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### Communication in times of crisis: The interplay between the organization, news media, and the public

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# CHAPTER 3

# THE PERSPECTIVE OF NEWS MEDIA

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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 the 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 the 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 to communicate. The findings imply that, during a crisis, journalists remain critical gatekeepers however they rely mainly on familiar sources.

## INTRODUCTION

News media, in their gatekeeper function, are expected to play a pivotal social role in providing relevant and accurate information during crisis situations (Kim & Lee, 2008). 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., Triandafyllidou 2009; Kleinnijenhuis et al., 2013). News media make information public and so add to collective knowledge of what is going on (Sorribes & 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, Verhoeven, Beentjes, & Vliegthart, 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 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 & 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 newsworthy crisis events. 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 and crisis situations. 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 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 & Reese, 1996; Shoemaker & 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 (Archetti, 2010; Gans, 1979; Hanitzsch, 2004). Therefore, during a crisis, sources are considered to have substantial framing power in news reporting and portraying of the crisis or shaping the context under which a journalist evaluates the issue (Holland, Sweet, Blood, & Fogarty, 2013). Since the way a crisis is covered can affect how the audience defines the crisis (Shoemaker & Vos 2009), the selection of news sources may have substantial consequences for the magnitude of the crisis and its effects on society (Cloudman & Hallahan, 2006).

Although journalism is a source-driven practice, the amount of research on sourcing is relatively limited, especially regarding crisis situations (Broersma, den Herder, & Schohaus, 2013; Dimitrova & Strömbäck, 2009; Manning, 2001). At this point, research has mainly explored how well news media perform during crises (Riegert & Olsson, 2007), addressed how organizations are framed during a crisis (e.g., Schultz, Kleinnijenhuis, Oegema, Utz, & van Atteveldt 2012), and revealed source-quotation frequency regarding specific crisis cases, using predominantly content analysis (Kim & Lee, 2008). Less attention has been given to the general

mechanism of the actual gatekeeping practices and how journalists select their sources in these hectic crisis situations.

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 during an organizational-crisis situation. To see which determinants are important for sources to make it into the news in times of crisis, a survey was administered amongst journalists. To understand how crisis situations disrupt journalists' selection practices, respondents were asked 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 in news coverage are influenced by multiple (external) factors at the level of the news issue (e.g., Bennett 1990; Manning 2001) and can thus vary among different situation (De Swert et al., 2013). It is especially important to understand how sources are represented and selected in crisis situations. Under the pressing and ambiguous circumstances of a crisis, 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 reportage.

### News agencies, organization, and general public

There are three types of sources that are commonly used in news reporting about crisis situations and organizational events (Kleinnijenhuis et al., 2013; Riegert & Olsson, 2007; Van der Meer et al., 2014). First, journalists often rely routinely on news agencies (Lewis, Williams, & Franklin, 2008). Second, communication by organizations (e.g., press releases, organizational spokesperson's statements, or public-relations reports) is acknowledged to play an increasing role in the construction of news content (Lewis et al., 2008; O'Neill & O'Connor, 2008). 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 (Anden-Papadopoulos & Pantti, 2013; Dimitrova & Strömbäck, 2009). Therefore, this study focuses on the following individual news sources during a crisis: (1) News agencies, (2) the organization that is undergoing the 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, such as governments, independent experts, political actors, or commentators. However, by emphasizing the role of these three sources, this paper provides an important starting point in understanding general gatekeeping patterns during a crisis.

*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 also the journalists' considerations differ on whether or not to include them in media coverage as news sources during a crisis. Under non-crisis circumstances, gate-keeping studies found that media organizations and their journalists are often far from equitable in the degree to which sources are allocated news access (Gans, 1979; White, 1950). 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 the perspectives and interpretative frameworks regarding a crisis situation that is presented through news media (Reich, 2011). Certain sources may indeed be significantly disadvantaged in the scramble to secure access to news media (Manning, 2001). Source inclination or bias towards certain sources decreases pluralistic information and distorts the representation of actors in the news about a crisis.

It can be expected that in times of crisis journalists depend more heavily on a specific type of source. Journalists might over use specific source types or fail to give voice to other important ones (Dimitrova & Strömbäck, 2009; Sorribes & Rovira, 2011). Certain sources can offer more assurance for journalists during the hectic times of a crisis situation. Journalists might look for information that is provided in a convenient form by sources that have proved to be reliable in the past. Therefore, journalists may rely most heavily on news agencies in times of crisis, as this familiar source generally provides accurate up-to-date information in a convenient and accessible form (Lewis et al., 2008). Quite the reverse, the specific organization that is experiencing the crisis is likely to be a less commonly used news source. Organizational press releases and spokespersons are often perceived as being less trustworthy (Park & Cameron, 2014). Journalists might be hesitant to rely on information from the organization without validation, something they have little time for in the initial phase of a crisis situation. 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 or skeptical perspective towards the crisis or offer basic information in terms of citizen journalism (e.g., eyewitness). The first research question is:

**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 & Vos, 2009). These routine forces

might partly hold in times of crisis. Furthermore, some aspects of the selection mechanisms that usually play a role might be amplified in times of crises. For example, the accuracy of information from sources might become more critical because the news content provided by journalists can have a large impact on the evolution of the crisis and the response of the audience.

In order to examine crisis journalism and see if non-crisis mechanisms remain partly applicable, this study will investigate whether the most important selection determinants, extrapolated from literature regarding normal circumstances, can be used to predict sources' likelihood of being included in the news during a crisis. Below the following selection criteria are addressed: (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 communication efforts and message acceptance, but perhaps nowhere is it such an important concern as in risk and crisis communication (McComas & Trumbo, 2001). Given the professional journalistic norm of objectivity, journalists need to confirm the credibility of sources used in their coverage. Thus, source credibility is a decisive component for journalists in assessing whether to include a source in the news (e.g., Powers & Fico, 1994; Reich, 2011; Seo & Lim, 2010). Accordingly, journalists tend to stick with sources they perceive as more credible (Reich, 2011). Especially during a crisis when time is pressing, the proven credibility of a source might be an important heuristic for journalists' gatekeeping practice.

The second determinant related to journalists' judgment is being knowledgeable. Besides credibility, journalists tend to select sources that they identify as knowledgeable and well-resourced (Gans, 1979; Messner & Distaso, 2008). While being knowledgeable and credible are often interrelated, being knowledgeable does not necessarily factor into credibility (McComas & Trumbo, 2001). In some cases, sources that are perceived as most knowledgeable may also be considered least trustworthy. For example, certain organizational spokespersons might hold the most relevant and detailed information but might also have a hidden agenda, limiting their credibility. Therefore, a source that is knowledgeable is considered a qualified and experienced source with a high level of information regarding the issue – i.e., crisis situation (Ohanian, 1990). When correct knowledge is displayed, journalists might perceive a source to be an expert source, a source type they normally heavily rely on (Albaek, 2011; Dimitrova & Strömbäck, 2009; Kalyango & Eckler, 2010; Kim & Lee, 2008; Manning, 2001). So when represented in the role as expert, sources are more likely to obtain news access. Especially during a crisis, these sources might be rendered more newsworthy as they are considered to be in positions of access to information about the complex situation at play (Powers & Fico, 1994). As information is often scarce in times of crisis, the extent to which a source is considered knowledgeable can substantially increase the probability that the source gets included in the news. The first hypothesis therefore reads as follows:

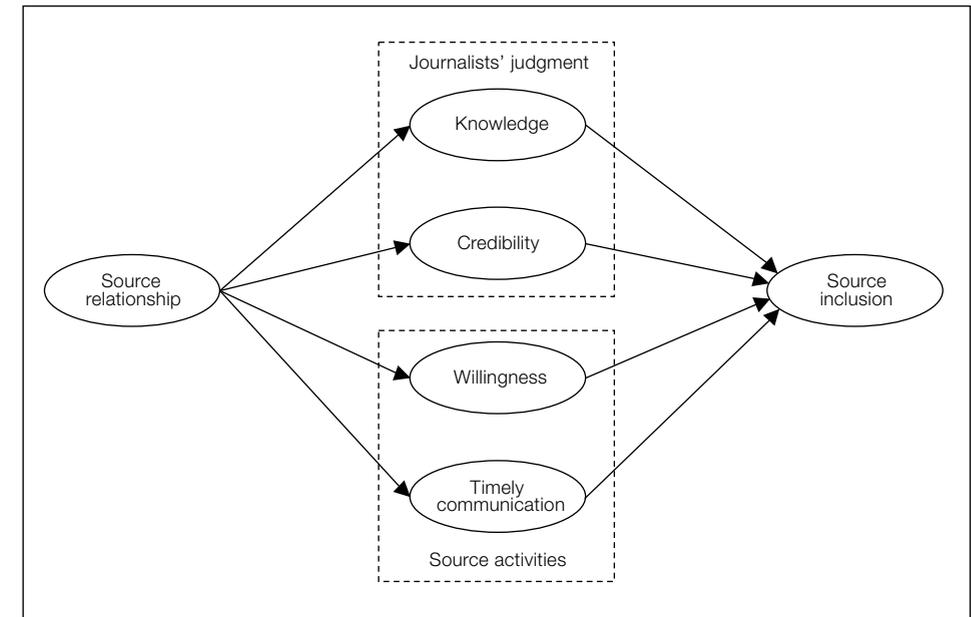
**H1:** *Journalists' judgments of a news source in terms of (a) credibility and (b) being knowledgeable have a positive effect on the likelihood of being included as a source in the news during a crisis.*

#### Sources' activities

Journalists' own orientations are considered a major determinant in choice of sources, but sources' communicative activities during a crisis can also be of substantial influence (Powers & Fico, 1994). First, a fundamental criterion that constitutes a news source is their willingness to communicate and serve as a source (Powers & Fico, 1994). The willingness to communicate and serve as a source is fundamental to obtain a voice in the news. Willingness of a source refers to a source's availability, accessibility, and willingness to share information (Seo & Lim, 2010). Previous studies report that the selection of sources in news media indeed depends on availability and willingness to talk (Broersma et al., 2013; Gans, 1979; Seo & Lim, 2010). Therefore, potential sources will have a greater likelihood of being represented in the news if they take professional journalistic practices into account by being easy to reach and willing to comment (Allgaier, 2011). Being accessible can even lead to becoming a regular or dominant news source (Seo & Lim, 2010). Therefore it is assumed that, during an organizational crisis, the limited potential sources might benefit from offering their information to news media in order to increase their likelihood of being included in the news.

In addition to willingness, timeliness is an important criterion for the selection of sources as it is an essential ingredient of novelty and relevance, both of which are highly prized in news. Crisis situations are fundamentally related to the idea of time (e.g., Fleischer 2013). The audience, including victims, will demand quick and accurate crisis information, resulting in high levels of time pressure for journalists (Avery, 2010). Additionally, journalists are not only trained to gather information, but also to compete. Daily deadlines must be met in order to report the information first. In order to rapidly deliver crisis information, journalists will look for those sources that can provide information in a timely manner. Therefore, for sources to make it into the news, it is important to be available in the first 24 hours of a crisis, quickly respond to journalists, and provide extensive information as soon as possible (Sailot, Steinfatt, & Saliven, 1998). So, it can be expected that during a crisis, when time and resources are at a premium, journalists will 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; O'Neill & O'Connor, 2008). Thus, 'good sources' are not only credible and knowledgeable, but they should also be willing to communicate in a timely fashion. Therefore, the second hypothesis is:

**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.*



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

#### Source-journalist relationship

Source selection partly depends on the nature of the exchange relationships that exist between source and journalist (Manning, 2012). Journalists rely more frequently on contacts and sources that they have built up over their time as news reporters (e.g., Lewis et al. 2008; Manning, 2012). Therefore, the relationship journalists have with a source is considered to play a substantial role in the selection of sources. In the context of a crisis situation, it is found that the development of a stronger interpersonal relationship has its benefits for both the journalist and source. When the relationship improves, the quality and timeliness of information provided to the public improves (Veil, 2012), implying that a good relationship will improve a source's timely communication and willingness to talk. Additionally, journalists are found to acculturate experienced sources that they know and deal with frequently in their circle of 'expert' contacts and trusted sources (Macnamara, 2014). Thus, sources that journalists have good relationships with might automatically be seen as experts and are perceived as more credible and knowledgeable. Hence, it can be argued that the source-journalist relationship has an indirect effect on source inclusion in times of 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 during a crisis 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. In other words, the selection criteria (a) credibility, (b) knowledge, (c) willingness, and (d) timely communication 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 & Bakker, 2009), timely communication might play a dominant role in the determination of whether the public gets a voice in the news. In the case of the organization, other criteria may be more important. The organization might be mainly selected 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 get a voice in the media (Shin & Cameron, 2005). The second research question is:

**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. 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). Additional prospective respondents were recruited through the professional network of the researchers. As a selection criterion, only journalists who had, at least once, reported about a crisis situation were included for analyses.

### **Respondents**

In the end, a total of 214 questionnaires were fully completed by journalists who had some experience in reporting about a crisis situation. The average age of the respondents was 48.05 ( $SD = 11.83$ ), 28% of the respondents were female, and on average they had 20.74 ( $SD = 11.62$ ) years of experience. Most had an education level of a professional bachelor degree (41.1%) or master's degree (27.2%). This sample is mainly in line with the general social demographic of Dutch journalists, predominantly male, in their forties, and highly educated (Deuze, 2002). Based on the sample of journalists with a thorough level of experience and education this

study is considered to lay a solid ground for understanding the nature of source selection during organizational crises.

### **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. See Appendix 1 for an overview of all included items. 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 & Smit, 2006). Respondents were asked about their relationship with the different sources and the contact frequency with sources.

*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 as: "I think information from this sources is accurate during a crisis" (Cassidy, 2007). Second, in order to measure the judgment of how knowledgeable the news sources are three items were included as: "I think the news source is well informed during a crisis" (Ohanian, 1990).

*Source activities.* The respondents were asked to indicate how news sources act during an organizational crisis based on two concepts; willingness and timely communication. First, the willingness of news sources to communicate was assessed with a three-items scale, e.g., "I think this news source is willing to provide information during a crisis" (Seo & Lim, 2010). Second, respondents were asked about the timeliness of communication of news sources with three items such as: "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, e.g., "I think the information of this news source is relevant for news consumers during a crisis" (Lee & Chyi, 2013).

### **Analysis**

In order to test the hypotheses regarding how the different source selection criteria directly and indirectly 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) in AMOS 20 using maximum likelihood estimation. SEM is a confirmatory approach to data analysis appropriate for the analysis of fully latent structural models with multiple mediations (Kline, 2011).

A fully latent moderated-mediation structural-regression model was tested with as dependent variable news inclusion of the source. The latent mediating variables were source credibility, source knowledge, timely communication, and willingness and the latent independent variable was source-journalist relationship. In order to compare the full model amongst the three sources incorporated in the survey (i.e., news agency, organization, and the public) a multi-group moderation

was conducted. In other words, to explore the effect differences in the path model among the sources, this study treated source type as a moderator in the model (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.

SEM provides fit indices to measure how well the model fits or explains the data. In order to evaluate model fit, this study relies on both incremental and absolute fit indices (e.g., Kline, 2011; Schweizer, 2010): Tucker-Lewis Index (TLI)  $\geq .95$ , the Comparative Fit Index (CFI)  $> .90$ , the standardized version of the root mean squared residual (SRMR)  $\leq .10$ , and the root mean square of approximation (RMSEA)  $\leq .05$ . The  $\chi^2$  statistic is reported primarily as a relative measure to assess differences with alternative or nested models based on the  $\Delta\chi^2$  test. Appendix 2 describes the confirmatory-factor analysis for testing measurement reliability.

**RESULTS**

The discussion of the results starts with answering RQ1. Afterwards, the findings for the structural-regression model are discussed in the order of the hypotheses and conclude with answering RQ2 by comparing the effects among the different sources. The discussion of the differences among the three sources observed will be treated under RQ2.

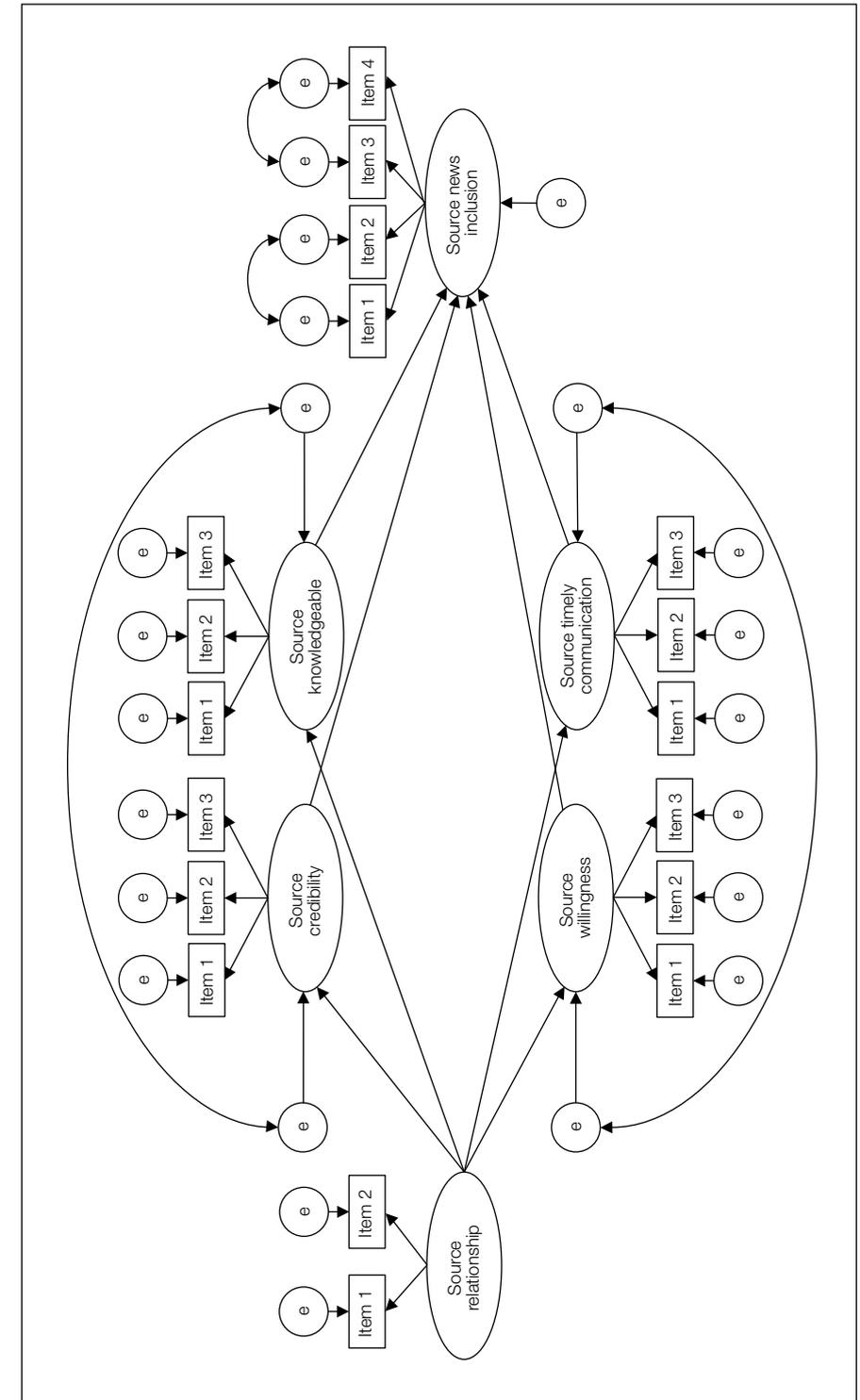
*RQ1: Differences between sources*

To answer RQ1, the differences between news agencies, organization, and public as news sources are explored. MANOVA analyses with Scheffe post-hoc test were run with the stacked data to explore the mean differences between the sources. Table 1 presents the results. The table shows that the journalists in the sample

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

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

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



**Figure 2.** *The general fully latent multi-group moderation mediation structural regression model (multi-group-moderation: this model is tested for the three groups news agencies, organization, and the public).*

**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                      |
|------------------------|-------------------------------|--------------------|-----------------------------|-----------------------------|-----------------------------|
|                        |                               |                    | <i>B</i> *(SE)              | <i>B</i> *(SE)              | <i>B</i> *(SE)              |
| 1a                     | Credibility                   | Source inclusion   | .28(.10)**                  | .02(.10)                    | .47(.11)***                 |
| 1b                     | Knowledge                     | Source inclusion   | .48(.12)***                 | .54(.12)***                 | .07(.10)                    |
| 2a                     | Willingness                   | Source inclusion   | -.23(.10)*                  | .20(.10)*                   | .06(.08)                    |
| 2b                     | Timeliness                    | Source inclusion   | .09(.10)                    | .13(.09) †                  | .27(.08)***                 |
| 3a                     | Source relationship           | Credibility        | .75(.23)***                 | .77(.17)***                 | .75(.10)***                 |
| 3b                     | Source relationship           | Knowledge          | .69(.27)***                 | .73(.17)***                 | .67(.08)***                 |
| 3c                     | Source relationship           | Willingness        | .64(.25)***                 | .68(.16)***                 | .61(.10)***                 |
| 3d                     | Source relationship           | Timeliness         | .66(.24)***                 | .64(.16)***                 | .58(.10)***                 |
| 3a                     | Relationship<br>→ Credibility | Source inclusion   | .26(.10)**                  | .10(.10)                    | .41(.10)***                 |
| 3b                     | Relationship<br>→ Knowledge   | Source inclusion   | .36(.21)***                 | .48(.10)***                 | .09(.08)                    |
| 3c                     | Relationship<br>→ Willingness | Source inclusion   | .24(.12)                    | .21(.08)**                  | .10(.07)                    |
| 3d                     | Relationship<br>→ timeliness  | Source inclusion   | .08(.06)                    | .12(.08) †                  | .19(.08)**                  |
| Variance accounted for |                               | Source inclusion   | <i>R</i> <sup>2</sup> = .38 | <i>R</i> <sup>2</sup> = .71 | <i>R</i> <sup>2</sup> = .52 |

Note. Cells contain standardized (*B*\*) and coefficients with standard errors (*SE*).  
†p-value < .10; \*p-value < .05; \*\*p-value < .01, \*\*\*p-value < .001.

indicated that they included 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.

### Structural regression model

For the purpose of testing the theory-based assumptions, parameters in accordance with the hypothesized expectations were added to the measurement model. Before testing the effects related to the hypotheses, it was tested to what extent the structural model fitted the data. Structural modeling results indicate that the model fits the data well for all three groups  $\chi^2(369) = 743.04$ ;  $\Delta\chi^2$  with CFA model (15) = 23.96,  $p = .07$ ; CFI = .96; TLI = .95; SRMR = .06 and RMSEA = .040 (CI: .036, .044). The final overall structural model is visualized in Figure 2. Table 2 shows the estimates of the effects yielded by the structural equation model based on 95%

bias-corrected 10,000 bootstraps interval. The table provides both the direct and indirect effects for the three groups: News agencies, organization, and the public. Additionally, the explained variance for the dependent variable is presented in the table. In sum, the retained model indicated acceptable model fit, allowing interpretation of the pathway estimates for testing the hypotheses.

### H1-2: Direct effects on source inclusion

Hypothesis 1 predicted that, in times of crisis, journalists' judgment of sources significantly affects the probability that the source gets included in the news. First, as shown in Table 2, credibility (H1a) was found to positively affect inclusion of the sources organization and public, but not of the news agency. Second, the extent to which sources are evaluated as knowledgeable (H1b) had a positive effect on inclusion of organization and news agency, but not of the public. These findings thus partly support H1a and H1b.

Hypothesis 2 expected also 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 regarding the crisis (H2a) had a positive and significant effect in the case of the news agency and a negative effect in the case of the organization. No effect of willingness was observed for the source public. Second, the timelier the sources communicate (H2b), the more likely they will be included in the news. However, no effect of timely communication on news inclusion was found for the organization. Hence, H2a and H2b were partially supported.

### H3: role of source-journalist relationship

Hypothesis 3 states that source-journalist relationship determines which sources will be included in times of crisis. First of all, regression analyses showed that the relationship had a significant effect on likelihood to be included in the news for news agencies ( $B^* = .58$ ,  $p < .001$ ), the organization ( $B^* = .54$ ,  $p < .001$ ), and the public ( $B^* = .62$ ,  $p < .001$ ). This finding indicates that a better relationship with journalists will increase sources' likelihood of being included in the news. Furthermore, it is argued that a good relationship will improve journalists' judgment and sources activities towards providing information. Accordingly, for all three sources, Table 2 shows 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, the relationship was also found to significantly affect news inclusion through knowledge (H3b), only for the organization and news agency. Third, the relationship was also found to significantly affect news inclusion through willingness

(H3c), however only for news agencies. Finally, the relationship between source and journalist was found to significantly affect news inclusion through timely communication (H3b), only for the news agency and public.

*RQ2: Individual differences among the selection of sources*

When addressing H1 to H3, already some differences among the groups were revealed regarding the effect on source inclusion. In order to see how the three sources differ at the path level, pair-wise parameter comparison tests were applied. 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. The results are presented in Table 3.

First, the pathway of credibility to news inclusion is significantly highest for the public ( $B^* = .54, p < .001$ ), followed by organization ( $B^* = .29, p < .05$ ), indicating that variance in the level of credibility is less important for journalists in determining whether news agencies ( $B^* = .03, n.s.$ ) 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 ( $B^* = .60, p < .001$ ) and organization ( $B^* = .48, p < .001$ ) versus public ( $B^* = .08, n.s.$ ). Third, in the case of willingness, a notable negative effect is found for organizations ( $B^* = -.23, p < .05$ )

**Table 3.** *Pair-wise 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 |
|----------------------|--------------------|--------|-------------|--------|-------------|---------------|----------------|
|                      |                    | $B^*$  | $B^*$       | $B^*$  | 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 relationship  | Knowledge          | .75*** | .77***      | .75*** | -1.47       | -3.6***       | -2.95***       |
| Source relationship  | Credibility        | .69*** | .73***      | .67*** | -.65        | -1.94*        | -1.56          |
| Source relationship  | Willingness        | .64*** | .68***      | .61*** | -.87        | -2.75***      | -2.49**        |
| Source relationship  | Timeliness         | .66*** | .64***      | .58*** | -1.06       | -2.90***      | -2.35**        |

Note. \*p-value < .10; \*\*p-value < .05; \*\*\*p-value < .01

on the likelihood of being included in the news. This effect is significantly different for the organization compared to the news agencies ( $B^* = .22, p < .05$ ) and public ( $B^* = .06, n.s.$ ). 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 PR reasons rather than providing relevant and unbiased information (Dimitrova & 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 ( $B^* = .39, p < .001$ ) and marginally significant for news agencies ( $B^* = .15, p < .10$ ). 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 sum, the findings regarding RQ2 suggest that the most important factors for news inclusion for the organization are the extent to which it is evaluated as knowledgeable and credible and if it is not too willing or too pushy to share its information. For news agencies, their inclusion is mainly dependent on their knowledge of the situation but also on their willingness to provide information. In the case of the general public, especially their credibility can determine their inclusion as a source. Also, the findings imply an important role of timely communication for the public to be included in the news. 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 & DISCUSSION

Gatekeeping theory and practices still hold during a crisis, however, a more nuanced understanding is needed for crisis times. Just as in non-crisis times, the findings indicate that journalists remain critical gatekeepers during a crisis. 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 that they considered applicable for that specific source. However, the disruption of the crisis is found to result in journalists' predispositions towards 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 like the organization and the public. This journalistic inclination towards certain routine sources might result in a bias in terms of the framing of the event and an imbalanced representation of sources (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 lastly the orga-

nization (RQ1). Journalists do not adhere the story of the organization in crisis or the (online) public reporting about the crisis. Instead, they have a strong predisposition towards news agencies as a news source during a crisis. 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 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 structural equation modeling, 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 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 & Trumbo, 2001; Manning, 2012; Powers & 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 a crisis.

Journalists reported to use 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. 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 & Cameron, 2014), an increase in their credibility and 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 & Strömbäck, 2009; Holland et al., 2013). Thus, for the organization, it is highly important to be evaluated as a quality source in order to obtain news access during a crisis, while their activities either make no difference (timeliness) or have negative consequences (willingness). 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 for 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 crisis. In sum, journalists critically 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. There are however several other event-specific sources (e.g., experts or political actors) that could be used by journalists during a crisis. 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). Third, 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, in the future the explicit difference between routine and crisis times should be examined using both survey and content analyses. Despite these limitations, this study provides a solid starting point for understanding gatekeeping practices during a crisis and which determinants generally play a role in selecting sources in these hectic times.

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## APPENDIX 1: ITEMS INCLUDED IN SURVEY

| Concept*   | Items  |
|--|--|
| Credibility  | <ol style="list-style-type: none"> <li>1. I think information of this source is trustworthy during a crisis.</li> <li>2. I think information of this source is fair during a crisis.</li> <li>3. I think information of this source is accurate during a crisis.</li> </ol>  |
| Knowledge  | <ol style="list-style-type: none"> <li>1. I think this source is qualified during a crisis.</li> <li>2. I think this source is well informed during a crisis.</li> <li>3. I think this source is knowledgeable during a crisis.</li> </ol>   |
| Willingness  | <ol style="list-style-type: none"> <li>1. I think this source is available during a crisis.</li> <li>2. I think this source is accessible during a crisis.</li> <li>3. I think this source is willing to provide information during a crisis.</li> </ol>   |
| Timely communication   | <ol style="list-style-type: none"> <li>1. I think this source is available in the first 24 hours during a crisis.</li> <li>2. I think this news source responds quickly during a crisis.</li> <li>3. I think this news source provides extensive information as soon as possible during a crisis.</li> </ol>   |
| Relationship   | <ol style="list-style-type: none"> <li>1. I have a good relationship with this source during a crisis.</li> <li>2. I have frequent contact with this source during a crisis.</li> </ol>  |
| News inclusion   | <ol style="list-style-type: none"> <li>1. I think the information of this news source is interesting for news consumers during a crisis.</li> <li>2. I think the information of this news source is relevant for news consumers during a crisis.</li> <li>3. I think the information of this news source is useful for news consumers during a crisis.</li> <li>4. I think this source is a source I would include in the news during a crisis.</li> </ol> |
| *Prior to each item it was stated in the questionnaire that the following items relate to the specific concept they are part of. |  |

## APPENDIX 2: CONFIRMATORY FACTOR ANALYSIS

Table 2. Factor loadings on the latent constructs.

|                        | Organization |              |                                  | News agencies |              |                                  | Public |              |                                  |
|------------------------|--------------|--------------|----------------------------------|---------------|--------------|----------------------------------|--------|--------------|----------------------------------|
|                        | $R^2$        | St. estimate | Unst. estimate (SE) <sup>a</sup> | $R^2$         | St. estimate | Unst. estimate (SE) <sup>a</sup> | $R^2$  | St. estimate | Unst. estimate (SE) <sup>a</sup> |
| <b>Source relation</b> |              |              |                                  |               |              |                                  |        |              |                                  |
| Item 1                 | .60          | .78          | 1.42 (.21)                       | .81           | .90          | 1.22 (.15)                       | .54    | .74          | .81 (.08)                        |
| Item 2                 | .25          | .50          | 1.00 <sup>b</sup>                | .35           | .60          | 1.00 <sup>b</sup>                | .59    | .77          | 1.00 <sup>b</sup>                |
| <b>Credibility</b>     |              |              |                                  |               |              |                                  |        |              |                                  |
| Item 1                 | .77          | .88          | 1.00 <sup>b</sup>                | .83           | .91          | 1.00 <sup>b</sup>                | .81    | .90          | 1.00 <sup>b</sup>                |
| Item 2                 | .77          | .88          | 1.01 (.06)                       | .71           | .84          | .92 (.05)                        | .46    | .68          | .84 (.08)                        |
| Item 3                 | .68          | .82          | .95 (.06)                        | .75           | .87          | .91 (.05)                        | .56    | .75          | .79 (.06)                        |
| <b>Knowledge</b>       |              |              |                                  |               |              |                                  |        |              |                                  |
| Item 1                 | .78          | .88          | 1.00 <sup>b</sup>                | .85           | .92          | 1.00 <sup>b</sup>                | .82    | .99          | 1.00 <sup>b</sup>                |
| Item 2                 | .76          | .87          | 1.01 (.06)                       | .78           | .88          | .95 (.05)                        | .61    | .78          | .96 (.05)                        |
| Item 3                 | .54          | .74          | .84 (.07)                        | .79           | .89          | 1.03 (.05)                       | .43    | .66          | 1.04 (.05)                       |
| <b>Willingness</b>     |              |              |                                  |               |              |                                  |        |              |                                  |
| Item 1                 | .73          | .86          | 1.04 (.07)                       | .85           | .93          | .93 (.04)                        | .68    | .82          | .94 (.07)                        |
| Item 2                 | .71          | .85          | 1.00 <sup>b</sup>                | .88           | .94          | 1.00 <sup>b</sup>                | .81    | .90          | 1.00 <sup>b</sup>                |
| Item 3                 | .40          | .63          | .74 (.08)                        | .66           | .81          | .88 (.05)                        | .67    | .74          | .89 (.06)                        |
| <b>Timeliness</b>      |              |              |                                  |               |              |                                  |        |              |                                  |
| Item 1                 | .80          | .90          | 1.00 <sup>b</sup>                | .77           | .88          | 1.00 <sup>b</sup>                | .77    | .88          | 1.00 <sup>b</sup>                |
| Item 2                 | .74          | .86          | 1.03 (.06)                       | .84           | .92          | 1.03 (.05)                       | .81    | .90          | 1.11 (.06)                       |
| Item 3                 | .77          | .87          | 1.09 (.06)                       | .81           | .90          | 1.03 (.06)                       | .76    | .87          | 1.10 (.06)                       |
| <b>News inclusion</b>  |              |              |                                  |               |              |                                  |        |              |                                  |
| Item 1                 | .70          | .84          | 1.03 (.10)                       | .84           | .92          | .96 (.04)                        | .67    | .82          | .92 (.08)                        |
| Item 2                 | .73          | .86          | 1.02 (.10)                       | .89           | .94          | .91 (.04)                        | .68    | .82          | .98 (.08)                        |
| Item 3                 | .75          | .86          | 1.03 (.08)                       | .88           | .94          | .91 (.04)                        | .73    | .85          | .94 (.07)                        |
| Item 4                 | .61          | .78          | 1.00 <sup>b</sup>                | .86           | .93          | 1.00 <sup>b</sup>                | .72    | .82          | 1.00 <sup>b</sup>                |

Note. Cells contain unstandardized and standardized factor loading estimates standard errors (SE), and explained variance ( $R^2$ ).

<sup>a</sup> All factor loadings are significant at  $p < .001$ .

<sup>b</sup> Unit loading indicator constrained to 1.

As the model is a full-latent structural-regression model, first a confirmatory-factor analysis (CFA) measurement models needed to be specified to assess the reliability of the measurement (see whether the items measure the latent factors they were conduct for) and test for discriminant and convergent validity with the data. The indicators (questionnaire items) as described formed the six latent factors within the model. The obtained measurement model, using unit-loading indicators to scale latent constructs, suggested satisfactory model fit among the three groups:  $\chi^2(354) = 719.08$ ; CFI = .97; TLI = .96; SRMR = .05 and RMSEA = .037 (CI: .032, .041). Two unanalyzed associated between error terms within the news inclusion construct were added to further improve model fit. The data showed no indications of poor discriminant validity as all cross-factor correlations were beneath the threshold value of .80 (Kline, 2011). However, high correlations between credibility and knowledgeable as well as between timely communication and willingness might be an indication of discriminant validity. This study allows for the high correlations as the variables are part of the same type of determinants – i.e., journalists' judgment and sources' activities. Additionally, in general no problems with convergent validity were observed as all factor loadings on the intended latent constructs were significant and sizable amongst the groups (see Table 2). Notably, the first item of the concept source-journalists relationship showed marginal factor loadings. However, this item was retained because of conceptual significance. Based on measurement invariance test most item regression weights were constrained among the groups.