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Disrupting gatekeeping practices: Journalists' source selection in times of crisis

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Abstract

As gatekeepers, journalists have the power to select the sources that get a voice in crisis coverage. The aim of this study is to find out how journalists select sources during a crisis. In a survey, journalists were asked how they assess the following sources during an organizational crisis: news agencies, an organization undergoing a crisis, and the general public. The sample consisted of 214 Dutch experienced journalists who at least once covered a crisis. Using structural equation modeling, sources' likelihood of being included in the news was predicted using five source characteristics: credibility, knowledge, willingness, timeliness, and the relationship with the journalist. Findings indicated that during a crisis, news agencies are most likely to be included in the news, followed by the public, and finally the organization. The significance of the five source characteristics is dependent on source type. For example, to be used in the news, news agencies and organizations should be mainly evaluated as knowledgeable, whereas information from the public should be both credible and timely. In addition, organizations should not be seen as too willing or too eager to communicate. The findings imply that, during a crisis, journalists remain critical gatekeepers; however, they rely mainly on familiar sources.

Keywords

Crisis, gatekeeping, journalist, source, source selection

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News media, in their gatekeeper function, are expected to play a pivotal social role in providing relevant and accurate information during crisis situations. In their coverage, news media and journalists are acknowledged being capable of shaping the evolution and magnitude of a crisis and its consequences (e.g. Kleinnijenhuis et al., 2013). Media make information public and so add to the collective knowledge of what is going on (Sorribes and Rovira, 2011). The audience uses the information and frames provided by journalists to interpret the crisis and act upon it. Therefore, news media and journalists can create or avoid public panic and hence play an important role in the prevention of crisis escalation (Van der Meer et al., 2014).

The very nature of a crisis situation makes it difficult for journalists to properly report on such events. Crisis situations are by definition sudden and unpredictable events that may pose a danger to society and create high levels of uncertainty, confusion, and time pressure (e.g. Fleischer, 2013). As crises disrupt continuity, journalistic practices and standards might be challenged (Sorribes and Rovira, 2011). It becomes difficult to obtain and relay information for journalists and find the time to validate stories (Veil, 2012). Nevertheless, journalists have a responsibility to report on such newsworthy crisis events (Galtung and Ruge, 1965; Maier, 2010). Even in the absence of crucial information, the story still needs to be run to address the audience's immediate desire for information when being (indirectly) confronted with significant risks. Thus, the disruptive nature of a crisis poses substantial problems for journalists in covering the event and potentially alters their journalistic practices. Yet, so far little is known about journalistic gatekeeping practices during a crisis situation.

Gatekeeping theory offers a powerful body of research for investigating journalists' crisis coverage. Besides the selection of news items, the decision as to which sources should be selected in stories is a crucial aspect of gatekeeping practices (Shoemaker and Reese, 1996; Shoemaker and Vos, 2009). As journalists' sources are an indispensable part of the news production process, they matter in determining which information and frames become manifest in the press (Gans, 1979; Hanitzsch, 2004). Therefore, during a crisis, sources are considered to have substantial framing power in news reporting of the crisis or shaping the context under which a journalist evaluates the issue (Holland et al., 2013). Since the way a crisis is covered can affect how the audience defines the crisis (Shoemaker and Vos, 2009), the selection of news sources may have substantial consequences for the magnitude of the crisis and its effects on society (Cloudman and Hallahan, 2006).

Although journalism is a source-driven practice, the amount of research on sourcing is relatively limited, especially regarding crisis situations (Broersma et al., 2013; Dimitrova and Strömbäck, 2009; Manning, 2001). At this point, research is inconclusive regarding journalists' selection of sources during crises. For example, previous content analyses observed variation in the attractiveness of an organization as news sources across crisis situations (e.g. Iraq war and Mohammed cartoon crisis; Dimitrova and Strömbäck, 2009); in some cases it increases (e.g. BP oil spill; Schultz et al., 2012), while it decreases in others (e.g. Shell's Brent Spar disposal; Heath, 1998). So far, less attention has been given to the general mechanism of the actual gatekeeping practices that can explain how journalists select their sources in these hectic crisis situations and why the inclusion of sources might vary.

The aim of this study is to understand how journalists select their sources when they report about a crisis. Therefore, this study focuses on journalists' gatekeeping practices when they report about an organizational-crisis situation. To see which determinants are important for sources to make it into the news during a crisis, journalists were surveyed about how they assess the following information sources: news agencies, the organization that is undergoing the crisis, and the public. The central research question is: *How do journalists select sources during a crisis situation?*

Theoretical framework

Source-selection mechanisms and pluralism are influenced by multiple factors at the level of the news issue (Bennett, 1990; Manning, 2001) and can thus vary among different situations (De Swert et al., 2013). It is especially important to understand how sources are represented and selected in crises. Under these pressing and ambiguous circumstances, reporters rarely use their own direct experience in covering the event (Veil, 2012). Thus, even more than in normal circumstances, during a crisis, news is mainly constructed from information provided by sources. A thorough understanding of source selection is therefore crucial to explore how news coverage is constructed during a crisis and if the audience can make informed decisions using news media.

News agencies, organization, and general public

There are three types of sources that are commonly used in news reporting about crises and organizational events (Kleinnijenhuis et al., 2013; Van der Meer et al., 2014). First, journalists often rely routinely on news agencies (Lewis et al., 2008). Despite being an important institute in the news production process, relatively little empirical research is dedicated to demonstrating the influence of news agencies. Nevertheless, scholars generally acknowledge news agencies' large impact on news production, especially due to notable cost reduction at media institutions (Whitney and Becker, 1982). Second, organizational communication, such as press releases, is acknowledged to play an increasing role in news content (Lewis et al., 2008). Organizations, which are normally not considered newsworthy, become part of the news agenda as soon as they go through a crisis. According to news value theory, part of this increased media attention comes from the fact that a crisis is a negative event (in its consequences) and therefore considered newsworthy (Galtung and Ruge, 1965). Third, the general public can be used as a news source to provide eyewitness accounts, a grassroots perspective or a vox-pop, or to put a human face on the issue or event (Dimitrova and Strömbäck, 2009). Social media have provided members of the public with a channel to quickly communicate their respective interpretation of the crisis, making them an easily accessible source when little information is available in the first crucial hours of a crisis (Neuman et al., 2014). Therefore, this study focuses on the following individual news sources during a crisis: (1) news agencies, (2) the organization in crisis, and (3) the general public in terms of citizens, eyewitnesses, and online and offline communities that represent certain public groups. It is acknowledged that multiple other sources can play a crucial role in the coverage of a crisis. However, emphasizing the role of these sources provides an important starting point in understanding general gatekeeping patterns during crises.

Reliance on different sources. The three types of sources differ considerably on several characteristics – for example, perceived standing, reliability, and accessibility. It is therefore likely that journalists differently evaluate different sources during crises. Under non-crisis circumstances, gatekeeping studies found that journalists are often far from equitable in the degree to which sources are allocated news access (Gans, 1979). Arguably, due to the disruptive and time-pressuring nature of a crisis, journalists might struggle even more with selecting different sources during a crisis (Hanitzsch, 2004; Veil, 2012). These differences between individual sources will have important bearing upon the diversity of perspectives and representation of actors in crisis coverage interpretative frameworks regarding a crisis presented through news media (Manning, 2001; Reich, 2011).

It can be expected that during crises journalists depend more heavily on a specific type of source or fail to give voice to other important ones (Dimitrova and Strömbäck, 2009; Sorribes and Rovira, 2011). Certain sources can offer more assurance for journalists during hectic crisis times. Journalists may rely mainly on news agencies during crises, as this familiar source generally provides accurate up-to-date information in a convenient form (Lewis et al., 2008). Quite the reverse, journalists might be hesitant to rely on information from the organization without validation (Park and Cameron, 2014), something they have little time for in the initial crisis phase. Moreover, when other sources are not available and information is scarce during a crisis, it can be convenient for journalists to rely on readily available (online) information from the public. Journalists can easily find members of the public who will provide a critical perspective toward the crisis or offer basic information in terms of citizen journalism. The first research question is as follows:

RQ1. What are the differences in the likelihood of being included in the news between the sources news agencies, organization, and the public during a crisis?

Source selection criteria

As the very nature of a crisis makes source selection more difficult, the question is whether practices that prevail in normal times hold during a crisis. Under normal circumstances, journalists rely heavily on their routine procedures in the construction of news and selection of sources (Shoemaker and Vos, 2009). These routine forces might partly hold in times of crisis. Furthermore, some aspects of the general selection mechanisms might be amplified during crises – for example, information accuracy. To examine crisis journalism, this study investigates whether important selection criteria, extrapolated from general journalism literature concerning ordinary source selection, can be used to predict sources' likelihood of being included in the news during a crisis: (1) journalists' own judgment of the key source qualities, (2) the sources' activities, and (3) the source–journalist relationship.

Journalists' judgment of sources. The first determinant related to journalists' source judgment is source credibility. Credibility is a key concern in messages acceptance, but perhaps nowhere is it such an important concern as in crisis communication (McComas and Trumbo, 2001). Given the professional journalistic norm of objectivity, journalists need to

confirm the credibility of their sources. Thus, source credibility is a decisive component for journalists in assessing whether to include a source in the news (e.g. Powers and Fico, 1994; Reich, 2011). Especially during crises when information accuracy is crucial, the proven credibility of sources might be an important heuristic for gatekeeping practice.

The second determinant is being knowledgeable. Besides credibility, journalists tend to select sources that they identify as knowledgeable (Gans, 1979). Credibility is often used as an umbrella concept and the relationships between different types of credibility are still under discussion in the research literature. While being knowledgeable (i.e. credibility on the basis of knowledge) and being credible are often interrelated, knowledgeable does not necessarily factor into credibility (McComas and Trumbo, 2001). In some cases, sources that hold the most information may also be considered least trustworthy as they might, for example, have their own (hidden) agenda. Therefore, knowledgeable sources are considered qualified and experienced with a high level of information (Ohanian, 1990). When correct knowledge is displayed, journalists might perceive a source to be an expert, the source type they heavily rely on (Albaek, 2011; Dimitrova and Strömbäck, 2009; Manning, 2001), increasing sources' chances to obtain news access. Especially during crises when information is scarce, knowledgeable sources might be rendered more newsworthy as they are in position of access to valuable information (Powers and Fico, 1994). The first hypothesis therefore reads as follows:

H1. Journalists' judgment of a news source in terms of (a) credibility and (b) being knowledgeable has a positive effect on the likelihood of being included as a source in the news during a crisis.

Sources' activities. Sources' communicative activities are also considered a major determinant in selection of sources (Powers and Fico, 1994). First, a fundamental criterion that constitutes sources is their willingness to communicate and serve as a news source (Powers and Fico, 1994). Potential sources will have a greater likelihood of being represented in the news if they take journalistic practices into account by being easy to reach and willing to comment. Previous studies report that the selection of sources in media indeed depends on availability and willingness to talk (Broersma et al., 2013; Gans, 1979; Seo and Lim, 2010). Therefore, during a crisis, sources might benefit from offering their information to news media to increase the likelihood of being included in the news.

Second, timeliness is an important selection criterion for sources as it is an essential ingredient of novelty and relevance, both of which are highly prized in news. Journalists are trained not only to gather information but also to compete and report information first. Additionally, crisis situations are fundamentally related to the idea of time (Fleischer, 2013). The audience, including victims, will demand quick and accurate crisis information, resulting in high levels of time pressure for journalists (Avery, 2010). Hence, during a crisis, when time and resources are at a premium, journalists might turn to those sources most eager to provide timely information as their immediate concern is to obtain basic information for the audience (Broersma et al., 2013; Gans, 1979).

Thus, 'good sources' are not only credible and knowledgeable, but they should also be willing to talk and communicate in a timely fashion. Therefore, the second hypothesis is as follows:

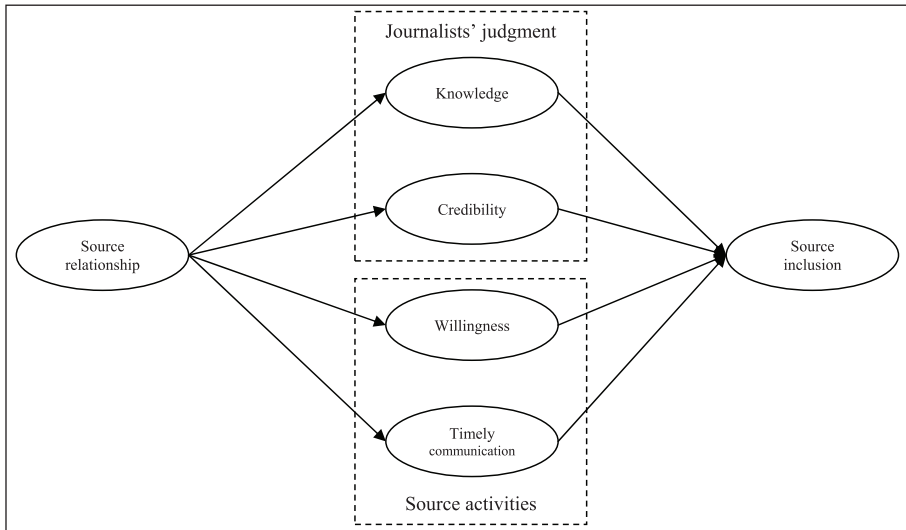


Figure 1. The conceptual mediation model explaining sources' likelihood of being included in the news.

H2. The activities of a news source in terms of (a) willingness to share information and (b) timely communication have a positive effect on the likelihood of being included as a source in the news during a crisis.

Source–journalist relationship. Source selection partly depends on the nature of the exchange relationships that exist between source and journalist. Journalists rely more frequently on contacts and sources that they have built up over their time (Lewis et al., 2008; Manning, 2012). In the context of a crisis, it is found that the development of a stronger relationship has its benefits for both journalist and source. When the relationship improves, the quality and timeliness of information provided to the public improve (Veil, 2012), implying that a good relationship will advance sources' timely communication and willingness to talk. Additionally, journalists are found to acculturate sources they deal with frequently in their circle of expert and trusted sources (Macnamara, 2014). Thus, sources that journalists have good relationships with might automatically be seen as experts and thus perceived as more credible and knowledgeable. Hence, it can be argued that the source–journalist relationship has an indirect effect on source inclusion during crisis. When the relationship is stronger, a journalist will evaluate a source more positively in terms of credibility and knowledge and a source will be more willing to comment and communicate more timely, in turn, increasing the likelihood of becoming a news source (see Figure 1):

H3. Source–journalist relationship has an indirect effect on the likelihood of being included as a source in the news through (a) credibility, (b) knowledge, (c) willingness, and (d) timely communication.

Preferred criteria to evaluate a specific source. It is likely that journalists are inclined to use different criteria to evaluate a specific source. The criteria (1) credibility, (2) knowledge, (3) willingness, and (4) timeliness might play a different role in the selection of the source types, news agencies, the organization, and the public. For example, as the public is mainly empowered by social media as a means of quick communication (Pantti and Bakker, 2009), timely communication might play a dominant role in the determination of whether the public gets a voice in the news. The public agenda tends to lag behind the agenda of news media (e.g. Kleinnijenhuis and Rietberg, 1995). The general public might especially be of no relevance in news stories about possible solutions to the crisis. However, when time pressure is high and little information is available, journalists might turn to the online public for information that is available within the first couple of hours during a crisis. Accordingly, empirical research, in the context of social media, shows how the public frames can precede media frames (e.g. Neuman et al., 2014). In the case of the organization, other criteria may be used. The organization might be mainly addressed as a knowledgeable source as it is close to the crisis situation and information. Additionally, the organization might be dependent on its good relationships with journalists as literature documents the importance for firms to make sure they obtain good relationships with journalists to get a (equal) chance to be included in the news (Shin and Cameron, 2005). The second research question is as follows:

RQ2. What are the differences in the effect of journalists' selection criteria on the likelihood of being included in the news between the sources news agencies, organization, and the public during a crisis?

Method

Data collection and research design

To explore the gatekeeping practices of journalists during crisis times, a survey of Dutch practicing and experienced journalists was conducted (launched on 1 October, last response obtained on 1 December 2014). To recruit respondents, email invitations were sent out via the Dutch associations for journalists (Nederlandse Vereniging van Journalisten) and an organization that links organizations with journalists (perslijst.nl). Only journalists that report on general news or write about topics that can relate to organizational crises received an invitation. Additional prospective respondents were recruited through the professional network of the researchers. The survey started with a definition of an organizational crisis with several examples. Afterward, journalists were asked how often they had reported on this type of situations. If they had never covered such a crisis, they were excluded from the survey.

Respondents

In all, 214 journalists who had, at least once, reported about a crisis completed the questionnaire. The response rate was 17 percent, presumably the survey was not relevant for all the invited journalists as they never reported on an organizational crisis. Respondents'

average age was 48.05 years (standard deviation (SD) = 11.83 years), 28 percent was female, and on average they had 20.74 years (SD = 11.62 years) of experience. Most had an education level of a professional-bachelor degree (41.1%) or master's degree (27.2%). This sample is largely in line with the social demographic of Dutch journalists, predominantly male, in their 40s, and highly educated (Deuze, 2002).

Measurement

For each of the following concepts, journalists were asked to respond to each individual item three times, once for each of the three news sources: news agencies, organization, and the general public. All items were assessed on 7-point Likert-type scales anchored by 1 = *never* and 7 = *always*. Additionally, respondents were asked to answer the question for the first 24 hours of an organizational crisis.

Source–journalist relationship. To measure source–journalist relationship, two items were included in the questionnaire for each news source individually (Neijens and Smit, 2006). Respondents were asked about their relationship with the different sources and the contact frequency.

Journalists' judgment. Respondents were requested to evaluate the three news sources based on two concepts: credibility and knowledgeable. First, the evaluation of the credibility of the news sources was measured with three items, for example, 'I think information from this sources is accurate during a crisis' (Cassidy, 2007). Second, to measure the judgment of how knowledgeable news sources are, three items were included, for example, 'I think the news source is well informed during a crisis' (Ohanian, 1990).

Source activities. Respondents were asked to indicate how sources act during a crisis based on two concepts: willingness and timely communication. First, willingness was assessed with a three-item scale, for example, 'I think this news source is willing to provide information during a crisis' (Seo and Lim, 2010). Second, timeliness was measured with three items, for example, 'I think this news source responds quickly during a crisis' (Sailot et al., 1998).

Source inclusion. The likelihood of being included as a source in the news during a crisis was measured with four items, for example, 'I think the information of this news source is relevant for news consumers during a crisis' (Lee and Chyi, 2013).

Analysis

To test how the selection criteria affect sources' likelihood to be included in the news and test assumptions about differences among multiple groups, the analyses were conducted using structural equation modeling (SEM) using maximum likelihood estimation. SEM, as a confirmatory approach to data analysis, is considered appropriate for this study as the analysis allows to test fully latent structural models with multiple mediations and conduct multi-group comparison (Kline, 2011).

A fully latent moderated-mediation structural-regression model was tested with as dependent variable news inclusion. The mediating variables were credibility, knowledge, timeliness, and willingness and the independent variable was source–journalist relationship. To compare the full model between the three sources, a multi-group moderation was conducted – that is, source type is treated as a moderator (Byrne, 2004). This discrete moderating variable can be seen as dividing the data into three groups of subsamples, enabling the comparison of path coefficients in the model between groups. A detailed appendix can be requested from the authors describing (1) the confirmatory-factor analysis for testing measurement reliability and (2) details regarding the fit statistics of the model. The analyses show satisfactory reliability and the retained model indicated acceptable model fit for all three groups, allowing interpretation of the pathway estimates for testing the hypotheses.

Results

RQ1: Differences between sources. To answer RQ1, multivariate analysis of variance (MANOVA) with Scheffe post hoc test were run with the stacked data (based on journalists' response to each item for all three source types) to explore the mean differences between sources' likelihood to be included in the news. Table 1 shows that journalists indicated including news agencies ($M = 5.34$) significantly ($p < .001$) more often as a news source during a crisis compared to the organization ($M = 4.56$) and the public ($M = 4.70$). In general, a clear picture evolves regarding the journalists' preferences for these agencies during a crisis. News agencies are found to score significantly higher on both their judgment as news source (i.e. credibility and knowledgeable) and their activities (i.e. timely communication and willingness). Additionally, journalists generally evaluate the public significantly more positive on these same variables than the organization. It can be concluded that journalists most frequently use news agencies as news sources to report on a crisis, followed by the public and the organization undergoing the crisis.

Structural equation model

To test the hypotheses regarding direct (H1-2) and indirect effects (H3) and compare the effects between different source types (RQ2), SEM was applied. Table 2 shows the regression estimates of the effects yielded by the structural equation model. The table provides both the direct and indirect effects for the three groups and the explained variance – that is, the proportion to which the model accounts for the variation in the dependent variable source selection.

H1 and 2: Direct effects on source inclusion. Hypothesis 1 predicted that, in times of crisis, journalists' judgment of sources significantly affects the probability that sources get included in the news. First, Table 2 indicates that credibility (H1a) was found to positively affect inclusion of the sources organization ($\beta = .28, p < .01$) and public ($\beta = .47, p < .001$), but not of news agencies ($\beta = .02$, not significant (n.s.)). Second, being evaluated as knowledgeable (H1b) had a positive effect on inclusion of organization ($\beta = .48$,

Table 1. *F*-values of MANOVA analyses per variable and mean scores and standard deviations per source and variable.

Dependent variable DF(2, 639)	Org	News agencies	Public	Org vs news agencies	Org vs public	News agencies vs public
Source relation <i>F</i> = 2.56*	4.59 (1.26)	4.41 (1.52)	4.71 (1.37)	.19	.12	.30*
Credibility <i>F</i> = 83.59***	3.41 (1.30)	4.92 (1.20)	3.95 (1.16)	1.51***	.55***	.96***
Knowledge <i>F</i> = 179.34***	4.36 (1.33)	5.19 (1.22)	2.98 (1.11)	.83***	1.39***	2.21***
Willingness <i>F</i> = 63.49***	4.05 (1.33)	5.42 (1.25)	5.11 (1.44)	1.37***	1.06***	.31**
Timeliness <i>F</i> = 69.85***	3.72 (1.39)	5.19 (1.25)	4.93 (1.48)	1.47***	1.21***	.26
Inclusion <i>F</i> = 18.88***	4.56 (1.40)	5.34 (1.30)	4.70 (1.50)	.77***	.14	.64***

DF: degree of freedom; MANOVA: multivariate analysis of variance.

* $p < .05$; ** $p < .01$; *** $p < .001$, based on Scheffe post hoc test to explore mean difference among the source types.

$p < .001$) and news agencies ($\beta = .54, p < .001$), but not of the public ($\beta = .07, n.s.$). The statistical estimates of direct effects found with SEM are path coefficients, which are interpreted just as (un)standardized regression coefficients in multiple-regression analysis (Kline, 2011). For example, the significant positive effect of credibility on source inclusion in the case of the organization ($b = .29, \beta = .28, p < .01$) indicates that when journalists perceive the organization as more credible, the organization is significantly more likely to be included in the news. More specially, the unstandardized coefficient ($b = .29$) shows the expected raw score difference of .29 in *Y* (source inclusion) on the 7-point Likert scale, given a 1-point difference on the predictor *X1* (i.e. credibility), while controlling for other predictors. Additionally, the standardized coefficient ($\beta = .28$) indicates that the difference in *Y* (source inclusion) is expected to be .28 SDs large, given a difference on predictor *X1* (i.e. credibility) of 1 SD, controlling for the other independent variables. In sum, these findings partly support H1a and H1b; for some sources, their likelihood of being included in the news is increased when journalists perceive them as either more credible or more knowledgeable. Discussion of pathway differences between sources will be treated under RQ2.

Hypothesis 2 expected an effect of sources' activities during a crisis on the probability that the source gets included in the news. First, as shown in Table 2, the extent to which sources are willing to provide information (H2a) had a significant positive effect in the case of news agencies ($\beta = .20, p < .05$) and a negative effect in the case of the organization ($\beta = -.23, p < .05$). No effect was observed for the public ($\beta = .06, n.s.$). Second, the timelier the sources news agencies ($\beta = .13, p < .10$) and public ($\beta = .27, p < .001$) communicate (H2b), the more likely they will be included in the news. However, no effect of

Table 2. Parameter estimates for the general fully latent moderation mediation structural-regression model, predicting inclusion in the news of the three sources.

Hyp.	Independent variable	Dependent variable	Organization		News agencies		Public	
			b (SE)	β	b (SE)	β	b (SE)	β
1a	Credibility	Source inclusion	.29 (.10)	.28***	.03 (.10)	.02	.54 (.11)	.47***
1b	Knowledge	Source inclusion	.48 (.12)	.48***	.60 (.12)	.54***	.08 (.10)	.07
2a	Willingness	Source inclusion	-.23 (.10)	-.23*	.22 (.10)	.20*	.06 (.08)	.06
2b	Timeliness	Source inclusion	.09 (.10)	.09	.15 (.09)	.13†	.29 (.08)	.27***
3a	Source relationship	Credibility	.89 (.27)	.75***	.93 (.17)	.77***	.64 (.08)	.75***
3b	Source relationship	Knowledge	.76 (.23)	.69***	.89 (.17)	.73***	.86 (.10)	.67***
3c	Source relationship	Willingness	.74 (.25)	.64***	.83 (.16)	.68***	.67 (.10)	.61***
3d	Source relationship	Timeliness	.75 (.24)	.66***	.80 (.16)	.64***	.65 (.10)	.58***
3a	Relationship → credibility	Source inclusion	.46 (.10)	.26**	.09 (.10)	.10	.41 (.10)	.41***
3b	Relationship → knowledge	Source inclusion	.58 (.21)	.36***	.43 (.10)	.48***	.10 (.08)	.09
3c	Relationship → willingness	Source inclusion	.26 (.12)	.24	.20 (.08)	.21**	.09 (.07)	.10
3d	Relationship → timeliness	Source inclusion	.12 (.06)	.08	.12 (.08)	.12†	.17 (.08)	.19**
Variance accounted for		Source inclusion	$R^2 = .38$		$R^2 = .71$		$R^2 = .52$	

SE: standard error; CFA: confirmatory factor analysis; CFI: comparative fit index; TLI = Tucker-Lewis Index; SRMR: standardized root mean square residual; RMSEA: root mean square error of approximation; CI: confidence interval.

Fit indices: $\chi^2 (369) = 743.04$; $\Delta \chi^2$ with CFA model (15) = 23.96, $p = .07$; CFI = .96; TLI = .95; SRMR = .06 and RMSEA = .040 (CI: .036, .044).

Cells contain unstandardized (b), standardized (β), and coefficients with SEs.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

timely communication on news inclusion was found for the organization ($\beta = .09$, n.s.). Hence, H2a and H2b were partially supported; for some sources, their likelihood of being included in the news is increased when they are more willing to communicate and communicate more timely.

H3: Role of source–journalist relationship. Hypothesis 3 states that source–journalist relationship determines which sources will be included during crises. First, regression analyses showed a significant effect of relationship on likelihood to be included in the news for news agencies ($\beta = .58$, $p < .001$), the organization ($\beta = .54$, $p < .001$), and the public ($\beta = .62$, $p < .001$). This finding indicates that a better relationship with journalists will increase sources’ likelihood of being included in the news. Furthermore, Table 2 shows

Table 3. Pairwise parameter comparison tested to determine which pairs of parameters are significantly different between the groups news agencies, organization, and public.

Independent variable	Dependent variable	Org	News agency	Public	Org vs news	Org vs public	News vs public
		β	β	β	z-score	z-score	z-score
Credibility	Source inclusion	.28**	.02	.47***	-1.88*	1.70*	3.52***
Knowledge	Source inclusion	.48***	.54***	.07	.72	-2.54**	-3.38***
Willingness	Source inclusion	-.23**	.20**	.06	3.23***	2.32**	-1.28
Timeliness	Source inclusion	.09	.13*	.27***	.44	1.62	1.23
Source relation	Knowledge	.75***	.77***	.75***	-1.47	-3.6***	-2.95***
Source relation	Credibility	.69***	.73***	.67***	-.65	-1.94*	-1.56
Source relation	Willingness	.64***	.68***	.61***	-.87	-2.75***	-2.49**
Source relation	Timeliness	.66***	.64***	.58***	-1.06	-2.90***	-2.35**

* $p < .10$; ** $p < .05$; *** $p < .01$.

that the relationship with journalists positively affects source judgment in terms of credibility and knowledge as well as sources' activities regarding timeliness and willingness.

Additionally, an indirect effect of relationship on news inclusion was assumed. When adding the mediating variables, the direct effect of relationship on inclusion disappeared for news agencies and the organization. So, for these two groups, a full mediation was found while for the public a partial mediation was established. First, the source-journalist relationship was found to significantly affect news inclusion through credibility (H3a), only for the groups organization and public (see Table 2). Second, a mediation effect through knowledge (H3b) was only found for the organization and news agencies. Third, a mediation effect through willingness was found (H3c), only for news agencies. Finally, a mediation effect through timeliness was observed for news agencies and the public (H3b). In sum, for certain sources, the more positive the source-journalist relationship, the more positive the perceived credibility and knowledge of a source and sources' willingness and timely communication, which in turn increases the likelihood that sources are included in the news.

RQ2: Individual differences in the selection of sources. When addressing H1-H3, already some differences among the groups were revealed regarding the effect on source inclusion. To see how the three sources differ at the path level, pairwise parameter comparison tests were applied (see Table 3). This test is used to determine which pairs of parameters are significantly different between the three groups in the model. For the pair-wise parameter comparison test, critical ratios for differences between two parameters in question are calculated by dividing the difference between the parameter estimates by an estimate of the standard error of the difference.

First, the pathway of credibility to news inclusion is significantly highest for the public ($\beta = .54, p < .001$), followed by organization ($\beta = .29, p < .05$), indicating that variance in the level of credibility is less important for journalists in determining whether news agencies ($\beta = .03, n.s.$) will be included in the news in times of crisis. Second, knowledge is

found to be mainly an important factor for news agencies in order to make it into the news. The effect of being knowledgeable on news inclusion is significantly higher for both news agencies ($\beta = .60, p < .001$) and organization ($\beta = .48, p < .001$) versus public ($\beta = .08, n.s.$). Third, in the case of willingness, a notable negative effect is found for organizations ($\beta = -.23, p < .05$) on the likelihood of being included in the news. This effect is significantly different for the organization compared to the news agencies ($\beta = .22, p < .05$) and public ($\beta = .06, n.s.$). Substantially, it is the only source where an increase in willingness to communicate has a negative effect on being included in the news. Being too eager to share information might backfire for the organization as it might be an indication for a journalist that the source is mainly interested in being in the news for public relations reasons rather than providing relevant and unbiased information (Dimitrova and Strömbäck, 2009; Holland et al., 2013). Fourth, the effect of timely communication on source inclusion is found to be only significant in the case of the public ($\beta = .39, p < .001$) and marginally significant for news agencies ($\beta = .15, p < .10$). This indicates that timely communication mainly matters for the public's chance of obtaining a voice in the news. However, the differences between the sources are insignificant. Finally, it is found that especially the organization can benefit from a better relationship with the journalist. In conclusion, it can be stated that both the judgment of news sources and their activities determine whether the news source will be included in the news during a crisis. However, inclusion in the news also depends on the type of source.

Conclusion and discussion

Gatekeeping theory and practices still hold during a crisis; however, a more nuanced understanding is needed. Just as in non-crisis times, the findings indicate that journalists remain critical gatekeepers during crises. Despite the hectic circumstances, journalists will still take the effort to personally assess the quality of the source rather than just selecting the sources that are available or present. Additionally, they judge the quality of different sources based on different criteria they considered applicable for the specific source type. However, the findings imply that the disruption of the crisis results in journalists' predispositions toward certain sources. During a crisis, journalists have the tendency to rely mainly on familiar sources such as news agencies and disregard certain other less familiar news sources such as the organization and the public. This journalistic inclination toward certain routine sources might result in a bias in terms of the framing of the event and an imbalanced coverage (Reich, 2011), which in turn can affect the evolution and consequences of the crisis situation.

The source selection criteria, as applied by journalists during a crisis, are mainly favorable toward news agencies compared to the public and the organization experiencing the crisis. The study shows that in times of crisis, news agencies are most likely to be included in the news, followed by the public, and finally the organization (RQ1). These findings indicate that on average journalists do not directly adhere to the story of the organization in crisis or the (online) public reporting about the crisis but mainly rely on other journalistic institutions. In this sense, crisis situations disrupt balanced and pluralistic reportage (Veil, 2012). Crisis coverage appears to be mainly constructed from information provided by news agencies.

To understand in more detail how sources are selected during a crisis, sources' likelihood of being included in the news was predicted using five source characteristics extrapolated from journalistic literature regarding normal or routine times. Using SEM, journalists' judgment of the sources (i.e. credibility and knowledge, H1) as well as sources' activities (i.e. willingness and timely communication, H2) were found to play an important role in the likelihood that sources obtain a voice in the news during a crisis. Additionally, the relationship between the journalist and its source was found to be important in journalists' judgment and sources' activities (H3). The better the relationship, the more positive the journalists' judgment of the source and the more available the sources are during a crisis, which in turn increases sources' chances to be included in the news. The observation that these five source characteristics are important in source selection during a crisis is in line with previous research examining source selection under routine circumstance (e.g. McComas and Trumbo, 2001; Manning, 2012; Powers and Fico, 1994). Hence, this study contributes to gatekeeping theory by identifying several key factors that determine source selection during a crisis and revealing that, to a certain extent, the same selection criteria as under routine circumstance hold during crises.

Journalists reported using different determinants for different source types in assessing the likelihood of including a source in the news (RQ2). First, the inclusion of news agencies mainly depends on the extent that they are seen as knowledgeable regarding the crisis but also on their willingness to provide information. So news agencies are mainly selected when they have access to crisis-related information and when they make this available. Perhaps credibility is less important for news agencies as little variation is possible in their credibility according to journalists. Second, knowledge and credibility are the most important factors for the inclusion of an organization. As organizations and their spokespersons are often perceived as being less trustworthy (Park and Cameron, 2014), an increase in either their credibility or knowledge is crucial for their chances of obtaining a voice. Additionally, being too willing or too pushy to share their information was found to decrease the probability of being included in the news. Being too eager to obtain a voice in the news backfires, because journalists might become skeptical regarding the organizations' motives and agenda for sharing crisis-related information (Dimitrova and Strömbäck, 2009; Holland et al., 2013). Thus, for the organization, it is highly important to be evaluated as a quality source to obtain news access during a crisis, while its activities either make no difference (timeliness) or have negative consequences (willingness or eagerness). Third, especially the general public's credibility and timeliness can determine their news inclusion as a source. So, the public mainly benefits from social media as a means of quick communication during pressing crisis circumstances, yet their information should be evaluated as credible. Knowledge as a selection criterion might be less important for the public as they are usually not considered to have any expertise on crises. In sum, journalists use different selection criteria to select specific sources in their coverage of a crisis.

Certainly, additional questions await future exploration. First, this study was limited to the inclusion of three source types and five selection criteria. There are, however, several other event-specific sources (e.g. public authorities, experts, or political actors) that could be used by journalists during a crisis. Furthermore, another cue to understand received attention is whether or not the troubled organization, as the problem owner, succeeds in becoming the solution owner. Future research should tell

whether ‘problem’ actors, in their role as solution owners, are used as the sources of potential solutions. This might also nuance the findings of this study, arguably only organizations that are not perceived by journalists as indispensable actors to solve the crisis may suffer from the boomerang effect of the eagerness of organizations in crisis to present Public Relations stories. Second, journalists are likely to differ with respect to source selection and gatekeeping practices depending on the organizational and cultural contexts in which they work, and on the type of crisis (e.g. magnitude of risk and nature of the crisis) they have to report on. Ergo, the structural model, as presented in this study, is an oversimplification of what are actually highly complex sets of interactions between sources and journalists (Manning, 2001). Moreover, by asking journalists not currently engaged in covering a crisis how they evaluate sources when they report on a crisis, there is the risk that their answers do not reflect their actual practices. Third, when news agencies are understood as representing ‘news media’, the inclusion of this source can be seen as a limitation. News agencies are very important sources for all kind of media, especially in times of crisis; however, the people working at news agencies are also journalists. Thus, journalists at news outlets somehow just seem to have ‘outsourced’ their gatekeeping function to other journalists. This observation implies that journalists mainly rely on information sources that are part of the same journalistic domain in times of crisis. Whereas news agencies might work differently and have different functions, the strong role of news agencies might partly result in amplification of certain interpretations or convergence across media. News institutes seem to rely on the same information and mainly reproduce what others have reported on. Future research should explore how news agencies, in turn, perform their gatekeeping function and why journalists at other news outlets do not go after these sources themselves. Fourth, regarding the measurement of the different selection criteria, further research should indicate to what extent criteria are part of comparable or second-order factors that relate to journalists’ source selection as the measurement model showed high correlations among the factors. Finally, this study only provides empirical understanding of what happens in times of crisis, which is compared with the literature regarding routine source selection. In the future, the explicit difference between routine and crisis times should be examined using both survey and content analyses. These future studies should examine in more detail what actually changes in the day-to-day routine of a journalist when reporting about a crisis and how this changes the news coverage in the end. Despite these limitations, this study provides a solid starting point for understanding gatekeeping practices during a crisis and which criteria generally play a role in selecting sources in these hectic times.

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