeholders receive the most information about an organization through media coverage (Coombs, 2007). Because crises are likely to be characterized by high levels of uncertainty for stakeholders (Coombs, 2007), one goal of crisis communication is to communicate with their stakeholders (Reynolds & Seeger, 2005) and reduce this uncertainty (Reynolds & Seeger, 2005). Although the public perceives information through the media more credible than direct communication (Bond & Kirshenbaum, 1998), framing the crisis to the media is crucial for effective communication during a crisis (Coombs, 1999).

The purpose of this research is to examine how an organizational crisis response strategy affects media coverage. Although existing literature underlines the importance of a crisis response, the actual effect of a crisis response on media coverage is still understudied. To fill this gap, this study includes corporate communication coverage in the form of press releases, and compares it with media coverage involving the same crisis. Furthermore, media coverage involving an organization with a passive crisis response strategy is compared with media coverage involving an organization with an active crisis response strategy.

2. Theoretical framework

2.1 Responding to a crisis

Coombs (2007) defines a crisis as 'a sudden and unexpected event that threatens to disrupt an organization's operations and poses both a financial and a reputational threat'. Because crises are characterized by high levels of uncertainty, an immediate need for specific information is created (Sellnow & Seeger, 2001; Mitroff, 2004). Without timely information, people have no other option than to rely on rumours for their information, increasing uncertainty and exacerbating the situation (Veil & Ojeda, 2010).

To fulfil the need for information during a crisis, information about an organization can be received in four ways (Coombs, 2007). Stakeholders can receive information through interactions with an organization (1), mediated reports (2) and second-hand information from other people (3). However, most of the information stakeholders collect is derived from the news media (4).

In addition to providing the most information about an organization during a crisis, the prominent role of news media is also characterized by its credibility. The public perceives information through the media more credible than direct corporate communication (Bond & Kirshenbaum, 1998).

Coombs (1999) suggests that corporate communication during and after a crisis is one of the most important factors in determining the long-term effects of a crisis. Organizations need to determine how to communicate with their various stakeholders to preserve the relationship (Stephens & Malone, 2009). Crisis communication refers to public relations (Benoit, 1995; Coombs, 1999), and these include a variety of goals. These goals are to limit damage to their reputation, avoid responsibility, shift blame (Seeger, 2006), and to reduce uncertainty so audiences may act appropriately (Reynolds & Seeger, 2005).

Managing corporate communication through a crisis response strategy can limit the negative media coverage and manage perceptions both during a crisis and at the recovery/resolution stage (Ritchie, Dorell, Miller, & Miller, 2004). Experimental research by Coombs and Holladay (1996) has shown that even mismatched communication strategies (i.e. strategies which are not recommended by Coombs' (1995) symbolic approach for a particular crisis type) were related to less reputational damage compared to when an organization does not respond to a crisis at all.

Organizations in crisis which interact with the media to get information to the public have much more influence on media coverage than it would if others provided the information (Ulmer, Sellnow, and Seeger, 2007; Veil & Ojeda, 2010). By integrating the Internet into a crisis response (i.e. by frequently and consistently updating of Web page content), organizations can rapidly frame and define the crisis to the media (Taylor & Perry, 2005).

2.2 Framing a message

Framing a crisis to the media refers to *how* people think and talk about issues (Pan & Kosicki, 1993). Also, it influences public perception (Bullock, Wyche, & Williams, 2001). Entman (1993) states that frames highlight some bits of information about an item that is the subject of a communication, thereby elevating them in salience.

The way a message is framed shapes how people define problems, causes of problems, attributions of responsibility and solutions to problems (Cooper, 2002). Creating frames for understanding and offering explanatory definitions are both crucial for effective communication during a crisis (Coombs, 1999). In line with this, Coombs (2007) has developed several crisis response strategies (i.e. *attack the accuser, scapegoat, excuse, justification, compensation, apology, reminder, ingratiation* and *victimage*).

Although the media are in most cases the final arbitrator of the crisis frames, crisis managers use the crisis response strategies to establish a frame or to reinforce an existing frame (Coombs, 2007). This way, the frames indicate how stakeholders should interpret a crisis (Coombs & Holladay, 2002). Where organizations want to reduce uncertainty and repair its reputation in times of crisis (e.g. Reynolds & Seeger, 2005; Coombs, 2007), overt goals of mass media are primarily to inform and entertain (McCombs, 1977). Given these different goals it is likely to assume that the media and

organizations in crisis differ in the way they frame a crisis. One part of framing is characterized by the tone-of-voice, influencing audience members to think in a certain way about a particular issue (Brunken, 2006).

2.3 Tone-of-voice

Although the media do not create a crisis, they can move them to centre stage or keep them out of public view (Nelkin, 1988). Through deliberate coverage of events and issues, the media have the ability to set the agenda for public discussion (Barnes, Hanson, Novilla, Meacham, & McIntyre, 2008). Agenda-setting refers to *'the process by which the news media create public awareness and concern for certain issues'* (Carroll, 2004). Thus, daily decisions by journalists do significantly influence their audience's pictures of the world (Carroll & McCombs, 2003).

While traditional agenda setting research mainly involved the amount of media coverage, attribute agenda setting research refers to the tone of media coverage (Hester & Gibson, 2003). McCombs and Ghanem (2001) suggest that media coverage conveys more than just facts. It also conveys feeling and tone. In line with this, Brunken (2006) assumes that the tone media use to disseminate news tells the audience not just news, but also the opinion of a particular reporter.

Tone-of-voice can be positive, neutral or negative. Similarly, Deephouse (2000) states that an organization can receive favourable (i.e. an organization was praised for its actions), unfavourable (i.e. an organization was criticized for its actions) or neutral media coverage (i.e. no evaluative modifier was included in the media coverage).

Several studies have found that the tone-of-voice in media coverage has a significant effect on public opinion. The tone-of-voice toward Helmut Kohl in German news magazines and major newspapers influenced public opinion about his political performance (Kepplinger, Donsbach, Brosius, & Staab, 1989). Also, the tone-of-voice in television coverage about U.S. political campaign events influenced voters' preference for the candidates (Shaw, 1999). Furthermore, Gunther (1998) states that people who perceived unfavourable media coverage inferred more negative public opinion, whereas people who perceived favourable media coverage inferred more positive public opinion. Similarly, greater exposure to unfavourable news articles about a university was associated with lower levels of perceived reputation and trust in the university (Kim, Carvalho, & Cooksey, 2007).

According to Coombs (2007), a crisis gives people reasons to think badly of an organization. Not surprisingly, the tone-of-voice toward concerned parties in media coverage involving a crisis tends to be covered negative or neutral. Involved parties in a crisis may differ in their responsibility, blame and/or involvement and therefore the tone-of-voice may vary within these parties. Although tone-of-voice between different levels of government differed, the tone-of-voice in general, was relatively neutral for governments after Hurricane Katrina (Brunken, 2006). Regarding the explosions at a fireworks facility in the Netherlands, the tone-of-voice was mildly negative toward local and national governments. Valentini and Romenti (2011) found that very few news stories involving a crisis were positively covered, although differences occurred between certain subgroups, negative tones were predominant.

2.4 News frames

In addition to the tone-of-voice, content of media coverage is also characterized by presence of certain news frames. A framing effect occurs when a communication increases the weight of a new or existing belief in the formation of one's overall attitude (Wood, 2000). The presence of certain news frames in media coverage can affect perceptions of issues and people in the news (Price, Tewksbury, & Powers, 1997). These authors state that by prompting the activation of certain constructs at the expense of others, frames can directly influence what enters the minds of audience members.

Neuman, Just and Crigler (1992) have identified five dominant news frames that were common in general U.S media coverage: conflict, economic consequences, human impact and morality. Elaborating on the theoretical work of Iyengar (1991), Semetko and Valkenburg (2000) have extended the previously mentioned frames with the responsibility frame and renamed the human impact frame to human-interest. The human-interest frame brings an emotional, personal angle to the

presentation of an event. News stories with a conflict frame emphasize conflicts between individuals, groups or organizations. The responsibility frame is present when some actor (e.g. an individual or organization) is held responsible for its causes. The economic consequences frame reports an issue in terms of consequences it will have economically on an individual, group, organization or region. News stories put in the context of moral prescriptions are framed in terms of morality.

The presence of these five most common frames activates explicit thoughts and responses among the public (Iyengar, 1987; Cappella & Jamieson, 1997; Valkenburg, Semetko, & de Vreese, 1999; de Vreese, 2004; Cho & Gower, 2006). Cho and Gower (2006) suggest that a human-interest frame can stimulate the emotional responses and exaggerating the evaluation or perception of crises much more negatively than a different frame might. Through to the presence of winners and losers, a story framed in terms of conflict can activate the cynical reactions among the public (Cappella & Jamieson, 1997), often including more and opposing points of view in their thoughts (de Vreese, 2004). A news story framed in terms of economic consequences will activate thoughts and responses concerning the costs, benefits and financial implications of involved parties (Valkenburg et al., 1999; de Vreese, 2004). Although not experimentally tested, Iyengar (1987) states that a news story framed in terms of attribution of responsibility, provides the public with more understanding regarding which party is responsible for causing problems.

Initially, framing research focused primarily on political media coverage. However, given the reliance on media during a crisis (Brunken, 2006), conducting a frame analysis concerning media coverage involving a crisis is perhaps more relevant. Not surprisingly, more recent framing research has been applied to media coverage involving a crisis (Baysha & Hallahan, 2004; Chyi & McCombs, 2004; Brunken, 2006; Muschert & Carr, 2006; Hong, 2007; Li, 2007; An & Gower, 2009; Muschert, 2009; Liu, 2010; García, 2011; Kuttschreuter, Gutteling & de Hond, 2011; Valentini & Romenti, 2011).

A number of studies have used these most five common news frames, identified by Semetko and Valkenburg (2000) to analyse media coverage involving a crisis. Brunken (2006) found that the human-interest frame was most used in media coverage about Hurricane Katrina, followed by the conflict frame, responsibility frame, economic consequences frame and the morality frame. Furthermore, Brunken (2006) found that the human-interest frame dropped strongly after the first three weeks. An and Gower (2009) found that the responsibility frame was most used in media coverage about the top 10 crisis prone businesses as identified in the 2006 annual report published by the *Institute for Crisis Management (ICM)*, followed by the economic consequences frame, the human-interest frame, the conflict frame and the morality frame. Kuttschreuter et al. (2011) found that the responsibility frame was most used in media coverage concerning explosions at a fireworks facility in the Netherlands, followed by the conflict frame, the human-interest frame, the economic consequences frame, the morality frame did not occur in the media coverage. Valentini and Romenti (2011) found that the economic consequences frame was most used in media coverage about Alitalia's crisis before its privatization, followed by the conflict frame, the responsibility frame, the human-interest frame and the morality frame. Regarding these studies, the only common result was that the morality frame was the less used frame in all these studies. Although the use of frames in aforementioned studies varied by crisis type, a distinction can be made between frequently used news frames by the media and less frequent news frames by the media. Generally, the conflict frame and responsibility frame appear to be the most frequent used frames, followed by the human-interest frame and the economic consequences frame. The morality frame is by far, the less frequent used news frame. Furthermore, two studies (i.e. An & Gower, 2009; Kuttschreuter et al., 2011) show that one news article can contain more than one news frame.

2.5 Competing frames

As noted above, the audience can be exposed to more than one news frame for an issue (Edy & Meirick, 2007). Furthermore, in modern deliberative democracy, people are continuously exposed to various competing arguments (Hansen, 2007). Media often reframe an event by –consciously or unconsciously– emphasizing different attributes in order to keep the story alive and fresh (Chyi & McCombs, 2004). In presenting their side of the story, crisis managers may take advantage from it. On

the other hand, news media may reject the crisis manager's frame and continue using a different frame (Coombs, 2007). Coombs (2007) defines this process as competing frames. Where early studies (e.g. Iyengar, 1987) have explored the impacts of a single frame on audience opinion, counter-framing (i.e. where the alternative frame is offered) and heterogeneous discussions limit framing effects by prompting deliberate processing and offering reformulations of the problems (Druckman, 2004). This author conducted an experiment, exposing 580 individuals to four widely cited problems. Each problem can be framed in either a positive (i.e. gaining money from a base amount) or negative light (i.e. losing money from a base amount). Participants assigned to the counter-framing condition received for each problem not only the original problem but also a reframing of the problem that uses the opposite frame. Results indicate that framing effects appear to be neither robust nor particularly pervasive. Despite Druckman's (2004) pioneering research, it remains limited in that it compares exactly opposing frames (Edy & Meirick, 2007).

Media texts often contain only portions of a frame and rely on audiences to infer the rest based upon their existing cultural knowledge (Gamson & Modigliani, 1989). Furthermore, Edy and Meirick (2004) conclude that confronted with competing frames, the audience will combine them to build stories of their own.

2.6 Research questions

How does an organizational crisis response strategy affect media coverage?

RQ1: To what extent do the media differ in how they frame two crises?

RQ2: To what extent do the media reframe an organization's crisis response?

3. Method

3.1 Crisis events

This study investigated present news frames and tone-of-voice toward relevant stakeholders in media coverage regarding two crises as well as the corporate communication coverage of an organization's crisis response. The impact of an organization's crisis response has been determined by the selection of the crisis events. One crisis involved an organization which used an active crisis response strategy and one crisis involved an organization using a passive crisis response strategy.

3.1.1 Organization with a passive crisis response strategy

On 5 January 2011 a major fire erupted at Chemie-Pack, a Dutch chemical storage and packaging company. Large quantities of chemicals were burned. This resulted in a large toxic cloud blowing over parts of the Netherlands. Twenty caregivers and hundreds of citizens were treated in the hospital with health issues. The total damage of this crisis was estimated to be €71 million. Despite the widespread media coverage the Netherlands, Chemie-Pack did not proactively provide its stakeholders with information. Its crisis response was purely reactive (e.g. short responses to questions of journalists).

3.1.2 Organization with an active crisis response strategy

In May 2011, the Maasstad Hospital in Rotterdam was confronted with a bacteria outbreak. Hundreds of patients were infected by the *Klebsiella pneumoniae* bacteria and for at least three people this bacterium was the direct cause of death. For two months, the hospital was put under stricter surveillance by the inspection for health. Also, during the crisis, its director resigned. The height of his severance (i.e. €236.000) resulted in commotion in the national media. Furthermore, the bacteria outbreak has been investigated by several independent commissions. The Maasstad Hospital used an active crisis response strategy: in addition to responding to journalists, the hospital proactively provided its stakeholders with information during the crisis.

3.2 Corpus

3.2.1 Selection of corporate communication coverage

This study analysed corporate communication coverage in the form of digital press releases. From the Maasstad Hospital's website, all press releases related to the bacteria outbreak (n=24) were retrieved and analysed. Regarding the corporate communication coverage, the unit of analysis was one press release.

3.2.2 Selection criteria of media coverage

For the media coverage, the unit of analysis was one newspaper article. Prior to determining a final sample, the eight national newspapers with the largest circulation in the Netherlands and the eight local newspapers with the largest circulation in the Netherlands were selected (HOI, Instituut voor Media Auditing, 2011; De Persgroep Advertising, 2013). These newspapers are presented in table 1.

Table 1

Eight newspapers (i.e. national and regional) with the largest circulation in the Netherlands

	Medium	Circulation
National newspaper	De Telegraaf	618.876
	Metro	434.390
	Algemeen Dagblad	429.391
	Sp!ts	354.256
	De Volkskrant	259.968
	NRC Handelsblad	201.619
	Trouw	103.035
	NRC Next	83.037
Regional newspaper	Rotterdams Dagblad	409.000
	De Gelderlander	143.433
	Dagblad v/h Noorden	130.145
	Brabants Dagblad	124.568
	De Stentor	124.539
	Dagblad de Limburger	122.993
	TC Tubantia	110.798
BN/De Stem	109.258	

Important inclusion criteria were the geographical circulation of regional newspapers in the crisis region and the focus of national newspapers (Metareporter, 2011). Free newspapers (i.e. *Metro* and *Sp!ts*) were excluded. Their distribution area cannot be exactly determined and these newspapers focus on volatile news. One purpose of this study was to reveal certain news frames and the more a newspaper focuses on extensive background news, the more frames were expected to be present. As *Rotterdam's Dagblad* is part of *Algemeen Dagblad*, the latter newspaper was excluded to prevent eventual duplication in news articles. Table 2 presents five national newspapers and its focus and circulation in each crisis region and two regional newspapers with its circulation in each crisis region.

Table 2

Newspapers and its circulation in each crisis region and its focus

	Medium	Circulation in crisis region		Focus
		Organization with a passive crisis response	Organization with an active crisis response	
National newspapers	De Telegraaf	59.647	95.379	Shallow news, wide range of topics. Suitable for 'everyone who can read Dutch'
	De Volkskrant	25.722	47.286	Quality paper targeted on highly educated people as Focus on economic news
	NRC Handelsblad	20.072	53.066	Economic news, backgrounds. Focus on business executives and highly educated people
	Trouw	6.366	24.727	Quality newspaper with focus on background news and political news.
	NRC Next	7.949	21.058	Highly educated people as target group. Brief, powerful news articles with depth
Regional newspapers	Rotterdams Dagblad		409.000	
	Brabants Dagblad	113.954		

For each crisis, the local newspaper with the largest circulation in the crisis region was selected and a local newspaper without circulation in the crisis-area was selected (Cebuco, 2012; De Persgroep Advertising, 2013). The crisis region referred to the province in which the crisis occurred. Because the selected local newspapers with the highest circulation in the crisis-area had either the largest circulation in one crisis-area and no circulation in the other crisis-area, the same local newspapers have been were selected for both crises. Furthermore, this way the variable *regional newspaper* was kept constant.

National newspapers were selected based only on the focus and on the circulation in both crisis-areas. In order to reveal the presence of frames, newspapers covering background news were selected over newspapers covering shallow news. It is likely that these quality newspapers cover news stories more extensive. This assumption was confirmed. Quality newspapers returned the largest numbers of hits in the electronic databases regarding both crises. For each crisis, the same two national quality newspapers have been selected.

Based on searches for various combinations of the terms "fire Chemie-Pack Moerdijk", "disaster Moerdijk", "Maasstad Hospital bacteria" and "contamination Maasstad Hospital", news articles were retrieved from the Lexis-Nexis database. A pilot-study indicated that these keywords returned the largest number of hits in this electronic database.

Of all relevant articles, duplicates were excluded. The final sample (n=446) consisted of two national newspapers (*NRC Handelsblad* and *Trouw*) which focus on extensive background news and two regional newspapers (*Rotterdams Dagblad* and *Brabants Dagblad*) with circulation in one of the disaster areas. The final sample is shown in Table 3.

Table 3
Final sample of media coverage

	Medium	Crisis response type	
		Organization with passive crisis response	Organization with active crisis response
National newspapers	NRC Handelsblad	75	27
	Trouw	70	25
Regional newspapers	Rotterdams Dagblad	46	57
	Brabants Dagblad	127	19
	Total	318	128

3.3 Coding categories and coding procedure

The coding instrument consisted of three parts. The name of the crisis, name of the newspaper, type of the newspaper (i.e. national or local), date of the publication, whether the article was published on the frontpage, whether the article mentioned an organization's crisis response and the type of crisis response (e.g. a quote from a spokesman, reference to a press release).

For tone-of-voice, relevant stakeholders were derived from a preliminary reading of news articles. It can be expected that different stakeholders are covered different in terms of tone-of-voice. The seven stakeholders are: (1) the organization in general; (2) employees; (3) the management; (4) local government; (5) national government; (6) research council; and (7) caregivers. Examples of all stakeholder groups are shown in Appendix A1. Tone-of-voice was coded separately for these subgroups on five-point scales (very negative to very positive).

To measure to what extent certain news frames appear in the news and in the press releases, Semetko and Valkenburg's (2000) framework has been used. This framework involves the following frames: the human-interest frame (i.e. this frame brings an emotional, personal angle to the presentation of an event), the conflict frame (i.e. this frame emphasizes conflicts between individuals, groups or organizations), the responsibility frame (i.e. this frame holds some actor responsible for its causes), the economic consequences frame (i.e. this frame reports an issue in terms of consequences it will have economically on an individual, group, organization or region) and the morality frame (i.e. this frame puts stories in the context of moral prescriptions). For each article it was analysed whether each of the following frames was present (yes, no).

Except for the type of newspaper, whether the article was published on the frontpage, whether the article mentioned an organization's crisis response and the type of crisis response, the coding instrument for the corporate communication coverage was similar to that used for the media coverage. The complete codeboek, used for this study is shown in Appendix A2.

Prior to coding the final sample, several samples were drawn to achieve a minimum Cohen's Kappa score of approximately .7. To prevent eventual biases, the used samples varied. For the inter-coder reliability test, two coders were subjected to a coding instruction and coded 48 newspaper articles, approximately 10% of the total sum of newspaper articles per newspaper. The sample newspaper articles were randomly selected. After three completed samples, all variables showed a sufficient Cohen's Kappa. The sample involved all separately coded tone-of-voice for relevant stakeholders and the presence of news frames. Table 4 presents the final Cohen's Kappa and interrater agreement for these variables.

Table 4
Cohen's Kappa and interrater agreement scores

Type of variable	Variable	Cohen's Kappa	Interrater agreement
Tone-of-voice (ranging from very negative to very positive)	Organization in general	.865	93%
	Employees	.871	92%
	Management	.682	79%
	Caregivers	.805	92%
	Local government	.707	83%
	National government	.716	90%
	Research council	.755	85%
Present news frames	Human-interest	1	100%
	Conflict	.837	100%
	Responsibility	1	100%
	Economic consequences	.705	85%
	Morality	1	79%

4. Results

In this chapter, the results of this study are presented. All results involve the presence of news frames and tone-of-voice toward relevant stakeholders. Furthermore, all results are divided in two parts. Media coverage involving an organization with a passive crisis response strategy versus media coverage involving an organization with an active crisis response strategy (1), and media coverage versus corporate communication coverage (2).

4.1 News frames

The presence of news frames is shown in table 5. In order to reveal significant differences between the crises and communication types, Chi-Square tests and Fisher's exact tests were conducted.

4.1.1 Passive crisis response strategy versus active crisis response strategy

Media coverage involving an organization with a passive crisis response strategy was framed most frequently in terms of human-interest (83%), conflict (58%), economic consequences (47%), responsibility (15%) and morality (8%). Media coverage involving an organization with an active crisis response strategy is framed most frequently in terms of human-interest (96%), followed by the conflict frame (67%), the economic consequences frame (22%), the responsibility frame (16%) and the morality frame (1%). Chi-Square tests revealed that in media coverage, the percentage of the human-interest frame, $X^2(1, N = 446) = 14.05, p = .000$, the economic consequences frame, $X^2(1, N = 446) = 24.35, p = .000$, and the morality frame $X^2(1, N = 446) = 8.78, p = .003$ significantly differed by the used crisis response strategy.

The number of news frames per article is approximately the same for media coverage involving an organization with a passive crisis response strategy (i.e. 2.1) and for media coverage involving an organization with an active crisis response strategy (i.e. 2).

4.1.2 Media coverage versus corporate communication coverage

Corporate communication coverage was framed most frequently in terms of human-interest (96%), followed by the conflict frame (13%) and the economic consequences frame (4%). No press releases have been framed in terms of responsibility and morality. Chi-Square tests revealed that the percentage of the conflict frame significantly differed by communication type, $X^2(1, N = 152) = 24.91, p = .000$. Due to small sample sizes, Fisher's exact test is used to reveal significant differences in the use of the human-interest frame, responsibility frame, economic consequences frame and the morality frame. Fisher's exact tests revealed that the percentage of the responsibility frame, $p = .044$, and the percentage of the economic consequences frame, $p = .048$, significantly differed by communication type.

In media coverage, the number of news frames (i.e. 2) is higher than in corporate communication coverage (i.e. 1.3).

Table 5
Use of news frames by communication strategy, and comparisons

News frames	Media coverage		Corporate communication coverage	Comparisons of frame use (Chi-Square Tests)	
	I. Passive crisis response	II. Active crisis response	III. Press releases	I vs. II	II vs. III
Human-interest frame	83%	96%	96%	14.05**	
Conflict frame	58%	67%	13%		24.91**
Responsibility frame	15%	16%	0%		*
Economic consequences frame	47%	22%	4%	24.35**	*
Morality frame	8%	1%	0%	8.78**	
Total number of news frames	669	258	27		
Number of news frames per article	2.1	2	1.3		

* $p < .05$ ** $p < .01$

4.2 Tone-of-voice

Table 6 presents results of the average tone-of-voice toward relevant stakeholders. In addition, these relevant stakeholders are divided in two groups: internal stakeholders and external stakeholders. Internal stakeholders are stakeholders in the organization itself (i.e. the organization in general, employees, and management). External stakeholders are stakeholders from outside the organization (i.e. local government, national government, and caregivers). Research council is not included in the internal stakeholder group or external stakeholder group due to its independent character. An independent-samples *t*-test was conducted to compare the tone-of-voice toward relevant stakeholders for each crisis response type.

4.2.1 Passive crisis response strategy versus active crisis response strategy

Internal stakeholders were significantly covered more negative in media coverage involving an organization with an active crisis response strategy ($M = -.43$, $SD = .476$), than in media coverage involving an organization with a passive crisis response strategy ($M = -.22$, $SD = .369$), $t(192.76) = 4.50$, $p < .01$. In contrast, external stakeholders were significantly covered more negative in media coverage involving an organization with a passive crisis response strategy ($M = -.22$, $SD = .369$), than in media coverage involving an organization with an active crisis response strategy ($M = .00$, $SD = .000$), $t(270) = 8.47$, $p < .01$. When analysing relevant stakeholders separately, the following significant differences were found: the organization in general was covered significantly more negative in media coverage involving an organization with an active crisis response strategy ($M = -.44$, $SD = .637$), than in media coverage about an organization with a passive crisis response strategy ($M = -.22$, $SD = .420$), $t(174.15) = 3.63$, $p < .01$. Employees were covered significantly more negative in media coverage involving an organization with an active crisis response strategy ($M = -.56$, $SD = .585$), than in media coverage involving an organization with a passive crisis response strategy ($M = -.24$, $SD = .463$), $t(123.49) = 3.53$, $p < .01$. National government was covered significantly more negative in media coverage involving an organization with a passive crisis response strategy ($M = -.26$, $SD = .504$), than in media coverage involving an organization with an active crisis response strategy ($M = .00$, $SD = .000$), $t(128) = -5.76$, $p < .01$. Overall, the tone-of-voice was significantly more negative in media coverage involving an organization with an active crisis response strategy ($M = -.32$, $SD = .372$), than in media coverage involving an organization with a passive crisis response strategy ($M = -.20$, $SD = .270$), $t(183.19) = 3.50$, $p < .01$.

4.2.2 Media coverage versus corporate communication coverage

Internal stakeholders were significantly covered more negative in media coverage ($M = -.43, SD = .476$), than in corporate communication coverage ($M = .04, SD = .204$), $t(79.03) = -7.94, p < .01$. External stakeholders were not mentioned in corporate communication coverage.

When analysing the relevant stakeholders separately, all mentioned stakeholders were significantly covered more negative in media coverage, than in corporate communication coverage. The organization in general was significantly covered more negative in media coverage ($M = -.44, SD = .637$), than in corporate communication coverage ($M = .00, SD = .000$), $t(127) = -7.77, p < .01$. Employees were significantly covered more negative in media coverage ($M = -.56, SD = .585$), than in corporate communication coverage ($M = .00, SD = .000$), $t(65) = -7.78, p < .01$. Management was significantly covered more negative in media coverage ($M = -.48, SD = .623$) than in corporate communication coverage ($M = .25, SD = .707$), $t(81) = -3.11, p < .01$. Research council was covered significantly more negative in media coverage ($M = -.06, SD = .241$), than in corporate communication coverage ($M = .00, SD = .000$), $t(81) = -2.29, p < .05$. Overall tone-of-voice was significantly more negative in media coverage ($M = -.32, SD = .372$), than in corporate coverage ($M = .03, SD = .136$), $t(97.84) = -8.16, p < .01$. Local government and national government were not covered in corporate communication coverage. However, the media did cover local government ($M = .00, SD = .000$), and national government ($M = .00, SD = .000$) neutral.

Table 6

Average tone-of-voice scores toward relevant stakeholders in media coverage and comparisons

	Media coverage				Corporate communication coverage		Comparisons of tone-of-voice (t-test)	
	I. Passive crisis response		II. Active crisis response		III. Press releases		I vs. II	II vs. III
	M	SD	M	SD	M	SD		
Internal stakeholders	-.22	.369	-.43	.476	.04	.204	4.50**	-7.94**
External stakeholders	-.22	.369	.00	.000			8.47**	
Organization in general	-.22	.420	-.44	.637	.00	.637	3.63**	-7.77**
Employees	-.24	.463	-.56	.585	.00	.585	3.53**	-7.78**
Management	-.62	.510	-.48	.623	.25	.623		-3.11**
Local government	-.22	.493	.00	.000				
National government	-.26	.504	.00	.000			-5.76**	
Research council	-.07	.272	-.06	.241	.00	.241		-2.29*
Caregivers	-.21	.444						
Overall tone-of-voice	-.20	.270	-.32	.372	.03	.136	3.50**	-8.16**

* $p < .05$ ** $p < .01$

Note. Tone-of-voice ranges from -2 (very negative) to +2 (very positive)

4.3 News frames and tone-of-voice

Although the following results do not provide a direct answer to the research questions, the present data provides additional, relevant results.

4.3.1 Passive crisis response strategy versus active crisis response strategy

Table 7 shows correlations between news frames and the average tone-of-voice toward relevant stakeholders. In media coverage involving an organization with a passive crisis response, the tone-of-voice toward the organization in general becomes more negative when news articles are framed in

terms of conflict $r(309) = -.360, p .000$, responsibility $r(309) = -.429, p .000$, or morality $r(309) = -.183, p .001$. The tone-of-voice toward employees becomes more negative when news articles are framed in terms of conflict $r(72) = -.275, p .018$, or morality $r(72) = -.328, p .004$. The tone-of-voice toward management becomes more negative when news articles are framed in terms of conflict $r(92) = -.455, p .000$, responsibility $r(92) = -.482, p .000$, or morality $r(92) = -.323, p .001$. The tone-of-voice toward the local government becomes more negative when news articles are framed in terms of conflict $r(203) = -.446, p .000$, or responsibility $r(203) = -.199, p .004$. Also, the tone-of-voice toward local government becomes more positive when news articles are framed in terms of economic consequences $r(203) = .282, p .000$. The tone-of-voice toward the national government becomes more negative when news articles are framed in terms of conflict $r(127) = -.426, p .000$, or responsibility $r(127) = -.346, p .000$. Also, the tone-of-voice toward the national government becomes more positive when news articles are framed in terms of economic consequences $r(127) = .333, p .000$. The tone-of-voice toward the research council becomes more negative when news articles are framed in terms of conflict $r(215) = -.139, p .041$. Also, the tone-of-voice toward research council becomes more positive when news articles are framed in terms of economic consequences $r(215) = .149, p .028$. The tone-of-voice toward caregivers becomes more negative when news articles are framed in terms of conflict $r(135) = -.364, p .000$. The conflict frame is correlated with the tone-of-voice toward all stakeholders. When this frame is present, the tone-of-voice becomes more negative. Moreover, results show that the tone-of-voice can be correlated to more than just the conflict frame. Two combinations were the most frequent: the combination conflict frame, responsibility frame, morality frame and the combination conflict frame, responsibility frame.

In media coverage involving an organization with an active crisis response, the tone-of-voice toward the organization in general becomes more negative when the news articles are framed in terms of conflict $r(126) = -.517, p .000$ or responsibility $r(126) = -.188, p .033$. The tone-of-voice toward employees becomes more negative when the news articles are framed in terms of conflict $r(64) = -.476, p .000$ or responsibility $r(64) = -.364, p .003$. The tone-of-voice toward management becomes more negative when news articles are framed in terms of conflict $r(73) = -.347, p .002$. All significant correlations between news frames and tone-of-voice toward relevant stakeholders involve the conflict frame. The combination conflict frame, responsibility was the most frequent combination.

When comparing media coverage involving both crisis response strategies, several news frames have an impact on the tone-of-voice toward relevant stakeholders. In media coverage involving an active crisis response strategy, the combination conflict frame, responsibility frame is correlated with the tone-of-voice toward the organization in general and employees. However, in media coverage involving an organization with a passive crisis response strategy, these news frames are correlated with the local government and national government. Also, all stakeholders are correlated with (a combination of) news frames in media coverage involving an organization with a passive crisis response strategy. In media coverage involving an organization with an active crisis response strategy, only the organization in general, employees and management are correlated with (a combination of) news frames.

4.3.2 Media coverage versus corporate communication coverage

In corporate communication coverage, the economic consequences frame is significantly correlated with the tone-of-voice toward management $r(6) = 1.00$. Tone-of-voice toward management becomes more positive when the press releases are framed in terms of economic consequences.

When comparing media coverage with corporate communication coverage, several statements can be made. First, in media coverage the conflict frame is involved in all significant correlations with the tone-of-voice toward relevant stakeholders. However, in corporate communication coverage, the only significant correlation between news frames and tone-of-voice toward a relevant stakeholder group (i.e. management) is characterized by the economic consequences frame. Second, in media coverage the significant correlation between management and tone-of-voice is characterized by the conflict frame. Also, the tone-of-voice toward management becomes more negative when the conflict frame is present. However, in corporate communication coverage, the tone-of-voice toward

management is significantly correlated with the economic consequences frame. Also, when corporate communication coverage is framed in terms of economic consequences, the tone-of-voice toward management becomes more positive.

Table 7

Average tone-of-voice per news frame in media coverage and corporate communication coverage

Relevant stakeholders in media coverage involving an organization with a passive crisis response strategy							
News frames	Organization in general	Employees	Management	Local government	National government	Research council	Caregivers
Human-interest	-.23 (83%)	-.25 (88%)	-.60 (86%)	-.23 (80%)	-.27 (91%)	-.06 (83%)	-.22 (90%)
Conflict	-.34 (58%)**	-.31 (80%)*	-.71 (85%)**	-.41 (56%)**	-.42 (61%)**	-.09 (68%)*	-.32 (69%)**
Responsibility	-.65 (15%)**	-.31 (35%)	-.97 (33%)**	-.48 (11%)**	-.67 (14%)**	-.12 (20%)	-.27 (19%)
Economic consequences	-.18 (47%)	-.27 (41%)	-.63 (37%)	-.11 (57%)	-.09 (51%)**	-.02 (42%)*	-.25 (35%)
Morality	-.46 (8%)**	-.50 (22%)**	-.88 (27%)**	-.43 (3%)**	-.50 (2%)	-.12 (12%)	-.33 (11%)
Total number of articles	311	74	94	205	129	217	137
Relevant stakeholders in media coverage involving an organization with an active crisis response strategy							
News frames	Organization in general	Employees	Management	Local government	National government	Research council	Caregivers
Human-interest	-.44 (96%)	-.57 (98%)	-.48 (100%)	.00 (100%)	.00 (100%)	-.06 (99%)	
Conflict	-.65 (67%)**	-.69 (82%)**	-.56 (85%)**	.00 (100%)	.00 (100%)	-.07 (82%)	
Responsibility	-.75 (16%)*	-.89 (29%)**	-.68 (25%)	.00 (50%)	.00 (42%)	-.11 (23%)	
Economic consequences	-.25 (22%)	-.50 (18%)	-.60 (33%)	.00 (100%)	.00 (50%)	-.07 (18%)	
Morality	.00 (1%)		-1 (1%)		.00 (8%)	.00 (1%)	
Total number of articles	128	66	75	2	12	82	
Relevant stakeholders in corporate communication coverage							
News frames	Organization in general	Employees	Management	Local government	National government	Research council	Caregivers
Human-interest	.00 (96)	.00 (100%)	.29 (88%)	.00 (95%)			
Conflict	.00 (13%)	.00 (17%)	.00 (13%)	.00 (14%)			
Responsibility							
Economic consequences	.00 (4%)		2.00 (13%)**	.00 (5%)			
Morality							
Total number of articles	24	6	8	22			

* $p < .05$ ** $p < .01$

Note. Tone-of-voice ranges from -2 (very negative) to +2 (very positive), values in parentheses represent percentages

4.4 Timelines of news frames, tone-of-voice and events during the crisis

In order to gather insight in the development of present news frames and average tone-of-voice toward relevant stakeholders, chronological timelines are presented. On these timelines, key events during the crises were marked.

4.4.1 News frames

Figure 1 presents a chronological timeline of media coverage involving an organization with a passive crisis response strategy. A chronological timeline of media coverage involving an organization with an active crisis response strategy is shown in figure 2. The development of present news frames in corporate communication coverage is shown in figure 3. For all timelines, the total number of observed frames is presented.

4.4.1.1 Passive crisis response strategy versus active crisis response strategy

In both crises, the first two months are framed most frequently in terms of human-interest and conflict. After this period, these frames drop significantly. Furthermore, both crises are characterized by fluctuations in presence of news frames. These fluctuations are the result of certain events during the crises. The sequence of present news frames in the fluctuations is approximately identical. In the fluctuations, both crises are framed most in terms of human-interest, followed by the conflict frame, the economic consequences frame and the responsibility frame.

4.4.1.2 Media coverage versus corporate communication coverage

In both communication types, the first month was framed most frequently in terms of human-interest. Also, both communication types are characterized by fluctuations in presence of news frames. These fluctuations occur approximately at the same time. However, the used news frames in these fluctuations differ. Media coverage was covered most frequently in terms of human interest, followed by the conflict frame, economic consequences frame and the responsibility frame. After three months, corporate communication coverage was only covered in terms of human-interest. Also, media coverage is framed in terms of any of the news frames at a given moment in time. Corporate communication coverage is only framed in terms of human-interest, conflict and economic consequences. Furthermore, the economic consequences frame is used in media coverage before in corporate communication coverage.

Figure 1

Timeline of media coverage involving an organization with a passive crisis response strategy: number of observed news frames per month

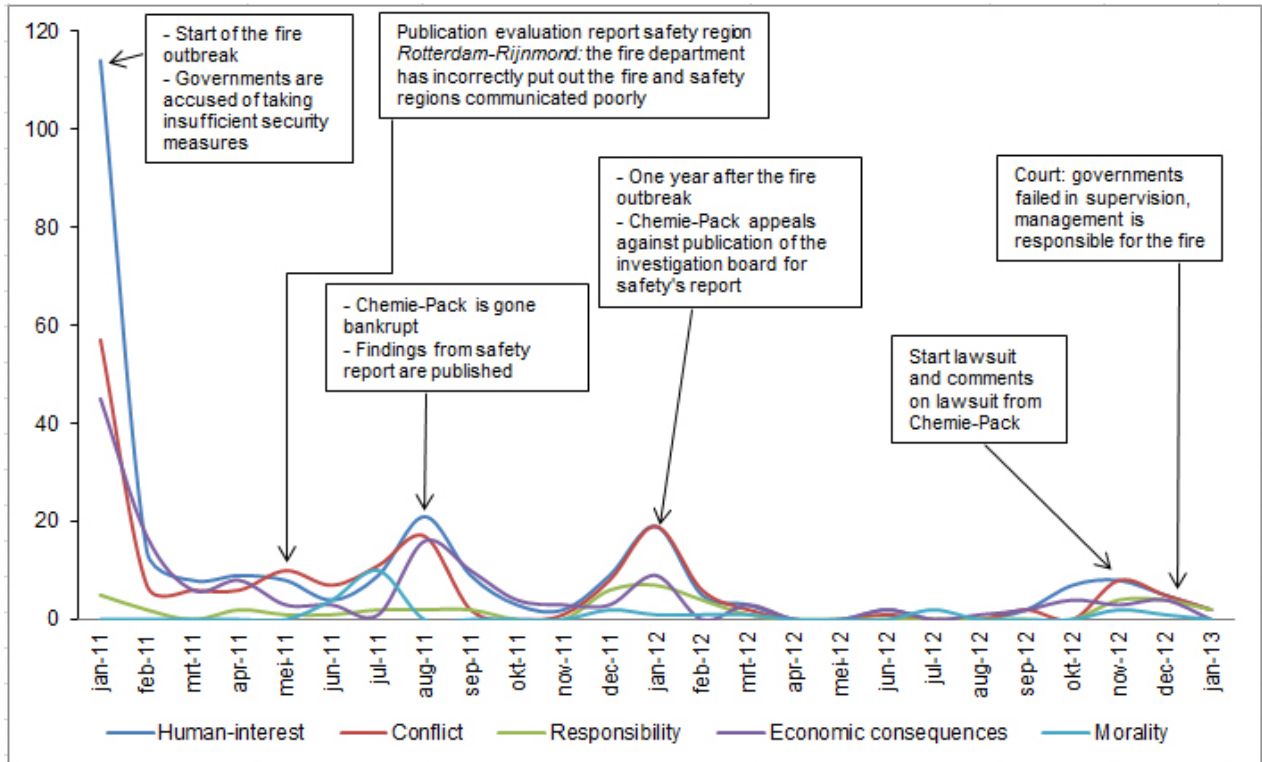


Figure 2

Timeline of media coverage involving an organization with an active crisis response strategy: number of observed news frames per month

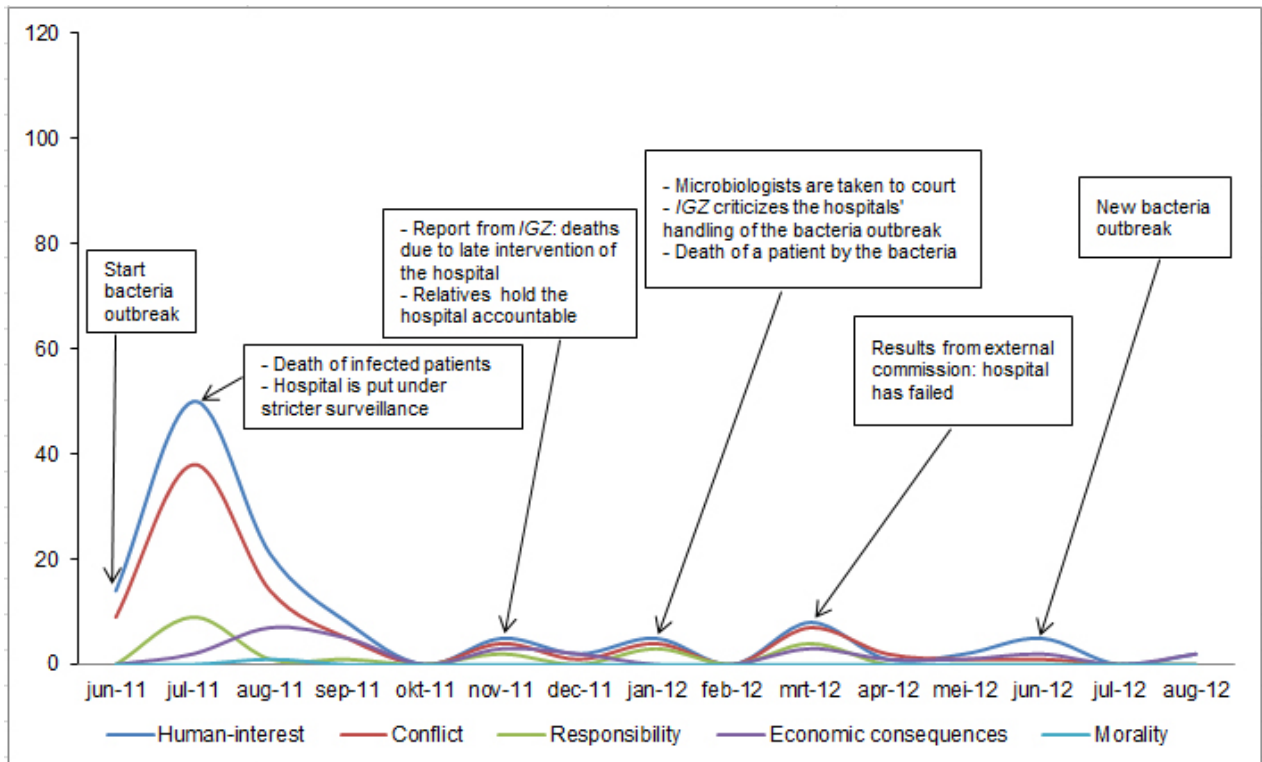
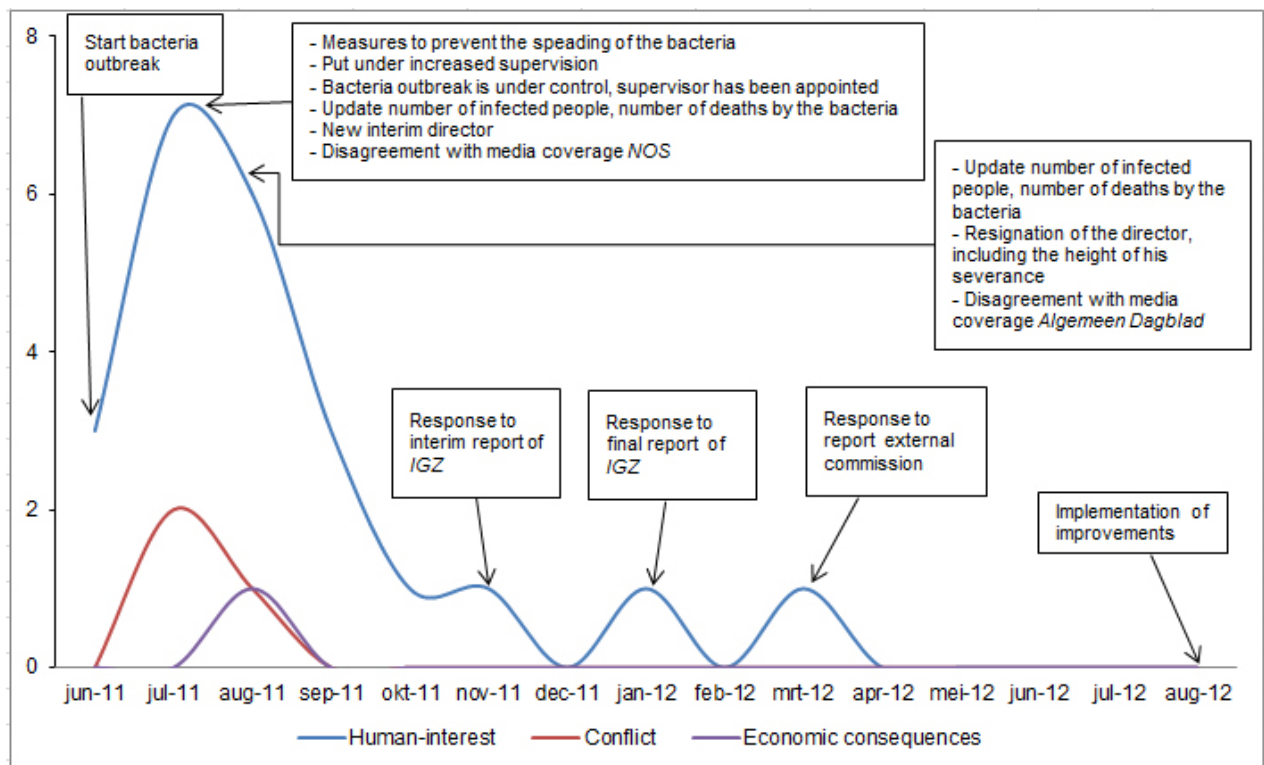


Figure 3

Timeline of corporate communication coverage by the Maasstad Hospital: number of observed news frames per month



4.4.2 Tone-of-voice

Figure 4 presents a chronological timeline of media coverage involving an organization with a passive crisis response strategy. A chronological timeline of media coverage involving an organization with an active crisis response strategy is shown in figure 5. Also, figure 5 presents the average tone-of-voice for media coverage in general. The development of the average tone-of-voice toward relevant stakeholders in corporate communication coverage is shown in figure 6.

4.4.2.1 Passive crisis response strategy versus active crisis response strategy

The development of the average tone-of-voice toward internal stakeholders in media coverage involving an organization with a passive crisis response strategy can be classified by certain periods. From the start of the publications in January 2011 to May 2011, the tone-of-voice was mildly negative (i.e. approximately -.1.). The months June 2011 and July 2011 were characterized by a more negative tone-of-voice (i.e. approximately -.55.), which was slightly less negative in August 2011 (i.e. -.28). Thereafter, internal stakeholders were covered neutral in the period September 2011 – November 2011. After this period, the average tone-of-voice developed in a negative way. In the period December 2011 – March 2012, the average tone-of-voice varied from -.29 to -.58. After two months of no publications, the tone-of-voice in June 2012 was neutral. Again, in July 2012 there were no publications. The neutral tone-of-voice continued in August 2012 and September 2012. After these months, the period October 2012 – January 2013 was characterized by a negative average tone-of-voice (i.e. a variation of approximately -.36 to -.5). The average tone-of-voice toward external stakeholders was -.15 in January 2011. After a slightly positive tone-of-voice in February (i.e. .02), the period March 2011 – August 2011 was characterized by a negative average tone-of-voice (i.e. a variation of approximately -.2 to -.56.). In September 2011 and October 2011, the tone-of-voice was neutral. After a positive average tone-of-voice in November 2011 (i.e. .33), the tone-of-voice became increasingly negative in the following three months (i.e. from -.25 to -.8). In March 2012, the tone-of-

voice was less negative: -.17. The period April 2012 – May 2012 was characterized by no publications. In June 2012, the tone-of-voice toward external stakeholders was neutral. Again, in July 2012 there were no publications. After two months of neutral coverage (i.e. August 2012 and September 2012), the tone-of-voice in the months October 2012, November 2012 and December 2012 became increasingly negative (i.e. from -.18 to -1).

The average tone-of-voice toward internal stakeholders in media coverage involving an organization with an active crisis response strategy can be classified by several periods. From the start of the publications in June 2011 to September 2011, the tone-of-voice was negative (i.e. a variation of approximately -.23 to -.45). After one month of no publications, the average tone-of-voice became increasingly less negative in the period November 2011 – January 2012 (i.e. from -.73 to -.36). In February 2012, there were not publications. The publications resumed in March 2012 (i.e. average tone-of-voice was -.89). From April 2012 the publications became increasingly less negative, which lead to a slightly positive tone-of-voice in June 2012 (i.e. .1). After no publications in July 2012, the tone-of-voice toward internal stakeholders was neutral in August 2012. External stakeholders were only covered in the months June 2011, August 2011, September 2011, November 2011, January 2012, March 2012 and April 2012. Furthermore, this tone-of-voice was always neutral.

When comparing the average tone-of-voice toward relevant stakeholders in media coverage involving two different organizations (i.e. either with a passive crisis response strategy or with an active crisis response strategy), several statements can be made. First, in media coverage involving both organizations, internal stakeholders were covered mainly negative. Second, in media coverage involving an organization with a passive crisis response strategy external stakeholders were covered mainly negative. However, in media coverage involving an organization with an active crisis response strategy, external stakeholders were covered only neutral.

4.4.2.2 Media coverage versus corporate communication coverage

Despite a slight peak in August 2011 which is characterized by a positive tone-of-voice, internal stakeholders are only covered neutral in corporate communication coverage. External stakeholders were not mentioned.

When comparing the average tone-of-voice toward relevant stakeholders in corporate communication coverage and in media coverage, several statements can be made. First, internal stakeholders were covered more negative in media coverage than in corporate communication coverage. In corporate communication coverage, internal stakeholders were not covered negative at all. Second, external stakeholders were not covered in corporate communication coverage. In contrast, these stakeholders were covered in media coverage.

Figure 4

Timeline of media coverage involving an organization with a passive crisis response strategy: average tone-of-voice per month and internal stakeholders versus external stakeholders

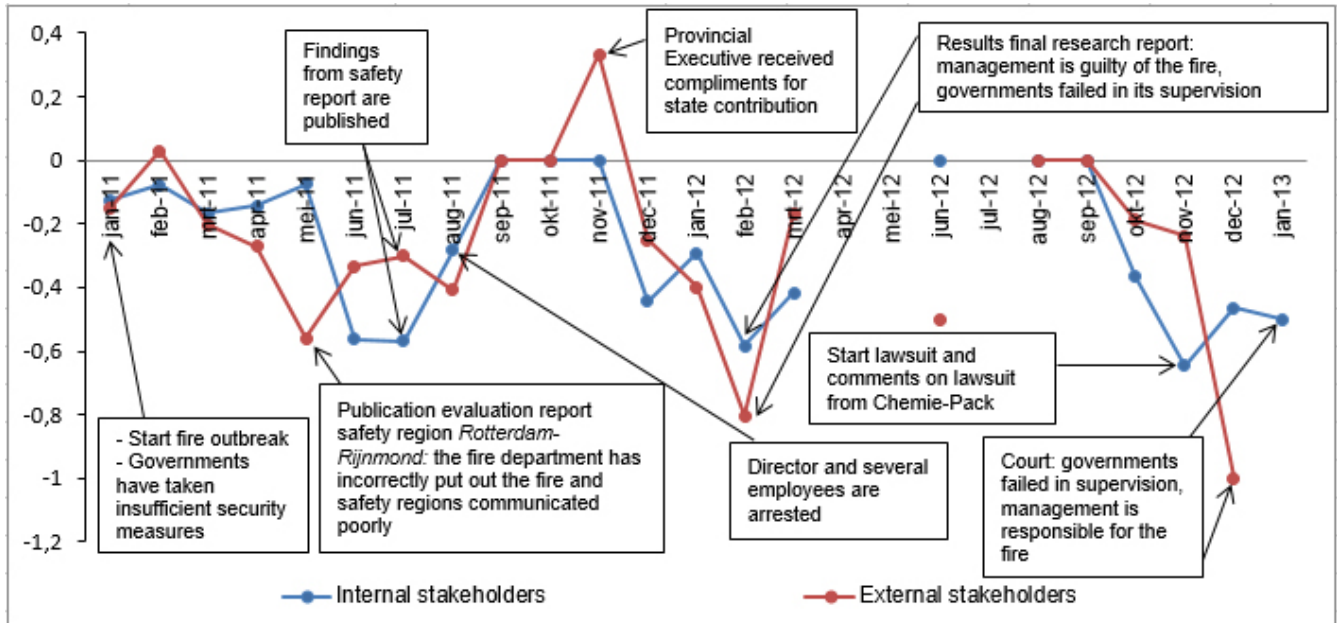


Figure 5

Timeline of media coverage involving an organization with an active crisis response strategy: average tone-of-voice per month and internal stakeholders versus external stakeholders

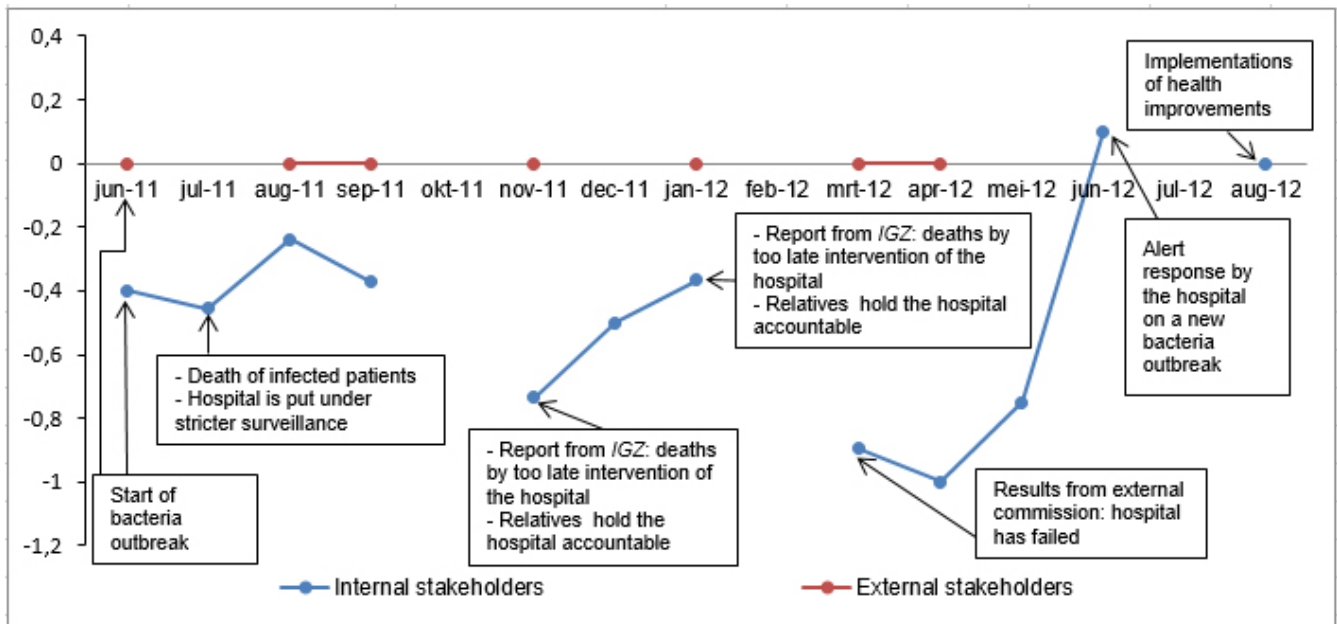
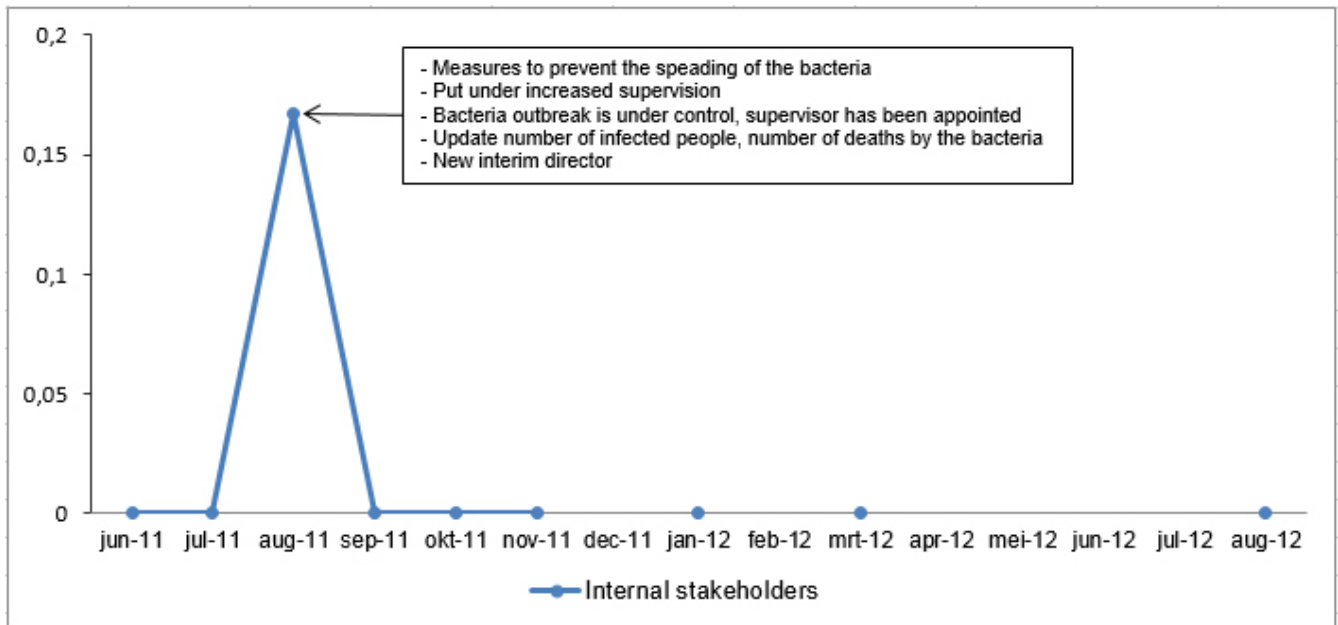


Figure 6

Timeline of corporate communication coverage by the Maasstad Hospital: average tone-of-voice per month and internal stakeholders versus external stakeholders



5. Discussion

In this chapter, the two research questions will be answered in order to give an answer to the main question: “*how does an organizational crisis response strategy affect media coverage?*”. The research questions were: “*to what extent do the media differ in how they frame two crises?* (i.e. one crisis which involves an organization with a passive response strategy and one crisis which involves an organization with an active response strategy) and “*to what extent do the media reframe an organization’s crisis response?*” Also, limitations of this study and suggestions of future research are discussed.

5.1 Conclusion

5.1.1 Passive crisis response strategy versus active crisis response strategy

In terms of the five most common news frames, significant differences have been found for the human-interest frame, economic consequences frame and the morality frame. Media coverage involving an organization with an active crisis response strategy was framed significantly more in terms of human-interest, than media coverage involving an organization with a passive crisis response strategy. However, media coverage involving an organization with a passive crisis response strategy was framed significantly more in terms of economic consequences and in terms of morality, than media coverage involving an organization with a passive crisis response strategy. Moreover, no significant differences have been found for the conflict frame and the responsibility frame. Furthermore, it appeared that a news article can be framed in terms of more than one news frame. This is in line with existing literature (An & Gower, 2009; Kuttschreuter et. al., 2011). Results indicate that the average number of news frames per article is 2.1 in media coverage involving an organization with a passive crisis response. In media coverage involving an organization with an active crisis response, the average number of news frames is 2.

Results of the chronological timelines reveal that in media coverage involving both crisis response strategies, the human-interest frame is most frequently used in the first period, then significantly dropping. This is in line with existing literature (Brunken, 2006; Kuttschreuter et. al., 2011). After the first period, news frames occur more equal. However, several peaks in media coverage are characterized by approximately the identical order of news frames. As shown in table 5, media coverage involving both crisis response strategies, is framed most frequently in terms of human-interest, followed by the conflict frame, economic consequences frame, responsibility frame, and the morality frame.

The tone-of-voice toward management, local government and research council did not significantly differ. However, the tone-of-voice toward relevant stakeholders significantly differed for the organization in general, employees and national government. The organization in general and employees were significantly covered more negative in media coverage involving an organization with an active crisis response strategy, than in media coverage involving an organization with a passive strategy. However, national government was covered significantly more negative in media coverage involving an organization with a passive crisis response strategy, than in media coverage involving an organization with an active crisis response strategy.

An additional analysis compared the tone-of-voice toward internal stakeholders (i.e. the organization in general, employees, and management) and external stakeholders (i.e. local government, national government, and caregivers). Results indicate that internal stakeholders were significantly covered more negative in media coverage involving an organization with an active crisis response strategy, than in media coverage involving an organization with a passive crisis response strategy. On the other hand, external stakeholders were significantly covered more negative in media coverage involving an organization with a passive crisis response strategy, than in media coverage involving an organization with an active crisis response strategy.

When correlating news frames with tone-of-voice, it appeared that that in media coverage involving an organization with a passive crisis response strategy, three news frames (i.e. the conflict frame, responsibility frame, and morality frame) have a negative impact on the tone-of-voice toward

relevant stakeholders. The conflict frame has a negative impact on the tone-of-voice toward research council and caregivers. Also, two combinations of news frames have a negative impact on the tone-of-voice toward relevant stakeholders. First, the combination of conflict frame, responsibility frame, morality frame has a negative impact on the tone-of-voice toward the organization in general and management. Second, the combination of conflict frame, responsibility frame has a negative impact on the tone-of-voice toward employees, local government and national government.

In media coverage involving an organization with an active crisis response strategy, two news frames (i.e. conflict frame and responsibility frame) have a negative impact on the tone-of-voice toward relevant stakeholders. The conflict frame has a negative impact on the tone-of-voice toward management. Furthermore, the combination of conflict frame, responsibility frame has a negative impact on the tone-of-voice toward the organization in general and employees.

In sum, it can be concluded that the media differ somewhat in how they have framed two crises. In terms of news frames, both crises are framed in a similar way. Although significant differences for the human-interest frame, economic consequences frame and morality frame are found, both crises are framed in the same order of news frames. Media coverage in both crises is framed most frequently in terms of the human-interest, followed by the conflict frame, economic consequences frame, responsibility frame, and the morality frame. Also, the number of news frames per article is approximately equal in media coverage about both crises.

In contrast to present news frames, the media have framed the two crises significantly different in terms of tone-of-voice. Significant differences have been found for the tone-of-voice toward the organization in general, employees and national government. Also, internal stakeholders are covered significantly more negative in media coverage involving an organization with an active crisis response strategy, than in media coverage involving an organization with a passive crisis response strategy. In contrast, external stakeholders are covered significantly more negative in media coverage an organization with a passive crisis response strategy, than in media coverage involving an organization with an active crisis response strategy. Moreover, the overall tone-of-voice was significantly more negative in media coverage involving an organization with an active crisis response strategy, than in media coverage involving an organization with a passive crisis response strategy.

5.1.2 Media coverage versus corporate communication coverage

In terms of present news frames, no significant differences have been found for the human-interest frame and the morality frame. However, significant differences have been found for the conflict frame, responsibility frame, and economic consequences frame. Media coverage is framed significantly more in terms of conflict, responsibility, and economic consequences, than corporate communication coverage. Although the order of used news frame is similar for both communication types (i.e. most news articles are framed in terms of human-interest, followed by the conflict frame, economic consequences frame, responsibility frame, and the morality frame), media coverage is characterized by more news frames per article, than corporate communication coverage. Where the average number of frames per article is 2 in media coverage, the average number of news frames per article is 1.3 in corporate communication coverage.

Results of the chronological timeline show that corporate communication in approximately the first three months is framed in terms of human-interest, conflict and economic consequences. After this period, corporate communication coverage is only covered in terms of human-interest. However, media coverage has used a variety of news frames during the whole crisis. Also, media coverage is framed in terms of economic consequences, before this news frame is used in corporate communication coverage.

The tone-of-voice toward all relevant stakeholders was significant more negative in media coverage, than in corporate communication coverage. The tone-of-voice significantly differed for the organization in general, employees, management, and research council. In line with this, internal stakeholders were covered more negative in media coverage, than in corporate communication coverage. External stakeholders were not mentioned in corporate communication coverage.

In sum, it can be concluded that the media significantly reframe an organization's crisis

response. The presence of two news frames (i.e. the human-interest frame and the morality frame) does not significantly differ. However, the presence of three news frames (i.e. the conflict frame, the responsibility frame, and the economic consequences frame) significantly differs. The media frame a crisis significantly more in terms of conflict, responsibility and economic consequences, than corporate coverage. Also, media coverage is to some extent framed in terms of responsibility and morality, where corporate communication coverage is not framed in terms of these frames at all. Moreover, results of the chronological timeline show that media coverage is framed in terms of economic consequences before the organization in crisis has. Furthermore, the average number of news frames per article in media coverage (i.e. 2) is higher than in corporate communication coverage (i.e. 1.3.).

The reframing character of the media is illustrated by significant differences in terms of tone-of-voice, compared to corporate communication coverage. All stakeholders in corporate communication coverage are covered significantly more negative in media coverage. Furthermore, the media has covered more stakeholders than the organization in crisis (i.e. local government and national government were covered in media coverage and not in corporate communication coverage).

5.1.3 Answering the main question

The primary goal of this research is to examine how a crisis response strategy affects media coverage. Based on results from this study it can be concluded that an organizational crisis response affects media coverage in a limited way.

Existing literature suggests that organizations in crisis which interact with the media to get information to the public have much more influence on media coverage, than it would if others provided the information (Ullmer, Sellnow, and Seeger, 2007; Veil & Ojeda, 2010). However, in terms of news frames, it could be stated that the media frame the two crises in a similar way, regardless of the used crisis response strategy by the organization in crisis. This is a first indication of a limited impact of a crisis response strategy on media coverage. Despite significant differences for the human-interest frame, economic consequences frame and the morality frame, the two crises are framed in the exact same order of news frames. Most news articles are framed in terms of human-interest, followed by the conflict frame, economic consequences frame, responsibility frame and the morality frame. Regarding the tone-of-voice toward relevant stakeholders, several differences have been found between media coverage involving an organization with a passive crisis response strategy and an active crisis response strategy.

Regarding the tone-of-voice toward relevant stakeholders, the media differed somewhat in how they framed the two crises. The tone-of-voice toward the organization in general, employees and national government significantly differed. Furthermore, internal stakeholders are covered significantly more negative in media coverage involving an organization with an active crisis response strategy, than in media coverage involving an organization with a passive crisis response strategy. In contrast, external stakeholders are covered significantly more negative in media coverage involving an organization with a passive crisis response strategy, than in media coverage involving an organization with an active crisis response strategy. The overall tone-of-voice was significantly more negative in media coverage involving an organization with an active crisis response strategy, than in media coverage involving an organization with a passive crisis response strategy.

The limited influence of an organization's crisis response strategy on media coverage is also illustrated by the reframing character of the media. It appeared that an organization's crisis response is significantly reframed by the media. Results show that the media frame a crisis significantly more in terms of conflict, responsibility and economic consequences, than corporate coverage. Although the organization with an active crisis response strategy has proactively presented their side of the story, the media have rejected the used frames and continued using other frames. Although the organization have not framed the crisis in terms of responsibility and morality, the media have framed the crisis in terms of these frames. Additionally, media coverage is framed in terms of economic consequences before corporate communication coverage is framed in terms of economic consequences. Finally, the average number of news frames per article in media coverage (i.e. 2) is higher than in corporate communication coverage (i.e. 1.3.). This indicates that the media add their own news frames in its

coverage.

The reframing character of the media is also illustrated by significant differences in terms of tone-of-voice, compared to corporate communication coverage. Ritchie, Dorell, Miller, and Miller (2004) suggest that managing corporate communication through a crisis response strategy can limit the negative media coverage. However, results show that all stakeholders in corporate communication coverage are covered significantly more negative in media coverage, than in corporate communication coverage. Furthermore, the media has covered more stakeholders than the organization in crisis (i.e. local government and national government were covered in media coverage and not in corporate communication coverage). Therefore it can be stated that not covering certain stakeholders in corporate communication coverage is no guarantee that the media will do the same. Despite proactively framing a crisis through the use of corporate communication coverage, the organization in crisis has not been able to prevent negative media coverage toward internal stakeholders.

5.2 Theoretical and practical implications

This study took a first step in involving corporate communication coverage in analysing coverage involving crisis situations. Existing literature (e.g. Benoit, 1995; Coombs & Holladay, 1996; Coombs, 1999; Reynolds & Seeger, 2005; Stephens & Malone, 2009) have stressed the importance of an organizational crisis response. However, none of these studies have actual included a crisis response in analysing media coverage involving an organizational crisis. This study has included an organization's crisis response and compared it with media coverage. Additionally, this study has compared media coverage involving an organization with a passive crisis response strategy with media coverage involving an organization with an active crisis response strategy.

Crisis managers can benefit from these two comparisons in several ways. First, insight is given in how the media differ in covering a crisis involving an organization with opposite crisis response strategies. Second, insight is given in the reframing nature of the media. Proactively responding to a crisis is no guarantee that the media will frame the crisis in a similar way as the organization. The most important practical implication for crisis managers is that mainly framing the crisis in terms of human-interest is not enough to affect media coverage. The Maasstad Hospital has mainly provided its stakeholders with updates about the number of infected people and deaths by the bacteria. Results from this study suggest that the media will reframe the organization's crisis response in terms of conflict, responsibility and economic consequences. Organizations in crisis should be aware of this reframing character of the media and consider framing the crisis in terms of conflict and responsibility itself. Perhaps the organization in crisis should have framed the crisis more in terms of responsibility or conflict. For example, by admitting mistakes by several employees. As a result, the media may frame its stories to a less extent in terms of responsibility and conflict.

5.3 Limitations and suggestions for future research

Despite a balanced research design (i.e. by including local and national newspapers) and a reliable codebook (i.e. Cohen's Kappa scores were sufficient for all tested variables), there are some limitations of this study. However, given the pioneering character of this research, it can serve as a starting point for future research.

This study has compared media coverage about two crises. These crises refer to a fire at a bacteria outbreak at a hospital and a fire at a chemical storage and packaging company. The nature of these crises (i.e. bacteria outbreak versus fire outbreak) is totally different. Significant found differences in present news frames and tone-of-voice toward relevant stakeholders may thus be the result of the nature of the crisis. The fire in Moerdijk caused environmental damage and Chemie-Pack went bankrupt. Consequently, the media have framed the fire at Chemie-Pack significantly more in terms of economic consequences, than the bacteria outbreak in the Maasstad Hospital. Also, the nature of both crises may have been the cause for differences in tone-of-voice toward relevant stakeholders in media coverage. Despite an active crisis response strategy, the average tone-of-voice toward internal stakeholders was more negative in media coverage involving an organization with an active crisis response strategy, than a passive crisis response strategy. After the bankruptcy of

Chemie-Pack, this organization was gone and several employees have been convicted. Since these events, this crisis may have become irrelevant for the media to publish about. However, the Maasstad Hospital still existed after the bacteria outbreak. For the media, several internal stakeholders are held responsible for the crisis. Significant differences in terms of tone-of-voice toward internal stakeholders may have been the result. By analysing media coverage of two crises with the same nature, this problem would be solved. Therefore, it would be recommended for future research to use media coverage of similar crises.

Second, the differences in how the media have framed a crisis and how an organization has framed a crisis may be the results of different goals. As noted earlier, overt goals of the media are primarily to inform and entertain (McCombs, 1977). However, organizations in crisis want to reduce uncertainty and repair its reputation (e.g. Reynolds & Seeger, 2005; Coombs, 2007). On the other hand, the differences in used news frames and average tone-of-voice toward relevant stakeholders between the media and the organization in crisis may be the result of poorly framed press releases by the organization in crisis. The Maasstad Hospital has mainly framed its press releases in terms of human-interest. Also, the tone-of-voice toward relevant stakeholders was mainly neutral. Perhaps the media will reframe a crisis in a different way when the organization in crisis frames the crisis in more than one news frame and will be more negative to relevant stakeholders, than the Maasstad Hospital. However, future research is needed to test this.

The third limitation of this research is the relatively small sample (n=24) of corporate communication coverage. Although significant differences in present news frames and tone-of-voice toward relevant stakeholders were found between media coverage and corporate communication coverage, the small sample of corporate communication coverage leads to a limited generalizability. In order to increase the generalizability, it would be recommended for future studies to involve a greater sample of corporate communication coverage.

The last limitation is about the type of media coverage which is used for this study. This research has only included media coverage from newspapers. Newspapers are a form of traditional media. Given the rising popularity of digital media and social media, it would be recommended for future research to include these types of media. Forms of digital media can be news websites. Social media can refer to weblogs, or social media channels.

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Appendix A1

Examples of stakeholders

Stakeholder group	Media coverage involving an organization with a passive crisis response strategy	Media coverage involving an organization with an active crisis response strategy
Employees	Employee who caused the fire, production worker	Microbiologists, hygienists, nurses
Management	The management, the director, the leading staff	The board, the management, the (interim) director
Local government	The mayor, city councillor, the municipality, safety regions	The mayor, city councillor, the municipality
National government	Ministers, the Cabinet	Ministers, the Cabinet
Research council	Public Prosecution, judges, investigation board, inspection services	Commissions of inquiry, inspection services
Caregivers	Fire department, ambulance staff, police	

Appendix A2

- Crisis/communication type
1 o Fire in Moerdijk 2 o Bacteria outbreak in Rotterdam 3 o Corporate communication by the Maasstad Hospital

- Name of the newspaper

1 o NRC 2 o Trouw 3 o Rotterdams Dagblad 4 o Brabants Dagblad
5 o Corporate communication

- Type of newspaper

1 o National 2 o Local 3 o Corporate communication

- Date (day/month/year)

- Article number

- Number of words

- Was the article published on the frontpage of the newspaper?

1 o Yes 2 o No

Tone-of-voice toward the particular organization

- Tone-of-voice toward the organization in general

1 o -2 very negative 2 o -1 negative 3 o 0 neutral 4 o +1 positive 5 o +2 very positive 6 o n.a.

- Tone-of-voice toward employee(s)

1 o -2 very negative 2 o -1 negative 3 o 0 neutral 4 o +1 positive 5 o +2 very positive 6 o n.a.

- Tone-of-voice toward management

1 o -2 very negative 2 o -1 negative 3 o 0 neutral 4 o +1 positive 5 o +2 very positive 6 o n.a.

Tone-of-voice toward the government

- Tone-of-voice toward local government (e.g. mayor, congregation)

1 o -2 very negative 2 o -1 negative 3 o 0 neutral 4 o +1 positive 5 o +2 very positive 6 o n.a.

- Tone-of-voice toward national government

1 o -2 very negative 2 o -1 negative 3 o 0 neutral 4 o +1 positive 5 o +2 very positive 6 o n.a.

Tone-of-voice toward external parties

- Tone-of-voice toward research Council

1 o -2 very negative 2 o -1 negative 3 o 0 neutral 4 o +1 positive 5 o+2 very positive 6 o
n.a.

- Tone-of-voice toward caregivers

1 o -2 very negative 2 o -1 negative 3 o 0 neutral 4 o +1 positive 5 o+2 very positive 6 o
n.a.

- Does the article refer to an organization's crisis response? 1 o yes 2 o no

- If the article does refer to an organization's crisis response, what medium did the organization use? (quote from a spokesman is also possible)

News frames

The following frames (Semetko & Valkenburg, 2000) are present in the article:

- Human-interest frame 1 o yes 2 o no
- Conflict frame 1 o yes 2 o no
- Responsibility frame 1 o yes 2 o no
- Economic consequences frame 1 o yes 2 o no
- Morality frame 2 o yes 2 o no