From #InsideAmazon to #WeAreVolkswagen: Employee Social-Mediated Crisis Communication as Reputational Asset or Threat?

Student Name	Marcus Opitz
Student Number	432003
Supervisor	Dr. Vidhi Chaudhri

Master Media Studies – Media & Business
Erasmus School of History, Culture and Communication
Erasmus University Rotterdam

Master's Thesis
June 2016

FROM #INSIDEAMAZON TO #WEAREVOLKSWAGEN:
EMPLOYEE SOCIAL-MEDIATED CRISIS COMMUNICATION
AS REPUTATIONAL ASSET OR THREAT?

ABSTRACT

Defending their employer on LinkedIn, attacking their organisation on Twitter, publishing videos in solidarity on YouTube: A ubiquitous social-mediated environment allows employees of crisis-stricken organisations to reach out to a mass audience potentially in the millions with only a few keystrokes. But is such employee social-mediated crisis communication (ESMCC) an opportunity or a threat to their organisations? By developing the perspective of the internal employees in contrast to external stakeholders such as consumers, the research investigates the specific conditions for ESMCC to become either threat or opportunity to assets such as organisational reputation. To generate knowledge in line with scholars' calls for quantitative, "evidence-based" crisis communication, a survey with experimental conditions was conducted among 594 participants constituting the publics of an organisation. The findings show that in comparison to consumers, employees attacking their organisation cause disproportionally more damage to organisational assets such as reputation than those defending it. In the latter scenario, employees are not more influential than consumers. It would still be a premature conclusion that ESMCC is only a threat – to this end, the study provides implications for both scholars and practitioners alike that outline positive and negative aspects.

Keywords: crisis communication, employees, reputation, secondary crisis actions, social media

TABLE OF CONTENTS

FIGURES AND TABLES

1 INTRODUCTION

> This article has gotten a lot of attention ... I wrote the article because it was the right thing to do. I would have written it regardless of whether PR would have approved or not, because the NYT article is so blatantly incorrect … Those in the technology community that know me, and have known me for many years, know of what I stand for, and where my integrity bar lies. (Ciubotariu, 2015, para. 4)

When a New York Times (NYT) article, titled “Inside Amazon: Wrestling Big Ideas in a Bruising Workplace” (Kantor & Streitfeld, 2015), heavily criticised Internet retailer Amazon for its workplace culture, company employee Nick Ciubotariu launched an unsanctioned counteroffensive. He penned a lengthy, aggressive response on social network LinkedIn. Not only did this action precede any official company communication, it was subsequently referenced in the reaction by Amazon’s CEO and received widespread attention from both media and public (Titcomb, 2015). To date, the response has a total of 1.2 million direct views – half of these were in less than 48 hours – 900 direct comments and many times over the amount in indirect reactions (Ciubotariu, 2015; LeBret, 2015).

At a first glance, these facts support what scholars have been increasingly arguing for years: Employees are essential in creating and upholding organisational reputation, potentially safeguarding Amazon’s in the case at hand (Dreher, 2014; Fombrun, Gardberg, & Sever, 2000; Helm, 2011). From a broader perspective, this case goes further – it is illustrative of a paradigm change: With the advent of social media, organisational crisis communication has been transformed (Coombs & Holladay, 2012; Takahashi, Tandoc, & Carmichael, 2015; Veil, Buehner, & Palenchar, 2011). In general, but specifically in crises situations, all publics of an organisation, external and internal, increasingly utilise social media (Jin, Liu, & Austin, 2014; Kietzmann, Hermkens, McCarthy, & Silvestre, 2011), and, through the creation and exchange of messages, become part of the crisis communication response themselves (Brummette & Fussell Sisco, 2015; Veil et al., 2011).

This development has made crisis communication processes exponentially more visible (Aula, 2010; Coombs & Holladay, 2012) and dissolves differences in what has traditionally been deemed external and internal in organisations (Frandsen & Johansen, 2011). Particularly employees gain visibility and influence on the formation of corporate perception (Miles & Mangold, 2014). However, while scholars have recently begun to investigate non-crisis social media behaviours, communication and outcomes on their employers (c.f. Dreher, 2014; Helm, 2011; Miles & Mangold, 2014; Neill & Moody, 2015), their perspective is not yet researched in crises[1].

[1] There are two separate approaches that somewhat touch on this area, which will be discussed later: First, a number of articles have analysed employee (social-mediated) communication as the cause of crises (e.g. Guidry et al., 2015; Miles & Mangold, 2014; Veil, Sellnow, & Petrun, 2012). Second, one notable exception is a study published late last year that explored source credibility in crises with the example of employees and organisations (van Zoonen & van der Meer, 2015).

The study addresses this gap, the investigation of which is relevant to both academics and practitioners alike – it is a fact that the case of Amazon is not a unique one. Other recent examples can be traced around the globe. For instance, after their company was embroiled in an emission cheating scandal that severely threatened its intangible assets (Boches, 2015), employees and unions of embattled German car manufacturer Volkswagen publically began to reaffirm their questioned organisational identity on video platform YouTube as well as on microblogging platform Twitter using texts and videos tagged #WirsindVW [We are Volkswagen] (IG Metall Wolfsburg, 2015). In a comparable scenario, Indian employees working for food and beverage producer Nestlé's Maggi brand defended their employer on instant messenger WhatsApp after products of the brand were banned in India. Commentators called it a "PR exercise ... started by employees of Nestle" (Divya, 2015, para. 3), indicating the significance media and public attributed to these actions.

Contrary to such opportunities for organisational crisis management, scholars also note the challenges and risks of social media enabling "employees to deliver messages to hundreds or even thousands of people with a few keystrokes" (Miles & Mangold, 2014, p. 401). Even in the case of Amazon, in which the positive message dominated perception and media coverage, many current and former employees wrote negatively about their company, with some using #InsideAmazon on Twitter (Valinsky, 2015). The examples given also show the diversity of social-mediated communication: While the "epic, fiery" (Nisen, 2015, para. 1) and/or "absurdly long" (Valinsky, 2015, para. 5) response by Nick Ciubotariu on LinkedIn measured over 6000 words, many messages on Twitter were less than the 140 characters limit of the platform. Employees of Volkswagen and Maggi extended communication to such forms as videos on YouTube and instant messages on WhatsApp.

This broad spectrum of messages and media is not only hard to control, it is also impossible to stop, even when it explicitly breaks organisational policy. In more than one of the above cases, the employees were aware of the fact that their activities were breaking protocol, but nevertheless felt the need to intervene in the reputation management of, as one of the Maggi employees phrased it, the "product that made our identity" (Divya, 2015, para. 5). Authors have early on noted that such decentralisation of crisis decision making can be severely threatening to a company (Argenti, 2002). As employees due to the user-centric, transparent nature of a social-mediated environment inevitably become crisis communicators (Dreher, 2014), it is of interest to both scholars and managers alike to understand this employee social-mediated crisis communication in order to develop strategies to address and incorporate them into crisis communication strategies and processes. To this end, the study explores the following overarching question:

RQ. Under what conditions can employee social-mediated crisis communication become a reputational asset or threat?

In this study, employee social-mediated crisis communication (ESMCC) is conceptualised as

> Social-mediated crisis communication via employees' own social media channels or profiles – organisationally sanctioned or unsanctioned – that is aimed towards external and/or internal stakeholders and (at least formally) independent from the organisations' management and professional crisis responders.

As research in the field is scarce to none existing (Dreher, 2014), the definition has been originally created in this context, drawing from established research on employee voice (Dundon, Wilkinson, Marchington, & Ackers, 2004; Hirschman, 1994; Miles & Mangold, 2014). As is visible in the description, an essential feature of both employee voice and ESMCC is formal independence from the employer voice. Even if the employees of organisations such as Amazon, Volkswagen and Maggi defended their employer and possibly only followed the organisation's line of communication, they are seen as individuals, not official communicators (van Zoonen & van der Meer, 2015). This raises an important question: How are employees and their ESMCC perceived by an organisation's publics? Scholars seem to agree in the assumption that they are authentic, knowledgeable, credible internal stakeholders (Dreher, 2014; Miles & Mangold, 2014), but this has virtually not been tested.

If employees are such highly considered stakeholders, this begs the question: Does ESMCC influence communication about as well as behaviour towards an organisation, and if so, how? In other words, is it really conceivable for employees to defend their organisation's intangible, perception-based assets such as reputation, and is it in turn possible for them to damage them? Employees themselves seem to think so, as they engage voluntarily and eagerly in such behaviour about their employer online (Landers & Callan, 2014; van Zoonen, van der Meer, & Verhoeven, 2014).

ESMCC is further made more complex because it is spread across the employees' own, independent – sanctioned or unsanctioned – channels and profiles, making it "inevitable and impossible to eliminate" (Dreher, 2014, p. 346). While sanctioned channels might include private, i.e. internal media, many employees also utilise public platforms (Rooksby et al., 2009). The cases discussed so far included public social media such as LinkedIn, Twitter, YouTube and WhatsApp. Do such choices of medium and message affect the outcomes of ESMCC? Particularly the use of public networks blurs the line between internal and external contacts and is controversial in nature, as it is seen as either improving productivity and relations or potentially harmful and dangerous. This makes those networks particularly interesting in the research context (Moqbel, Nevo, & Kock, 2013; Skeels & Grudin, 2009). In accordance with the research objective the following three research questions are thus set:

RQ1. How is ESMCC perceived by organisations' publics?

RQ2. How does ESMCC influence behaviour towards and communication about organisations?

RQ3. How do specifics of ESMCC (such as message and medium) moderate its impact?

So far, ESMCC has received little attention in scholarship. Therefore, the study will examine the intersections of (1) *organisational social-mediated crisis communication*, i.e. research that investigates the impact of social media on crisis management and communication; and (2) *employee social-mediated communication*, i.e. scholarship that aims to identify employees' usage of social media and its wider outcomes, both on a personal and public, broader level (c.f. Coombs & Holladay, 2012; Dreher, 2014; El Ouirdi, El Ouirdi, Segers, & Henderickx, 2015; Miles & Mangold, 2014; Ott & Theunissen, 2015; van Zoonen, van der Meer, et al., 2014; van Zoonen, Verhoeven, & Vliegenthart, 2016). By investigating public perception as well as organisation-reputational outcomes of ESMCC, the study adds to both areas outlined above and addresses a previously under-investigated perspective. For instance, only less than 10% of research on employees and social media is conducted from a communication (outcomes) point of view, the majority addresses such themes as knowledge management, legal aspects and policies, as well as implications for human resources (El Ouirdi et al., 2015).

At a broader theoretical level, this research addresses scholars' calls to increase knowledge in crisis communication by focusing on the previously often overlooked employees on the inside of crisis-stricken organisations (Johansen, Aggerholm, & Frandsen, 2012). At the same time, by extending a more integrated perspective on crisis communication that spans processes and outcomes across the external and internal divides that exist in much of established theory, the study recognises organisations not as isolated or sealed entities, but porous in their environments, which has been argued by scholars (Cheney & Christensen, 2001; Frandsen & Johansen, 2011).

From a practitioner perspective, the study creates awareness as well as knowledge about ESMCC, its perception by organisations' publics and its outcomes on central aspects of crisis communication, such as communication about and behaviour towards organisations (Sohn & Lariscy, 2015; Utz, Schultz, & Glocka, 2013). Previous studies found that communications professionals did not consider social media as an internal communication instrument in crisis and used hierarchical or implicit communication, which was not appreciated by employees (Mazzei & Ravazzani, 2011). Likewise, only half of surveyed practitioners thought that employees could be external ambassadors (Johansen et al., 2012). Both of these findings are relevant in this context as they indicate that practitioners are not aware of the potential of ESMCC's impact that can be expected based on scholarly assumptions. In addition to discussing outcomes of ESMCC, the research therefore provides strategic managerial implications. This of particular importance since the phenomenon is expected to gain traction in the future: More than two out of five employees worldwide have experienced a crisis or similar top tier change event such as mass lay-offs and almost six out of ten have defended their employers to external stakeholders (Weber Shandwick, 2014). Simultaneously, social media, after widely disseminating first into personal social interactions, now increasingly transform communication at and around the workplace (Davison, Ou, Martinsons, Zhao, & Du, 2014).

The remainder of this work is thus structured as follows: Chapter two, *Theoretical framework*, explores and discusses previous scholarship and relevant concepts in-depth. Of particular importance here is the Social-Mediated Crisis Communication model, which is used as a conceptual starting point for developing ESMCC from a perspective of audience-centric crisis communication. With the aid of this framework, stakeholders and specifics of crisis communication in social media are analysed, leading into a discussion of extant knowledge and, importantly, knowledge gaps that exist regarding ESMCC. Addressing these gaps, a survey with eight experimental conditions is developed to test the various conditions under which ESMCC potentially might become threat or opportunity. The research instrument is presented in detail in chapter three, *Method*. The number of participants as well as their characteristics and background, overall research design and procedure, independent and dependent variables, manipulation checks and analysis procedures are discussed. Findings of this step are then first described in chapter four, *Results*, and in consecutively brought back into context of research objective and literature in chapter five, *Discussion*. This chapter argues a novel perspective on ESMCC and includes both theoretical and managerial implications. In the final chapter, the *Conclusion*, limitations as well as directions for future research are discussed.

2 THEORETICAL FRAMEWORK

Starting via a fundamental perspective on the threats and opportunities that crises pose to organisations and how these events affect essential organisational assets such as reputation, the following review details the emergence of a social-mediated environment that has brought newfound power to individual stakeholders of organisations, particularly employees. It then discusses what is and is not known about employees and the outcomes of their social-mediated crisis communication and concludes by outlining a new model as well as the necessary steps for the empirical investigation.

2.1 Organisational crisis in social media

2.1.1 Organisations in crisis

Crises are significant and dangerous events in the lifecycle of an organisation that are becoming increasingly common (Seeger, Ulmer, Novak, & Sellnow, 2005). According to Coombs (2014), crises are a "significant threat to operations or reputations that can have negative consequences if not handled properly" (para. 3). They are described as "low probability/high consequence events that threaten the most fundamental goals of an organization" (Weick, 1988, p. 305). Their ramifications can relate to three interconnected threats: public safety, financial loss and loss of reputation (Coombs, 2014). Crisis situations generate challenges both within an organisation and for their stakeholders (Argenti, 2002) and these events have complex, far-reaching implications that may damage the organisation's culture, resources, and functionality in the long run (Dutton, Dukerich, & Harquail, 1994; Taylor, 2010). In addition, however, to such a narrative that views crises as a threat, they can also be seen through the lens of opportunity: Crisis events might help organisations to learn and overcome past mistakes and shed outdate assumptions, generate cooperation and support as well as point to directions for growth and renewal (Seeger et al., 2005).

Investigating questions raised by the urgent nature of organisational crises events is the recently established discipline of crisis communication research that has registered strong growth in the past years (Frandsen & Johansen, 2011; H. J. Kim & Cameron, 2011). The field is defined as the "managing of information and meaning throughout the crisis management process" (Coombs & Holladay, 2012, p. 409). It is therefore closely intertwined with crisis management, and, as some argue, the latter's most important element (Coombs, 2010). Scholars of the field focus on strategic implications relating to stakeholders such as customers, media, NGOs as well as employees (Coombs, 2014; Frandsen & Johansen, 2011). Their research investigates how to both protect these stakeholders and the organisation itself from unfavourable outcomes (Coombs, 2007). Elements of this research are for instance effects of crisis type (e.g. Sohn & Lariscy, 2015), crisis history (e.g. Coombs & Holladay, 2002) and emotions in crisis situations (Jin, 2010; H. J. Kim & Cameron, 2011) on organisational evaluation.

2.1.2 Organisational assets in crisis

A further focal point of crisis communication research is the question of how an organisation should fashion its messages and actions to safeguard its reputation most effectively when addressing publics in crisis (Benoit, 1997; Coombs & Holladay, 2008). An organisation's reputation is constituted by "a collective construction that describes the aggregate perceptions of multiple stakeholders about a company's performance" (Fombrun et al., 2000, p. 242). It is formed as a result of past organisational actions and the direct experiences of its constituents (Floreddu, Cabiddu, & Evaristo, 2014). These perceptions include the stakeholders' stories, anecdotes, and other discursive elements (Aula, 2010). Reputation is considered to be an organisation's most essential, strategic, and enduring asset (Cravens, Goad Oliver, & Ramamoorti, 2003) and a crisis is a severe threat to it (Coombs, 2014).

Reputation loss negatively influences competitiveness, positioning, trust and loyalty of publics, media relations, legitimacy of operations, and even the organisation's license to exist (Aula, 2010). It is therefore no surprise that managers see reputational threats to be a primary risk to operations and performance (Aula, 2010; Coombs, 2012). Scholars agree that restoring an organisation's reputation is the foremost objective of crisis communication[2] and a key point of analysis in much of existing crisis communication research (Utz et al., 2013). Crisis management can from this perspective be seen as the "flip side" of reputation management – both disciplines have significant intersections and are connected to each other (Carroll, 2009).

Related to reputation threat, crises produce secondary actions from an organisation's stakeholders that can have a further detrimental effect. These may manifest themselves twofold, first as communication and second as carried out behaviour. The former is defined as "sharing or forwarding the organization's crisis communication" (Utz et al., 2013, p. 41), i.e. further spreading news about a crisis situation to other users. The latter is described as "behavioural intentions such as the willingness to boycott the organization" (Schultz, Utz, & Göritz, 2011, p. 21). Given their propensity to accelerate reputation damage, and scholarly attention to these spill over effects (Coombs, 2015), this research investigates both threats, for the purposes of the study combined under the umbrella term *secondary crisis actions*, as part of an organisation's reputational assets.

[2] Others insist that different concerns, such as public safety, have an ethical priority; however, they also recognise the central importance of reputation management (Coombs & Holladay, 2002).

2.1.3 Crisis and reputation management in social media

The advent of social media[3] has extensive implications for both crisis and reputation management. Crises in a social-mediated environment even more frequently entail reputational threats than in other media, and it is vast consensus among scholars that the bulk of crises in social media relate to concerns of reputation (Argenti, 2010; Aula, 2010; Coombs & Holladay, 2012; Coombs, 2012). In a social-mediated space, where the spectrum of reputational risks is augmented, reputation becomes even more fragile and its management assumes greater importance (Aula, 2010). Not surprisingly therefore the influence of social media on crisis communication is among the themes currently of most interest as well as urgency to practitioners (Coombs, 2012). As a result, some authors have defined new crisis types specifically tailored to a social-mediated environment that adhere mainly to threats of perception and reputation (Coombs & Holladay, 2012; Coombs, 2012).

The ubiquity of social media and related online technologies are a significant reason for crises to become more and more common events for organisations (Seeger et al., 2005). Some authors even speak of "social media platforms … increasingly becoming breading grounds for organizational crises" (Pang, Hassan, & Chong, 2013, p. 97). In a recent report by public relations firm Burson-Marsteller (2011), two thirds of surveyed organisations indicated that they had recently experienced a crisis – and four out of five said one would likely happen in the next six to twelve months, a large number of them disclosing the belief that they would come from an online source.

In the complex, overlapping, and continuous interactions of a social-mediated environment, challenges to reputation might surface anywhere, both from outside and inside the organisation. Particularly detrimental communicative and behavioural intentions like negative word-of-mouth or boycotts are deeply embedded elements of social media crisis communication and therefore common occurrences in such events (Aula, 2010; Fediuk, Coombs, & Botero, 2010). Among the most famous of numerous analysed instances is the case of United Airlines, whose reputation – and financial performance – was severely hampered after a musician created a viral music video following a service failure in which his instrument was destroyed and subsequently not replaced (Floreddu et al., 2014). This example illustrates what researchers have stated: Inappropriate behaviour and communication can create or further fuel crises in social media (Ott & Theunissen, 2015).

Next to being a potential source of crises, social media also cause significant changes in processes and the unfolding of crises, increasing pace, scope and impact of crisis situations (Ott & Theunissen, 2015). Especially during the early stages of a crisis, social media often rapidly produce an overwhelming amount of information (Sung & Hwang, 2014; van der Meer & Verhoeven, 2013).

[3] Social media are defined here as Internet-based applications that ideologically and technologically build on the foundations of Web 2.0 and that enable the creation and distribution of Internet-user generated content, which can entail texts, images, or other multimedia (Kaplan & Haenlein, 2010; Safko & Brake, 2009).

Spill-over effects to traditional media can further be observed (Himmelreich & Einwiller, 2015).

Organisations can therefore no longer decide whether or not to integrate social media in their crisis response, the only remaining decision is how to do this (Jin et al., 2014). New approaches to crisis management and communication are a necessity (Brummette & Fussell Sisco, 2015). Although some scholars emphasise that strategy remains important and thus not all previous knowledge is rendered obsolete (Coombs & Holladay, 2012), all concede the severe implications of these new communication technologies. Social media in crisis situations can therefore be considered as an important evolution, if not revolution (Coombs, 2012). As a result, additional resources and knowledge are needed for the integration of social media in the crisis communication mix (Coombs, 2014).

Consequence to these developments, crisis management and communication research have been subject to rapid evolution to accommodate interest in new approaches (Coombs, 1995, 2014). Whole new fields of research have been opened up, such as how crisis information spreads online (Sung & Hwang, 2014) and how social and traditional media interact (Himmelreich & Einwiller, 2015; Pang et al., 2013). From the lens of crisis as an opportunity (Seeger et al., 2005), social media enable organisations to reach out directly to constituents, providing them with a platform for unmediated dialogue (Mei, Bansal, & Pang, 2010). This direct contact can be of advantage, since organisational crises affect a wide array of both external as well as internal stakeholders that include customers, employees, community members, suppliers and stockholders (Coombs, 2007). Nevertheless, many remain at the assessment of social media being a “double-edged sword” (Mei et al., 2010).

2.2 Stakeholders in control

2.2.1 A stakeholder-centric perspective on crises

“[U]sers, not organizations or the traditional news media, now control the creation and distribution of information” (Coombs, 2012, p. 18). Of the changes initiated by the advent of social media, the idea summed up by the preceding sentence is among the most consistently cited (e.g. Aaker, 2010). Stakeholders are not merely receivers of crisis communication, they command it to large extents – command that is in turn lost for the organisations themselves (Utz et al., 2013). So far has the dominance of users progressed that they are not only in charge, but already “accustomed” to this state of affairs (Coombs, 2012). Social media empower stakeholders to complain publicly to organisations and cause large scale crises that can quickly escalate far beyond initial reach to enormous audiences (Mei et al., 2010; Pang et al., 2013). Communication professionals therefore have to consider social-mediated crisis communication across multiple media as fragmented landscapes where many different people communicate and share ideas about crisis (Coombs & Holladay, 2014) and in which these events as well as reputations are collectively, publicly negotiated through participation by all stakeholder on a long-term basis (Aula, 2010). In such situations, there is a multitude of distinctively different voices, but no dominant sender or receiver exists (Frandsen & Johansen, 2011; J.-N. Kim & Rhee, 2011). Stakeholders are contrarily part of a crisis communication response (Veil et al., 2011).

This fundamental difference to what some term “traditional crisis” (Coombs, 2012) needs to be addressed adequately. To this end the research draws on a conceptual level on the Social-Mediated Crisis Communication model (Austin, Liu, & Jin, 2012; Jin et al., 2014; Liu, Jin, Briones, & Kuch, 2012). The framework’s advantage over other established models (e.g. Coombs & Holladay, 2002) is that it accounts for different stakeholders as sources of messages, along with factors essential in a social-mediated environment, such as message forms (Austin et al., 2012). In viewing an organisation’s publics as senders and receivers on par with the organisation, the model makes an important step towards audience-centric research (Coombs & Holladay, 2014; Liu & Fraustino, 2014).

At its core, the SMCC model highlights how information is transmitted between media, both social and traditional, and essential publics through digital communication as well as offline word-of-mouth (Austin et al., 2012; Jin et al., 2014). Originally created as the Blog-Mediated Communication model (Jin & Liu, 2010), it was later evolved into the SMCC model due to the advent of new social media platforms like Facebook and Twitter and the decreasing popularity of blogs (Liu et al., 2012).

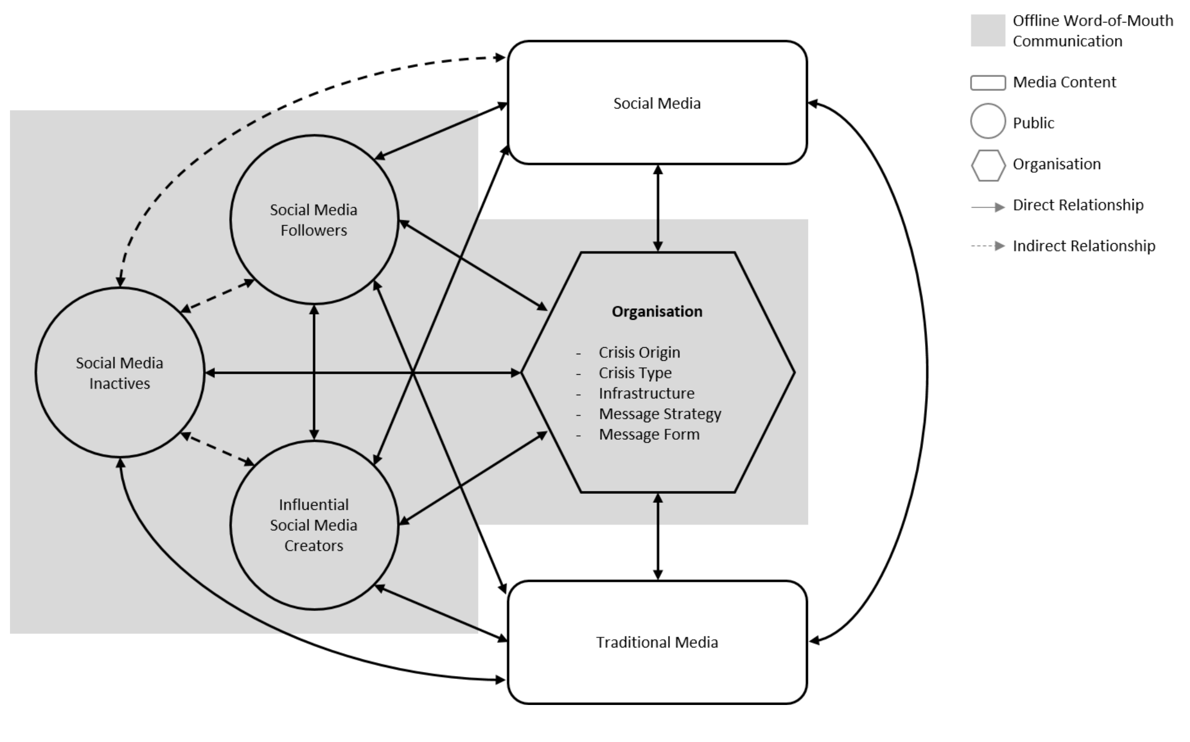


Figure 2.1 The Social-Mediated Crisis Communication (SMCC) model
Own figure based on Austin et al. (2012, p. 192)

An important step in audience-centric research is that it recognises the publics not as a passive, homogenous mass, but as active, in themselves fragmented stakeholder groups. To this end three external types of publics are incorporated in the SMCC model that interact with organisations in crises (Austin et al., 2012). They are (1) *influential social media creators*, who produce a large amount of crisis information for others. These creators are conceptually based on bloggers in the original BMCC model and influence other publics directly or even indirectly through (offline) word-of-mouth communication (Jin & Liu, 2010); (2) *social media followers*, who consume and spread the information the aforementioned produce online and offline; and (3) *social media inactives*, who are only indirectly exposed to this information through word-of-mouth or traditional media.

Further of importance are the relationships between these publics and other elements considered in the model, such as traditional media and its content. Interactions between these groups can be noted, e.g. cases where crises are spread through social media first, then picked up in coverage by traditional media, and then again distributed via social media (Aula, 2010; Pang et al., 2013).

Subsequent expansions of the SMCC reflect additional factors that are important to consider in general, but particularly in social-mediated crises: Crisis origin, crisis type, infrastructure, message strategy, and message form (Liu et al., 2012). Crisis origin refers to whether a crisis originates externally or internally (ibid.). Its type can be defined as either victim, accident or intentional (Coombs, 2007). Crisis infrastructure is the level of involvement of the organisation's headquarters in response to the situation – i.e. if it is either to be handled centralised or localised by local affiliates, chapters, or branches. In some situations, the latter is considered to be more effective. Message strategy and form refer to content and medium, respectively (Liu et al., 2012). The incorporation of not only the content of the message itself, but also the way it is delivered is in line with previous studies that found the latter might be more important than the former (Schultz et al., 2011; Utz et al., 2013).

Although as mentioned the SMCC model can be viewed as pertaining to a trend towards audience-centric research that investigates stakeholders as more than passive recipients of monolithic organisational crisis communication (Coombs & Holladay, 2014; Liu & Fraustino, 2014), it still puts one organisation at its core – even though the reality of today might look different (Schultz & Raupp, 2010). This is a limitation that the authors acknowledge (Jin et al., 2014). However, it is furthermore important to note that the model explicitly distinguishes only between the organisation as a source, i.e. the "official crisis information reported by the organization at the center of the crisis" (Jin et al., 2014, p. 80) and third-party groups or individuals outside the organisation.

2.2.2 Stakeholders as organisational crisis ambassadors

Since stakeholders are in control of crisis communication in social media, it is therefore only consequential to position these users at the center of the research rather than measuring the effects of employees against the monolithic organisational communication as in previous studies (van Zoonen & van der Meer, 2015). As one communication professional states in the study of Rokka et al. (2014): "In social media, people talk with people and not with the company" (p. 816). Reputation in the social-mediated space is built on a person-to-person basis. Studies finding employees being perceived as individuals, not part of "their" entity, further strengthens this logic (van Zoonen et al., 2016).

To this end an essential question is which groups constitute the most influential creators of crisis communication (Jin et al., 2014). Two stakeholder groups in particular are creating a large share of the (crisis) information about organisations in the social-mediated space and are therefore analysed in this study: Next to the employees already at the core of the study, these are an organisation's consumers (e.g. Guidry, Messner, Jin, & Medina-Messner, 2015; Leftheriotis & Giannakos, 2014; Rokka et al., 2014). Consumers as ambassadors are well established in communication literature. A long line of research in various contexts has analysed how consumers promote, defend, or attack organisations and brands they feel attracted to or repulsed by, i.e. by acting as brand positive or negative brand ambassadors (E. Keller, 2007; K. L. Keller, 2012; Kozinets & Handelman, 2004; Lee, Motion, & Conroy, 2009; Oetting, 2008; Wallace, Buil, & de Chernatony, 2012).

Although not recognised by many professionals (Johansen et al., 2012), employees, empowered by social media, can and will do the same, becoming highly influential defenders or attackers of their organisation in externally-oriented communication (Frandsen & Johansen, 2011; J.-N. Kim & Rhee, 2011; Korn & Einwiller, 2013; Mazzei, Kim, & Dell'Oro, 2012). As Dreher (2014) states: „Today, employees' participation in social media is more important than ever before as they embody an organization's corporate character and shape its reputation by functioning as powerful representatives of their organizations" (p. 345).

The case of RadioShackSucks.com helps to illustrate this. A decade ago – predating the ubiquity of social media and the examples cited so far – this platform was launched as a counterinstitutional website (Gossett & Kilker, 2006). Originally created by and for consumers of U.S. electronics company Radio Shack, it rapidly became a place that also attracted current and former employees of the firm. Thus, visitors of the site were greeted with the message: "Welcome to RadioShackSucks.com. Here we are providing a way for you, the consumer, the employee, and the ex-employee, to fight back" (Gossett & Kilker, 2006, p. 63). The case illustrates both activity of the two stakeholder groups as well as their interaction as senders and receivers. It thus underlines the conceptual choice to establish the outcomes of ESMCC against consumers' crisis communication.

2.2.3 Employees as influential ambassadors

Not recognised by many, employees form a nexus in social-mediated crisis communication. While they are influenced by external sources, they also actively influence stakeholders' perceptions of an organisation (Helm, 2011). On the one hand, external publics – from costumers to media to politicians – take interest in what happens inside a crisis-stricken organisation, perceiving employees as authentic, important sources for gathering information or a target for letting off steam (Frandsen & Johansen, 2011; Korn & Einwiller, 2013). On the other hand, employees themselves closely follow the reactions of external sources such as journalists and social network users to the external crisis communication of their organisation (Dutton et al., 1994; Frandsen & Johansen, 2011). Employees often perceive media content as biased, react emotionally, and engage with their co-workers about it (Korn & Einwiller, 2013). Employees hence have a heightened information need. It is not sufficient to supply them with the same level of crisis communication that would satisfy external publics – instead, employee would seek other, less qualitative sources of information and base their sensemaking on rumours and assumptions, ultimately creating their own version of the crisis via communication significantly taking place in social media (Strandberg & Vigsø, 2016).

These strong connections and interactions with stakeholders entail that employees themselves are affected by public perceptions of their employer. Employees show high levels of interest on what others are saying about their organisations – in regular and crisis situations – and follow media portrayals of their employers closely (Korn & Einwiller, 2013). In this context, Dutton et al. (1994) discuss the example of the New York Port Authority (PA), which came under fire for its treatment of homeless persons in one of its locations. Due to the prolonged criticism from the public, PA's employees, even those in faraway location, began to feel demeaned by the negative image the public held of the organisation. This, in turn, affected the employees' own identity. The cause for such consequences is the fact that employees have a stronger and more invested connection due to their status as internal stakeholders – simply stated, they are "closer" to their organisations than other publics (Frandsen & Johansen, 2011). Or put more bluntly in comparison between employees and consumers as stakeholders: "[T]he former must deal with a workplace and the work that they are performing and upon which they build their life, while the latter must deal with a product that they have acquired (through purchase) and that they are supposed to consume" (ibid., p. 354).

Overall, employees therefore aim to voluntarily and in many cases eagerly contribute to the organisational reputation management through online ambassadorship via their own social media channels (van Zoonen, van der Meer, et al., 2014). A recent report by Weber Shandwick (2014) discusses the example of employees of a Fortune 500 agribusiness. When the organisation came under fire, internal stakeholders took matters into their own hand and created a blog, stating on it: "If anyone should speak to [our company's] vision of the world, it's those of us who come to work here every day and collectively make this company what it is" (Weber Shandwick, 2014, p. 4), indicating further the hope that this communication would offer a personal perspective on their organisation.

The phenomenon has additionally gained traction in recent years as employees have become more active online. Studies found that between two thirds (Leftheriotis & Giannakos, 2014) and up to eight out of ten employees (van Zoonen et al., 2016) use social media for work purposes to communicate with different, internal and external, stakeholders about their organisation. With the further progressing ubiquity of the Internet, the diffusion of results of such practices has been described as limitless (Rickman Cosenza, Solomon, & Kwon, 2015), enabling entirely new methods of communication among co-workers and with customers (Leftheriotis & Giannakos, 2014).

These assessments lead scholars to assert that "[e]mployees are the most effective advocates of a company's reputation and a crisis is when the support of the work force/employees is critical" (Mazzei et al., 2012, p. 32). When their employer comes under attack, employees can take over organisational reputation management, marketing and public relations efforts, and general defence (Miles & Mangold, 2014). Through their "eye-witness" perspective, they are an invaluable asset in thwarting reputational harm to organisations (van Zoonen & van der Meer, 2015).

If and when employees elect to do so. While some might not perceive it as their task (Dreher, 2014), many might even behave in the opposite direction and spread dissent. Such actions are possible both directly inside the organisation, i.e. through critique towards management, as well as indirectly towards external publics (Miles & Mangold, 2014). While previously the latter scenario might have only included small audiences like family members and acquaintances (Gossett & Kilker, 2006), social media offers starkly different opportunities: "[E]mployees who have traditionally had limited choices in voicing their on-the-job experiences can now communicate with hundreds or even thousands of people outside the organization with a few keystrokes" (Miles & Mangold, 2014, p. 410). Whether employees' communication manifests itself as advocacy or adversary is strongly affected by the perception of the relationship with the organisation established through internal organisational communication (J.-N. Kim & Rhee, 2011; Mazzei et al., 2012; Mazzei & Ravazzani, 2015).

2.3 Employees as crisis communicators

2.3.1 Establishing ESMCC

As employees are essential stakeholders and potentially active ambassadors in social-mediated crisis, it is necessary to establish what specific forms their communication takes and what the outcomes of these actions are. In terms of the overall research objective, existing knowledge and, more importantly, knowledge gaps need to be identified for the following empirical investigation.

In order to be able to achieve this objective, employee social-mediated crisis communication (ESMCC) needs to first be further established. In the introduction, it was defined as social-mediated crisis communication via employees' own social media channels or profiles – organisationally sanctioned or unsanctioned – that is aimed towards external and/or internal stakeholders and (at least formally) independent from the organisations' management and professional crisis responders. In general, ESMCC can be located in a subsection of the broader field of social-mediated (crisis) communication, which is in turn derived from research on computer-mediated communication (Boyd & Ellison, 2007; Newhagen & Rafaeli, 1996).

This definition draws on the concept of employee voice. Based on previous research (Dundon et al., 2004), Miles and Mangold (2014) define employee voice as "an employee's attempt to use either organizationally sanctioned or unsanctioned media or methods for the purpose of articulating organisational experiences and issues or influencing the organisation, its members, or other stakeholders" (p. 403). The concept is an appropriate base because its theoretical conceptions range from the articulation of employees' individual dissatisfaction to expression of collective organisation to contribution to management decision making to expressions of mutuality (Dundon et al., 2004; Hirschman, 1994). These positive as well as negative manifestations are also represented in ESMCC. Although the concept of employee voice predates them, surveys have observed similar behaviours in social media (van Zoonen, Verhoeven, & Elving, 2014).

Important aspects of employee voice are employees' decisions about the message, venue, and media used to vocalise their opinions (Miles & Mangold, 2014) – considerations that are reflected in research on social-mediated crisis communication in the form of message and medium as well (Austin et al., 2012). To this end, several relationships are expected to exist that influence the perceptions and outcomes of ESMCC: It is expected that in comparison to consumers – as previously argued, they are the second influential stakeholder group for organisations in social media – employees' communication will result in stronger organisational reputation and secondary crisis action outcomes. This effected will be mediated, i.e. caused by credibility and moderated, i.e. influenced in strength by message and medium. Figure 2.2 presents a visual overview of these expectations in the form of hypotheses, they are theoretically developed in detail in the following sections.

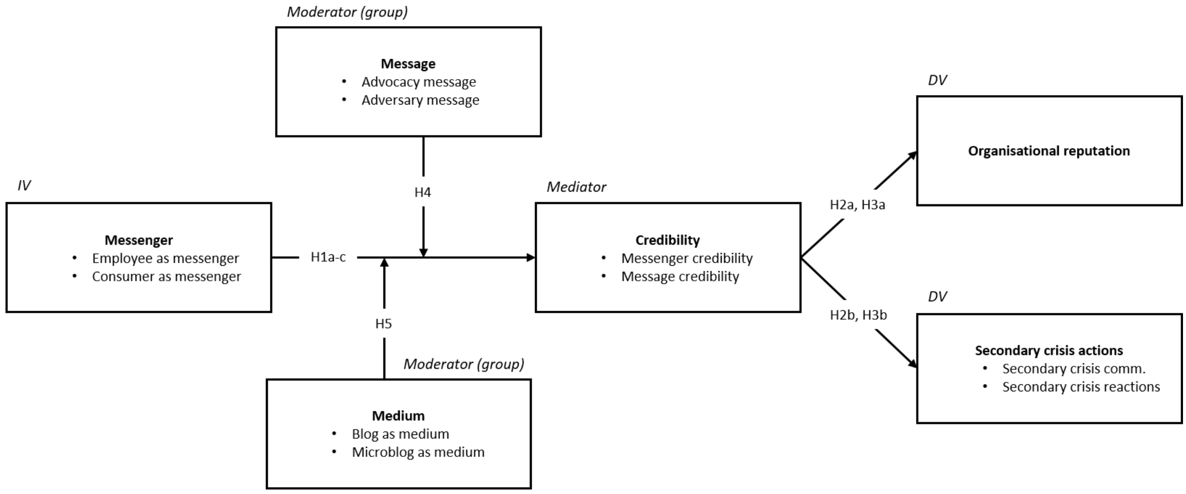


Figure 2.2 Visual overview of expected relationships

2.3.2 Messenger effects

Information source, a central consideration in social-mediated crisis communication, is defined as the creator – in the context of this research, messenger – of crisis information (Jin et al., 2014). Sources can be both users and organisations who send, receive and share information among each other (Austin et al., 2012). Perception of sources plays an important role in crisis communication. Although it might appear trivial at first, a central question in such a context relates to who exactly employees are. In addition to contrasting them with external stakeholders like consumers as done in this study, it is important to distinguish them from other internal stakeholders such as management and (crisis) communication professionals, e.g. social media teams and official crisis responders (Dreher, 2014; Jin et al., 2014), whose job entails communication on behalf of their employer.

Employees have a number of different objectives when voicing their opinion in general and via social media, such as articulation of individual dissatisfaction, contribution to management decision-making, expression of collective bargaining, and demonstration of partnership (Dundon et al., 2004). In aiming to create a rigorous taxonomy of social media-related work behaviours, Lander and Callan (2014) touch on many of these aspects while defining several positive and negative behaviours. On the positive side, they for instance listed communication with existing customers as well as outreach to new ones as well as organisational reputation management; on the negative side, they found activities like creating offensive content as well as diminishing personal and organisational reputation.

Due to communication resulting from these objectives, employees are seen as independent from the official voice of an organisation and – unlike the official communicators and/or crisis responders – share messages voluntarily and unrestrictedly (or at least, with less restrictions), being thus perceived as individuals instead of as part of their employers (van Zoonen & van der Meer, 2015). Publics further see them as highly knowledgeable about the inner workings of their organisation (van Zoonen, van der Meer, et al., 2014). Because of these traits, scholars assume that employees are credible, authentic representatives of organisations (Dreher, 2014; Miles & Mangold, 2014). This reasoning is supported by a review of extant literature finding that credibility, though a multi-faceted concept, has two primary dimensions: trustworthiness and expertise (Metzger, 2007). It can be expected that particularly the latter dimension is perceived strongly in employees due to the "closeness" to their organisation (Frandsen & Johansen, 2011). Thus, it expected that:

H1a. ESMCC results in a higher credibility than consumer social-mediated crisis communication.

A growing body of literature further underlines the vital importance of employees in creating and maintaining reputations (Fombrun et al., 2000). Some authors go so far as to assert that employees are the means by which organisational reputation is formed (Cravens et al., 2003). Organisations have therefore begun to strategically integrate them in social-mediated communication for branding purposes, such as in the case of the Danish Patent and Trademark Office*,* which let almost two dozen employees from different departments publically write about a range of topics regarding their work. Importantly, management ceded most of the control (Agerdal-Hjermind, 2013). Professional consulting firms in this area have urged to further similar strategic programmes (Weber Shandwick, 2014).

Employees are considered as influential reputation managers for a number of reasons. Firstly, they – particularly in sectors like the service industry – are frequently in direct contact with other stakeholders, most importantly consumers, becoming the day-to-day representatives of their employer (Helm, 2011). Scholars have therefore hypothesised that employees have a stronger impact on intangible assets like organisational reputation than other stakeholders (Rokka et al., 2014; van Zoonen, van der Meer, et al., 2014). Along this line, emerging research has found that employees can illicit stronger favourable outcomes on reputation in crises than for instance organisations themselves (van Zoonen & van der Meer, 2015). Thus, the hypothesis is set as:

H1b. ESMCC has a stronger effect on organisational reputation than consumer social-mediated crisis communication.

In terms of the conative component of reputation, i.e. secondary crisis actions, some recent studies have found that negative communication by employees received more interaction on social media than the negative communication of consumers (Guidry et al., 2015). It can be assumed that this is also applicable for actions that relate to crisis situations. Thus, the following hypothesis is set:

H1c. ESMCC has a stronger effect on secondary crisis actions than consumer social-mediated crisis communication.

It is further of interest if these concepts, i.e. credibility, reputation, and secondary crisis actions, are linked – and existing literature in a broader context points to the fact that they are. Authenticity of voice and transparency were found to be crucial in upholding reputation in a social media crisis situation (Ott & Theunissen, 2015). Jin and Liu (2010) also observed that messenger credibility increased the impact and spread of social media crisis communication, which was further confirmed in other social media contexts (Morris, Counts, Roseway, Hoff, & Schwarz, 2012; Reichelt, Sievert, & Jacob, 2014). In a review of relevant literature, Kang (2010) comes to a similar conclusion, summarizing that credibility is key to any successful relationship and influence on individual stakeholders. This is particularly true in the "people-to-people" social media environment due to the absence of professional gatekeepers of traditional media (Metzger, 2007). Here, "everyone can be a news producer" (Mei et al., 2010, p. 147). As users stumble upon vast sways of information daily, they need to apply a heuristic – which are judgments of credibility – to filter the information (Li & Suh, 2015). This is especially the case in crisis situations (Westerman, Spence, & van der Heide, 2014).

In more detail, different theoretical concepts can be applied to capture credibility (Appelman & Sundar, 2015). Messenger credibility is in this context one heuristic that is applied for judgments pertaining to perceptions in an online environment (Metzger, Flanagin, & Zwarun, 2003). Authors have found that in a blog setting, messenger credibility was of particular importance for cognitive and conative outcomes (Rickman Cosenza et al., 2015). Thus, the following expectation is formed:

H2a. Messenger credibility mediates messenger effect on organisational reputation.

H2b. Messenger credibility mediates messenger effect on secondary crisis actions.

Researchers have argued that as users have limited capacity for evaluating (social-)mediated messages, a tendency to mix up perceptions as well as interactions can be expected (Appelman & Sundar, 2015). Credibility as a phenomenon is thus difficult to completely disentangle, users often judge by both messenger and message credibility (Morris et al., 2012). An experimental study further found this to be true, message credibility did have an effect on outcomes (van Zoonen & van der Meer, 2015). This leads to the following additional expected mediation effect:

H3a. Message credibility mediates messenger effect on organisational reputation.

H3b. Message credibility mediates messenger effect on secondary crisis actions.

2.3.3 Message effects

A further central aspect of crisis communication is message content, defined as the information that enables publics to make meaning and react to the crisis (Jin et al., 2014). In much of extant research, message content is termed "message strategies" (Austin et al., 2012; van Zoonen & van der Meer, 2015). It can, however, be argued that in a vast number of cases employees will likely not communicate *strategically* aligned with their organisation, i.e. with the same strategy – may it be routinely investigated approaches such as denial or mortification (Benoit, 1997) – as their employer, or even fundamentally aligned, i.e. positively about their organisation. More adequately, many scholars in the context of employees speak of either positive and negative ambassadorship or *advocacy* and *adversary* (Frandsen & Johansen, 2011; Rokka et al., 2014). Most research has focussed on dissenting employee voices (Miles & Mangold, 2014). Mazzei et al. (2012) thus summarize that in times of crisis "[e]mployees may act as either advocates or as adversaries of their company" (p. 34).

As the question of which employees would attack their employer and which would defend it is of interest to organisations, recent industry reports have aimed to gauge the number of active advocates and adversaries. In a worldwide study, Weber Shandwick (2014) concludes that 21% percent of employees show a strong positive ambassadorship behaviour on social media and in other aspects of their communication, while 13% actively work against their own employers. In an American context, research firm Gallup (2014) comes to even more pronounced conclusions, stating that 30% of employees are engaged and 20% actively disengaged, thus spreading discontent and negative word-of-mouth. Such behaviour transcends media (Gossett & Kilker, 2006). This presents sufficient evidence that the phenomenon is indeed occurring in both variants. Employee voice can thus be a "source of competitive advantage or a time bomb waiting to explode" (Miles & Mangold, 2014, p. 402).

Message (as well as medium) are also important for publics to pass judgement on credibility (Flanagin & Metzger, 2007). Of interest is the question which behaviour – advocacy or adversary – more strongly affects judgements of credibility and outcomes regarding an organisation's assets. Previous research in the contexts of blogs as well as from the perspective of electronic word-of-mouth suggests negative communication is more credible than positive (Jin & Liu, 2010; Reichelt et al., 2014). A dominance of positive external communication might even limit credibility and damages messenger credibility perceptions in the long run (Doh & Hwang, 2009). These results would suggest that negative ESMCC is more credible than its positive counterpart. The expectation is thus:

H4. Adversary messages result in a stronger moderation of ESMCC effects than advocacy messages.

2.3.4 Medium effects

In social-mediated crisis communication, form refers to how the message reaches its recipient – this may be via such diverse forms as press releases or tweets (Jin et al., 2014). Some channels such as Twitter have received disproportionate attention in studies (e.g. Lachlan, Spence, Lin, Najarian, & Del Greco, 2016; Utz et al., 2013; Wan, Koh, Ong, & Pang, 2015), but social media include various forms such as blogs, microblogs, social networking and bookmarking, forums, photo and video sharing, as well as Wikis (Austin et al., 2012). Early research focussed on counterinstitutional forums managed and frequented by customers and employees (Gossett & Kilker, 2006), while the crisis cases discussed by Guidry et al. (2015) include platforms such as YouTube, Facebook, Instagram, and Reddit. As creating an all-inclusive list of social media platforms is "like trying to count sand on the beach" (Coombs, 2012, p. 21), informed decisions are necessary when selecting which media to research.

This study will therefore focus on blogs (in particular the blogging platform LinkedIn Pulse) and microblogs, i.e. Twitter. The two social media are part of the most popular networks to be researched in crises (Schultz et al., 2011; Sung & Hwang, 2014) and among the most used by both users and organisations according to studies (Go & You, 2016; Sung & Hwang, 2014). This selection, however, can be argued by more than sheer popularity with both users, organisations and researchers. The comparison is more emblematic for broader, symptomatic differences. Blogs are among the oldest social media (Schmierbach & Oeldorf-Hirsch, 2012). Their purpose is often enabling rich, lengthy, identity-focused conversations through regular updates on the blog (Kietzmann et al., 2011). Microblogs – with Twitter being the most famous example (Schmierbach & Oeldorf-Hirsch, 2012) – on the other hand aim at speed and high-paced dialogue (Kietzmann et al., 2011).

Discussing such differences is quite important, since previous research in terms of outcomes on reputation and secondary crisis actions has found the choice of information form to be equally as important as, or even more important than, the message content (Austin et al., 2012; Go & You, 2016; Jin & Liu, 2010; Kaplan & Haenlein, 2010; Liu, Fraustino, & Jin, 2015a, 2015b; Schultz et al., 2011; Utz et al., 2013). Various studies have found that Twitter is usually the least credible among multiple sources that include traditional media, but also blogs (Schmierbach & Oeldorf-Hirsch, 2012; Utz et al., 2013). This is in line with other research that determined scope and coverage – i.e. the "comprehensiveness or depth of the information provided on the site" (Metzger, 2007, p. 2079), notoriously low on Twitter, a medium that limits messages to around 140 characters (Sridharan, 2016) – as crucial in judging credibility (Metzger, 2007), leading to the following hypothesis:

H5. Blog as medium results in a stronger moderation of ESMCC effects than microblog as medium.

2.4 Building a case for ESMCC

So far, the essential theoretical blocks have been built up: From a fundamental perspective on crises and organisational assets like reputation the ramifications of a ubiquitous social-mediated environment were established, and stakeholder-centric approaches like the Social-Mediated Crisis Communication (SMCC) model discussed. Embedded in this view, employees were identified as key stakeholders, and their social-mediated crisis communication, or what is known of it, were dissected.

In this processes of working towards the overarching objective – to investigate under which conditions ESMCC can become a reputational asset and under what conditions it can become a threat – gaps in research have become visible. Three research questions were set at the beginning in order to contribute towards the research goal. In terms of the first research question – RQ1. "*How is ESMCC perceived by an organisations' publics?*" – credibility was identified as a main aspect of perception and preliminary findings were discussed, however, knowledge on credibility perceptions of ESMCC are not yet sufficient. Hence, this was addressed by hypothesis H1a, which expected ESMCC to be more credible than other, consumer social-mediated crisis communication.

The knowledge gap is particularly wide in terms of the second research question – RQ2. *"How does ESMCC influence behaviour towards and communication about organisations?"* – as these concepts have only recently found general recognition in scholarship at all (Schultz et al., 2011), although there is an abundance of speculation in regards to employees. Multiple hypotheses address this. It is expected that ESMCC has a stronger impact on reputation and secondary crisis actions (H1b-c), which is in turn expectantly mediated through forms of credibility (H2a-b; H3a-b).

Along the same lines, it is of importance for the overarching objective to identify moderating influences. To this end the third research question – RQ3. *How do specifics of ESMCC (message, medium) moderate its impact?* – and its corresponding hypotheses, i.e. H4, relating to message and H5, relation to medium, address these aspects.

Another gap has become visible on the conceptual level: While the SMCC model addresses many perspectives and dimensions relevant for this research, it does not consider the important role of ESMCC and employees as internal stakeholders. The framework explicitly distinguishes only between the organisation as a source and groups or individuals *outside* the organisation, such as journalists, bloggers or social media users (Jin et al., 2014). In the previous chapters, the fact has emerged that in social-mediated crisis settings, numerous crisis actors influence the development of a crisis (Coombs & Holladay, 2014). Crisis managers have been called upon to understand "how to manage the flow of information to the general population and the media, as well as those directly involved in the issue" (Sung & Hwang, 2014, p. 255). Although these perspectives have become common ground among scholars, remarkably few consider to include the important internal stakeholders (Frandsen & Johansen, 2011). Organisations are still seen as single-minded, one-message-strategy entities. With the cases and scholarship discussed in the study so far, this view is deemed as too narrow. Therefore, for the purposes of this research, the SMCC model is adapted to reflect the more complex environment facing an organisation's official crisis responders and to build the case for ESMCC, by incorporating employees as a separate source next to official crisis responders situated directly at the (permeable) borders of the organisation (see Figure 2.3).

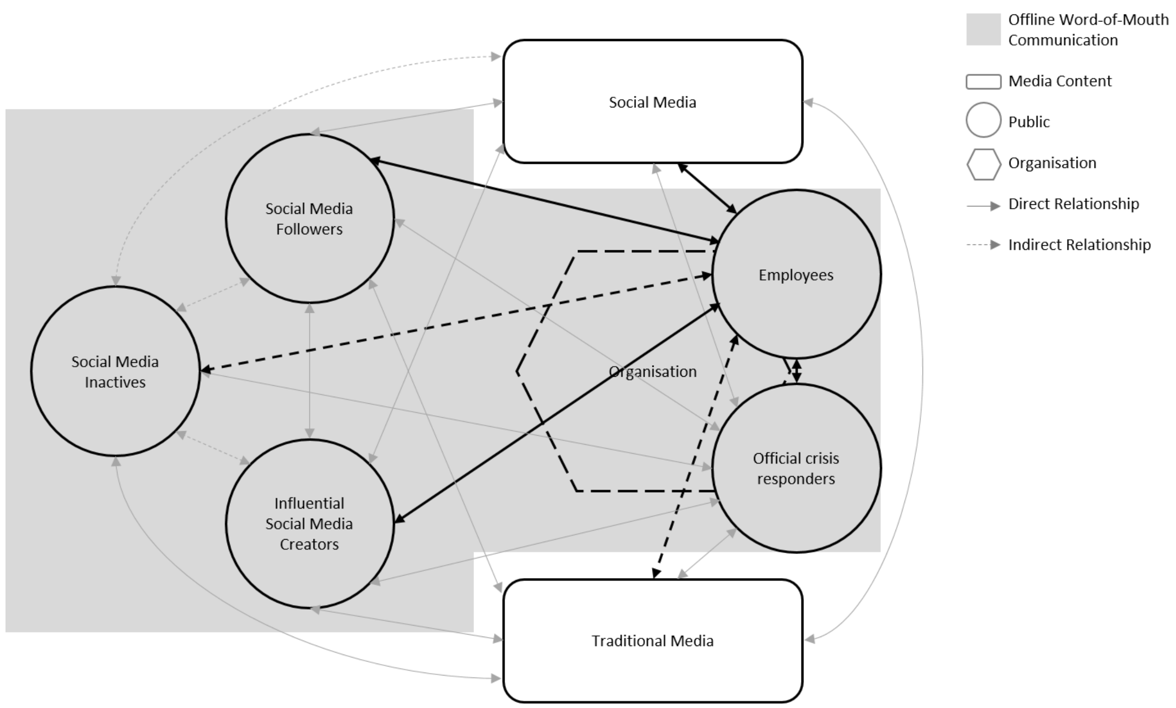


Figure 2.3 The case for ESMCC

Through this conceptual expansion, the fragmentation in crisis communication caused by the advent of social media becomes even more evident. In other words, the adaption adds an additional layer to the already complicated process of managing crisis situations (Brummette & Fussell Sisco, 2015). (Still, the presented view is simplified considering the fact that it continues to exclude third parties such as other organisations like companies or NGOs.) The novel perspective might, however, help scholars and practitioners to move from normative, tactical recommendations and actions to a more strategic, grounded perspective, as has been urged by scholars in the field in recent literature (Dreher, 2014; Frandsen & Johansen, 2011). After all, objective and ideal of crisis communication is to be applied in practice (Coombs, 2010). This will be paid attention to in the following chapters.

3 METHOD

A quantitative approach was adopted to answer research questions and test hypotheses. It was previously argued that research on employee social-mediated communication is methodologically dominated by qualitative or non-empirical methods (El Ouirdi et al., 2015). Similar observations have been noted in crisis communication research, where less descriptive, more prescriptive studies have been advised (Avery, Lariscy, Kim, & Hocke, 2010). Coombs (2009) goes so far as to conclude that the majority of existing research has created more speculation instead of testing actual claims. The method of choice, a survey with experimental conditions, therefore addresses this methodological gap. The study has a 2 (messenger: internal, external) x 2 (message: advocacy, adversary) x 2 (medium: blog, microblog) factorial between subject design. Research design and materials, i.e. stimuli, were informed by extensive literature review and the study of recent cases.

3.1 Participants

Participants constitute the external publics of organisations present on social media. They were recruited from two sources. The first source was a convenience sample conducted via the author's email and social media channels. Participants via this source received no incentive. It was expected from the start that this sample would primarily result in young adults and/or students. According to Patzer (1996), however, convenience samples do not necessarily impact the quality of findings as long as they are compatible with the general population of interest. As young adults are the most active and engaged social media users worldwide as well as in the country of this study (Lenhart, Purcell, Smith, & Zickuhr, 2010; Schoonderwoerd, 2010) and therefore likely the primary audience of employee social-mediated crisis communication, this poses no challenge. Convenience samples are further especially fit for research of fundamental questions such as cognitive information processing as is the case here (H. J. Kim & Cameron, 2011). Finally, a review of two decades of crisis communication research found that most studies relied on similar samples (Avery et al., 2010). In light of this number facts it can be concluded that advanced sampling methods such as Respondent Driven Sampling (RDS) would not necessarily have added to the study, as especially RDS is better suited to address hidden populations and complex to institute (Heckathorn, 1997).

Even though the convenience sample as argued would have been satisfactory for this research, it was aimed to further increase both diversity and number of respondents. A second pool of participants was therefore accessed via crowdsourcing. Crowdsourcing platforms (also referred to as online labour markets) are websites where a large, diverse community of online workers are paid for performing a usually substantial quantity of smaller micro tasks (Buhrmester, Kwang, & Gosling, 2011). Researchers from a variety of disciplines have made use of such platforms (for a discussion, see e.g. Berinsky, Huber, & Lenz, 2012; Buhrmester et al., 2011). Recently, crowdsourcing respondents has been adapted to crisis research (e.g. ten Brinke & Adams, 2015; Xu & Wu, 2015). Participants via this source received a small monetary incentive. Prolific Academic (www.prolific.ac) was chosen over other established tools (such as Amazon Mechanical Turk), as it on the one hand caters solely to researchers and aims to provide them a diverse, representative, high quality participant pool, while it on the other hand offers a fair reward structure with higher average compensation to participants (Damer, 2015). In turn, fairer wages have been proven to increase response quality (Silberman, Milland, LaPlante, Ross, & Irani, 2015). See Woods et al. (2015) for a detailed discussion on the appropriateness, comparability (and in a number of instances even superiority, such as in diversity) of crowdsourcing platforms in comparison to standard lab testing.

Table 3.1 Sample demographics

Age	*M* = 29.44 (*SD* = 10.05)
Education	Bachelor's degree: 212 (41.9%), high school graduate: 130 (25.7%), Master's degree: 112 (22.1%), other: 52 (10.3%)
Employment	Student: 198 (39.1%), full time employed: 196 (38.7%), part time employed: 66 (13.0%), other: 47 (9.3%)
Nationality	United Kingdom: 178 (34.7%), Austria: 72 (14.2%), The Netherlands: 49 (7.9%), Portugal: 41 (8.1%), Germany: 33 (6.5%), other: 146 (28.7%)
Social media usage	Followers: 323 (64.1%), inactives: 117 (23.2%), influencers: 64 (12.7%)

Note. Total completed responses (*N* = 508) excluding missing values per item.
For further elaboration on social media usage see chapter *Results* and Appendix A and B.

A total of 594 participants started and 508 successfully finished the survey (dropout rate of 14.5%). 488 cases were fit for analysis in the end (see following sections). The sample yielded a diverse pool of participants from a variety of primarily European backgrounds (see Table 3.1, and Appendix A for a comparison of sample groups). Students are as expected strongly represented in the sample (39.1%), however, employed participants were in the majority (51.7%). This makes the study's sample more diverse than the vast majority of crisis communication research (Avery et al., 2010).

3.2 Design and procedure

As stated the study has a 2 (messenger: employee, consumer) x 2 (message: advocacy, adversary) x 2 (medium: blog, microblog) factorial between subject design (see Table 3.2 for an overview) for a total of eight (8) conditions. The research was conducted online via Qualtrics (eshcc.qualtrics.com) software. An online environment is seen as suitable for this kind of study design and does not come with trade-offs in terms of data quality (Germine et al., 2012; Reips, 2002).

Table 3.2 Overview of the eight experimental conditions

Messenger: employee		
	Medium	
Message	*C1*. Advocacy blog post	*C3*. Advocacy microblog tweet
	C2. Adversary blog post	*C4*. Adversary microblog tweet
Messenger: consumer		
	Medium	
Message	*C5*. Advocacy blog post	*C7*. Advocacy microblog tweet
	C6. Adversary blog post	*C8*. Adversary microblog tweet

The procedure started by introducing the study – to a shortened extent that prevents bias (Brosius, Haas, & Koschel, 2005) – and the crisis scenario. Participants were then presented with a stimulus in one of the conditions that included messages by employees and consumers. They then responded to questions on messenger and message credibility, organisational reputation, and secondary crisis actions. These scales were displayed in randomised order to prevent effects of respondents' fatigue. Survey questions on medium usage during crises as well as perception of organisational stakeholders in general, manipulation checks and control questions, i.e. personal social media use and demographics, followed. The procedure ended with a debriefing explaining the fictional nature of the scenario and by thanking for the participation. The full instrument is available in Appendix F.

The study was made accessible in three languages to enable wider and higher quality participation: English; Dutch, the language of the country of this study; and German, the language with the largest amount of native speakers in Europe (European Commission, 2012). Scholars have advised to use this approach whenever possible, as partaking in research in their native language enables participants to respond closer to their true nature (Harzing, 2006). Translation was each done as closely to the original as possible by native speakers and proofread by another two.

Multiple rounds of pre-tests including in-depth exploratory interviews (Möhring & Schlütz, 2010) as well as a pilot study with 25 participants were conducted prior to the launch of the study. The complex research design and the use of three languages warranted such an intense process. For the interviews, some participants were briefed to fill in the questionnaire as in a normal situation, some were tasked to give particular attention to flow of questions, wording, overall experience and especially crisis scenario credibility. After each round of such a pre-test, the research instrument was adapted to reflect the feedback, e.g. by restructuring questions or items and replacing certain terms or translations. The pilot study was then conducted from 01.04.2016 to 03.04.2016. No changes were made following the completion of the pilot since respondents did not report any significant issues. Data was then collected in the two weeks between 04.04.2016 and 18.04.2016.

3.3 Independent variables: Materials

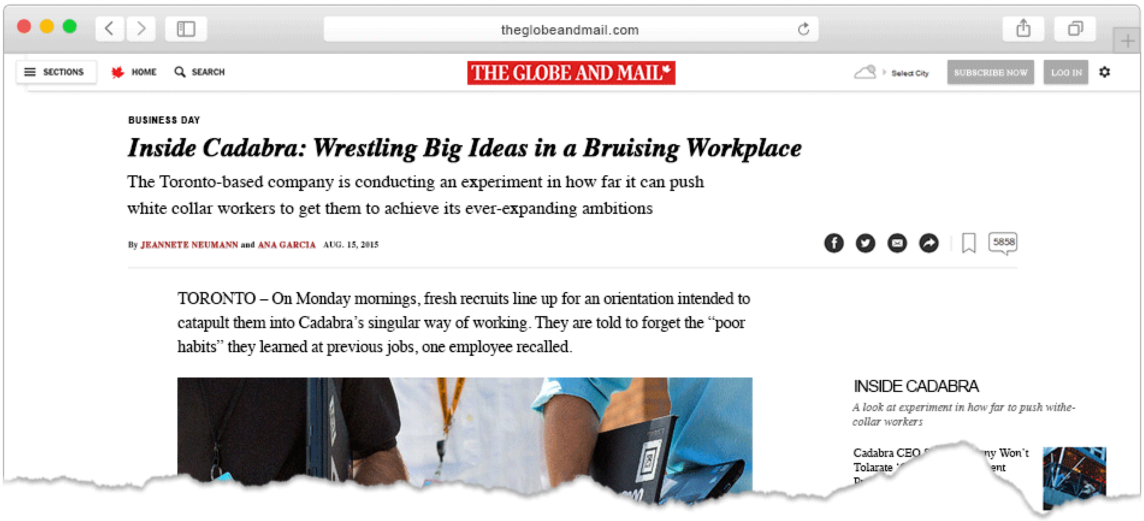
3.3.1 Crisis scenario

The study employs a real crisis case adapted to a fictional organisation for reasons outlined below. Several possibilities were considered, such as using a real case, adapting a real case to a different real, but lesser known and thus bias-inducing company, adapting a real case to a fictional company (and vice versa), and finally creating an entirely fictional case. Each of this options has been implemented in previous research (Hsiao, Shen, & Chao, 2015; Jin et al., 2014; Jin, 2010; H. J. Kim & Cameron, 2011; van Norel, Kommers, van Hoof, & Verhoeven, 2014). To test the most appropriate, stimuli were developed for various select scenarios and tested in convenience sample pre-tests. The chosen option was finally implemented as it balances external validity and credibility of a real scenario with unbiasedness of a company with which participants do not have any prior experience (see also Brosius et al., 2005; H. J. Kim & Cameron, 2011; Liu et al., 2015a, 2015b; Sohn & Lariscy, 2014).

Since pretests surfaced questions of negative country-of-origin, industry and (in scenarios with real companies) brand effects – as could be found in literature (Xu & Wu, 2015) – both nationality and industry where selected to reflect this. Polls from Gallup, Pew Research and the Reputation Institute (RepTrak©) across countries have previously found that retail, consumer electronics and Internet industries are largely perceived positively or neutral (unlike e.g. banking, government, and oil and gas) and that while Europeans are critical towards the United States (and its organisations and companies), they are more well-disposed towards the second North-American country, Canada (Newport, 2012; Reputation Institute, 2015; Sadlovska & Angelovska, 2014; Wike, Stoke, & Poushter, 2015). Hence, the fictional company was selected to be a Toronto, Canada-based Internet consumer electronics/retail firm named "Cadabra.ca". As explained to participants in the introduction:

> Cadabra.ca is a Canadian ecommerce company founded in 1994 in Toronto, Ontario, CA. The company started as a small web shop for presents (hence the name, referring to *Cadeau* [fr. present], Canada and the "magic" surprise of the presents). Today it sells a variety of unusual products, in categories such as electronics, apparel, and entertainment, to consumers in North and Central America. As of 2015, it had a revenue of $5.4 billion (€4.3 billion) and 11,500 employees.

To exclude any possibility of an existing company with the same name, an online search was performed across various search engines. No current companies were found. (At one point, an American ecommerce company primarily selling books with the name existed, but was renamed in 1994.) The crisis is framed using a shortened facsimile and summary of an article. The frame is based on the Amazon case previously discussed (Kantor & Streitfeld, 2015; Nisen, 2015; Valinsky, 2015), but transposed to the fictionalised setting (to increase external validity, as much as possible was kept unchanged). Thus, messengers are located in Canadian cities and the newspaper was chosen to be The Globe and Mail, the broadsheet newspaper with the largest national circulation (Levson, 2014).



theglobeandmail.com

SECTIONS HOME SEARCH THE GLOBE AND MAIL* SUBSCRIBE NOW LOG IN

BUSINESS DAY

Inside Cadabra: Wrestling Big Ideas in a Bruising Workplace

The Toronto-based company is conducting an experiment in how far it can push white collar workers to get them to achieve its ever-expanding ambitions

By JEANNETTE NEUMANN and ANA GARCIA AUG. 15, 2015

TORONTO – On Monday mornings, fresh recruits line up for an orientation intended to catapult them into Cadabra's singular way of working. They are told to forget the "poor habits" they learned at previous jobs, one employee recalled.

INSIDE CADABRA

A look at experiment in how far to push withe-collar workers

Figure 3.1 Stimulus: Article facsimile

The crisis was introduced to participants by stating that "On August 15 last year, Canadian newspaper The Globe and Mail published an article titled 'Inside Cadabra: Wrestling Big Ideas in a Bruising Workplace'". Below an article facsimile (see Figure 3.1), the crisis was summarized as follows (with some passages highlighted in the original in bold and the list bulleted for easier processing):

> The following allegations are raised in the article: Cadabra employees are encouraged to tear apart one another's ideas in meetings, toil long and late and held to standards the company boasts "unreasonably high". The internal phone directory ("Anytime Feedback Tool") instructs colleagues how to send secret feedback to another's bosses – the tool is often used to sabotage each other. "Nearly every person I worked with, I saw cry at their desk", says one employee who was one of the many that left or were fired. Employees are ranked and those at the bottom eliminated every year – so it is in everyone's best interest to outperform everyone else. "If you're a good Cadabrian, you become a Cadabot," says one employee. The hashtag #InsideCadabra was trending soon after the article was published. Technology magazine *Wired* reported that social media conversations around the story "garnered 17,000 mentions with negative sentiment outnumbering positive by 5-to-1".

Participants on average spent close to a minute reading the scenario (M = 56.00, SD = 40.10). This excludes two outliers who were considerably above an arbitrarily set 600 second threshold and thus, presumably, interrupted survey participation. Nine respondents spent less than five seconds familiarizing themselves with the crisis case and were thus excluded from further analysis, as it can be assumed that they did not process the information.

3.3.2 Conditions

Experimental materials followed the introduction of the crisis as described above. These included the eight conditions: For medium, a Twitter timeline with messages (commonly known as *tweets*) was displayed for the microblog condition; a LinkedIn Pulse (essentially a blogging feature on the network) post was shown for the blog condition. Each of these existed in an advocacy as well as adversary form, with either an employee or a consumer as sender. Like the crisis situation itself, the conditions were derived from the original messages in the Amazon case from both LinkedIn as well as Twitter (Ciubotariu, 2015; Valinsky, 2015). New materials for some of the conditions were also based on and developed from these materials. In general, it was paid attention to the fact that messages differed only in purposive elements (e.g. advocacy vs. adversary) to prevent incidental message effects; this was done both during stimulus development and during pre-tests.

Although scholars have debated whether it is necessary to include different messages in research designs to account for incidental message differences, it is generally agreed upon in cases where only (minor) manipulations within a message are tested, such as attributing the same message to different sources, it is justifiable to deploy only one message (Slater, 1989). See Appendix E for a full-length example as well as for a more in-depth discussion of choices relating to specific features of experimental messages as well as of the differences between the conditions.

Random distribution via *Qualtrics* ensured roughly equal participants in each condition (Table 3.3). On average participants (again excluding outliers above a 600 second threshold and systematic failures to record time, N = 7) each spent 45.25 seconds (SD = 35.38) familiarizing themselves with the stimulus materials. As might be expected, time spent per condition varied significantly between the blog (M = 71.28, SD = 103.37) and the microblog (M = 29.00, SD = 40.60) condition, t (332) = -6.05, p < .001, 95%CI [-56.01, -28.55]. Six participants took less than five seconds and were excluded.

Table 3.3 Participants and time spent per condition

		Medium: Microblog		Medium: Blog	
		Message: Advocacy	Message: Adversary	Message: Advocacy	Message: Adversary
Messenger: Employee	N	64	63	65	64
	t	M = 27.62, SD = 13.46	M = 25.69, SD = 25.69	M = 67.92, SD = 39.01	M = 66.41, SD = 31.23
Messenger: Consumer	N	63	56	64	62
	t	M = 27.41, SD = 15.25	M = 24.56, SD = 13.97	M = 65.06, SD = 34.82	M = 62.19, SD = 50.00

Note. Total completed responses excluding seven outliers and system failures, N=501.
N = absolute number of respondents, t = time spent per condition in seconds.

3.4 Dependent variables: Measures

Measures, i.e. dependent variables in this study rely on scales implemented and validated in previous research. Multi-item scales were deployed. All items were measured on seven-point Likert scales (from 1 = "strongly disagree"/"extremely unlikely" to 7 = "strongly agree"/"extremely likely"). Five participants were removed as they did not fill in all questions.

3.4.1 Credibility

Two separate measures of credibility were operationalized within the study design, as done in previous studies (Flanagin & Metzger, 2007). This is necessary as credibility perception in a digital environment may be the result of the information source, the message alone (e.g. when the information source is not available) or of a combination of both (Maillat, Oswald, Metzger, & Flanagin, 2013).

Even though medium plays a central role in this study, medium credibility will, in line with some research, but contrary to other recommendations (Sundar, 2008) not be assessed separately. There are two major reasons that justify this decision: Firstly, the most consistent elements of medium credibility – believability, accuracy, trustworthiness, bias, and (Metzger et al., 2003) – are part of the other two credibility scales of this research. They will thus be drawn upon to measure the influence of medium. As multiple studies have already shown that users tend to somewhat confuse source, message, and medium and that these are further correlated, interdependencies are expected, as formulated by the hypotheses (Eysenbach & Kohler, 2002; Roberts, 2010). Secondly, it was not possible in the research design to provide enough cues to participants to enable separate assessment of medium credibility with specific online dimensions as suggested by some, such as interactivity, multimodality, and hypertextuality (Chung, Nam, & Stefanone, 2012).

Messenger credibility. Previous research has identified two primary dimensions of messenger credibility: Trustworthiness and expertise (Flanagin & Metzger, 2007). It is further argued that lack of bias increases trustworthiness (Sundar, 2008). This factor is particularly interesting since researchers have stated high credibility of employees (Helm, 2011), however, it can be expected that they are perceived as more biased due to their embeddedness in their organisation. Bias as a dimension is supported by literature reviews on credibility (Flanagin & Metzger, 2000) and has been included in previous studies of employees in crisis (van Zoonen & van der Meer, 2015). Although previous scales have employed other, secondary items to measure source credibility (e.g. Feick & Higie, 1992; Flanagin & Metzger, 2000), they are not as suitable in this context of new and/or social media (Westerman et al., 2014). Hence, expertise, trustworthiness, and bias form the scale of messenger credibility, with statements "The sender is trustworthy", "The sender has expertise" and "The sender is biased". Together, these three factors formed the initial messenger credibility scale, which however proved unreliable (α = .55, *M* = 3.85, *SD* = 1.36). Post-hoc analysis found that omitting bias as an item increased the reliability to an adequate level (α = .72, *M* = 4.08, *SD* = 1.17).

Message credibility. As discussed, credibility assessments are possible not only for messengers, but also the message itself (Flanagin & Metzger, 2007). Based on previous research (Appelman & Sundar, 2015), message credibility was assessed in terms of accuracy ("The content is accurate"), authenticity ("The content is authentic"), and believability ("The content is believable"). These indicators were found to exclusively measure message credibility. Together, these three items form the message credibility scale (α = .86, *M* = 4.22, *SD* = 1.29).

3.4.2 Organisational reputation

Reputation of the organisation was measured using Coombs and Holladay's (1996, 2002) revised five-item "Organisational Reputation Scale". Hence, the five items were "Cadabra is concerned with the well-being of its publics", "Cadabra is basically dishonest", "I do not trust Cadabra to tell the truth", "Under most circumstances, I would be likely to believe what Cadabra says", and "Cadabra is NOT concerned with the well-being of its publics". The scale (α = .77, *M* = 3.30, *SD* = 1.01) has been previously implemented in recent crisis communication research (e.g. Kiambi & Shafer, 2016; van der Meer & Verhoeven, 2014; van Zoonen & van der Meer, 2015).

3.4.3 Secondary crisis actions

The secondary crisis actions measure consists of two established scales. Secondary crisis communication was determined with the three indicators established by Schultz, Utz and Göritz (2011): "I would share the message with others", "I would tell friends about this incident", and "I would react directly on social media." Secondary crisis reactions were measured by asking participants about their likeliness to agree to the following statements: "I would be less supportive of Cadabra", "I would stop buying Cadabra products or services", "I would tell negative things about Cadabra and its products", and "I would sign an online petition to boycott Cadabra" (Coombs & Holladay, 2008; Schultz et al., 2011). These seven items were then consolidated in the one reliable scale (α = .86, *M* = 3.86, *SD* = 1.24) described earlier. To test the new scale's unidimensionality, i.e. to determine if these items indeed form only one factor, Cronbach's alpha is a first step, but factor analysis is also necessary (Sijtsma, 2009). This analysis (see Appendix C for table) reveals that the scale is unidimensional, but as two items ("I would be less supportive of Cadabra" and "I would stop buying Cadabra products or services") cross-loaded with the other dependent variable scale, organisational reputation, they were removed. The resulting scale still had good reliability (α = .82, *M* = 3.49, *SD* = 1.32).

3.5 Manipulation checks

Success of manipulation was assessed with three questions in the final section of the questionnaire. Participants were asked to correctly identify each of the conditions. Questions where therefore “Who was the sender of the message you saw (not the article)?”, “Where did you read the message?”, and “Was the message you saw attacking or defending the company?” This is similar to previous studies (c.f. Utz et al., 2013). A chi-square test confirmed that the manipulation of messenger condition was successful, χ^2 (2) = 226.18, $p < .001$. Success of medium manipulation was tested the same way, χ^2 (2) = 376.33, $p < .001$. Finally, a third chi-square test showed that manipulation of the message condition had also succeeded, χ^2 (2) = 256.9, $p < .001$.

3.6 Analysis

Analysis was conducted in multiple steps. First, the data collected in the study was pre-processed for analysis by means of the Statistical Package for the Social Sciences (SPSS) software. Incomplete (i.e. with some missing answers) and disengaged (i.e. those with significantly lower response times than average) responses as well as outliers were excluded. Recoding and reverse coding was performed were necessary, such as on reversed items in the organisational reputation scale. Assumption tests that are necessary for parts of the analysis, i.e. tests for linearity and normality of errors, skewness and kurtosis followed. Two cases were removed in this step.

According to the hypotheses, messenger and message credibility are thought to explain the causal relationship between messenger and reputation as well as secondary crisis actions, making these variables mediators (Frazier, Barron, & Tix, 2004; Preacher, Rucker, & Hayes, 2007). Hypotheses further posit that message and medium impact the strength and direction of mediators and dependent variables, constituting moderator variables (Baron & Kenny, 1986; Frazier et al., 2004). To assess these indirect relationships, bias corrected (BC) bootstrapping was implemented in addition to more common tests (e.g. one-way analyses of variance) as method of analysis, as it is particularly recommended in mediation and/or moderation scenarios (Preacher & Hayes, 2008). Bootstrapping is a family of resampling technique with fewer assumptions, less requirements in terms of sample size and only minor drawbacks in comparison to other statistical techniques; in summary, researchers are advised to “use bootstrapping whenever possible” (Preacher et al., 2007, p. 185). Bootstrapping for any mediation model further is the test of indirect effect with the highest power (Kenny, 2008).

The analysis was carried out with the Analysis of Moment Structures (AMOS) software, which has built in bootstrapping capabilities (Arbuckle, 2013). Although plugins are available for researchers to perform bootstrap mediation/moderation analysis in more popular programs such as SPSS (Hayes, 2014), there are major strengths associated with utilising AMOS for multiple mediation cases instead of using multiple single analyses, one being that the magnitude of the mediators and their indirect effects can be assessed at the same time and in relation to each other. For an extended discussion see Preacher and Hayes (2008). The analysis followed the recommendations by the authors and was, as is common, embedded in a path model. This model was insignificantly different from the "ideal" model, χ^2 (6) = 6.19, p = .402, and had good fit indices, *GFI* = .997, *AGFI* = .981, *NFI* = .989, *RMSEA* = .008 (Hox & Bechger, 1998). All direct and indirect paths (a_1, b_1, c_I, c_I' and a_2, b_2, c_{II}, c_{II}' and a_3, b_3, c_I, c_I' as well as a_4, b_4, c_{II}, c_{II}') were tested simultaneously (see Figure 3.2). The indirect effect is calculated as the product of two paths (Preacher et al., 2007). To assess these indirect effect sizes, a pre-written user-defined "estimand" was used (Gaskin, 2012). As recommended (Hayes, 2009), 5000 resamples were drawn. The confidence interval was set at 95%. As moderators are naturally dichotomous (advocacy or adversary, blog or microblog) and moderate the effect of more than one (in this case, four) variables, a multigroup approach (Arbuckle, 2013; Newsom, Prigerson, Schulz, & Reynolds, 2003) was implemented, calculating the mediation model separately for each variable.

Control questions regarding any unaccounted effects were implemented in the analysis procedure. The following variables were controlled for: age, education, employment, nationality, membership in social media public (inactive, follower or influential creator) as well as (non-)usage of LinkedIn and Twitter. No significant confounding effects emerged in multiple tests.

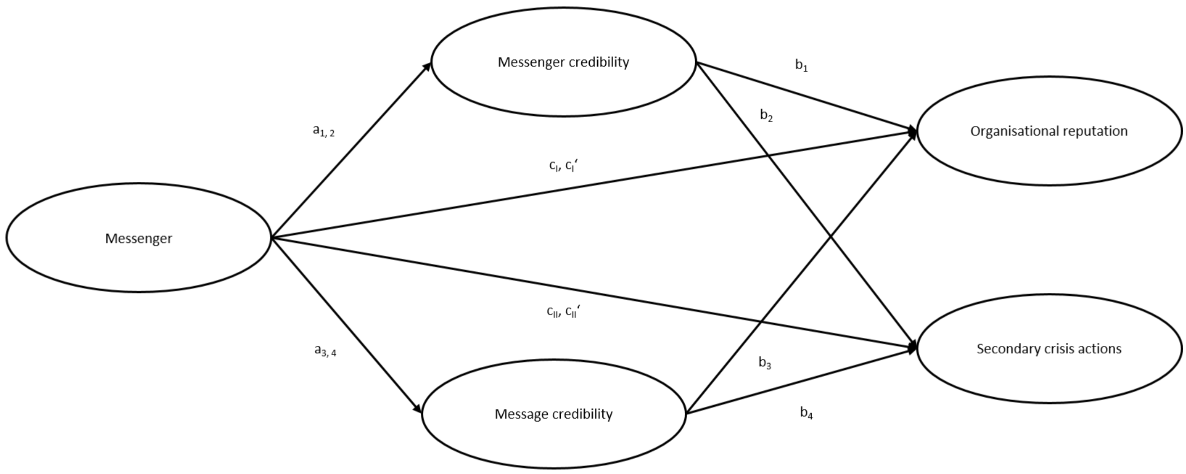


Figure 3.2 Bootstrapping multiple mediation model

4 RESULTS

This chapter contains the reporting of results in relation to research objective and hypotheses. Following this step, the findings are then discussed and brought back into the literature context in the next chapter. The section is structured in order of hypotheses. It begins with a report on overall sample population characteristics in relation to social media and crises.

4.1 Descriptive analysis: Crises, social media and the public(s)

Participants (N = 508) in the survey were on average 29.44 years old (SD = 10.05) and mostly from European nations such as the United Kingdom (N = 178, 34.7%), Austria (N = 72, 14.2%) and The Netherlands (N = 49, 7.9%). The remaining 43.2% hail from a large array of also predominantly European countries. Overall, most participants had completed some tertiary education (Bachelor's degree = 212, 41.9%, Master's degree = 112, 22.1%), the second biggest group had finished secondary education (high school diploma = 130, 25.7%). In general, the sample includes close to two hundred persons still obtaining a degree (students = 198, 39.1%) and 262 already employed (full time = 196, 38.7%, part time = 66, 13.0%). For a more in-depth demographic overview, see Appendix A and B.

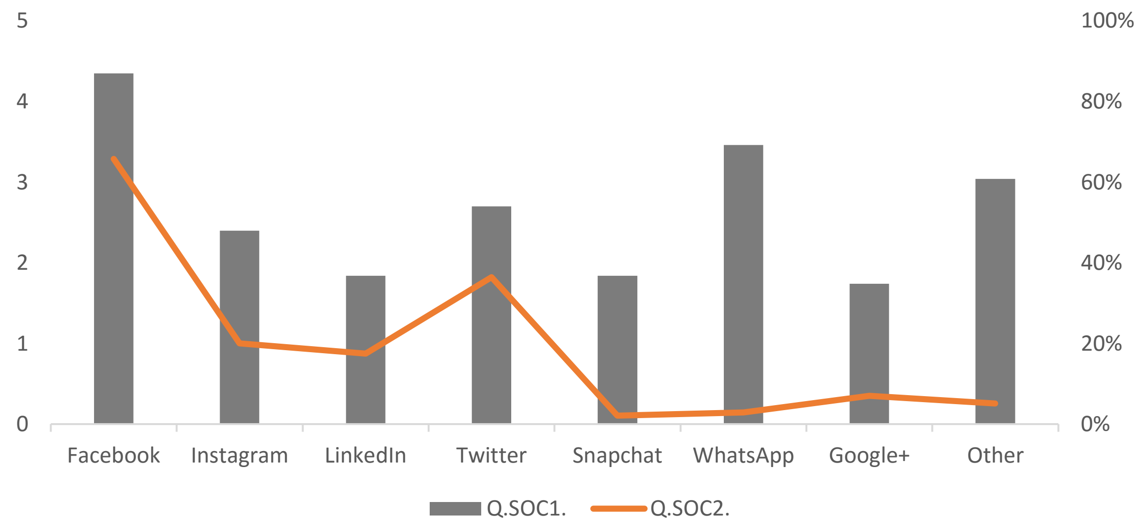
Such commonly reported demographics are complemented in this context by participants' social media characteristics and usage. Social-mediated communication is after all at the center of this study, of returning importance in the discussion chapter, and social media users not a homogenous group. As mentioned, this audience is not completely representative of the general population, but it has previously been argued that it is quite close to the population that receives (employee) social-mediated crisis communication (Lenhart et al., 2010; Schoonderwoerd, 2010).

Since this study builds on the SMCC model (Austin et al., 2012), it was of interest from a conceptual perspective to include the three key publics – social media inactives, followers, and creators – described by its authors. Participants were to this end asked to indicate which public (if any) described them most adequately (an overview of the statements derived from SMCC is provided in Appendix F.9). Results show that the largest public by far are followers (N = 323, 64.3%), while both inactives (N = 117, 23%) and particularly creators (N = 64, 12.6%) were less represented.

In total, these groups use Facebook among all social media the most often, i.e. on average more than 4-6 times a week (M = 4.35, SD = 1.26), followed by up to three times a week usage of WhatsApp (M = 3.44, SD = 1.76) and "other" (M = 3.02, SD = 1.83), which includes e.g. Reddit (N = 33), Xing and Tumblr (N = 9, respectively). Twitter (M = 2.70, SD = 1.54), Instagram (M = 2.40, SD = 1.64), LinkedIn (M = 1.85, SD = 1.12), Snapchat (M = 1.83, SD = 1.38) and Google+ (M = 1.73, SD = 1.20) were used less than 2-3 times a week. Twitter and LinkedIn are of particular interest because of their central position in the study. Further analysis reveals that 29.8% (N = 150) never use Twitter and even more, 48.3% (N = 243) never make use of LinkedIn. For this reason, both usage factors were – as previously mentioned – included as control variables in the analysis.

While it is the most used social medium in general, Facebook is also the channel via which the most interactions with brands or companies take place (N = 331, 65.8%), followed by Twitter (N = 183, 36.4%), Instagram (N = 101, 20.1%), and LinkedIn (N = 89, 17.7%). In combining both general usage and company and brand interaction rates, Figure 4.1 illustrates how some social media are particularly used for communication with organisations (e.g. Facebook, Twitter), while some are only used for private exchanges (e.g. WhatsApp, Snapchat).

Q.SOC1. How often do you personally use the following social media?
Q.SOC2. On which of these social media do you follow or interact with brands or companies?



Note. Q. SOC1. measured from 1 = never to 5 = daily; *Q. SOC2.* from 0 = no to 1 = yes; N = 501.

Figure 4.1 Social media usage and brand relationships

4.2 Analysis of total effects: Outcomes of ESMCC

4.2.1 Overview of findings

A total of nine hypotheses was tested with the data fit for analysis (N = 488). As mentioned, this include total effects, indirect (mediation) effects as well as conditional effects (moderation). The results of the hypotheses offer, in view of expectations set by theory, a mixed, interesting picture. Six hypotheses were fully, one additional was tentatively, and a further two were partially supported (see Table 4.1 for an overview). Following this outline, the next sections show the findings in detail.

Table 4.1 Overview of analysis outcomes

Hypothesis		Test outcome
H1a	ESMCC results in a higher credibility than consumer social-mediated crisis communication.	Supported
H1b	ESMCC has a stronger effect on organisational reputation than consumer social-mediated crisis communication.	Partially sup.
H1c	ESMCC has a stronger effect on secondary crisis actions than consumer social-mediated crisis communication.	Partially sup.
H2a	Messenger credibility mediates messenger effect on organisational reputation.	Supported
H2b	Messenger credibility mediates messenger effect on secondary crisis actions.	Supported
H3a	Message credibility mediates messenger effect on organisational reputation.	Tentatively sup.
H3b	Message credibility mediates messenger effect on secondary crisis actions.	Supported
H4	Adversary messages result in a stronger moderation of ESMCC effects than advocacy messages.	Supported
H5	Blog as medium results in a stronger moderation of ESMCC effects than microblog as medium.	Supported

4.2.2 ESMCC and messenger effects

The first of several hypotheses regarding the characteristics and attributes of ESMCC relates to perceptions of credibility. It was expected that:

H1a. ESMCC results in a higher credibility than consumer social-mediated crisis communication.

Analysis shows that ESMCC results in a significantly higher judgment of messenger credibility (M = 4.07, SD = .93) than the social-mediated crisis communication from consumers (M = 3.61, SD = 1.00), t (501) = 5.39, p < .001, 95%CI [.29, .63]. Interesting trends surfaced when the original three item scale (trustworthiness, expertise, bias) was analysed in more detail. A comparison of means revealed that ESMCC (M = 4.21, SD = 1.27) scored significantly higher for trustworthiness than communication from consumers (M = 3.81, SD = 1.26, $M_{\text{difference}}$ = .40), t (499) = 3.53, p < .001, 95%CI [.18, .62]. These differences were even more pronounced for expertise, where ESMCC (M = 4.75, SD = 1.15) differed from consumer communication (M = 3.58, SD = 1.34) by more than a full point ($M_{\text{difference}}$ = 1.17), t (483) = 10.46, p < .001, 95%CI [.95, 1.39]. In contrast, the differences were insignificant for bias, t (499) = 1.48, p = .14, 95%CI [-.06, .44]. Even though as expected employees were seen as somewhat more biased (M = 4.76, SD = 1.42) than consumers (M = 4.57, SD = 1.47, $M_{\text{difference}}$ = .19), the differences were not large. Thus, bias was (as reported) removed from the credibility scale.

ESMCC further also influences judgements of message – i.e. what some authors refer to as content – credibility, which is rated significantly higher (*M* = 4.40, *SD* = 1.11) than communication from consumers (*M* = 4.04, *SD* = 1.15), *t* (501) = 3.54, *p* < .001, 95%*CI* [.16, .56]. A more detailed investigation, however, found that this effect did not hold up in the advocacy condition, *t* (248) = 1.58, *p* = .115, 95%*CI* [-.06, .51], meaning that when both stakeholders defended an organisation, their messages were perceived as potentially equally credible ($M_{difference}$ = .23). Still, however the employee in this condition was seen as more credible (*M* = 4.25, *SD* = 1.16) than the consumer (*M* = 4.02, *SD* = 1.12). In general, hypothesis H1a is confirmed in both messenger and message credibility elements.

These results are generally in line with answers participants gave in the survey section of the research. When asked who they would trust to provide accurate information – both positive and negative – in times of crisis, participants rated employees (*M* = 4.84, *SD* = 1.16) higher than activist consumers[4] (*M* = 3.84, *SD* = 1.38) and most other groups, particularly other internal stakeholders, i.e. company CEO (*M* = 3.09, *SD* = 1.34), senior executive (*M* = 3.19, *SD* = 1.34), and media spokesperson (*M* = 3.20, *SD* = 1.35). While employees were also perceived as more credible than NGOs (*M* = 4.33, *SD* = 1.22), they were slightly less credible than academics (*M* = 5.12, *SD* = 1.30). The latter effect is not driven by the large student and/or academically educated population in the sample, one-way analyses of variance shows results between all groups were not significantly different, *F* (6, 494) = .65, *p* = .69, η^2 = .88 for employees and *F* (6, 491) = 1.14, *p* = .34, η^2 = 1.89 for academics.

Q.ESMCC2. How much do you personally trust the following people to provide credible and honest information about a company's handling of a crisis, both positive and negative?

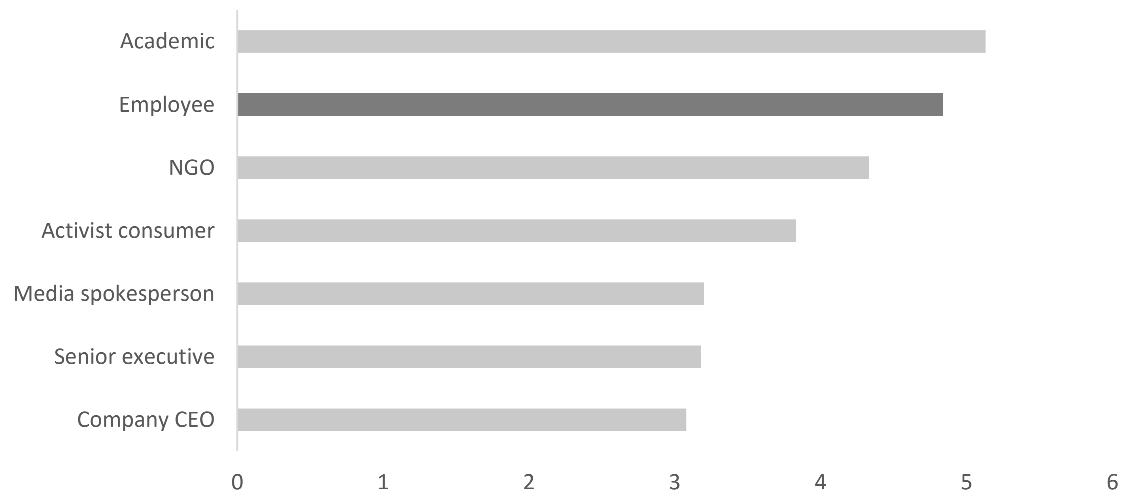


Figure 4.2 Credible messengers in crisis situations

[4] The selection and wording of each stakeholder group (e.g. "activist consumer") in this question is – with the exception of NGO which was added later – based on previous studies (Edelman, 2016).

Since employees were as expected among the most trusted stakeholders, it was of interest to determine which of their traits made them most credible. Participants were to this end asked to sort terms according to impact on credibility. (Three categories were provided, their values were coded from 2.00 = makes highly trustworthy, 1.00 = makes somewhat trustworthy to .00 = does not influence trustworthiness, see Figure 4.3.) First-hand experience with the day-to-day operations of the organisation was the highest ranked trait (M = 1.67, Mdn = 2.00, SD = .59), followed by expertise (M = 1.46, Mdn = 1.00, SD = .68), regular contact with customers (M = 1.27, Mdn = 1.00, SD = .74) and tenure (M = 1.23, Mdn = 1.00, SD = .71). Position (M = .92, Mdn = 1.00, SD = .68), loyalty (M = .62, Mdn = 1.00, SD = .69) and age (M = .47, Mdn = .00, SD = .67) were ranked as not (particularly) increasing credibility. (The question design also permitted participants to enter further elements, but this was not used. No elements were provided to assign terms that might have negative influence.)

Q.ESMCC3. Please think specifically about employees of a company. Which traits make them more trustworthy to you personally in a crisis, which less?

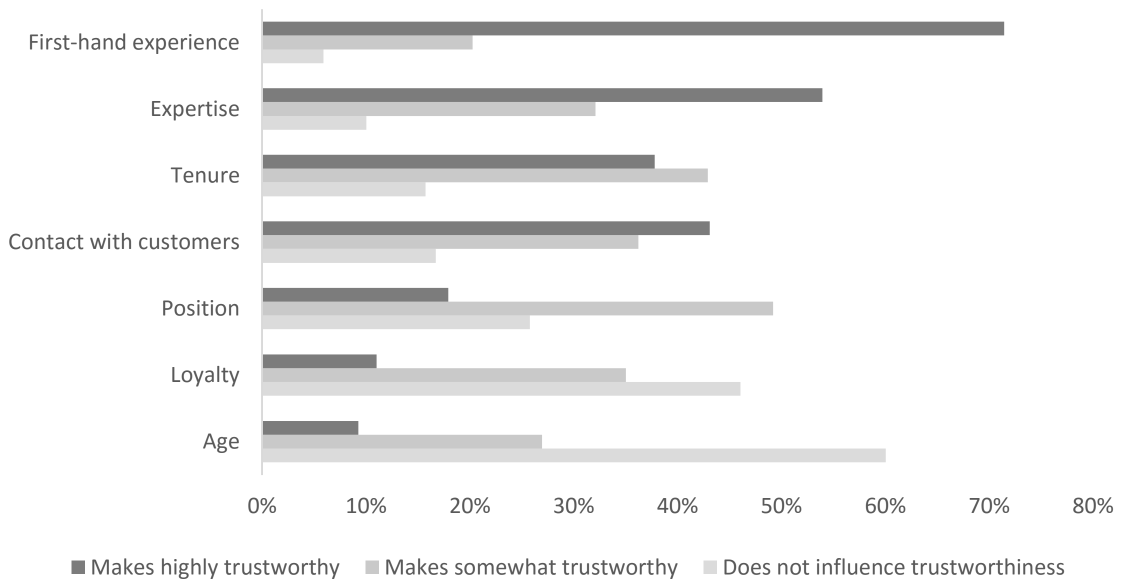


Figure 4.3 Employee traits and credibility

Two expectations were derived from literature in terms of outcomes of ESMCC. The first hypothesis relates to organisational reputation outcomes. It was hypothesized that:

H1b. ESMCC has a stronger effect on organisational reputation than consumer social-mediated crisis communication.

Expectations on the effect of ESMCC in this dimension could only partially be confirmed. It was found that the reputational effect of ESMCC is dependent on message condition. Were employee and consumer defending a company, no significant differences could be found, t (256) = .34, p =

.744, 95%*CI* [-.21, .29]: The employee resulted in only a slightly higher reputation (M = 3.65, SD = 1.01) than the consumer (M = 3.61, SD = 1.05, $M_{\text{difference}}$ = .04). This means that although the effect goes in the expected direction, it is statistically insignificant. Were the two stakeholder groups to attack a company, however, a different picture emerged. Significant differences could be found, t (243) = -2.29, p = .023, 95%*CI* [-.47, -.04]. In such a case, the employee would have a stronger impact, i.e. resulting in a lower reputation (M = 2.83, SD = .88) than the consumer (M = 3.09, SD = .85, $M_{\text{difference}}$ = -.25). The hypothesis is partially supported. Mirroring the previous hypothesis, the next expectation concerned secondary crisis actions such as negative word-of-mouth and boycotts:

H1c. ESMCC has a stronger effect on secondary crisis actions than consumer social-mediated crisis communication.

A similar picture emerged when comparing effects of ESMCC and consumer social-mediated crisis communication in terms of secondary crisis actions, e.g. “I would tell friends about this incident”. Again, the differences in the case of the defending messages were small and nonsignificant, t (249) = -1.57, p = .118, 95%*CI* [-.54, .06]: The employee resulted in slightly fewer secondary crisis actions (M = 3.40, SD = 1.11) than the consumer (M = 3.64, SD = 1.34, $M_{\text{difference}}$ = -.24). In the case of attacking messages, significant effects could again be found, t (243) = 2.33, p = .021, 95%*CI* [.05, .62]. In these instances, the employee resulted in more secondary crisis actions (M = 4.37, SD = 1.07) than the consumer (M = 4.04, SD = 1.19, $M_{\text{difference}}$ = .34).

4.3 Mediation analysis: The influence of credibility

The following four hypotheses (H2a-b and H3a-b) concern expected mediation effects. Although some of the previous findings (H1b-c) indicate the absence of total effects in some conditions, failing to test for indirect effects in such scenarios when using bootstrapping analysis can result in the researcher missing “potentially interesting, important, or useful mechanisms by which X exerts some kind of effect on Y” (Hayes, 2009, p. 415). The reasons for this effect are discussed in-depth in Zhao, Lynch, and Chen (2010). Following this logic, mediation was tested even in cases where no total effects were found. As mentioned in the method section, the indirect, i.e. mediation effect in this analysis is calculated as the product of the two paths (Gaskin, 2012; Preacher et al., 2007). Authors argue that contrary to older literature (Baron & Kenny, 1986), this is the “one and only requirement to demonstrate mediation” (Zhao et al., 2010, p. 200). Other paths are not necessary and thus omitted here. Interested readers may see all paths of the model in Table A.3 in Appendix D. An outcome of calculating the indirect effect as a product is that the resulting values are smaller than direct effects as well as that the direction (positive/negative signs) cannot necessarily be read from the results.

H2a. Messenger credibility mediates messenger effect on organisational reputation.

In bootstrapping mediation analysis, a relationship between *X* and *Y* is mediated by *M* if the confidence bands for *M* do not include zero (Preacher et al., 2007). As this was the case in the advocacy condition, messenger credibility did not mediate the effect on organisational reputation, b^* = .02, *SE* = .05, 95%*CI* [-.07, 12] – due to a lack of total effect (H1b) this is not unexpected. Messenger mediation was found for the adversary condition, b^* = .12, *SE* = .06, 95%*CI* [.01, .25] where a total effect had been noted. H2a is thus supported.

H2b. Messenger credibility mediates messenger effect on secondary crisis actions.

A similar result was found for this relationship. Messenger credibility did not mediate effects on secondary crisis actions in the advocacy condition, b^* = .05, *SE* = .06, 95%*CI* [-.18, .05] but did in the adversary condition, b^* = -.19 *SE* = .11, 95%*CI* [-.41, -.01]. H2b is therefore supported.

H3a. Message credibility mediates messenger effect on organisational reputation.

In the advocacy condition, message credibility did not mediate the effect on organisational reputation, b^* = -.02, *SE* = .03, 95%*CI* [-.11, .04] due to lack of a total effect. However, in the adversary condition, message credibility did also not mediate the effect on organisational reputation at the 95% level, b^* = .06, *SE* = .04, 95%*CI* [.00, .09]. This confidence interval was originally set to be on par with the non-mediation tests of the previous hypotheses. Some authors, however, argue a convention of 90% (or even lower) would be useful for bootstrapping mediation (Shrout & Bolger, 2002), and this standard is also often used by theoretical researchers (Efron, 1988; Stine, 1989). At this level, the effect was significant, b * = .06., *SE* = .04. 90%*CI* [.01, .14]. H3a can thus be tentatively accepted.

H3b. Message credibility mediates messenger effect on secondary crisis actions.

Likewise, in the advocacy condition, message credibility did not mediate the effect on secondary crisis actions, b^* = .01, *SE* = .04, 95%*CI* [-.02, .09], but did in the adversary condition, b^* = -.12, *SE* = .06, 95%*CI* [-.28, -.02]. This constitutes a similar pattern as in the preceding hypothesis. H3b is supported.

4.4 Moderation analyis: Message and medium

4.4.1 ESMCC and message effects

The final two hypotheses concerned different moderation effects. The first one posited that:

H4. Adversary messages result in a stronger moderation of ESMCC effects than advocacy messages.

In the multigroup moderation analysis of the path model, differences within the advocacy message condition were only significant for messenger credibility, $b^* = .55$, $SE = .14$, $p < .001$. They were not significant for message credibility, $b^* = .11$, $SE = .14$, $p = .464$, organisational reputation, $b^* = .00$, $SE = .06$, $p = .949$, and secondary crisis actions, $b^* = -.12$, $SE = .07$, $p = .104$. In turn, differences between ESMCC and consumer social-mediated crisis communication in adversary messages were significant for messenger, $b^* = .41$, $SE = .05$, $p < .001$, and message credibility, $b^* = .27$, $SE = .06$, $p < .001$, as well as organisational reputation, $b^* = -.15$, $SE = .06$, $p = .020$, and, although it was not significant at the .05 level, the indirect effect for secondary crisis actions was at the .1 level, $b^* = .11$, $SE = .06$, $p = .094$. This indicates that adversary messages strengthened the effects of ESMCC in comparison to consumer social-mediated crisis communication. Hypothesis H4 is thus supported.

4.4.2 ESMCC and medium effects

The last hypothesis stated that:

H5. Blog as medium results in a stronger moderation of ESMCC effects than microblog as medium.

Differences between ESMCC and consumer social-mediated crisis communication in the microblog condition were only significant for messenger credibility, $b^* = .31$, $SE = .06$, $p < .001$, not message credibility, $b^* = .10$, $SE = .06$, $p = .120$, organisational reputation, $b^* = -.20$, $SE = .07$, $p = .729$ or secondary crisis actions, $b^* = -.07$, $SE = .07$, $p = .281$. In turn, differences between ESMCC and consumers' communication in the blog condition were significant in messenger credibility, $b^* = .34$, $SE = .06$, $p < .001$, as well as message credibility, $b^* = .20$, $SE = .06$, $p < .001$, but not at the .05 level for organisational reputation, $b^* = .12$, $SE = .06$, $p = .056$ and insignificant for secondary crisis actions, $b^* = -.08$, $SE = .06$, $p = .180$. The result still indicates that blog has a stronger moderation effect on the results of ESMCC than microblog as a medium. This confirms hypothesis H5.

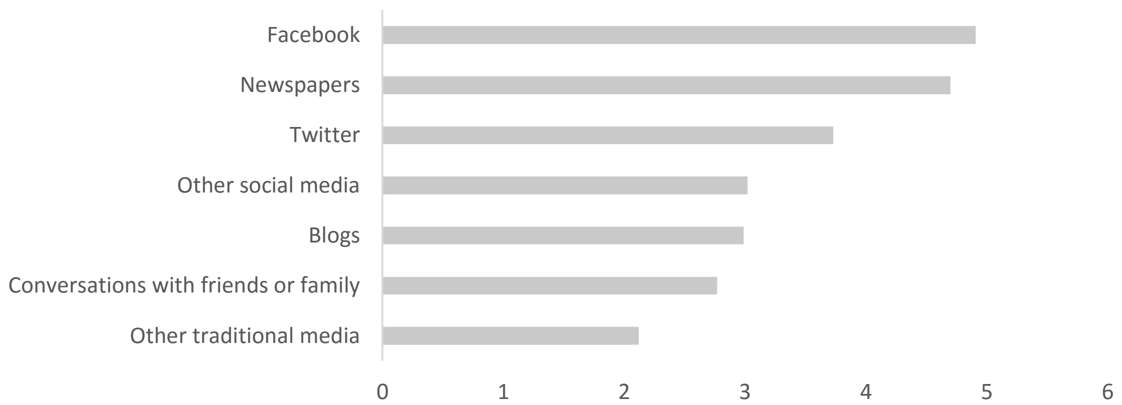
An unexpected finding was that in the advocacy condition, consumer social-mediated crisis communication via blogs resulted in a somewhat higher ($M = 3.88$, $SD = 1.00$) reputation than ESMCC ($M = 3.71$, $SD = .97$), although this result is not significant, $t\,(129) = -1.03$, $p = .305$, 95%CI [-.52, .16]. The opposite was the case for communication via microblogs, were ESMCC resulted in a higher ($M = 3.54$, $SD = 1.00$) evaluation of reputation than consumer social-mediated crisis communication ($M = 3.33$, $SD = 1.03$). Again, this is not a significant result, $t\,(124) = 1.17$, $p = .245$, 95%CI [-.15, .56], but its reporting is of interest in the context of the study.

To complement these findings on medium effects, further results are presented from the survey section. Here, respondents were asked to sort different media in order of likelihood that they would receive crisis information via this channel. Facebook ($M = 4.91$, $SD = 2.21$) and newspapers ($M =$

4.69, *SD* = 2.09) were the two media that were consistently ranked at the top. They were followed by Twitter (*M* = 3.74, *SD* = 2.27), other social media (*M* = 3.03, *SD* = 2.20) and blogs (*M* = 3.00, *SD* = 2.00). Conversations with friends and family (*M* = 2.76, *SD* = 2.00) and other traditional media such as radio (*M* = 2.12, *SD* = 2.09) were in most cases ranked near the bottom. The high ranking of "other" could be seen as an indication that the social media landscape is further fragmenting from the few preferred networks that have been used in research so far, such as Facebook and Twitter.

One-way analyses of variances found further differences among social media inactives, followers and creators. Facebook, for instance, is a primary source of information for both followers (*M* = 5.33, *SD* = 2.00) and creators (*M* = 5.57, *SD* = 1.84), but not for inactives (*M* = 3.38, *SD* = 2.28), *F* (2, 481) = 41.25, $p < .001$, $\eta^2 = 173.11$. The opposite is true for newspapers, which inactives (*M* = 5.53, *SD* = 1.86) rated higher than followers (*M* = 4.54, *SD* = 2.01) and creators (*M* = 3.88, *SD* = 2.00), *F* (2, 481) = 15.19, $p < .001$, $\eta^2 = 62.82$. An elaborated discussion will be presented in the following chapter, however, it is in not an unexpected finding that more active social media users also receive more crisis information from such sources. Interestingly though, this effect is not true for blogs. It is the only of the seven media where no significant differences existed, *F* (2, 481) = 6.45, $p = .43$, $\eta^2 = 3.22$. Neither inactives (*M* = 3.16, *SD* = 2.00) nor followers (*M* = 2.91, *SD* = 2.00) or creators (*M* = 3.13, *SD* = 1.74) rated them particularly high. This result suggests that blogs have diffused into all groups almost equally, however, only to some extent that does not make them primary media in times of crises for most. Twitter, on the other hand, is an important medium for social media creators (*M* = 4.98, *SD* = 2.14) – by far the most important after Facebook – but to significantly lesser extents followers (*M* = 3.86, *SD* = 4.14) and inactives (*M* = 2.78, *SD* = 2.01), *F* (2, 481) = 21.08, $p < .001$, $\eta^2 = 100.65$.

Q.ESMCC1. When a crisis hits a company like in the case [presented to you], where do you most likely go to read or hear more information about it?



Note. Descriptive means, recoded. Ranks from 7 = highest likelihood to 1 = lowest likelihood.

Figure 4.4 Medium usage in crisis

5 DISCUSSION

The central question for this study was: Is employee social-mediated crisis communication (ESMCC) an opportunity for organisations – or is it a threat? The assumption that employees are the most powerful ambassadors of an organisation in crisis – both in a positive and negative manner – is implicit in theory and practice (Frandsen & Johansen, 2011; Rokka et al., 2014; van Zoonen, van der Meer, et al., 2014; Weber Shandwick, 2014). It is perhaps best summarized in the assertion that "employees are the most effective advocates of a company's reputation and a crisis is when the support of the work force/employees is critical" (Mazzei et al., 2012, p. 32).

Although widely agree upon, this idea has until now – with very few exceptions (van Zoonen & van der Meer, 2015) – remained virtually untested. Through "evidence-based crisis communication research" (Coombs, 2015, p. 142), the findings of this research offer nuanced insight on the role of employees in an organizational crisis. By revisiting and connecting themes previously discussed in the study, this chapter outlines academic and managerial implications of the findings.

5.1 ESMCC as a powerful, paradoxical phenomenon

Contrary to expectations and extant scholarship, this research finds that employees are not the most effective crisis communication advocates. Both consumers and employees can be seen as equally powerful in such a defensive role. The findings indicate one thing however: Employees are the most effective *adversaries* of their organisation. When they attack their employer on social media, intangible assets such as reputation suffer disproportionally.

Is the conclusion then that ESMCC presents no opportunity, only a threat to organisations? This interpretation does also not hold up in view of the results. Rather, a complex and rich picture emerges at closer inspection. It is argued here that ESMCC is a powerful, but paradoxical phenomenon for organisations and their intangible assets.

It is powerful, because it is perceived as highly credible by the publics of an organisation. Not only is employees' communication judged superior than the organisation's own (van Zoonen & van der Meer, 2015), but it is also, as this study finds, far more credible than messages from stakeholders such as consumers. Employees are seen as more trustworthy and as having more expertise than consumers. Contrary to expectations however, even though employees are much more invested in the events in and surrounding their organisation and have strong emotional as well as existential ties to their organisations (Frandsen & Johansen, 2011; Korn & Einwiller, 2013), they were not perceived as significantly more biased than consumers. This would fit with the view that they are seen as less restricted in their communicative behaviour (van Zoonen, van der Meer, et al., 2014) and thus indeed viewed as authentic and independent (Dreher, 2014; van Zoonen & van der Meer, 2015).

This perspective is further supported by juxtaposing the public's perception of employees with that of other internal stakeholders. Employees are after all not the only representatives of an organisation that are observed from the outside – all levels of internal stakeholders including senior management and leadership are to some extent in the spotlight (Cravens et al., 2003). To this end the study found that when people were asked to rank which stakeholders they found credible in a crisis situation, employees were the only internal stakeholders to receive high assessments of credibility. Other groups from the inside of an organisation such as media spokespersons, senior executives, or the CEO were ranked at the lower end of the spectrum, with the latter being the least trusted of all.

But what traits and characteristics exactly make employees credible? Up until now, this has not been researched empirically, and although scholars have outlined arguments (Dreher, 2014; Helm, 2011; van Zoonen, van der Meer, et al., 2014), these were nothing more than educated guesswork. To this end the study included some exploratory questions, the findings of which offer some insights as starting points for further research, but also provoke further questions[5]. For instance, a number of factors is not important in judging credibility of employees according to respondents. Among them were age, loyalty and a person's position in the organisation. In comparison to the experimental conditions, however, these survey results may somewhat downplay a part of the influencing factors because they might be considered socially undesirable by respondents (Crowne & Marlowe, 1960), e.g. the influence of age on the evaluation of a person's credibility. (This is also the reason why e.g. gender of employees was excluded from this question.) If, for instance, loyalty was to be seen as following the employer's line of communication or not, i.e. filling an advocacy or adversary role for the organisation, then the experimental findings somewhat oppose these survey results, as it was shown that a disloyal adversary message was seen as more credible than a loyal advocacy message.

The same could be registered for position, which might well have some important effects. As van Zoonen and van der Meer (2015) argue, there are ample grounds for researchers to investigate whether and if so, how an employee's function influences the public's perception. An example to give some indication of this effect is the case of Amazon discussed at the beginning of this study. It could be seen that the media reception of the Amazon employee, Nick Ciubotariu (whose job title is "Sr. Software Development Manager, Head of Infrastructure Development"), was different depending on whether he was reported as a regular employee or an "exec" (Nisen, 2015, para. 1).

[5] It should be noted that these survey results do not adhere to the same methodological rigor as the results of the experiment as they are subject to e.g. the social desirability bias. They can, however, be seen as adding context (see limitations).

While such results open up interesting routes for further discussion and investigation, the remainder of traits in question supports assumptions made in extant literature, i.e. that foremost first-hand experience, followed by expertise, tenure and contact with customers are the factors that make employees credible. This fits to the image that employees are the day-to-day representatives of their organisations (Cravens et al., 2003; Dreher, 2014).

It was further found that it is this strong perception of credibility that is key in mediating the impact on organisational reputation and secondary crisis actions. Both messenger credibility and message credibility judgements were discovered to translate into outcomes relevant to organisations. Messenger credibility in the study was the most important factor for influencing cognitive and conative outcomes (Rickman Cosenza et al., 2015; Westerman et al., 2014). In addition to messenger credibility, message credibility also played a role in mediation effects (van Zoonen & van der Meer, 2015). An explanation for the fact that both perception scales did in the end have an impact might be that users tend to mix perceptions of messenger and message due to limited mental capacity for evaluation processes, which is said to be particularly the case in social-mediated settings (Appelman & Sundar, 2015). Such interactions are also to be expected, because credible messages make messengers more credible and vice versa (Roberts, 2010).

Traditional notions of credibility, however, are not enough to capture the whole causal relationship between employees as crisis communicators and impact on organisational dimensions such as reputation and secondary crisis actions. Although employees as senders scored higher under all eight conditions of the study for both messenger and message credibility, these credibility perceptions did not always translate to outcomes, particularly in the advocacy condition. This suggests that there is another variable at work here that nullifies the impact of especially messenger credibility, thus making ESMCC stronger in attacking than defending conditions. Interestingly, this is not bias, as employees were not perceived as more biased than consumers. These findings are the reason why ESMCC is not only powerful, as argued up to this point, but also inherently paradoxical. At closer inspection, the phenomenon presents both *manifest threat* and *latent opportunity* for organisations and their reputations simultaneously.

5.2 ESMCC as manifest threat

In a social-mediated environment, organisational reputation is exceptionally fragile. While this already essential asset is gaining importance, it also more vulnerable than ever (Aula, 2010). In social media, crises have – due to stakeholders increased power – become increasingly common for organisations, leading to the question of not if, but when one will happen (Heide & Simonsson, 2014). Employees importantly also play a role in this regard, as they frequently cause crises with inappropriate behaviour or communication (Guidry et al., 2015; Miles & Mangold, 2014) and engage in already ongoing crisis situations.

From this perspective, even while it would be too quick to jump to the conclusion that ESMCC represents a threat only to organisations, it is a significant finding of this study to what large extent adversary messages of employees may cause damage to intangible organisational assets. Overall, the trend of the results followed the expectations set by the review of literature: When stakeholders were defending the organisation, employees' actions resulted in a somewhat higher reputation and less secondary crisis actions (e.g. boycotts) than consumers'. When the situation was reversed and stakeholders were attacking the organisation, employees' communication resulted in lower evaluations of organisational reputation and more secondary crisis actions than consumers'. Contrary to expectations, however, the effect in the defending conditions was small and insignificantly different between stakeholders; while in the attacking it was significant and stronger. Employers are thus to an extent rightfully afraid that their employees will "destroy their reputations with one easy click of a social media 'share' button" (Weber Shandwick, 2014, p. 7). This is the reason why ESMCC presents a manifest, very real and easily visible threat to organisations and their reputations.

A necessary question is therefore: Why is ESMCC stronger when it is directed against an organisation? There are multiple post-hoc explanations that one might consider. On an overall level it can be noted that a part of human nature is the fact that negative events have a stronger impact than positive ones. It is virtually in any domain the case that "bad is stronger than good" (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001, p. 362). Studies in social media and crisis communication support the applicability of such claims. Both in blog as well as consumer word-of-mouth contexts it was shown that negative communication was stronger than positive (Doh & Hwang, 2009; Jin & Liu, 2010; Reichelt et al., 2014). Pointedly put: Social media is "a world where satisfied customers tell three friends while angry customers tell 3,000" (Blackshaw, 2008, p. 11). This significantly supports the argument of reputational fragility and has important implications for organisations, such as the fact that it is always essential in crises to keep the volume of negative social-mediated communication as low as possible. It is, however, not sufficient to explain the differences in strength between employees' and consumers' messages.

To this end, a second factor is also likely to play a major role: Employees are closer to their organisation than most stakeholders (Helm, 2011). They are much more emotionally and cognitively invested in their organisation – after all, it is the work "upon which they build their life", while consumers must only "deal with a product that they have acquired" (Frandsen & Johansen, 2011, p. 354). Employees' work is part of their identity (Dutton et al., 1994). If, in view of these facts, employees speak up publically against their own employer, it might be received such that they take a higher risk, know things others do not or that their message was ignored in the organisationally sanctioned venues (Dundon et al., 2004). After all, part of the perception of employees is that they know the day-to-day operations of an organisation (Dreher, 2014). Closer is thus stronger than farther.

On a broader level, it is also necessary to view crisis/reputation management – as mentioned, they are each other's "flip side – in a social-mediated environment from this overall perspective of threat as discussed here. Reputation in this space is "driven by risk, not returns" (Fournier & Avery, 2011, p. 193). Organisations are always in danger to be on the receiving end of stakeholders' detrimental actions. In this regard, the study has added to the conception of reputation, previously seen as consisting of emotional, i.e. affective and rational, cognitive components (Dijkmans, Kerkhof, & Beukeboom, 2015; Fombrun et al., 2000), a third, conative building block: Secondary crisis actions, e.g. calls for boycott or negative word-of-mouth, as such actions are inherent in social media.

Reputation management in these environments will become more like what Fournier and Avery (2011) stipulated: An "open source" situation, where an organisation is "embedded in a cultural conversation such that consumers gain an equal, if not greater, say than marketers in what the brand looks like and how it behaves" (p. 194). As reputation management's flip side, crisis communication will also become more decentralised. Contrary to some assumptions, this does not have to have the same effect on reputation as a "virtual bomb" (Miles & Mangold, 2014) – the following section to this end outlines arguments that support a view that also acknowledges positive aspects.

5.3 ESMCC as latent opportunity

In a social-mediated environment, reputations cannot be controlled by organisations. They are to an increasing extent managed "person-to-person", as in the in crisis situations increasingly utilised social media, people talk to other people, not organisations (Rokka et al., 2014, p. 816). The study has aimed to validate this claim (Guinan, Parise, & Rollag, 2014). To this end it investigated questions of social media usage among its participants both in non-crisis and crisis situations. Previous studies have found traditional avenues of communication to dominate over social media in crisis (Austin et al., 2012) – this would contradict the essential role ascribed to social media in crisis communication. The study at hand however discovered a predominance of social media. It was found that Facebook and then newspapers were reported as the most likely channels to receive crisis information, followed by Twitter, other social media and blogs. Conversations with family and friends and other traditional media were ranked last. From an overall perspective these findings support what authors have asserted in different contexts, that in the course of the past decades, social media have become in processes and interactions part of everyday life (Dijck & Poell, 2013).

It is this development that constitutes a reason why ESMCC manifests as not just threat, but also presents a latent, but significant opportunity to organisations and their crisis/reputation management efforts. It is the users, not traditional actors like media and organisations, who are in control in a social-mediated space (Aaker, 2010; Coombs, 2012). Employees are viewed as an authentic, independent sources of information distinct from the official communicators of the organisation itself – they are seen as individuals, not institutional entities (Dreher, 2014; van Zoonen & van der Meer, 2015). In an environment that was originally created for people, not organisations and their brands (Fournier & Avery, 2011), their chances of managing reputation successfully in crises is higher than the organisations. Experiments support such assertions (van Zoonen & van der Meer, 2015). From this perspective, ESMCC is an opportunity: The employees' crisis communication is at least *equally* strong as consumers' messages. It is important to acknowledge that employees' closeness does not prevent their communication from having any effect at all. Stakeholders – both employees as well as consumers – can therefore take over parts of the reputation management for organisations.

Extending this argument even further, the study shows that employees are effective in reputation management across media and publics. It is an essential lesson for reputation management that organisations themselves have learned: Not all social media are the same (Go & You, 2016). Different social media publics, as found, utilise different social media platforms. For instance, this study found that microblogs, represented in the research design by Twitter, are strongly utilised by the public of influential social media creators, constituting their second most used medium overall (after Facebook). An explanation for this might be the medium's "open-by-default, private-by-effort nature" (van Zoonen & van der Meer, 2015, p. 377). ESMCC was effective via this medium.

ESMCC further showed particular impact when it was communicated via blogs, a medium for in-depth communication. An unexpected and interesting effect was discovered in the advocacy consumer blog condition: Out of the eight experimental conditions, this was the only one were the consumer message resulted in (insignificantly) stronger effects on organisational reputation (not secondary crisis actions) than ESMCC. A post hoc explanation for this might be logic applied earlier: Employees are highly invested in their organisation – again, it is the work "upon which they build their life", while consumer only have to "deal with a product that they have acquired" (Frandsen & Johansen, 2011, p. 354). In this light, when consumers voluntarily go to such lengths – in literal terms, by writing an extensive blog post – to defend an organisation with which they have only limited ties, it is reasonable that this results in stronger outcomes on organisational reputation. These results are insignificant and need to be reproduced to be meaningful in a larger theoretical context.

However, even if consumers under specific conditions really have a – to a minor extent – stronger impact on reputation than employees, the latter further present a potent opportunity for organisations for a simple reason: As they are invested in their employers' perception and fate (Dutton et al., 1994; Korn & Einwiller, 2013), they are much more likely to speak up in defence of an organisation. The employee in the case of Amazon illustrates this with the assertion that he is "not going to stand idly by as a horribly misinformed piece of 'journalism' slanders my company in public without merit" (Ciubotariu, 2015, para. 10). Employees are likely to utilise a broad set of tools at their disposal to voice their opinions (Gossett & Kilker, 2006) and participate in the management of organisational reputations. While some authors say that they need to be mobilized as ambassadors of their organisation (Frandsen & Johansen, 2011), this does not seem necessary within a social-mediated environment as such behaviour naturally occurs (Miles & Mangold, 2014).

Moving employees – and other stakeholders well-disposed towards organisations such as consumers – to the center of research from a perspective of opportunity (and not only threat) is finally one of the broader theoretical implications of this study for prospective literature. While there is overall much research being conducted on the effects of social media on general society, only few scholars have investigated employees and their outcomes on various groups (El Ouirdi et al., 2015). Particularly, their perspective has been all but neglected in contexts of crises – even though research has been acknowledging their importance in general (Frandsen & Johansen, 2011; Mazzei et al., 2012). This contribution is part of an effort among scholars towards a paradigm change in both communication in general and particularly crisis communication (Botan & Taylor, 2004; Liu et al., 2015b). Following the grander logic of the Social-Mediated Crisis Communication (SMCC) model that puts an organisation's publics on a level with the organisation (Austin et al., 2012), the study at hand has moved away from a perspective of analysing different aspects of an organisation's monolithic crisis communication such as its strategies that is still dominant in much of emerging research (e.g. Coombs, 2015; Sohn & Lariscy, 2015; van Zoonen & van der Meer, 2015; Wang, 2016; Xu & Wu, 2015). Instead, it has focused on the users who are now in control of creating and distribution crisis information (Coombs, 2012), and particularly consumers and employees (Gossett & Kilker, 2006; Guidry et al., 2015; Leftheriotis & Giannakos, 2014; Rokka et al., 2014). In a field were the rapid evolution of media means that communication practice often gets ahead of research (Coombs, 2008), this study constitutes an important contribution for current, practical (see also next section) research. Future research could follow in these tracks.

5.4 Managerial (and employee) implications

ESMCC is a phenomenon nested in the social-mediated environment that is inherently paradoxical. Practitioners, and this includes managers, communication professionals as well as the employees themselves, will have to get accustomed to this ambiguity. ESMCC is both “inevitable and impossible to eliminate” (Dreher, 2014, p. 345). It is inevitable because it has already disseminated into most organisational contexts as the vast majority of employees – both day-to-day as well as in crises – communicates about their employers online (Leftheriotis & Giannakos, 2014; van Zoonen et al., 2016; Weber Shandwick, 2014). It is impossible to eliminate because attempting to control ESMCC may lead to inauthentic communication as well as internal alienation and resistance (Rokka et al., 2014), and even considering legal actions against an organisation’s own employees may ultimately be futile, as the case of RadioShackSucks.com shows: After the employee-run website was forced offline following an intense legal battle, it just resurfaced on a different domain with all its users soon after (Gossett & Kilker, 2006).

Managers need to be cognizant of the reputational threats of crises in social media (Coombs, 2012), but results from recent studies indicate that they are not (Guidry et al., 2015; Strandberg & Vigsø, 2016). In line with the objective of applied crisis communication (Coombs, 2010), this section outlines essential implications for practitioners in order for organisations to be able to enhance the opportunity and alleviate the threat of ESMCC. They are divided among the three phases of crisis, pre-crisis, during the event itself, and post-crisis (Avery et al., 2010).

In a pre-crisis stage where monitoring of potential issues and influential stakeholders in social media is key (Mei et al., 2010), identifying employees that could cause problems is therefore essential. Fortunately for organisations, employees as attackers seem to be in the minority. All of the examples aggregated in this study – from Amazon to Volkswagen and Maggi – involved strong advocacy messages, which is further backed up by industry data which suggests that more than a fifth of employees show strong positive ambassadorship behaviour in general and via social media (Weber Shandwick, 2014). Still, however, the same reports found one in eight actively works against their own employers – and just as in the previously discussed case of United Airlines, where a single customer caused massive reputational damage (Dijkmans et al., 2015), the study found that it might only take one employee to do the same or likely more damage to the organisation’s most valuable intangible assets. In this context an important step in the successful management of ESMCC is to provide employees with the right organisational context and authorized channels for their voice (Miles & Mangold, 2014). Often, communication via unauthorized social media channels is only the result of ineffective authorized internal channels (Gossett & Kilker, 2006). Providing these appropriate venues can potentially prevent negative ESMCC and therefore damage before it is produced.

Once a crisis occurs within an organisation, employees are likely to become active as ambassadors on their own (Weber Shandwick, 2014). Or, in future scenarios, organisations might even call on selected employees to represent them, in the knowledge that they are highly regarded by the public. In such cases it is important to carefully choose who to highlight in official communication as done in the case of Amazon (Streitfeld & Kantor, 2015) or who to appoint as spokesperson: Ideally, this function is filled by someone who knows the day-to-day business well and has expertise as well as regular contact with consumers, as this is what was found makes internal stakeholders credible. Somewhat counterintuitively to current organisational practice, the choice would thus be to let lower level employees prominently support the official crisis communicators instead of managers, senior executives or even the CEO, as these stakeholders are seen as not particularly credible. It has to be considered, however, that official spokespersons themselves are not viewed as credible in the public eye. Organisations thus should aim to avoid the impression that the employees are forced to communicate on behalf of their employer, as this will make them seem inauthentic (Rokka et al., 2014).

Again, choice of medium is a consideration to be acknowledged. Should employees rather communicate via an (official organisational) blog or via short message services like Twitter? The findings of this study indicate that, in a defending condition, the difference in effect is not particularly large. Organisations might however choose to let employees use public networks instead organisation-owned platforms like the official website or blog, as this again leaves a more authentic impression. With such a decision however comes the awareness that extensive control on reputation management is not possible in a social-mediated space (Fournier & Avery, 2011).

Which medium is selected – either strategically by the organisations or voluntarily by the employees – matters when it comes to the stakeholder group being reached. While Facebook is the dominating social network for the general public, influential social media creators are particularly frequenting Twitter. If ESMCC is sent via this media, it might be received by people who are likely well-networked persons like journalists (Dubois & Gaffney, 2014) and who then spread it onwards.

In post crisis communication, when organisations aim to rebuild their reputation (Mei et al., 2010), both employees and consumers can be called upon as brand ambassadors, as they are seen as equally potent for such contexts. While these stakeholders are of course different – as one group is “inside” an organisation and the other “outside” – they both are individuals and as such ideally fit to manage reputations in the social-mediated environment (Rokka et al., 2014).

6 CONCLUSION

Should scholars and practitioners view employee social-mediated crisis communication (ESMCC) as an opportunity or as a threat? Drawing from recent, emblematic cases around the globe – such as #InsideAmazon and #WeAreVolkswagen – as well as emergent scholarship, the study set out to answer this central question and to identify the specific conditions under which ESMCC could benefit or harm organisations in crises. Achieving this research objective required a multi-step approach. First, the phenomenon was embedded in an audience-centric perspective on crisis communication that is arguably necessary in a social-mediated environment, where the user is in control of these significant events. By expanding the SMCC model, a case for ESMCC was built and employees as social media users juxtaposed with another influential stakeholder group: Consumers. In comparison to this group, it was determined by means of a survey with experimental conditions (1) that ESMCC is perceived as highly credible by an organisation's publics, (2) that this credibility mediates the communication's impact on organisational assets such as reputation as well as secondary crisis actions, and (3) that the impact is further moderated by message and medium. It was found that employees are not the most effective advocates, but adversaries of their employer. These findings were then linked to build a case that reproduced and expanded, but also rejected previous findings by arguing ESMCC simultaneously as manifest threat and latent opportunity. Through judging the phenomenon as powerful but paradoxical, the study also aimed to contribute to the establishment of ESMCC as a research area worth further investigating. With this exploratory mission come certain limitations, but also a host of opportunities for future research. Both are discussed in the concluding sections.

6.1 Limitations

All research has to make choices, and this concurrently focuses and strengthens a study as well as generates limitations. It is therefore important to acknowledge such factors when evaluating the results of this research. In the intersecting fields of crisis, employee communication and social media that are dominated by case studies and qualitative research (Avery et al., 2010; Landers & Callan, 2014), the study has used a different approach by testing claims rather than generating "more speculation about what should be done" (Coombs, 2009, p. 113). The study thus followed the longstanding call by Coombs (2007, 2010, 2015) to pursue "evidence-based crisis communication" (Coombs, 2010, p. 721). In this context it can also be regarded as a strength that the research was a true experiment and that it was carried out online – people, as Schultz et al. (2011) argue, do not consume news, blogs, or social media messages in a laboratory setting. An online context is more natural for users, and thus increases external reliability. However, an important limitation in the same context is that the scenario included a one-time crisis message (as in nearly all of previous research), but it is highly unlikely that participants would only receive one message regarding a crisis in a social-mediated environment. Even if such a reduced setup might be ideal for studying the outcomes of a single message or messenger, it is not able to capture possibly interaction effects, such as employees and consumers exchanging multiple, different adversary messages. This certainly constitutes a limitation that is at the current level of research impossible to circumvent without creating resource-intense, overly complex research instruments, but should be kept in mind nonetheless.

Unlike much of the preceding research (e.g. Utz et al., 2013; van Zoonen & van der Meer, 2015), the study used a fictional company with a real, but transposed crisis case to enable both external reliability as well as generalisability of findings. However, this also constitutes a weakness, as a small number of participants in a response field created for this purpose indicated that they were able to identify the real company (i.e. Amazon). Those who did were removed from the analysis.

A further factor worth consideration is that although all implemented scales were based on previous research and all but one of them had good reliability, two were only measured in reduced form with three items. Grounds for using shortened scales were that, as the study's participants were not a college sample who mandatorily participated, but volunteers who took part on the Internet, length of the research instrument was an important issue. (It is also for this reason that further items that are common place in research but were not expected to result in particular effects/were not of interest to the study were also excluded; an example of this is the gender of participants.) Further complicating is that one of those scales, messenger credibility, proved unreliable as bias was not measured as expected and had to be omitted. Thus the resulting scale had only two items. Such solutions are generally acceptable, but should be avoided if possible (Eisinga, te Grotenhuis, & Pelzer, 2013). Furthermore, a mediation hypothesis was tentatively accepted despite its confidence level being slightly below 95%. These issues are mitigated by the fact that these scales were solely used to reproduce mediation effects already observed in a previous study (van Zoonen & van der Meer, 2015). Another limitation is that – for reasons previously argued – the study measured messenger and message credibility, but did not observe medium credibility as suggested by some authors (Rickman Cosenza et al., 2015; Sundar, 2008). This could be investigated by future research.

Finally, the study touched on some novel, previously not researched aspects such as the question which traits make employees credible, but as these were not part of the experimental conditions, the findings are only complementary and preliminary, and thus need to be reproduced before being of the same value. It is important to take this balance of strengths and limitations into account when evaluating the results. Even in the light of these qualifiers the findings constitute a solid starting ground for further research. Some directions are discussed in the final section below.

6.2 Outlook and future research

ESMCC as a phenomenon and in particular the implications offered by this study can be explored from different perspectives in terms of disciplines, themes, as well as methods. Scholars focusing on external crisis communication could explore in more detail platforms and users: Not all social media are alike (Go & You, 2016). This study has focused on two emblematic platforms, namely blogs and microblogs. Future research could incorporate additional social media, such as websites created for employees to voice their concerns (Gossett & Kilker, 2006; Miles & Mangold, 2014). Users are also not a homogenous group. Combining those two approaches, scholars might explore interaction effects between different media and crisis actors (Aula, 2010). In other words: How do users – influential creators, followers, or inactives – and traditional media interact with ESMCC? To investigate the nexus of different media and the influence of time is also possible – in the Amazon case, one factor might have been the low reaction time of just one day (Spence, Lachlan, Edwards, & Edwards, 2016).

Scholars advocating a focus on internal crisis communication (Frandsen & Johansen, 2011; Johansen et al., 2012) could instead of focusing on public outcomes such as organisational reputation and secondary crisis actions investigate organisation-internal effects of ESMCC, e.g. in terms of perceived organisational identity (Dutton et al., 1994) or collegial support (Korn & Einwiller, 2013).

Zhao, Lynch, and Chen (2010) also point to the fact that researchers should encourage others to look into additional mediation variables. Scholars in this context could investigate which variable mediates the reduced impact of employees' credibility in the advocacy condition. This study may have ruled out bias, but other factors such as "closeness" to an organisation remain in question.

A more practitioner-oriented line of research might investigate how to integrate employees in the official crisis response. As demonstrated by the adaption of the SMCC model, the crisis communication environment of an organisation is becoming increasingly complex. It might thus be of interest to investigate how practitioners should handle particular situations. There is much room for specialisation, e.g. on the question of what occurs in cases where employees and organisations communicate different strategies. Along a similar line it could be researched what happens when the employee is becoming the official crisis communicator. This has been a theme in non-crisis situations (Agerdal-Hjermind, 2013). In the Amazon case, the individual response of the employee was leverage opportunistically for reputation benefit (Streitfeld & Kantor, 2015), but future organisations, recognising the communicative value of their employees, might also do this strategically from the start.

Finally, qualitative research could evaluate organisations' practices and managers' experiences in future scenarios. Scholars have after all highlighted how in the fast evolving social-mediated environment practitioners often get ahead of researchers. Specialists might find new, innovative approaches that in turn could be analysed for their effectiveness in an experimental study like this one.

REFERENCES

Aaker, D. (2010). Marketing challenges in the next decade. *Journal of Brand Management*, *17*(5), 315–316. http://doi.org/10.1057/bm.2010.2

Agerdal-Hjermind, A. (2013). Organizational blogging: a case study of a corporate weblog from an employee perspective. *Corporate Communications: An International Journal*, *19*(1), 34–51. http://doi.org/10.1108/CCIJ-09-2012-0066

Appelman, A., & Sundar, S. S. (2015). Measuring message credibility: Construction and validation of an exclusive scale. *Journalism & Mass Communication Quarterly*, *93*(1), 5979. http://doi.org/10.1177/1077699015606057

Arbuckle, J. L. (2013). *IBM SPSS Amos 22 user's guide*. Crawfordville, FL: Amos Development Corporation. Retrieved from ftp://public.dhe.ibm.com/software/analytics/spss/documentation/amos/22.0/en/Manuals/IBM_SPSS_Amos_User_Guide.pdf

Argenti, P. (2002). Crisis communication: Lessons from 9/11. *Harvard Business Review*, *80*(12), 103–119. Retrieved from https://hbr.org/2002/12/crisis-communication-lessons-from-911

Argenti, P. (2010). Digital strategies for powerful corporate communications. *The European Financial Review*, 61–64. Retrieved from www.europeanfinancialreview.com

Aula, P. (2010). Social media, reputation risk and ambient publicity management. *Strategy & Leadership*, *38*(6), 43–49. http://doi.org/10.1108/10878571011088069

Austin, L., Liu, B., & Jin, Y. (2012). How audiences seek out crisis information: Exploring the Social-Mediated Crisis Communication model. *Journal of Applied Communication Research*, *40*(2), 188–207. http://doi.org/10.1080/00909882.2012.654498

Avery, E. J., Lariscy, R. W., Kim, S., & Hocke, T. (2010). A quantitative review of crisis communication research in public relations from 1991 to 2009. *Public Relations Review*, *36*(2), 190–192. http://doi.org/10.1016/j.pubrev.2010.01.001

Baron, R. M., & Kenny, D. a. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. http://doi.org/10.1037/0022-3514.51.6.1173

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323–370. http://doi.org/10.1037/1089-2680.5.4.323

Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review*, *23*(2), 177–186. http://doi.org/10.1016/S0363-8111(97)90023-0

Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis*, *20*(3), 351–368. http://doi.org/10.1093/pan/mpr057

Blackshaw, P. (2008). *Satisfied customers tell three friends, angry customers tell 3,000: Running a business in today's consumer-driven world*. New York: Doubleday.

Boches, E. (2015, September 29). How Volkswagen just squandered 55 years of great advertising. *Boston University Public Relations News*. Retrieved from http://www.bu.edu/news/2015/09/29/how-volkswagen-just-squandered-55-years-of-great-advertising/

Botan, C. H., & Taylor, M. (2004). Public relations: State of the field. *Journal of Communication*, *54*(4), 645–661. http://doi.org/10.1093/joc/54.4.645

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, *13*(1), 210–230. http://doi.org/10.1111/j.1083-6101.2007.00393.x

Brosius, H.-B., Haas, A., & Koschel, F. (2005). *Methoden der empirischen Kommunikationsforschung* (6th ed.). Wiesbaden: Springer VS.

Brummette, J., & Fussell Sisco, H. (2015). Using Twitter as a means of coping with emotions and uncontrollable crises. *Public Relations Review*, *41*, 89–96. http://doi.org/10.1016/j.pubrev.2014.10.009

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, *6*(1), 3–5. http://doi.org/10.1177/1745691610393980

Burson-Marsteller. (2011). *Crisis preparedness study*. Retrieved from http://www.burson-marsteller.com/what-we-do/our-thinking/2011-crisis-preparedness-study/

Carroll, C. (2009). Defying a reputational crisis—Cadbury's salmonella scare: Why are customers willing to forgive and forget? *Corporate Reputation Review*, *12*(1), 64–82. http://doi.org/10.1057/crr.2008.34

Cheney, G., & Christensen, L. T. (2001). Organizational identity. Linkages between internal and external communication. In F. Jablin & L. Putnam (Eds.), *The New Handbook of Organizational Communication* (pp. 231–270). Thousand Oaks, CA: SAGE Publications. http://doi.org/doi: http://dx.doi.org/10.4135/9781412986243.n7

Chung, C. J., Nam, Y., & Stefanone, M. A. (2012). Exploring online news credibility: The relative influence of traditional and technological factors. *Journal of Computer-Mediated Communication*, *17*(2), 171–186. http://doi.org/10.1111/j.1083-6101.2011.01565.x

Ciubotariu, N. (2015, August 16). An Amazonian's response to "Inside Amazon: Wrestling Big Ideas in a Bruising Workplace". *[LinkedIn Post]*. Retrieved from https://www.linkedin.com/pulse/amazonians-response-inside-amazon-wrestling-big-ideas-nick-ciubotariu

Coombs, W. T. (1995). Choosing the right words: The development of guidelines for the selection of the "appropriate" crisis-response strategies. *Management Communication Quarterly*, *8*(4), 447–476. http://doi.org/10.1177/0893318995008004003

Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of Situational Crisis Communication Theory. *Corporate Reputation Review*, *10*(3), 163–176. http://doi.org/10.1057/palgrave.crr.1550049

Coombs, W. T. (2008). Crisis communication and social media. Retrieved from http://www.instituteforpr.org/crisis-communication-and-social-media/

Coombs, W. T. (2009). Conceptualizing crisis communication. In R. L. Heath & D. H. O'Hair (Eds.), *Handbook of Risk and Crisis Communication* (pp. 100–119). New York: Routlegde.

Coombs, W. T. (2010). Pursuing evidence-based crisis communication. In W. T. Coombs & S. J. Holladay (Eds.), *The Handbook of Crisis Communication* (pp. 719–725). Chichester, UK: Wiley-Blackwell.

Coombs, W. T. (2012). Effects of the online world on crisis communication and crisis management. *Ongoing Crisis Communication*, 19–30. Retrieved from http://www.sagepub.com/upm-data/39371_2.pdf

Coombs, W. T. (2014). Crisis management and communications. Retrieved from http://www.instituteforpr.org/crisis-management-communications/

Coombs, W. T. (2015). The value of communication during a crisis: Insights from strategic communication research. *Business Horizons*, *58*(2), 141–148. http://doi.org/10.1016/j.bushor.2014.10.003

Coombs, W. T., & Holladay, S. J. (1996). Communication and attributions in a crisis: An experimental study in crisis communication. *Journal of Public Relations Research*, *8*(4), 279–295. http://doi.org/10.1207/s1532754xjprr0804_04

Coombs, W. T., & Holladay, S. J. (2002). Helping crisis managers protect reputational assets: Initial tests of the Situational Crisis Communication Theory. *Management Communication Quarterly*, *16*(2), 165–186. http://doi.org/10.1177/089331802237233

Coombs, W. T., & Holladay, S. J. (2008). Comparing apology to equivalent crisis response strategies: Clarifying apology's role and value in crisis communication. *Public Relations Review*, *34*(3), 252–

257. http://doi.org/10.1016/j.pubrev.2008.04.001
Coombs, W. T., & Holladay, S. J. (2012). The paracrisis: The challenges created by publicly managing crisis prevention. *Public Relations Review*, *38*(3), 408–415. http://doi.org/10.1016/j.pubrev.2012.04.004
Coombs, W. T., & Holladay, S. J. (2014). How publics react to crisis communication efforts: Comparing crisis response reactions across sub-arenas. *Journal of Communication Management*. http://doi.org/10.1108/JCOM-03-2013-0015
Cravens, K., Goad Oliver, E., & Ramamoorti, S. (2003). The Reputation Index: Measuring and managing corporate reputation. *European Management Journal*, *21*(2), 201–212. http://doi.org/10.1016/S0263-2373(03)00015-X
Crowne, D., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal Oj Consulting Psychology*, *24*(4), 349–354. http://doi.org/10.1037/h0047358
Damer, E. (2015). A crowdsourcing platform designed for scientific research. Retrieved from http://blog.prolificacademic.co.uk/2015/07/23/a-crowdsourcing-platform-designed-for-scientific-research
Davison, R. M., Ou, C. X. J., Martinsons, M. G., Zhao, A. Y., & Du, R. (2014). The communicative ecology of web 2.0 at work: Social networking in the workspace. *Journal of the Association for Information Science and Technology*, *65*(10), 2035–2047. http://doi.org/10.10002/asi
Dijck, J. Van, & Poell, T. (2013). Understanding social media logic. *Media and Communication*, *1*(1), 2–14. http://doi.org/10.12924/mac2013.01010002
Dijkmans, C., Kerkhof, P., & Beukeboom, C. J. (2015). A stage to engage: Social media use and corporate reputation. *Tourism Management*, *47*, 58–67. http://doi.org/10.1016/j.tourman.2014.09.005
Divya, G. (2015). “Keep calm and eat Maggi”, Nestle employees on WhatsApp. *The Indian Express*. Retrieved from http://indianexpress.com/article/india/india-others/keep-calm-and-eat-maggi-nestle-employees-on-whatsapp/
Doh, S.-J., & Hwang, J.-S. (2009). How consumers evaluate eWOM messages. *Cyberpsychology and Behavior*, *12*(2), 193–197. http://doi.org/10.1089/cpb.2008.0109
Dreher, S. (2014). Social media and the world of work. *Corporate Communications: An International Journal*, *19*(4), 344–356. http://doi.org/10.1108/CCIJ-10-2013-0087
Dubois, E., & Gaffney, D. (2014). The multiple facets of influence: Identifying political influentials and opinion leaders on Twitter. *American Behavioral Scientist*, *58*(10), 1260–1277. http://doi.org/10.1177/0002764214527088
Dundon, T., Wilkinson, A., Marchington, M., & Ackers, P. (2004). The meanings and purpose of employee voice. *The International Journal of Human Resource Management*, *15*(6), 1149–1170. http://doi.org/10.1080/095851904100016773359
Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly*, *39*(2), 239–263. http://doi.org/10.2307/2393235
Edelman. (2016). *2016 Edelman trust barometer: Global report*. Retrieved from http://www.edelman.com/insights/intellectual-property/2016-edelman-trust-barometer/
Efron, B. (1988). Bootstrap confidence intervals: Good or bad? *Psychological Bulletin*, *104*(2), 293–296. Retrieved from doi.apa.org/journals/bul/104/2/293.pdf
Eisinga, R., te Grotenhuis, M., & Pelzer, B. (2013). The reliability of a two-item scale: Pearson, Cronbach or Spearman-Brown. *International Journal of Public Health*, *58*(4), 637–642. http://doi.org/10.1007/s00038-012-0416-3
El Ouirdi, A., El Ouirdi, M., Segers, J., & Henderickx, E. (2015). Employees’ use of social media technologies: A methodological and thematic review. *Behaviour & Information Technology*, *34*(5), 454–464. http://doi.org/10.1080/0144929X.2015.1004647
European Commission. (2012). Europeans and their languages. *Special Eurobarometer 386*, *77*(1),

147. Retrieved from http://ec.europa.eu/public_opinion/archives/ebs/ebs_386_en.pdf
Eysenbach, G., & Kohler, C. (2002). How do consumers search for and appraise health information on the world wide web? Qualitative study using focus groups, usability tests, and in-depth interviews. *The BMJ*, *324*(573), 573–577. http://doi.org/10.1136/bmj.324.7337.573
Fediuk, T. A., Coombs, W. T., & Botero, I. C. (2010). Exploring crisis from a receiver perspective: Understanding stakeholder reactions during crisis events. In *The Handbook of Crisis Communication* (pp. 635–656). Malden, MA: Wiley-Blackwell.
Feick, L. F., & Higie, R. a. (1992). The effects of preference heterogeneity and source characteristics on ad processing and judgments about endorsers. *Journal of Advertising*, *21*(2), 9–24. http://doi.org/10.1080/00913367.1992.10673364
Flanagin, A. J., & Metzger, M. J. (2000). Perception of internet information credibility. *Journalism & Mass Communication Quarterly*, *77*(3), 515–540.
Flanagin, A. J., & Metzger, M. J. (2007). The role of site features, user attributes, and information verification behaviors on the perceived credibility of web-based information. *New Media & Society*, *9*(2), 319–342. http://doi.org/10.1177/1461444807075015
Floreddu, P. B., Cabiddu, F., & Evaristo, R. (2014). Inside your social media ring: How to optimize online corporate reputation. *Business Horizons*, *57*(6), 737–745. http://doi.org/10.1016/j.bushor.2014.07.007
Fombrun, C., Gardberg, N., & Sever, J. (2000). The Reputation Quotient: A multi-stakeholder measure of corporate reputation. *The Journal of Brand Management*, *7*(4), 241–255. http://doi.org/10.1057/bm.2000.10
Fournier, S., & Avery, J. (2011). The uninvited brand. *Business Horizons*, *54*(3), 193–207. http://doi.org/10.1016/j.bushor.2011.01.001
Frandsen, F., & Johansen, W. (2011). The study of internal crisis communication: towards an integrative framework. *Corporate Communications: An International Journal*, *16*(4), 347–361. http://doi.org/10.1108/13563281111186977
Frazier, P. A., Barron, K. E., & Tix, A. P. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, *51*(1), 2004. http://doi.org/10.1037/0022-0167.51.1.115
Gallup. (2014). State of the American workplace: Employee engagement insights for U.S. business leaders, 1–68. Retrieved from http://www.gallup.com/services/176282/state-american-consumer.aspx.
Gaskin, J. (2012). Amos AxB estimand. Retrieved from http://www.gaskination.com/MyIndirectEffects.AmosEstimandVB
Germine, L., Nakayama, K., Duchaine, B. C., Chabris, C. F., Chatterjee, G., & Wilmer, J. B. (2012). Is the Web as good as the lab? Comparable performance from Web and lab in cognitive/perceptual experiments. *Psychonomic Bulletin & Review*, *19*(5), 847–857. http://doi.org/10.3758/s13423-012-0296-9
Go, E., & You, K. H. (2016). But not all social media are the same: Analyzing organizations' social media usage patterns. *Telematics and Informatics*, *33*(1), 176–186. http://doi.org/10.1016/j.tele.2015.06.016
Gossett, L. M., & Kilker, J. (2006). My job sucks: Examining counterinstitutional Web sites as locations for organizational member voice, dissent, and resistance. *Management Communication Quarterly*, *20*(1), 63–90. http://doi.org/10.1177/0893318906291729
Guidry, J. D., Messner, M., Jin, Y., & Medina-Messner, V. (2015). From #mcdonaldsfail to #dominossucks. *Corporate Communications: An International Journal*, *20*(3), 344–359. http://doi.org/http://dx.doi.org/10.1108/CCIJ-04-2014-0027
Guinan, P. J., Parise, S., & Rollag, K. (2014). Jumpstarting the use of social technologies in your organization. *Business Horizons*, *57*(3), 337–347. http://doi.org/10.1016/j.bushor.2013.12.005
Harzing, A.-W. (2006). Response styles in cross-national survey research: A 26-country study. *International Journal of Cross Cultural Management*, *6*(2), 243–266.

http://doi.org/10.1177/1470595806066332
Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, *76*(4), 408–420. http://doi.org/10.1080/03637750903310360
Hayes, A. F. (2014). *Comparing conditional effects in moderated multiple regression: Implementation using PROCESS for SPSS and SAS*. Retrieved from www.afhayes.com
Heckathorn, D. D. (1997). Respondent-driven sampling: A new approach to the study of hidden populations. *Social Problems*, *44*(2), 174–199. http://doi.org/10.1525/sp.1997.44.2.03x0221m
Heide, M., & Simonsson, C. (2014). Developing internal crisis communication: New roles and practices of communication professionals. *Corporate Communications*, *19*(2), 128–146. http://doi.org/10.1108/CCIJ-09-2012-0063
Helm, S. (2011). Employees' awareness of their impact on corporate reputation. *Journal of Business Research*, *64*(7), 657–663. http://doi.org/10.1016/j.jbusres.2010.09.001
Himmelreich, S., & Einwiller, S. (2015). Wenn der „Shitstorm" überschwappt – Eine Analyse digitaler Spillover in der deutschen Print- und Onlineberichterstattung. In O. Hoffjann & T. Pleil (Eds.), *Strategische Onlinekommunikation* (pp. 183–205). Wiesbaden: Springer Fachmedien. http://doi.org/10.1007/978-3-658-03396-5
Hirschman, A. O. (1994). *Exit, voice and loyalty*. Cambridge, MA: Harvard University Press. http://doi.org/10.1007/978-3-531-90400-9_48
Hox, J. J., & Bechger, T. M. (1998). An introduction to structural equation modeling. *Family Science Review*, *11*, 354–373. http://doi.org/10.1080/10705510903008345
Hsiao, C. H., Shen, G. C., & Chao, P. J. (2015). How does brand misconduct affect the brand-customer relationship? *Journal of Business Research*, *68*(4), 862–866. http://doi.org/10.1016/j.jbusres.2014.11.042
IG Metall Wolfsburg. (2015). #WirsindVW - Ein Film aus der Belegschaft. Retrieved from http://www.igmetall-wob.de/meldung/wirsindvw-ein-film-aus-der-belegschaft/
Jin, Y. (2010). Making sense sensibly in crisis communication: How publics' crisis appraisals influence their negative emotions, coping strategy preferences, and crisis response acceptance. *Communication Research*, *37*(4), 522–552. http://doi.org/10.1177/0093650210368256
Jin, Y., & Liu, B. F. (2010). The Blog-Mediated Crisis Communication model: Recommendations for responding to influential external blogs. *Journal of Public Relations Research*, *22*(4), 429–455. http://doi.org/10.1080/10627261003801420
Jin, Y., Liu, B. F., & Austin, L. L. (2014). Examining the role of social media in effective crisis management: The effects of crisis origin, information form, and source on publics' crisis responses. *Communication Research*, *41*(1), 74–94. http://doi.org/10.1177/0093650211423918
Johansen, W., Aggerholm, H. K., & Frandsen, F. (2012). Entering new territory: A study of internal crisis management and crisis communication in organizations. *Public Relations Review*, *38*(2), 270–279. http://doi.org/10.1016/j.pubrev.2011.11.008
Kang, M. (2010). Measuring social media credibility: A study on a measure of blog credibility. *Institute for Public Relations*. Retrieved from http://www.instituteforpr.org/files/uploads/BlogCredibilityForIRP_Submitted_101210.pdf\nhttp://www.instituteforpr.org/wp-content/uploads/BlogCredibility_101210.pdf
Kantor, J., & Streitfeld, D. (2015, August 7). Inside Amazon: Wrestling big ideas in a bruising workplace. *The New York Times*. Retrieved from http://www.nytimes.com/2015/08/16/technology/inside-amazon-wrestling-big-ideas-in-a-bruising-workplace.html?_r=0
Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, *53*(1), 59–68. http://doi.org/10.1016/j.bushor.2009.09.003
Keller, E. (2007). Unleashing the power of word of mouth: Creating brand advocacy to drive growth. *Journal of Advertising Research*, (4), 448–452. http://doi.org/10.2501/S0021849907070468
Keller, K. L. (2012). Understanding the richness of brand relationships: Research dialogue on brands as intentional agents. *Journal of Consumer Psychology*, *22*(2), 186–190.

http://doi.org/10.1016/j.jcps.2011.11.011
Kenny, D. a. (2008). Reflections on mediation. *Organizational Research Methods*, *11*(2), 353–358. http://doi.org/10.1177/1094428107308978
Kiambi, D. M., & Shafer, A. (2016). Corporate crisis communication: Examining the interplay of reputation and crisis response strategies. *Mass Communication and Society*, *19*(2), 127–148. http://doi.org/10.1080/15205436.2015.1066013
Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, *54*(3), 241–251. http://doi.org/10.1016/j.bushor.2011.01.005
Kim, H. J., & Cameron, G. T. (2011). Emotions matter in crisis: The role of anger and sadness in the publics' response to crisis news framing and corporate crisis response. *Communication Research*, *38*(6), 826–855. http://doi.org/10.1177/0093650210385813
Kim, J.-N., & Rhee, Y. (2011). Strategic thinking about employee communication behavior (ECB) in public relations: Testing the models of megaphoning and scouting effects in Korea. *Journal of Public Relations Research*, *23*(3), 243–268. http://doi.org/10.1080/1062726X.2011.582204
Korn, C., & Einwiller, S. (2013). Media coverage about organisations in critical situations: Analysing the impact on employees. *Corporate Communications: An International Journal*, *18*(4), 451–468. http://doi.org/10.1108/CCIJ-04-2012-0036
Kothari, A. (2015). Introducing the new LinkedIn Pulse: Your daily news, powered by your professional world. Retrieved from https://blog.linkedin.com/2015/06/17/introducing-the-new-linkedin-pulse-your-daily-news-powered-by-your-professional-world
Kozinets, R. V., & Handelman, J. M. (2004). Adversaries of consumption: Consumer movements, activism, and ideology. *Journal of Consumer Research*, *31*(3), 691–704. http://doi.org/10.1086/425104
Lachlan, K. A., Spence, P. R., Lin, X., Najarian, K., & Del Greco, M. (2016). Social media and crisis management: CERC, search strategies, and Twitter content. *Computers in Human Behavior*, *54*(0), 647–652. http://doi.org/http://dx.doi.org/10.1016/j.chb.2015.05.027
Landers, R. N., & Callan, R. C. (2014). Validation of the beneficial and harmful work-related social media behavioral taxonomies: Development of the work-related social media questionnaire. *Social Science Computer Review*, *32*(5), 628–646. http://doi.org/10.1177/0894439314524891
LeBret, J. (2015, August 17). Amazon's rebuttal that they didn't write. *Forbes Magazine*. Retrieved from http://www.forbes.com/sites/jabezlebret/2015/08/17/amazons-rebuttal-that-they-didnt-write/
Lee, M. S. W., Motion, J., & Conroy, D. (2009). Anti-consumption and brand avoidance. *Journal of Business Research*, *62*(2), 169–180. http://doi.org/10.1016/j.jbusres.2008.01.024
Leftheriotis, I., & Giannakos, M. N. (2014). Using social media for work: Losing your time or improving your work? *Computers in Human Behavior*, *31*, 134–142. http://doi.org/10.1016/j.chb.2013.10.016
Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). *Social media and mobile internet use among teens and young adults*. *Pew Research Center*. Washington. Retrieved from http://pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx
Levson, K. (2014). *Circulation report: Daily newspapers*. Toronto, ON. Retrieved from http://www.newspaperscanada.ca/sites/default/files/2014_Circulation_Report-Daily_Newspapers_in_Canada_FINAL_20150603_0.pdf
Li, R., & Suh, A. (2015). Factors influencing information credibility on social media platforms: Evidence from Facebook pages. *Procedia Computer Science*, *72*, 314–328. http://doi.org/10.1016/j.procs.2015.12.146
Liu, B. F., & Fraustino, J. D. (2014). Beyond image repair: Suggestions for crisis communication theory development. *Public Relations Review*, *40*(3), 543–546. http://doi.org/10.1016/j.pubrev.2014.04.004
Liu, B. F., Fraustino, J. D., & Jin, Y. (2015a). How disaster information form, source, type, and prior

disaster exposure affect public outcomes: Jumping on the social media bandwagon? *Journal of Applied Communication Research*, *43*(1), 44–65. http://doi.org/10.1080/00909882.2014.982685
Liu, B. F., Fraustino, J. D., & Jin, Y. (2015b). Social media use during disasters: How information form and source influence intended behavioral responses. *Communication Research*, *43*(5), 626–646. http://doi.org/10.1177/0093650214565917
Liu, B. F., Jin, Y., Briones, R., & Kuch, B. (2012). Managing turbulence in the blogosphere: Evaluating the Blog-Mediated Crisis Communication model with the American Red Cross. *Journal of Public Relations Research*, *24*(4), 353–370. http://doi.org/10.1080/1062726X.2012.689901
Maillat, D., Oswald, S., Metzger, M. J., & Flanagin, A. J. (2013). Credibility and trust of information in online environments: The use of cognitive heuristics. *Journal of Pragmatics*, *59*, 210–220. Retrieved from http://www.sciencedirect.com/science/article/pii/S0378216613001768
Mazzei, A., Kim, J.-N., & Dell'Oro, C. (2012). Strategic value of employee relationships and communicative actions: Overcoming corporate crisis with quality internal communication. *International Journal of Strategic Communication*, *6*(1), 31–44. http://doi.org/10.1080/1553118X.2011.634869
Mazzei, A., & Ravazzani, S. (2011). Manager-employee communication during a crisis: The missing link. *Corporate Communications: An International Journal*, *16*(3), 243–254. http://doi.org/10.1108/13563281111156899
Mazzei, A., & Ravazzani, S. (2015). Internal crisis communication strategies to protect trust relationships: A study of Italian companies. *International Journal of Business Communication*, *52*(3), 319–337. http://doi.org/10.1177/2329488414525447
Mei, J. S. A., Bansal, N., & Pang, A. (2010). New media: A new medium in escalating crises? *Corporate Communications: An International Journal*, *15*(2), 143–155. http://doi.org/10.1108/13563281011037919
Metzger, M. J. (2007). Making sense of credibility on the web: Models for evaluating online information and recommendations for future research. *Journal of the American Society for Information Science and Technology*, *58*(13), 2078–2091. http://doi.org/10.1002/asi.20672
Metzger, M. J., Flanagin, A. J., & Zwarun, L. (2003). College student Web use, perceptions of information credibility, and verification behavior. *Computers and Education*, *41*(3), 271–290. http://doi.org/10.1016/S0360-1315(03)00049-6
Miles, S. J., & Mangold, W. G. (2014). Employee voice: Untapped resource or social media time bomb? *Business Horizons*, *57*(3), 401–411. http://doi.org/10.1016/j.bushor.2013.12.011
Möhring, W., & Schlütz, D. (2010). *Die Befragung in der Medien- und Kommunikationswissenschaft* (2nd ed.). Wiesbaden: VS Verlag für Sozialwissenschaften. http://doi.org/10.1007/978-3-531-92421-2
Moqbel, M., Nevo, S., & Kock, N. (2013). Organizational members' use of social networking sites and job performance. *Information Technology & People*, *26*(3), 240–264. http://doi.org/10.1108/ITP-10-2012-0110
Morris, M. R., Counts, S., Roseway, A., Hoff, A., & Schwarz, J. (2012). Tweeting is believing? Understanding microblog credibility perceptions. *CSCW '12 Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work*, 441–450. http://doi.org/10.1145/2145204.2145274
Neill, M. S., & Moody, M. (2015). Who is responsible for what? Examining strategic roles in social media management. *Public Relations Review*, *41*(1), 109–118. http://doi.org/10.1016/j.pubrev.2014.10.014
Newhagen, J., & Rafaeli, S. (1996). Why communication researchers should study the Internet: A dialogue. *… Computer-Mediated Communication*, *46*(1), 4–13. http://doi.org/10.1111/j.1083-6101.1996.tb00172.x
Newport, F. (2012). *Americans rate computer industry best, oil and gas worst*. Princeton, NJ. Retrieved from http://www.gallup.com/poll/156713/americans-rate-computer-industry-best-

oil-gas-worst.aspx
Newsom, J. T., Prigerson, H. G., Schulz, R., & Reynolds, C. F. (2003). Investigating moderator hypotheses in aging research: Statistical, methodological, and conceptual difficulties with comparing separate regressions. *International Journal of Aging & Human Development*, *57*(2), 119–50. http://doi.org/10.2190/13LV-B3MM-PEWJ-3P3W
Nisen, M. (2015, August 17). Epic, fiery 5,000-word rebuttal penned by an Amazon exec takes on the New York Times' "hatchet piece." *Quartz*. Retrieved from http://qz.com/481087/epic-fiery-5000-word-rebuttal-penned-by-an-amazon-exec-takes-on-the-new-york-times/
Oetting, M. (2008). Wie Web 2.0 das Marketing revolutioniert. In T. Schwarz & G. Braun (Eds.), *Leitfaden Integrierte Kommunikation* (2nd ed., pp. 25–54). Wiesbaden: Marketing Börse/Absolit.
Ott, L., & Theunissen, P. (2015). Reputations at risk: Engagement during social media crises. *Public Relations Review*, *41*(1), 97–102. http://doi.org/10.1016/j.pubrev.2014.10.015
Pang, A., Hassan, N. B. B. A., & Chong, A. C. Y. (2013). Negotiating crisis in the social media environment: Evolution of crises online, gaining credibility offline. *Corporate Communications: An International Journal*, *19*(1), 96–118. http://doi.org/10.1108/CCIJ-09-2012-0064
Patzer, G. L. (1996). *Experiment-research methodology in marketing: Types and applications*. Westport, CT: Quorum Books.
Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879–891. http://doi.org/10.3758/BRM.40.3.879
Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *42*(1), 185–227. http://doi.org/10.1080/00273170701341316
Reichelt, J., Sievert, J., & Jacob, F. (2014). How credibility affects eWOM reading: The influences of expertise, trustworthiness, and similarity on utilitarian and social functions. *Journal of Marketing Communications*, *20*(1-2), 65–81. http://doi.org/10.1080/13527266.2013.797758
Reips, U.-D. (2002). Standards for Internet-based experimenting. *Experimental Psychology*, *49*(4), 243–256. http://doi.org/10.1027//1618-3169.49.4.243
Reputation Institute. (2015). *The world's most reputable countries*. Retrieved from http://www.reputationinstitute.com/thought-leadership/country-reptrak
Rickman Cosenza, T., Solomon, M. R., & Kwon, W.-S. (2015). Credibility in the blogosphere: A study of measurement and influence of wine blogs as an information source. *Journal of Consumer Behaviour*, *14*(2), 71–91. http://doi.org/10.1002/cb.1496
Roberts, C. (2010). Correlations among variables in message and messenger credibility scales. *American Behavioral Scientist*, *54*(1), 43–56. http://doi.org/10.1177/0002764210376310
Rokka, J., Karlsson, K., & Tienari, J. (2014). Balancing acts: Managing employees and reputation in social media. *Journal of Marketing Management*, *30*(7-8), 802–827. http://doi.org/10.1080/0267257X.2013.813577
Rooksby, J., Baxter, G., Cliff, D., Greenwood, D., Harvey, N., Kahn, A. W., … Sommerville, I. (2009). *Social networking and the workplace*. *The UK Large Scale Complex IT Systems Initiative*. North Haugh, UK: University of St. Andrews. Retrieved from http://lscits.cs.bris.ac.uk/docs/HOReport1b.pdf
Sadlovska, V., & Angelovska, A. (2014). *CSR guiding public perception of the global energy industry*. Retrieved from https://www.reputationinstitute.com/getattachment/Resources/Registered/PDF-Resources/CSR-Guiding-Public-Perception-of-the-Global-Energy/Energy-Multi-Country-Brief-BLH.pdf.aspx;;?ext=.pdf
Safko, L., & Brake, D. K. (2009). *The social media bible: Tactics, tools and strategies for business success.* Hoboken, NJ: John Wiley & Sons.
Schmierbach, M., & Oeldorf-Hirsch, A. (2012). A little bird told me, so I didn't believe it: Twitter,

credibility, and issue perceptions. *Communication Quarterly*, *60*(3), 317–337. http://doi.org/10.1080/01463373.2012.688723
Schoonderwoerd, N. (2010). Twitter onderzoek. Retrieved from http://nl.twirus.com/details/blog/672/
Schultz, F., & Raupp, J. (2010). The social construction of crises in governmental and corporate communications: An inter-organizational and inter-systemic analysis. *Public Relations Review*, *36*(2), 112–119. http://doi.org/10.1016/j.pubrev.2009.11.002
Schultz, F., Utz, S., & Göritz, A. (2011). Is the medium the message? Perceptions of and reactions to crisis communication via Twitter, blogs and traditional media. *Public Relations Review*, *37*(1), 20–27. http://doi.org/10.1016/j.pubrev.2010.12.001
Seeger, M. W., Ulmer, R. R., Novak, J. M., & Sellnow, T. (2005). Post-crisis discourse and organizational change, failure and renewal. *Journal of Organizational Change Management*, *18*, 78–95. http://doi.org/10.1108/09534810510579869
Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: new procedures and recommendations. *Psychological Methods*, *7*(4), 422. http://doi.org/10.1037//1082-989x.7.4.422
Sijtsma, K. (2009). On the use, the misuse, and the very limited usefulness of Cronbach’s alpha. *Psychometrika*, *74*(1), 107–120. http://doi.org/10.1007/s11336-008-9101-0
Silberman, M. S., Milland, K., LaPlante, R., Ross, J., & Irani, L. (2015). Stop citing Ross et a. 2010, “Who are the crowdworkers?” Retrieved from https://medium.com/@silberman/stop-citing-ross-et-al-2010-who-are-the-crowdworkers-b3b9b1e8d300#.6c9uwotpe
Skeels, M. M., & Grudin, J. (2009). When social networks cross noundaries: A case study of workplace use of Facebook and LinkedIn. *Group´09*, *10*(3), 95–103. http://doi.org/10.1145/1531674.1531689
Slater, M. D. (1989). Messages as experimental stimuli: Design, analysis, and interference. In *Paper presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication* (pp. 1–21).
Sohn, Y. J., & Lariscy, R. W. (2014). Understanding reputational crisis: Definition, properties, and consequences. *Journal of Public Relations Research*, *26*(1), 23–43. http://doi.org/10.1080/1062726X.2013.795865
Sohn, Y. J., & Lariscy, R. W. (2015). A “buffer” or “boomerang?” The role of corporate reputation in bad times. *Communication Research*, *42*(2), 237–259. http://doi.org/10.1177/0093650212466891
Spence, P. R., Lachlan, K. A., Edwards, A., & Edwards, C. (2016). Tweeting fast matters, but only if I think about it: Information updates on social media. *Communication Quarterly*, *64*(1), 55–71. http://doi.org/10.1080/01463373.2015.1100644
Sridharan, P. (2016). Doing more with 140 characters. Retrieved from https://blog.twitter.com/2016/doing-more-with-140-characters
Stine, R. (1989). An introduction to bootstrap methods. *Sociological Methods and Research*, *18*(2-3), 243–291. http://doi.org/10.1177/0049124189018002003
Strandberg, J. M., & Vigsø, O. (2016). Internal crisis communication: An employee perspective on narrative, culture, and sensemaking. *Corporate Communications: An International Journal*, *21*(1), 89–102. http://doi.org/10.1108/CCIJ-11-2014-0083
Streitfeld, D., & Kantor, J. (2015, August 17). Jeff Bezos and Amazon employees join debate over its culture. *The New York Times*. Retrieved from http://www.nytimes.com/2015/08/18/technology/amazon-bezos-workplace-management-practices.html?_r=0
Sundar, S. S. (2008). The MAIN model: A heuristic approach to understanding technology effects on credibility. *Digital Media, Youth, and Credibility*, 73–100. http://doi.org/10.1162/dmal.9780262562324.073
Sung, M., & Hwang, J.-S. (2014). Who drives a crisis? The diffusion of an issue through social

networks. *Computers in Human Behavior*, *36*, 246–257. http://doi.org/10.1016/j.chb.2014.03.063

Takahashi, B., Tandoc, E. C., & Carmichael, C. (2015). Communicating on Twitter during a disaster: An analysis of tweets during Typhoon Haiyan in the Philippines. *Computers in Human Behavior*, *50*, 392–398. http://doi.org/10.1016/j.chb.2015.04.020

Taylor, M. (2010). Towards a holistic organizational approach to understanding crisis. In W. T. Coombs & S. J. Holladay (Eds.), *The Handbook of Crisis Communication* (pp. 698–704). Oxford, UK: Wiley-Blackwell. http://doi.org/10.1002/9781444314885.ch36

ten Brinke, L., & Adams, G. S. (2015). Saving face? When emotion displays during public apologies mitigate damage to organizational performance. *Organizational Behavior and Human Decision Processes*, *130*, 1–12. http://doi.org/10.1016/j.obhdp.2015.05.003

Titcomb, J. (2015, August 17). Jeff Bezos says he doesn't recognise "soulless and dystopian" portrayal of Amazon. *The Telegraph*. Retrieved from http://www.telegraph.co.uk/technology/amazon/11806849/Jeff-Bezos-says-he-doesnt-recognise-soulless-and-dystopian-portrayal-of-Amazon.html

Utz, S., Schultz, F., & Glocka, S. (2013). Crisis communication online: How medium, crisis type and emotions affected public reactions in the Fukushima Daiichi nuclear disaster. *Public Relations Review*, *39*(1), 40–46. http://doi.org/10.1016/j.pubrev.2012.09.010

Valinsky, J. (2015, August 17). #InsideAmazon: "Soul-crushing" workplace slammed after New York Times exposé. *Digiday*. Retrieved from http://digiday.com/brands/insideamazon-soul-crushing-workplace-slammed-new-york-times-expose/

van der Meer, T. G. L. A., & Verhoeven, J. W. M. (2014). Emotional crisis communication. *Public Relations Review*, *40*(3), 526–536. http://doi.org/10.1016/j.pubrev.2014.03.004

van der Meer, T. G. L. A., & Verhoeven, P. (2013). Public framing organizational crisis situations: Social media versus news media. *Public Relations Review*, *39*(3), 229–231. http://doi.org/10.1016/j.pubrev.2012.12.001

van Norel, N. D., Kommers, P. a M., van Hoof, J. J., & Verhoeven, J. W. M. (2014). Damaged corporate reputation: Can celebrity Tweets repair it? *Computers in Human Behavior*, *36*, 308–315. http://doi.org/10.1016/j.chb.2014.03.056

van Zoonen, W., & van der Meer, T. (2015). The importance of source and credibility perception in times of crisis: Crisis communication in a socially mediated era. *Journal of Public Relations Research*, *27*(5), 371–388. http://doi.org/10.1080/1062726X.2015.1062382

van Zoonen, W., van der Meer, T. G. L. A., & Verhoeven, J. W. M. (2014). Employees work-related social-media use: His master's voice. *Public Relations Review*, *40*(5), 850–852. http://doi.org/10.1016/j.pubrev.2014.07.001

van Zoonen, W., Verhoeven, J. W. M., & Elving, W. J. L. (2014). Understanding work-related social media use: An extension of theory of planned behavior. *International Journal of Management Economics and Social Sciences*, *3*(4), 164–183. Retrieved from http://www.ijmess.com

van Zoonen, W., Verhoeven, J. W. M., & Vliegenthart, R. (2016). How employees use Twitter to talk about work: A typology of work-related tweets. *Computers in Human Behavior*, *55*, 329–339. http://doi.org/10.1016/j.chb.2015.09.021

Veil, S. R., Buehner, T., & Palenchar, M. J. (2011). A work-in-process literature review: Incorporating social media in risk and crisis communication. *Journal of Contingencies and Crisis Management*, *19*(2), 110–122. http://doi.org/10.1111/j.1468-5973.2011.00639.x

Veil, S. R., Sellnow, T. L., & Petrun, E. L. (2012). Hoaxes and the paradoxical challenges of restoring legitimacy: Dominos' response to its YouTube crisis. *Management Communication Quarterly*, *26*(2), 322–345. http://doi.org/10.1177/0893318911426685

Wallace, E., Buil, I., & de Chernatony, L. (2012). Facebook "friendship" and brand advocacy. *Journal of Brand Management*, *20*(2), 128–146. http://doi.org/10.1057/bm.2012.45

Wan, S., Koh, R., Ong, A., & Pang, A. (2015). Parody social media accounts: Influence and impact on organizations during crisis. *Public Relations Review*, *41*(3), 381–385.

http://doi.org/10.1016/j.pubrev.2015.01.002
Wang, Y. (2016). Brand crisis communication through social media. *Corporate Communications: An International Journal*, *21*(1), 56–72. http://doi.org/http://dx.doi.org/10.1108/CCIJ-10-2014-0065

Weber Shandwick. (2014). *Employees rising: Seizing the opportunity in employee activism*. Washington. Retrieved from https://www.webershandwick.com/uploads/news/files/employees-rising-seizing-the-opportunity-in-employee-activism.pdf

Weick, K. E. (1988). Enacted sensemaking in crisis situations. *Journal of Management Studies*, *25*(4), 305–317. http://doi.org/10.1111/j.1467-6486.1988.tb00039.x

Westerman, D., Spence, P. R., & van der Heide, B. (2014). Social media as information source: Recency of updates and credibility of information. *Journal of Computer-Mediated Communication*, *19*(2), 171–183. http://doi.org/10.1111/jcc4.12041

Wike, R., Stoke, B., & Poushter, J. (2015). Global publics back U.S. on fighting ISIS, but are critical of post-9/11 torture. *Pew Research Center*, 1–42. Retrieved from http://www.pewglobal.org/files/2015/06/Balance-of-Power-Report-FINAL-June-23-2015.pdf

Woods, A. T., Velasco, C., Levitan, C. A., Wan, X., & Spence, C. (2015). Conducting perception research over the internet: A tutorial review. *PeerJ*, *3:e1058*. http://doi.org/10.7717/peerj.1058

Xu, J., & Wu, Y. (2015). Using Twitter in crisis management for organizations bearing different country-of-origin perceptions. *Journal of Managerial Psychology*, *19*(3), 239–254. http://doi.org/10.1108/JCOM-06-2013-0050

Zhao, X., Lynch Jr., J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, *37*(2), 197–206. http://doi.org/10.1086/651257

APPENDIX

A Additional figures and tables: Demographics

Table A.1 Demographics across sample groups

	Convenience sample	Crowdsource sample	Overall
Age	*M* = 27.30 (*SD* = 9.47)	*M* = 30.08 (*SD* = 10.15)	*M* = 29.44 (*SD:* 10.05)
Education	Bachelor's: 53 (43.8%) High school: 30 (24.8%) Master's: 29 (24%) Other: 9 (7.6%)	Bachelor's: 159 (41.3%) High school: 100 (26.0%) Master's: 83 (21.6%) Other: 43 (11.2%)	Bachelor's: 212 (41.9%) High school: 130 (25.7%) Master's: 112 (22.1%) Other: 52 (10.3%)
Employment	Student: 66 (54.1%) Full time: 41 (33.6%) Part time: 12 (9.8%) Other: 3 (2.4%)	Full time: 155 (40.3%) Student: 132 (24.3%) Part time: 54 (14.0%) Other: 44 (11.4%)	Student: 198 (39.1%) Full time: 196 (38.7%) Part time: 66 (13.0%) Other: 47 (9.3%)
Nationality	Austria: 70 (57.4%) The Netherlands: 11 (9%) Germany: 9 (7.4%) Bulgaria: 6 (4.9%) Other (Belarus, Bermuda, Canada, China, Finland, France, Greece, Hungary, Kazakhstan, Lithuania, Russia, Singapore, Slovenia, Switzerland, United Kingdom, United States): 26 (21.3%)	United Kingdom: 172 (45%) Portugal: 41 (10.6%) The Netherlands: 29 (7.5%) Germany: 24 (6.2%) Other (Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Hungary, Ireland, Italy, Lithuania, Malawi, Norway, Poland, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland): 120 (31.1%)	United Kingdom: 178 (35%) Austria: 72 (14.2%) The Netherlands: 49 (7.9%) Portugal: 41 (8.1%) Germany: 33 (6.5%) Other: 146 (28.7%)
Social media usage	Inactives: 19 (16.0%) Follower: 91 (76.5%) Influencer: 9 (7.6%)	Inactives: 98 (25.5%) Follower: 232 (60.3%) Influencer: 55 (14.3%)	Inactives: 117 (23.2%) Follower: 323 (64.1%) Influencer: 64 (12.7)

Note. Total completed responses (*N* = 508) excluding missing values per item.

B Additional figures and tables: Social media usage

The following Figure (A.1) presents a concise view on some of the findings regarding the participants in this study and their social media usage, grounded in the Social-Mediated Crisis Communication (SMCC) model (Austin et al., 2012). The size of the circles representing the publics has been adjusted in size according to (self-reported) membership. As most people in the study identified with the statements describing the social media followers, this circle is the largest. Since both traditional and social media are, as found by the study, increasingly fragmented, the rectangular shapes include the most used media in each category, i.e. Facebook and newspapers. The blue arrows next to the three social media publics also show how these use different media as primary venues of information.

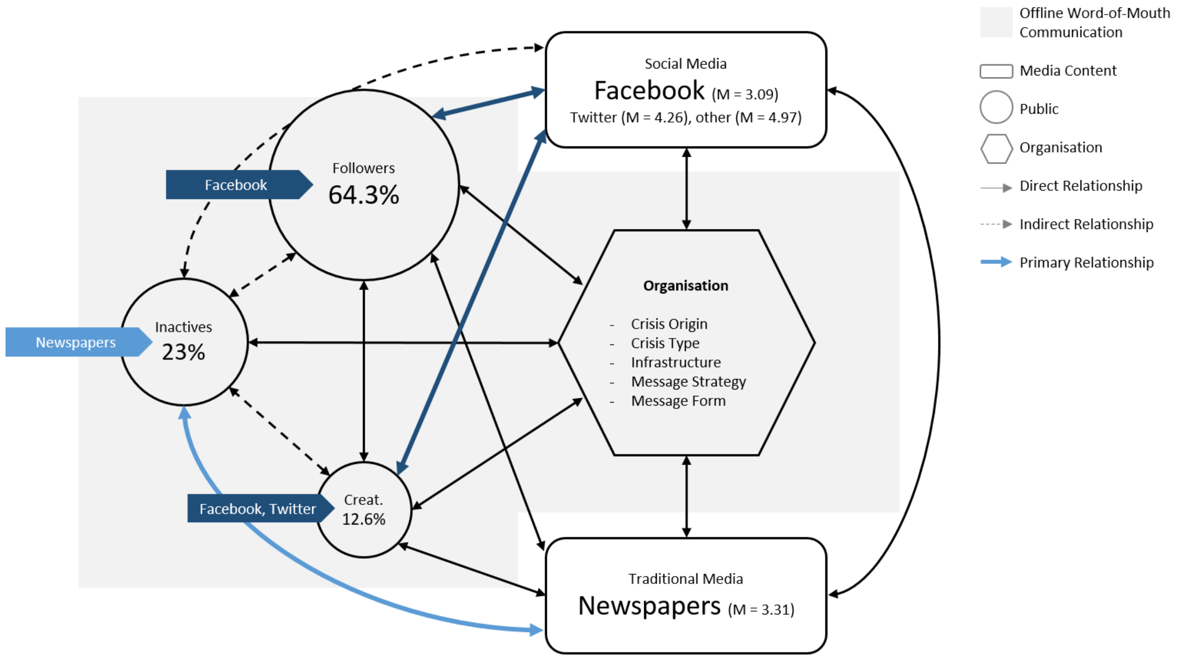


Figure A.1 Social media usage across sample groups

C Factor analysis outcome variables

Table A.2 Determining unidimensionality through factor analysis

Items	Secondary crisis actions	Organisational reputation
I would share the message I saw with others.	.828	
I would tell friends about this incident.	.702	
I would react directly on social media.	.773	
I would be less supportive of Cadabra.	.499	-.599
I would stop buying Cadabra products or services.	.538	-.550
I would tell negative things about Cadabra and its products.	.649	
I would sign an online petition to boycott Cadabra.	.703	
Cadabra is concerned with the well-being of its publics (e.g. customers, employee, suppliers).		.756
Cadabra is basically dishonest.		.502
I do not trust Cadabra to tell the truth.		.675
Under most circumstances, I would be likely to believe what Cadabra says.		.682
Cadabra is NOT concerned with the well-being of its publics (e.g. customers, employee, suppliers).		.765
Cronbach's alpha	.82	.77
Eigenvalue	5.15	1.60

Note. Factor (principal components) analysis with varimax rotation. Two factors with eigenvalue above 1, 56.21% of variance explained. Table with rotated loadings. Factor loadings below .4 were omitted from the table. Cronbach's alpha excluding cross-loading items that were as reported subsequently removed.

D Path model bootstrapping mediation

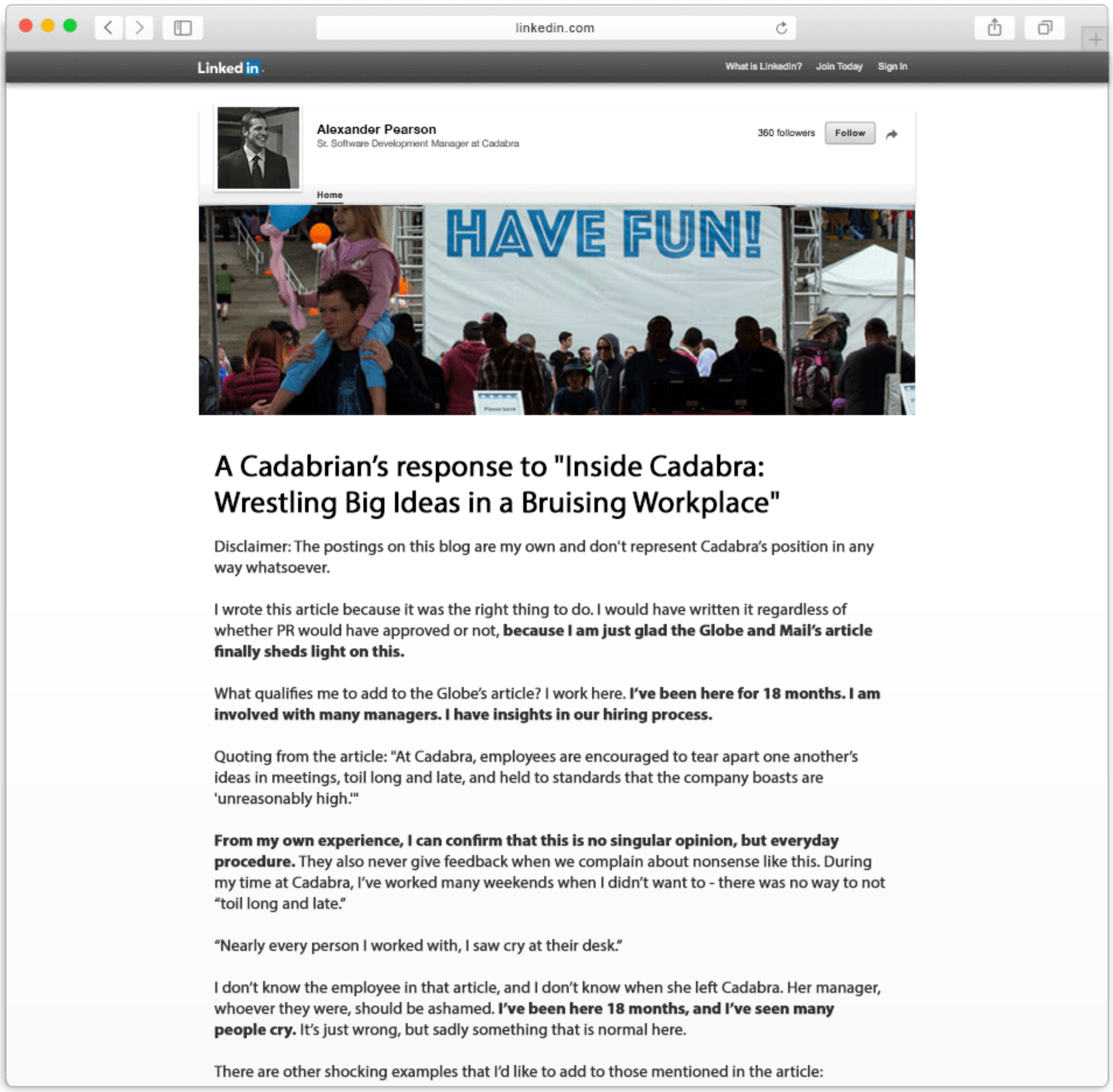
Table A.3 Bootstrapping values for path mediation model

Condition	$a_{1,2}$	$b_{1,2}$	$a_{3,4}$	$b_{3,4}$	c (total)^{A}	c' (direct)^{A}	Indirect$_{1,2}$^{B}	Indirect$_{3,4}$^{B}	R^2
Advocacy									
Reputation	-.55 (.14)***	-.04 (.09)^{ns}	-.11 (.14)^{ns}	.25 (.09)**	-.00 (.06)^{ns}	-.00 (.07)^{ns}	.02 (.05) [-.07, .12]	-.02 (.03) [-.11, .04]	.06
Secondary actions	-.55 (.14)***	.08 (.08)^{ns}	-.11 (.14)^{ns}	-.07 (.09)^{ns}	.10 (.07)^{ns}	.12 (.07)*	.05 (.06) [-.18, .05]	.01 (.02) [-.02, .09]	.06
Adversary									
Reputation	-.41 (.05)***	.17 (.07)**	-.27 (.06)***	.12 (.08)*	.15 (.06)**	-.05 (.07)^{ns}	.12 (.06) [.01, .25]	.06 (.04) [-.00, .15]	.08
Secondary actions	-.41 (.05)***	.18 (.09)*	-.27 (.06)***	.18. (.08)**	-.11 (.06)*	.01 (.07)^{ns}	-.19 (.11) [-.41, -.01]	-.12 (.06) [-.28, -.02]	.14
Microblog									
Reputation	-.31 (.06)***	-.21 (.10)**	-.10 (.06)^{ns}	.11 (.10)^{ns}	.20 (.07) ^{ns}	-.03 (.07)^{ns}	.12 (.07) [.02, .29]	-.02 (.03) [-.10, .01]	.03
Secondary actions	-.31 (.06)***	.19 (.09)**	-.10 (.06)^{ns}	.10 (.08)^{ns}	.07 (.07)^{ns}	.13 (.07)**	-.16 (.08) [-.36, -.02]	-.03 (.03) [-.12, .01]	.11
Blog									
Reputation	-.34 (.06)***	-.08 (.09) ^{ns}	-.20 (.06)***	.08 (.08)^{ns}	-.12 (.06)*	.08 (.07) ^{ns}	.05 (.07) [-.07, .19]	.03 (.04) [-.03, .13]	.05
Secondary actions	-.34 (.06)***	.12 (.09) ^{ns}	-.20 (.06)***	.09 (.09) ^{ns}	.08 (.06)^{ns}	-.02 (.07) ^{ns}	-.11 (.09) [-.28, .06]	-.04 (.05) [-.18, .04]	.06

Note. Messenger credibility mediation paths $a_{1,2}$ and $b_{1,2}$, message credibility mediation paths $a_{3,4}$ and $b_{3,4}$ from Figure 4.2. Standardised values. Confidence intervals for indirect effects in brackets. Please note that signs + and - have been reversed in the results chapter for ease of comprehension. Table elements loosely based on van Zoonen and van der Meer (2015, p. 381).
^{ns} = not significant, * = $p < .1$, ** $p < .05$, *** $p < .001$.
^{A} Non-linear total effects calculated with AMOS 22 (Arbuckle, 2013)
^{B} Mediation effects calculated with AMOS 22 (Arbuckle, 2013) implementing a user-defined "estimand" written by Gaskin (2012)

E Stimulus materials

The section below details some decisions regarding the manipulation of stimulus materials in the study's conditions. It also shows four out of the total of eight messages. Below (Figure A.2) is a full-length example of one of the stimulus messages. All materials are available from the author.


linkedin.com

Linked in

What is LinkedIn? Join Today Sign In

Alexander Pearson
Sr. Software Development Manager at Cadabra

360 followers Follow

Home

HAVE FUN!

A Cadabrian's response to "Inside Cadabra: Wrestling Big Ideas in a Bruising Workplace"

Disclaimer: The postings on this blog are my own and don't represent Cadabra's position in any way whatsoever.

I wrote this article because it was the right thing to do. I would have written it regardless of whether PR would have approved or not, **because I am just glad the Globe and Mail's article finally sheds light on this.**

What qualifies me to add to the Globe's article? I work here. **I've been here for 18 months. I am involved with many managers. I have insights in our hiring process.**

Quoting from the article: "At Cadabra, employees are encouraged to tear apart one another's ideas in meetings, toil long and late, and held to standards that the company boasts are 'unreasonably high.'"

From my own experience, I can confirm that this is no singular opinion, but everyday procedure. They also never give feedback when we complain about nonsense like this. During my time at Cadabra, I've worked many weekends when I didn't want to - there was no way to not "toil long and late."

"Nearly every person I worked with, I saw cry at their desk."

I don't know the employee in that article, and I don't know when she left Cadabra. Her manager, whoever they were, should be ashamed. **I've been here 18 months, and I've seen many people cry.** It's just wrong, but sadly something that is normal here.

There are other shocking examples that I'd like to add to those mentioned in the article:

Figure A.2 Full-length example of a stimulus: Adversary employee blog post

Messenger: External vs. internal. Some key signals were placed to differentiate both conditions (see Figure A.2): While in the internal variant, the employee both announced his affiliation in heading and body text as well as in the 'profile section' of both media (LinkedIn, Twitter), the external variant displayed an unrelated company affiliation in the section and only announced in the body text that the respondent was a consumer of the company. This choice was made in order to bolster the authenticity of the messages – after review of real messages it was decided that is was unlikely and thus inauthentic for a consumer to announce his affiliation in the heading, however, it was more likely for an employee, as happened in the existing case (Ciubotariu, 2015).

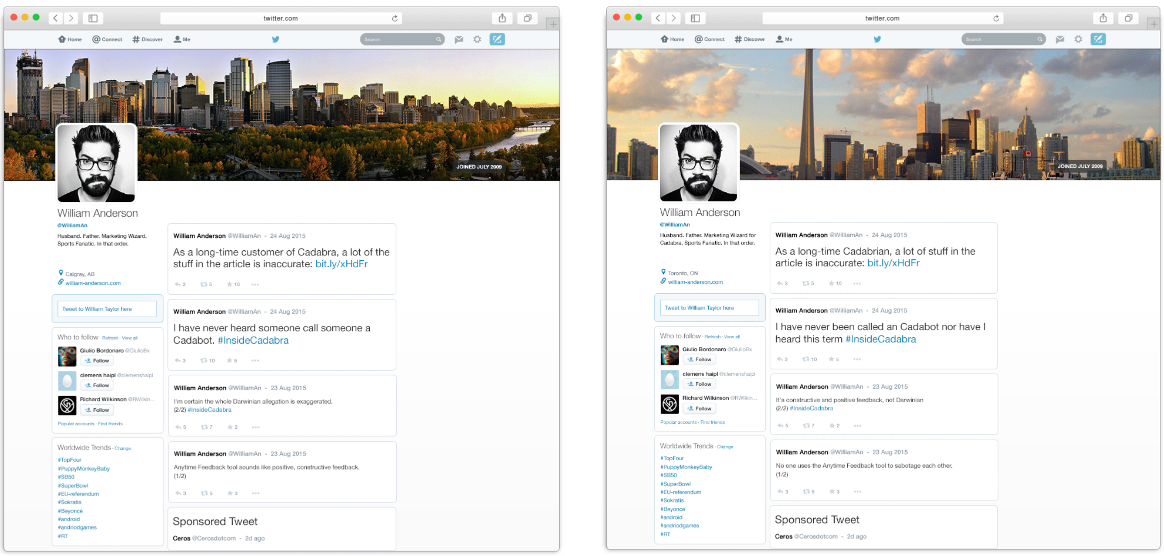


Figure A.3 Examples of the messenger condition: Consumer vs. employee

Message: Advocacy vs. adversary. The advocacy condition was kept as close to the original messages of the Amazon case as possible (Ciubotariu, 2015). The adversary condition was developed from the former (see Figure A.4 on the next page). To ensure authenticity of the newly developed version, all versions were checked by experienced social media users. To keep close to the real template, visuals were also used to transport the message.

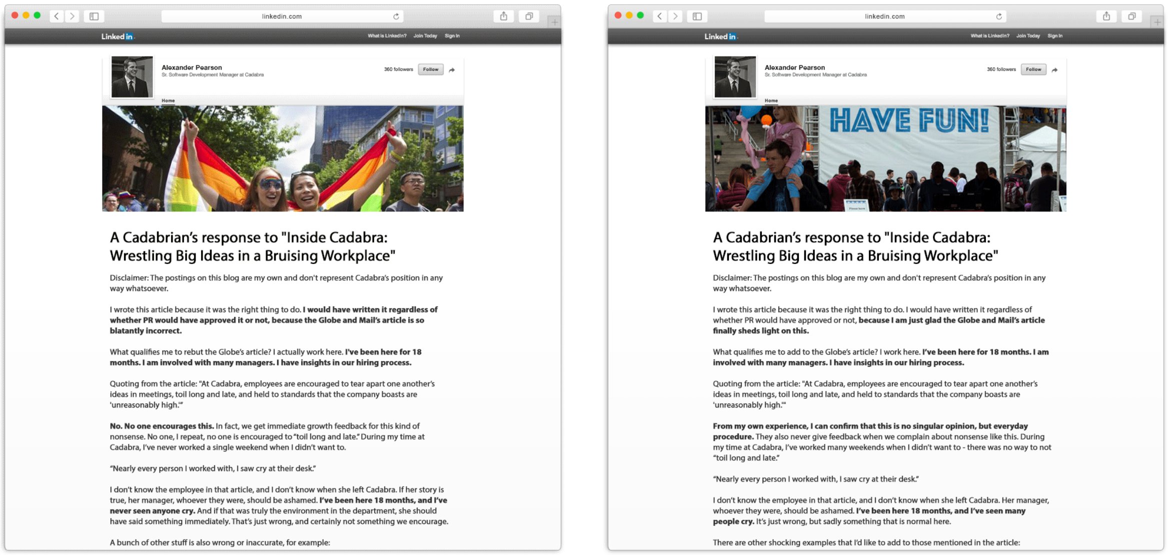


Figure A.4 Examples of the message condition: Advocacy vs. adversary

Medium: Blog vs. microblog. Twitter was chosen for the microblog condition, as it is the most renowned microblogging platform (Schmierbach & Oeldorf-Hirsch, 2012) as well as among the most studied social media in crises (Austin et al., 2012). LinkedIn was chosen as it is a popular social network that enables blogging without length limitations via its Pulse platform (Kothari, 2015). Design followed the most recent version of the platform as closely as possible (see Figure 3.3).

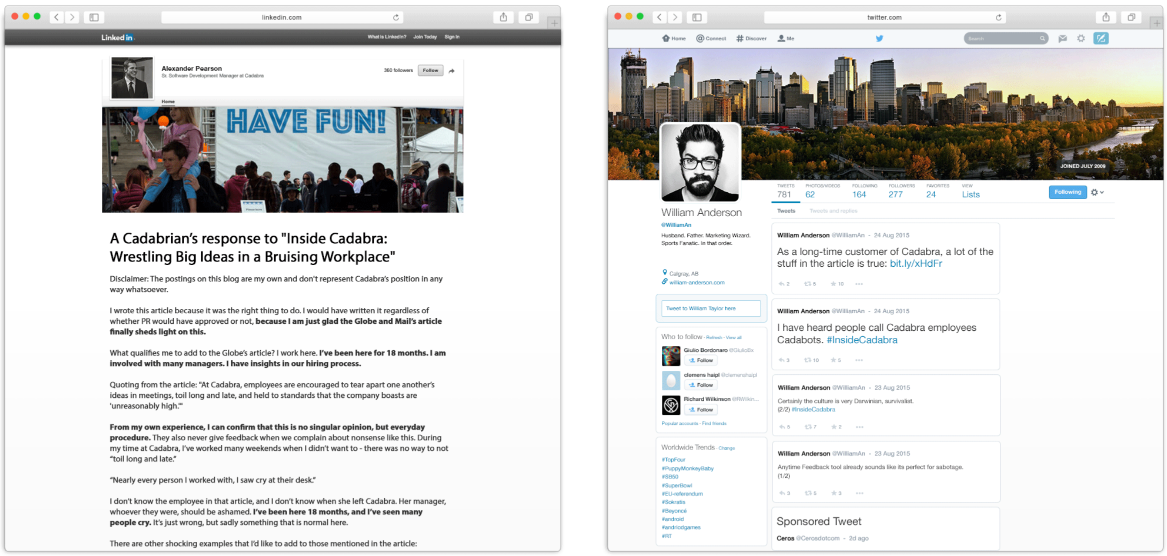
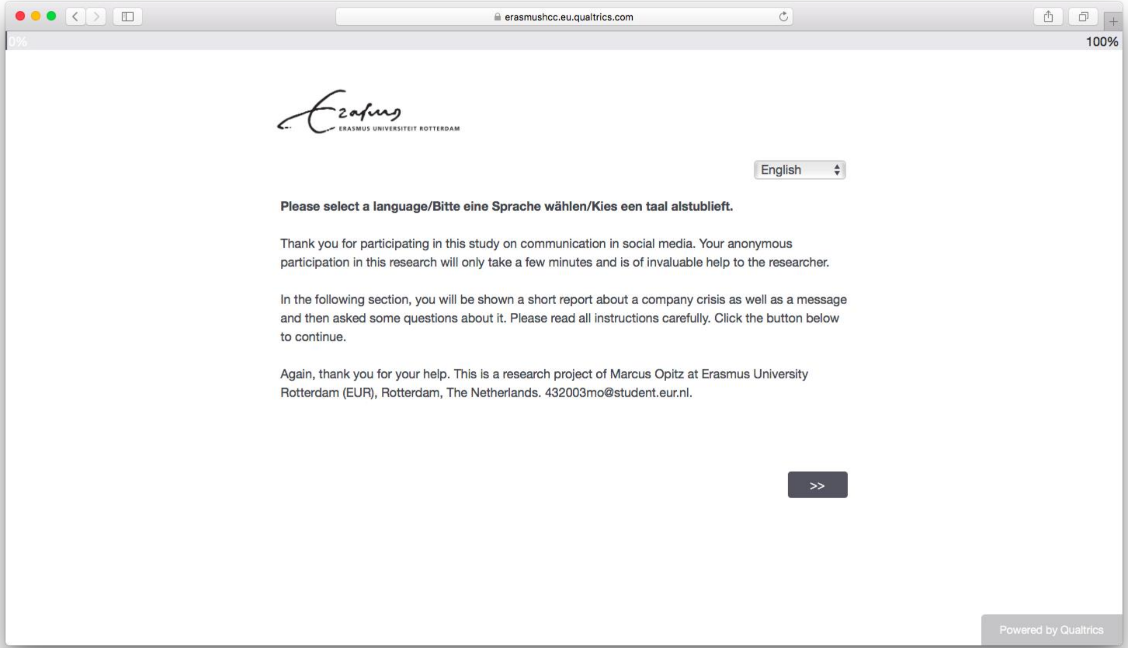
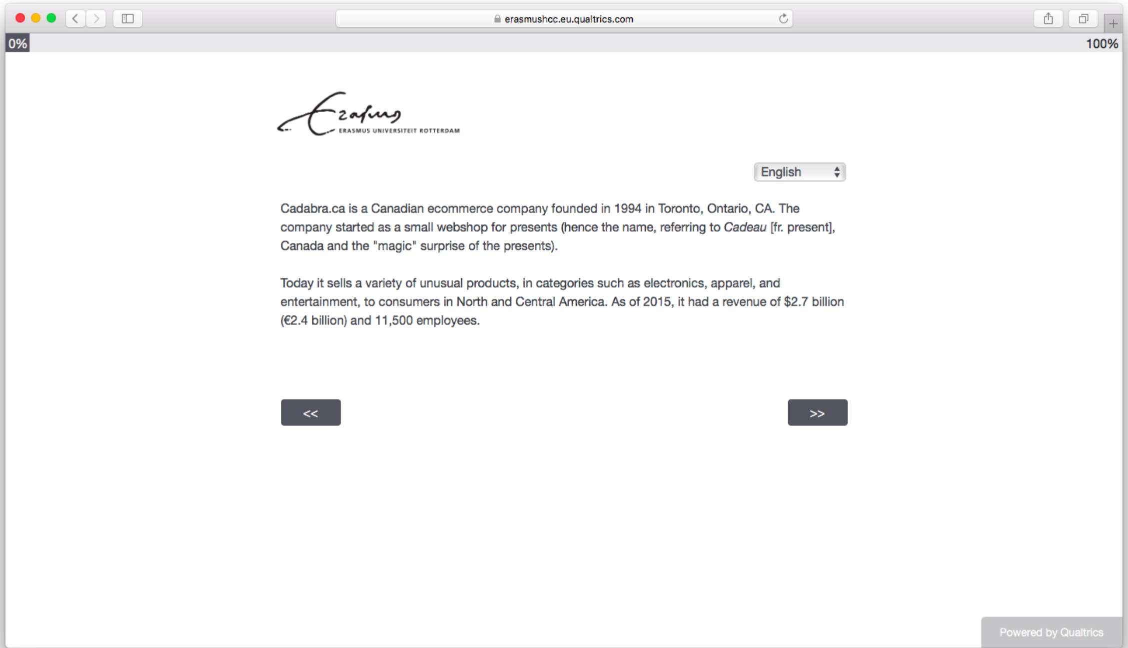


Figure A.5 Examples of the medium condition: Blog vs. microblog

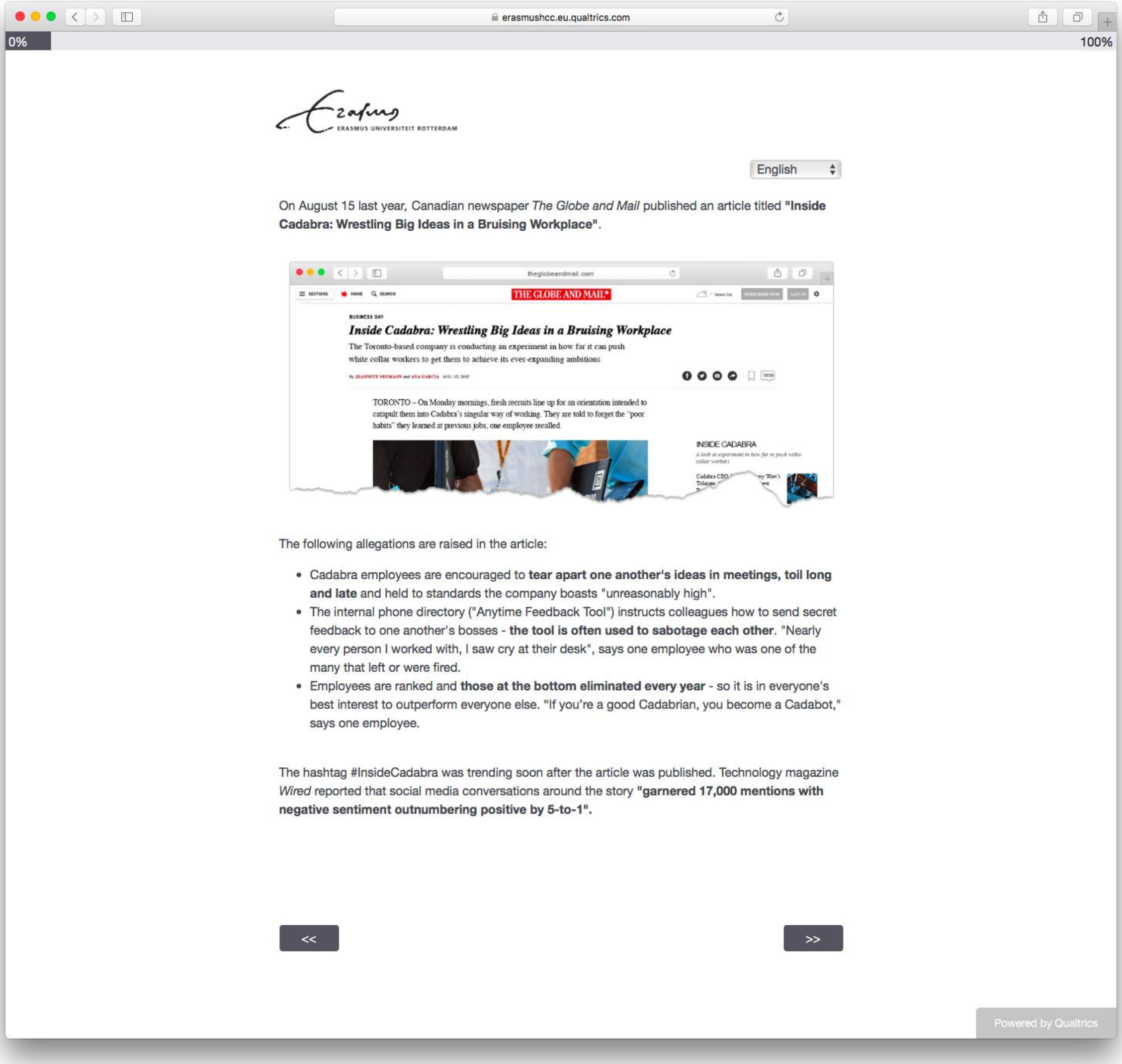
F Research instrument



1 Introduction



2 Company



erasmushcc.eu.qualtrics.com

0%

100%

ERASMUS UNIVERSITEIT ROTTERDAM

English

On August 15 last year, Canadian newspaper *The Globe and Mail* published an article titled **"Inside Cadabra: Wrestling Big Ideas in a Bruising Workplace"**.

theglobeandmail.com

THE GLOBE AND MAIL

BUSINESS DAY

Inside Cadabra: Wrestling Big Ideas in a Bruising Workplace

The Toronto-based company is conducting an experiment in how far it can push white collar workers to get them to achieve its ever-expanding ambitions

By JEANNETTE NEUMANN and ANA GARCIA

TORONTO – On Monday mornings, fresh recruits line up for an orientation intended to catapult them into Cadabra's singular way of working. They are told to forget the "poor habits" they learned at previous jobs, one employee recalled.

INSIDE CADABRA

A look at experiment in how far to push white-collar workers

The following allegations are raised in the article:

- Cadabra employees are encouraged to **tear apart one another's ideas in meetings, toil long and late** and held to standards the company boasts "unreasonably high".
- The internal phone directory ("Anytime Feedback Tool") instructs colleagues how to send secret feedback to one another's bosses - **the tool is often used to sabotage each other**. "Nearly every person I worked with, I saw cry at their desk", says one employee who was one of the many that left or were fired.
- Employees are ranked and **those at the bottom eliminated every year** - so it is in everyone's best interest to outperform everyone else. "If you're a good Cadabrian, you become a Cadabot," says one employee.

The hashtag #InsideCadabra was trending soon after the article was published. Technology magazine *Wired* reported that social media conversations around the story **"garnered 17,000 mentions with negative sentiment outnumbering positive by 5-to-1"**.

<<   >>

Powered by Qualtrics

3 Crisis scenario

erasmushcc.eu.qualtrics.com

ERASMUS UNIVERSITEIT ROTTERDAM

English

This is how someone responded to the article on his LinkedIn profile. Please read the message carefully. (*In some cases the screenshot might take a few seconds to load. A transcript is available at the bottom.*)

linkedin.com

Alexander Pearson

A response to "Inside Cadabra: Wrestling Big Ideas in a Bruising Workplace"

Disclaimer: The postings on this blog are my own and I am not connected to Cadabra in any way whatsoever.

I wrote this article because it was the right thing to do. **I would have written it regardless of what others say, because the Globe and Mail's article is so blatantly incorrect.**

What qualifies me to rebut the Globe's article? **I've been a long-time customer. I have been talking to them many times, have dealt with them many times.**

Quoting from the article: "At Cadabra, employees are encouraged to tear apart one another's ideas in meetings, toil long and late, and held to standards that the company boasts are 'unreasonably high.'"

No. No one I have heard of encourages this. In fact, I even heard from managers who aim to give immediate feedback for this kind of nonsense.

"Nearly every person I worked with, I saw cry at their desk."

I don't know the employee in that article, and I don't know when she left the company. If her story is true, her manager, whoever they were, should be ashamed. **I've been dealing with them for so long, and I have never heard or read of anyone crying.** And if that was truly the environment in the department, she should have said something immediately.

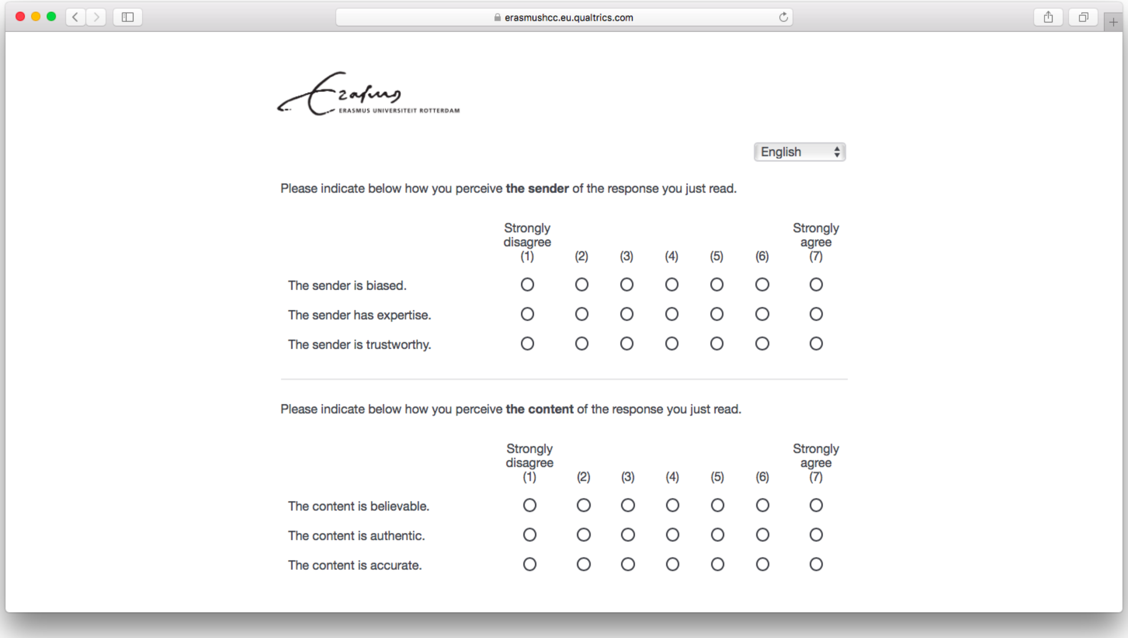
That's just wrong, and certainly not something the company I have dealt so many times with encourages. A bunch of other stuff is also wrong or inaccurate.
For example:

Were you able to read the text in the screenshot?

- Yes.
- No, I would like to see a transcript.

>>

4 Condition (select one of eight; see Appendix E)



erasmushcc.eu.qualtrics.com

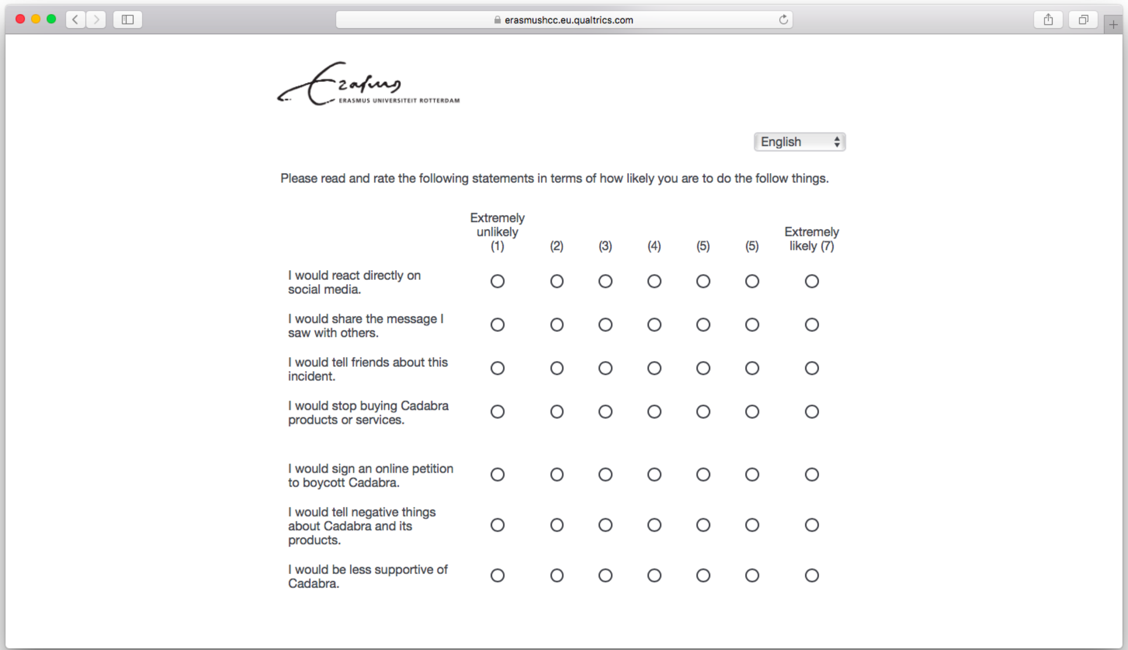
English

Please indicate below how you perceive **the sender** of the response you just read.

	Strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	Strongly agree (7)
The sender is biased.	○	○	○	○	○	○	○
The sender has expertise.	○	○	○	○	○	○	○
The sender is trustworthy.	○	○	○	○	○	○	○

Please indicate below how you perceive **the content** of the response you just read.

	Strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	Strongly agree (7)
The content is believable.	○	○	○	○	○	○	○
The content is authentic.	○	○	○	○	○	○	○
The content is accurate.	○	○	○	○	○	○	○

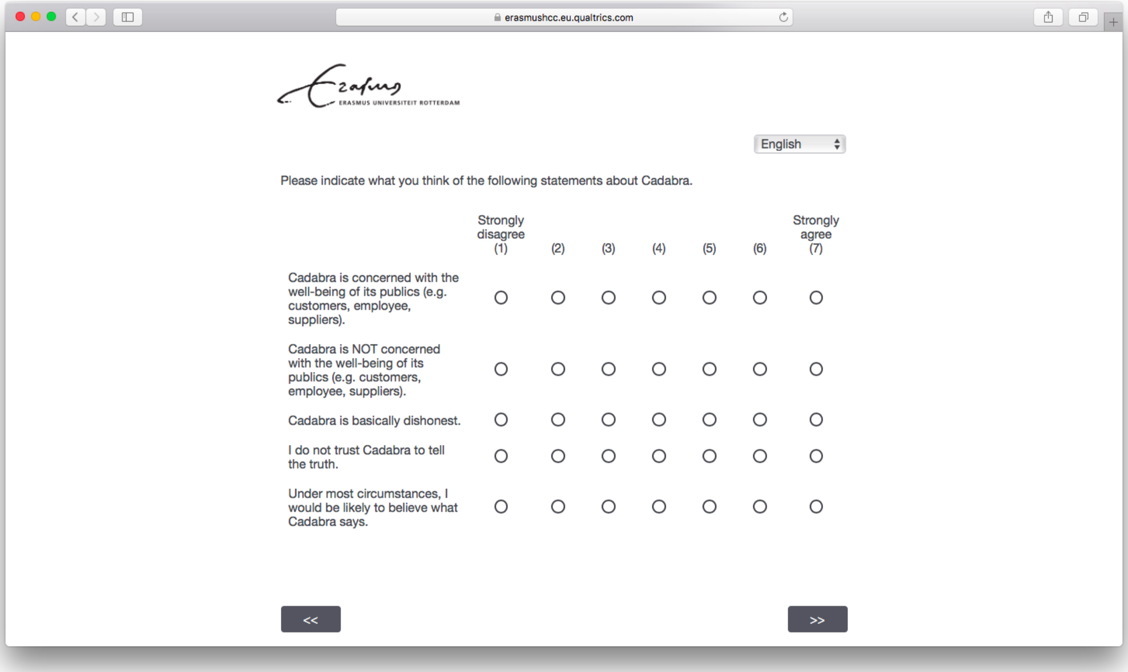


erasmushcc.eu.qualtrics.com

English

Please read and rate the following statements in terms of how likely you are to do the follow things.

	Extremely unlikely (1)	(2)	(3)	(4)	(5)	(5)	Extremely likely (7)
I would react directly on social media.	○	○	○	○	○	○	○
I would share the message I saw with others.	○	○	○	○	○	○	○
I would tell friends about this incident.	○	○	○	○	○	○	○
I would stop buying Cadabra products or services.	○	○	○	○	○	○	○
I would sign an online petition to boycott Cadabra.	○	○	○	○	○	○	○
I would tell negative things about Cadabra and its products.	○	○	○	○	○	○	○
I would be less supportive of Cadabra.	○	○	○	○	○	○	○

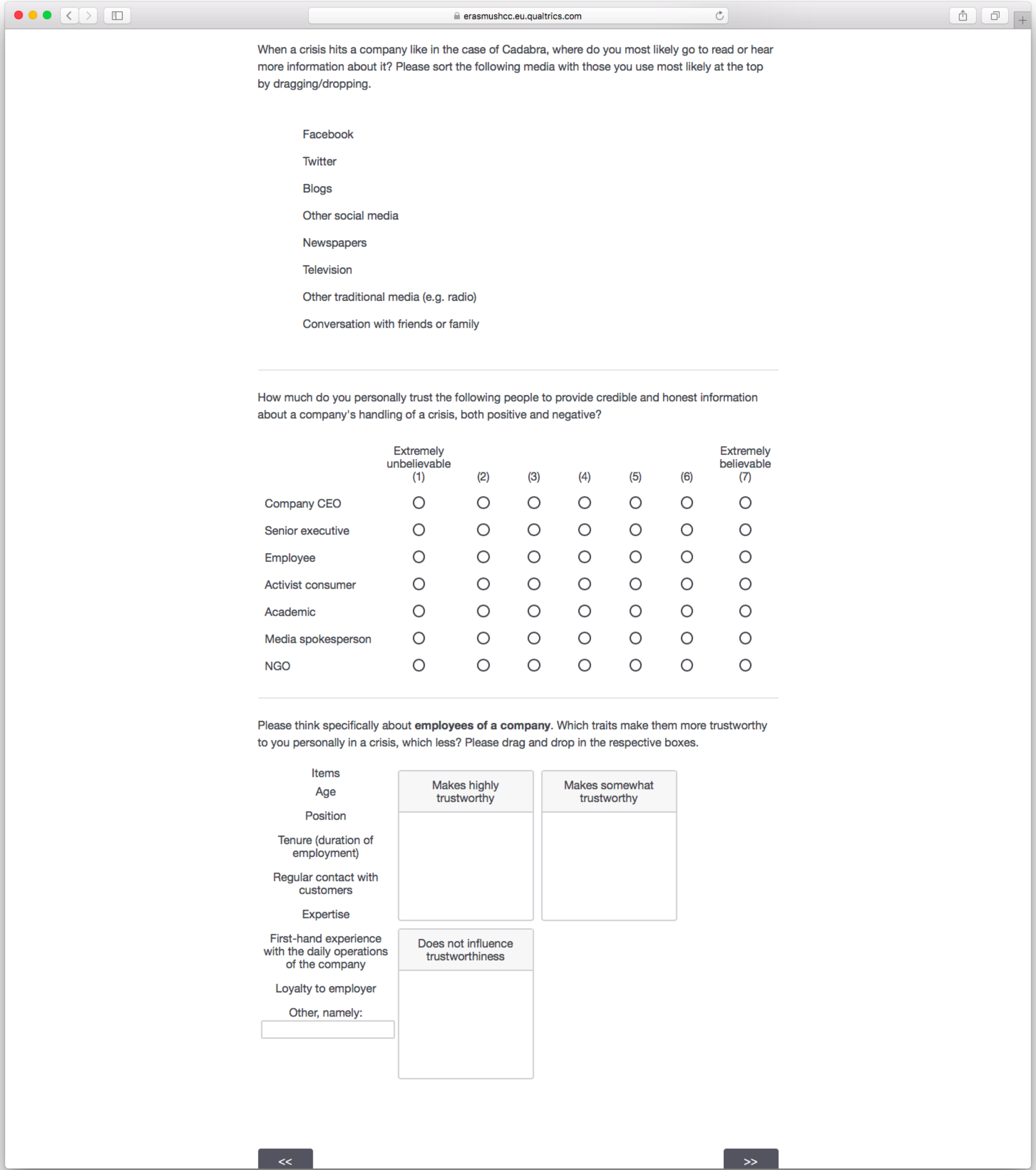


Please indicate what you think of the following statements about Cadabra.

	Strongly disagree (1)	(2)	(3)	(4)	(5)	(6)	Strongly agree (7)
Cadabra is concerned with the well-being of its publics (e.g. customers, employee, suppliers).	○	○	○	○	○	○	○
Cadabra is NOT concerned with the well-being of its publics (e.g. customers, employee, suppliers).	○	○	○	○	○	○	○
Cadabra is basically dishonest.	○	○	○	○	○	○	○
I do not trust Cadabra to tell the truth.	○	○	○	○	○	○	○
Under most circumstances, I would be likely to believe what Cadabra says.	○	○	○	○	○	○	○

<< >>

5 Measures: Credibility, secondary actions, reputation (from top to bottom; randomized)



erasmushcc.eu.qualtrics.com

When a crisis hits a company like in the case of Cadabra, where do you most likely go to read or hear more information about it? Please sort the following media with those you use most likely at the top by dragging/dropping.

Facebook
Twitter
Blogs
Other social media
Newspapers
Television
Other traditional media (e.g. radio)
Conversation with friends or family

How much do you personally trust the following people to provide credible and honest information about a company's handling of a crisis, both positive and negative?

	Extremely unbelievable (1)	(2)	(3)	(4)	(5)	(6)	Extremely believable (7)
Company CEO	O	O	O	O	O	O	O
Senior executive	O	O	O	O	O	O	O
Employee	O	O	O	O	O	O	O
Activist consumer	O	O	O	O	O	O	O
Academic	O	O	O	O	O	O	O
Media spokesperson	O	O	O	O	O	O	O
NGO	O	O	O	O	O	O	O

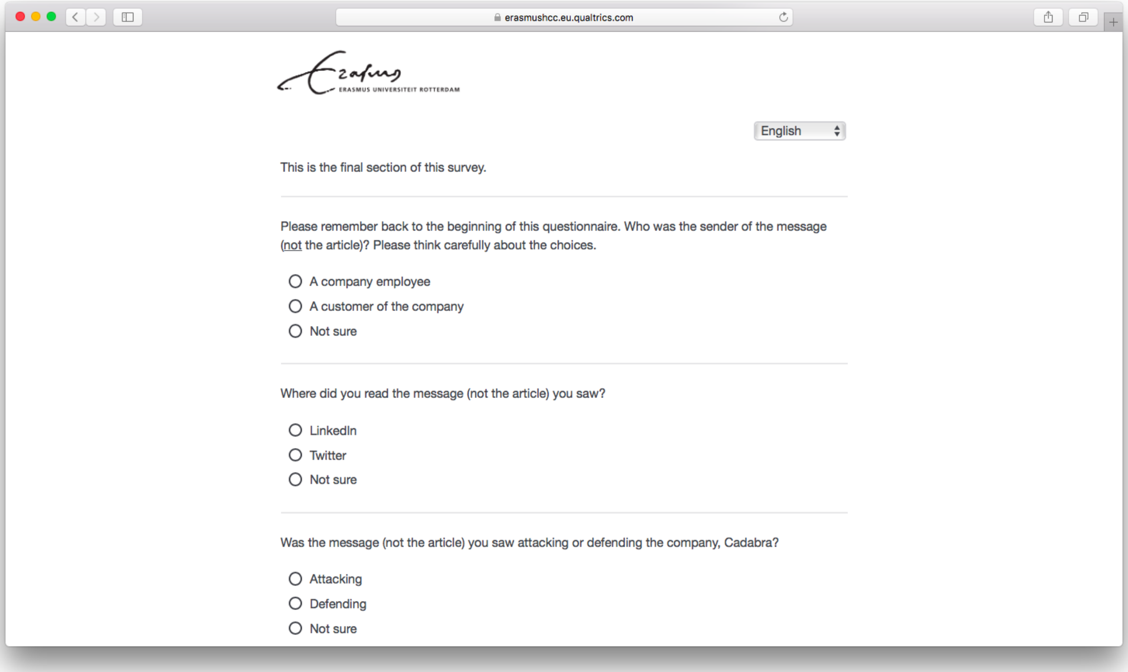
Please think specifically about **employees of a company**. Which traits make them more trustworthy to you personally in a crisis, which less? Please drag and drop in the respective boxes.

Items
Age
Position
Tenure (duration of employment)
Regular contact with customers
Expertise
First-hand experience with the daily operations of the company
Loyalty to employer
Other, namely:

Makes highly trustworthy
Makes somewhat trustworthy
Does not influence trustworthiness

<<
>>

6 Additional measures



erasmushcc.eu.qualtrics.com

Erasmus Universiteit Rotterdam

English

This is the final section of this survey.

Please remember back to the beginning of this questionnaire. Who was the sender of the message (not the article)? Please think carefully about the choices.

- A company employee
- A customer of the company
- Not sure

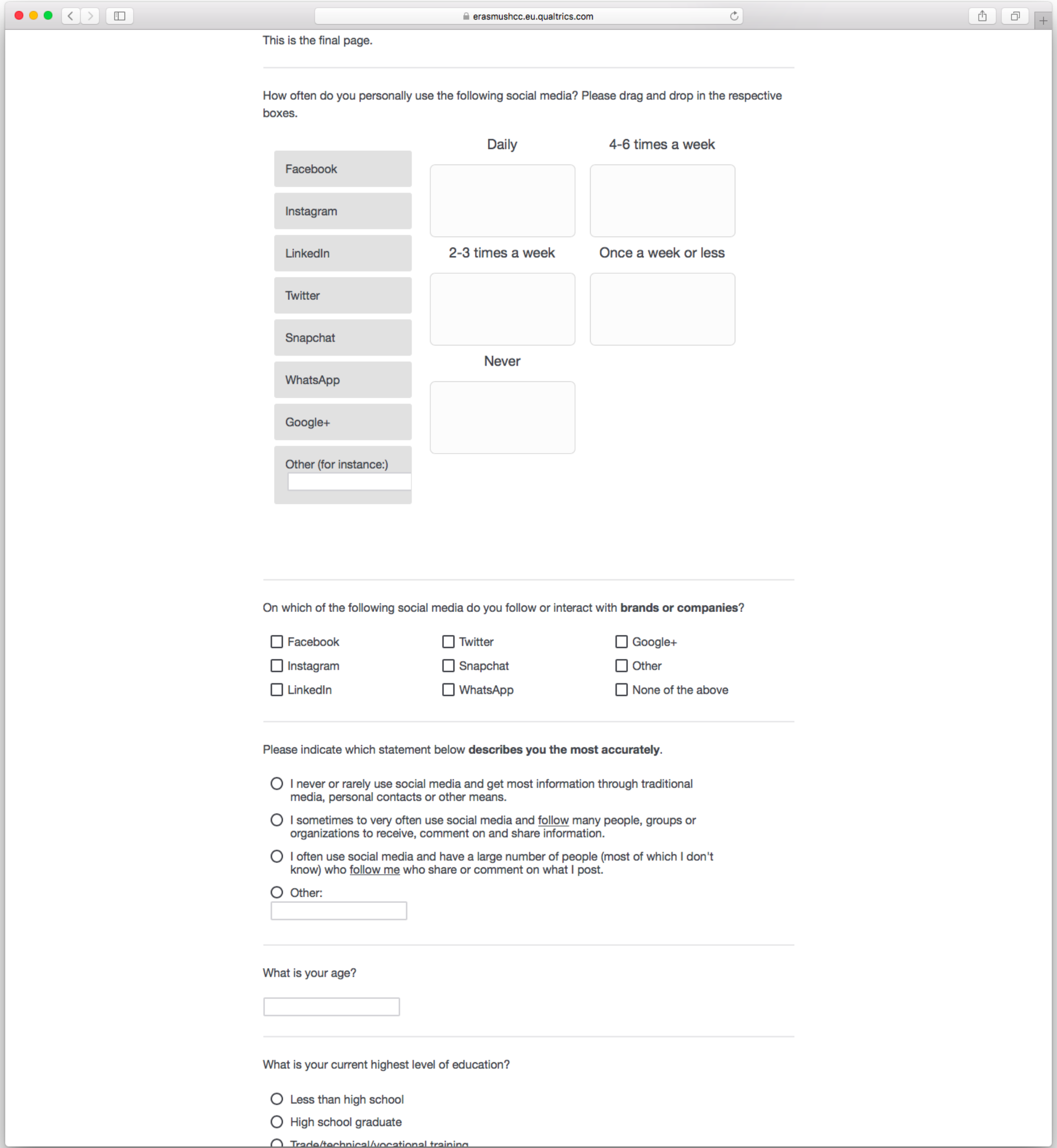
Where did you read the message (not the article) you saw?

- LinkedIn
- Twitter
- Not sure

Was the message (not the article) you saw attacking or defending the company, Cadabra?

- Attacking
- Defending
- Not sure

7 Manipulation check questions



erasmushcc.eu.qualtrics.com

This is the final page.

How often do you personally use the following social media? Please drag and drop in the respective boxes.

Facebook
Instagram
LinkedIn
Twitter
Snapchat
WhatsApp
Google+
Other (for instance:)

Daily
4-6 times a week
2-3 times a week
Once a week or less
Never

On which of the following social media do you follow or interact with **brands or companies**?

- ☐ Facebook
- ☐ Twitter
- ☐ Google+
- ☐ Instagram
- ☐ Snapchat
- ☐ Other
- ☐ LinkedIn
- ☐ WhatsApp
- ☐ None of the above

Please indicate which statement below **describes you the most accurately**.

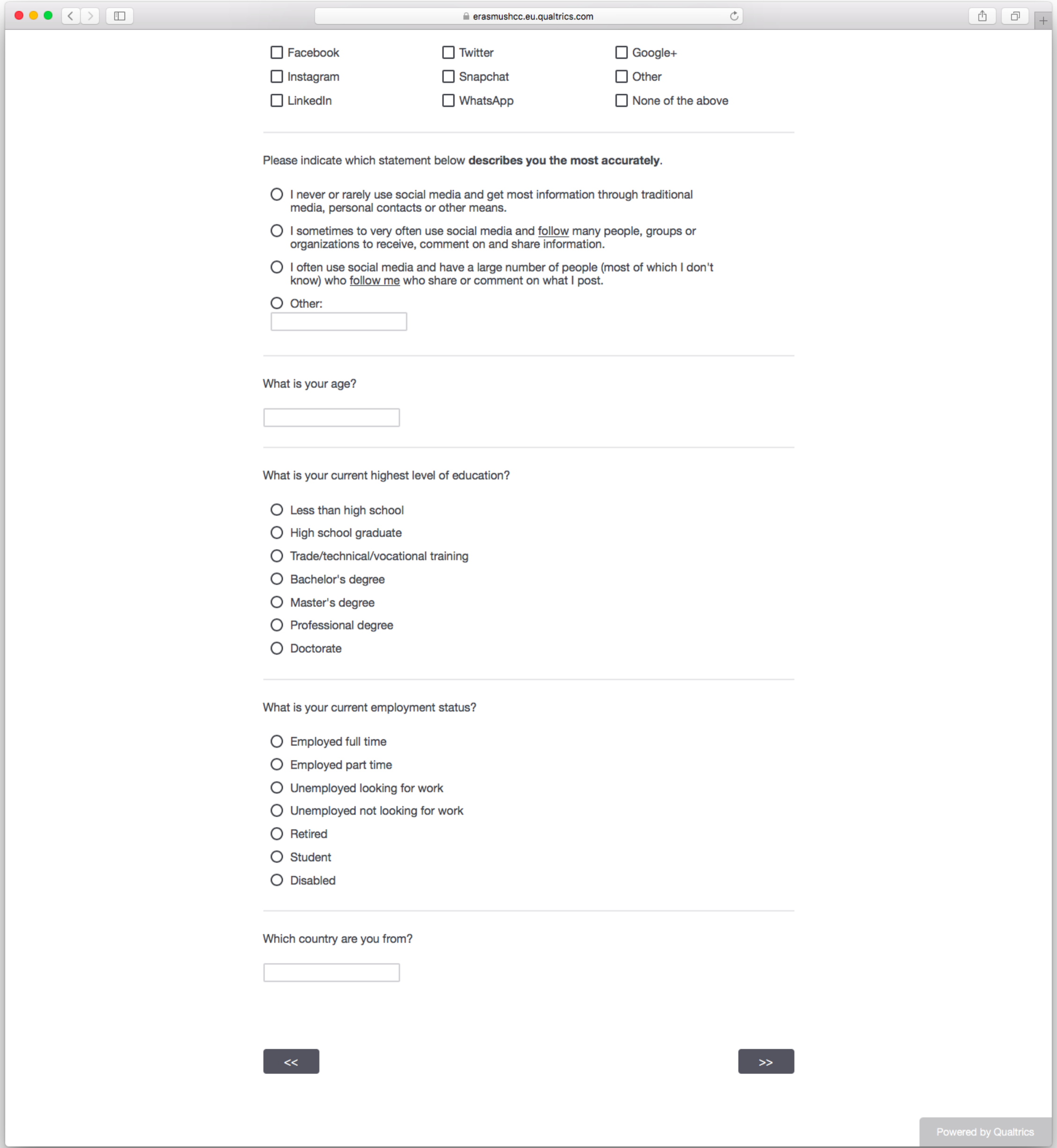
- ○ I never or rarely use social media and get most information through traditional media, personal contacts or other means.
- ○ I sometimes to very often use social media and follow many people, groups or organizations to receive, comment on and share information.
- ○ I often use social media and have a large number of people (most of which I don't know) who follow me who share or comment on what I post.
- ○ Other:

What is your age?

What is your current highest level of education?

- ○ Less than high school
- ○ High school graduate
- ○ Trade/technical/vocational training

8 Social media usage questions



erasmushcc.eu.qualtrics.com

- ☐ Facebook
- ☐ Twitter
- ☐ Google+
- ☐ Instagram
- ☐ Snapchat
- ☐ Other
- ☐ LinkedIn
- ☐ WhatsApp
- ☐ None of the above

Please indicate which statement below **describes you the most accurately**.

- ○ I never or rarely use social media and get most information through traditional media, personal contacts or other means.
- ○ I sometimes to very often use social media and follow many people, groups or organizations to receive, comment on and share information.
- ○ I often use social media and have a large number of people (most of which I don't know) who follow me who share or comment on what I post.
- ○ Other:

What is your age?

What is your current highest level of education?

- ○ Less than high school
- ○ High school graduate
- ○ Trade/technical/vocational training
- ○ Bachelor's degree
- ○ Master's degree
- ○ Professional degree
- ○ Doctorate

What is your current employment status?

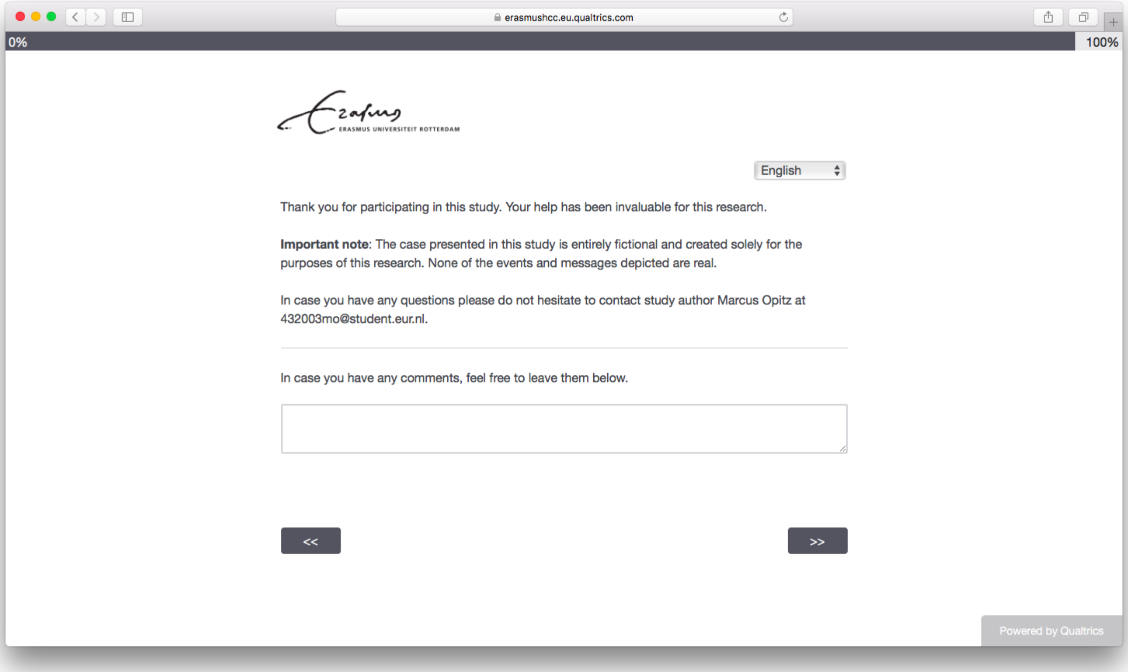
- ○ Employed full time
- ○ Employed part time
- ○ Unemployed looking for work
- ○ Unemployed not looking for work
- ○ Retired
- ○ Student
- ○ Disabled

Which country are you from?

<< >>

Powered by Qualtrics

9 Demographic questions



10 Debriefing

Figure A.6 Research instrument