

Managing social media crises: The effects of communication form and communication strategy

Håndtering af kriser på sociale medier: Betydningen af kommunikationsform of kommunikationsstrategi

Master Thesis

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"Nothing travels faster than	n the speed of light, excep	ot bad news on the Internet" - Robert Pasikoff

Resume

Formål

Dette speciale omhandler håndtering af kriser på sociale medier. Derfor relaterer specialet sig til krisekommunikation, men fokuserer specifikt på, hvordan organisationers tilgang til kommunikation på sociale medier influerer interessenters opfattelser og reaktioner. Således har specialet til formål at demonstrere, hvordan valget af både kommunikationsstrategi og kommunikationsform har betydning, når det trækker op til stormvejr på sociale medier.

Metode

På baggrund af en deduktiv, kvantitativ tilgang, anvender specialet et eksperimentelt 2 (kommunikationsstrategi: undskyldende, forklarende) x 3 (kommunikationsform: meddelelse på tidslinje, direkte kommentar, videresendelse til anden kanal) faktordesign. Således be- eller afkræftes en række opstillede hypoteser, udledt på baggrund af relevant forskningslitteratur. Studiet fokuserer på Facebook og undersøger hermed, hvordan de seks forskellige, uafhængige variable influerer afhængige variable såsom omdømme, virkningsfuldhed og villighed til at interagere og reagere.

Resultater

Studiets resultater viser, at kommunikationsform har stor betydning for, hvordan interessenter bedømmer virksomhedens omdømme og kommunikationens virkningsfuldhed, da studiet påviser statistisk signifikante forskelle blandt de forskellige grupper af respondenter. Modsat viser studiets resultater, at strategi har en statistisk signifikant effekt på kommunikationens virkningsfuldhed, men ikke på omdømme. Herudover påvises det, at hverken kommunikationsstrategi eller kommunikationsform influerer interessenters villighed til at 'like' eller kommentere på indhold.

Konklusion

På baggrund af den gennemførte undersøgelse konkluder dette speciale, at organisationer må anerkende, at det at indgå i dialog med interessenter er en forudsætning for at bedrive mere effektiv krisehåndtering på sociale medier. Resultaterne viser, at organisationer bør anvende symmetrisk kommunikation, da det er signifikant mere effektfuldt end at anvende traditionel

envejskommunikation. Herudover konkluderes det, at organisationer bør interagere med interessenter i det medie, hvor krisen forekommer, snarere end at henvise til andre kommunikationskanaler. Derudover er en undskyldende strategi at anbefale, fordi kriser på sociale medier karakteriseres af en høj tilskrivning af ansvar. Sammenfattende påviser dette speciale derfor en række forhold, der har betydning for både teori og praksis, i henhold til krisekommunikation på sociale medier.

Nøgleord

Sociale medier, krisehåndtering, kommunikationsstrategi, kommunikationsform, Facebook, SCCT

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Introduction

In August 2012, a dissatisfied customer published a negative post to the public Facebook page of the Danish telecommunications provider, Telenor. The author, Anders Brinkmann, scrutinized Telenor's customer service, and within 24 hours the post received more than 31,500 likes and almost 3,500 predominately negative comments (Kristensen, 2012). Also, the post initiated hundreds of deleterious posts, following a reply by Telenor that outlined how all customer service inquires should be directed towards its customer service hotline, rather than Facebook. Quickly, the story spread across social media and got picked up by traditional news outlets (Wirtoff, 2012). The crisis even experienced prime-time TV coverage in Denmark, which in the end forced Telenor to publically apologize, make changes to its customer service policy, eliminate several administrative fees, and launch an image-repair campaign within the following months.

The case of Telenor illustrates how the rise of new, digital media has made it incredibly easy for dissatisfied stakeholders to voice their concerns. Furthermore, it demonstrates how such challenges have an inherent potential to snowball into situations that fosters elaborate crisis communications efforts by the affected organization (Kietzman, Hermkens & McCarty, 2011). Consequently, it has been argued how social media platforms are increasingly becoming breeding grounds for organizational crises (Pang, Hassan & Chong, 2014). Such crises are often labeled as social media crises, which have been defined as "a crisis issue that arises in or is amplified by social media, and results in negative mainstream media coverage, a change in business process, or financial loss" (Owyang, 2011, p. 17).

Social media crises are an interesting topic of study, as social media introduces an added complexity to crisis management (Ott & Theunissen, 2015). The absence of time and geographic barriers, the dialogic nature of social media, the accessibility of information, virality, and the speed of development are just some of the factors that managers must take into account, when engaging in crisis management on social media (Veil, Sellnow & Petrun, 2012; Veil, Buehner & Palenchar, 2011; Jin, Liu & Austin, 2011). Consequently, it has been argued: "Although most of the basics of crisis management remains the same, the tools to apply them need to be revised and adapted to today's digital environment" (Gonzales-Herrero & Smith, 2008).

A number of scholars have presented frameworks meant to guide practitioners in the event of a social media crisis (e.g. Coombs, 2014b; Coombs & Holladay, 2012; Jin, Liu & Austin, 2014; Lancaster & Boyd, 2015; Veil, Buehner & Palenchar, 2011; Veil, Sellnow & Petrun, 2012). Also, some studies have analyzed the effects of different crisis management strategies in relation to social media (e.g. DiStaso, Vafeiadis & Amaral, 2015; Einwiller & Steinen, 2015; Hosseinali-Mirza, Marcellis-Warin & Warin, 2015; Lillqvist & Salminen, 2014). However, these studies omit the effect of communication form, a concept that "(...) refers to how crisis messages are presented" (Huang, 2008, p. 303).

The exclusion of communication form is problematic considering, for instance, the findings by Schultz, Utz and Göritz (2011) indicating that in relation to reputation, secondary crisis communication, and reactions: "the medium matters more than the message" (p. 25). Furthermore, Coombs and Holladay (2009) noted how "It is important for crisis managers to know how media presentation affects stakeholders' reactions to their messages" (p. 2).

Social media crises always have a public element, as all stakeholders can observe how a crisis is being managed on social media. Therefore, the effect of communication form may very well be even more imperative and significant in the event of a social media crisis. This underlines the importance of determining whether the communication form used to convey an organizations response has an effect on stakeholders. Consequently, this thesis aims to address an apparent gap in the literature by investigating how both communication form, and communication strategy, affects reactions and perceptions to crisis communication on social media. Accordingly, the following research question is derived:

What are the effects of communication strategy and communication form in relation to reactions and perceptions to crisis communication on social media?

Literature review

This thesis investigates the effectiveness of different communication forms and strategies in relation to crises on social media. However, the nature of a social media crisis, and the management of such, is inherently connected to areas such as crisis communication, organizational legitimacy, and changes in the communicative environment brought on by

digitalization and the rise of new, social media. Therefore, an understanding of the current media landscape, the theoretical implications, and current research is necessary. Consequently, a comprehensive literature review is conducted before turning to the methodology of the study, the study design, and the analysis of findings. Accordingly, Figure 1 illustrates the overall structure of the thesis.

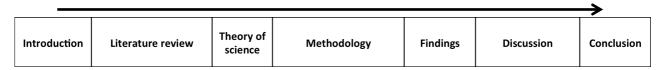


Figure 1. Thesis structure

Legitimacy & Organizational crises

Dowling and Pfeffer (1975) noted how "Organizations seek to establish congruence between the social values associated with or implied by their activities and the norms of acceptable behaviors in the larger social system of which they are part" (p. 122). Organizations do so because the central element of legitimacy is adhering to the norms, values, rules and meanings of a given social system (Deephouse & Carter, 2005). In turn, legitimacy has been described as a "license to operate" that grants an organization its right to exist and conduct operations (Metzler, 2001). However, a legitimacy gap may occur if there is a perceived discrepancy between an organization's actions and society's expectations. Such a gap can threaten both the image and reputation of an organization, and ultimately its very existence (Sethi, 1975). Thus, much literature has been devoted to crisis communication, and crisis management, because "a crisis disrupts the social order, affects the interaction of stakeholders with the organization, and tends to damage the organization's reputation and legitimacy" (Schultz, Utz & Göritz, 2011, p. 21).

The concept of an organizational crisis encompasses a wide spectrum of situations and events spanning from explosions, oil spills and other disasters to harmful products, management misconduct, unethical behavior and customer service failures. The Volkswagen emission crisis, FIFA's corruption charges, and the public outrage following the Copenhagen Zoo's killing of a healthy giraffe are just some of the more recent examples. The plethora of organizational crises that have unfolded throughout the past 50 years have caused a growing realization that "(...) crises are a matter of 'when' and not 'if' in corporate life" (Coombs, Frandsen, Holladay & Johansen, 2010, p. 337).

Therefore, an extensive body of knowledge concerned with crisis communication have developed, and several theoretical approaches for responding to organizational crises exits within the literature. Today, the most prominent are: Image repair theory (Benoit, 1995), Corporate apologia (Hearit, 2006), Situational crisis communication theory (Coombs, 2002; Coombs, 2009, Coombs 2014a) and Organizational renewal theory (Ulmer, Sellnow & Seeger, 2014).

Image repair theory. According to Benoit and Pang (2008), an attack on an organizations image has to two basic elements; an offensive act has occurred, and the accused is responsible for that act. However, because both the image of an organization and the threat to that image are perceptual, communication may mitigate such treats. Consequently, image repair theory focuses on the content of crisis communication messages, and five broad categories of image repair strategies, which may be used to respond to image threats, are presented. The categories are denial, evasion of responsibility, reducing offensiveness of an event, corrective action, and mortification (Benoit, 1995). Denial, evasion of responsibility, and reducing offensiveness of event has various subcategories, and each image repair strategy lists a number of strategic options that the affected organization may use to correct the damage done to its image. Nevertheless, there is no guarantee that "(...) any strategy or combination of strategies will necessarily repair an image" (Benoit & Pang, 2008). Rather, it is possible to at least alleviate some of the inflicted damage, by accurately responding to the threat. The accurate response depends on factors such as identifying the nature of the crisis, identifying the relevant audiences, and determining appropriate response strategies for each audience (Benoit, 1995). As such, image repair theory focuses on accounting for the organizational actions that caused the crisis, and repairing the threat to the image, by leveraging different communications strategies.

Corporate apologia. The focus of corporate apologia is how a corporation, in the midst of a public relations crisis, can respond to criticism, and defend its image, while dealing with the problem of guilt (Hearit, 2006). It focuses on apologizing for wrongdoing, and features primarily defensive communication strategies for such apologies. However, it should be noted that in Hearit's perspective, an apology represents "a response to criticism that seeks to present a compelling competing account of organizational accusations" (as cited in Ulmer, Sellnow & Seeger, 2014, p. 17). Hearit (2006) outlines five distinct stances that an organization may use to defend its actions; denial, differentiation, counter-attack, apology and legal (Hearit, 2006). The choice of

stance is driven by the question of guilt and responsibility, as "the reply is dictated by the degree to which the organization as an agent is seen to be responsible for the act or as a victim of some misfortune" (Hearit, 2006, p. 15). The theoretical approach is rooted in legitimacy theory, and Hearit (2006) describes how the apology itself is only one stage, in a five-stage process.

In the first stage, the sociocultural order is transgressed by the organization. The organization violates a norm, law or value of the surrounding community. Then, in the second stage, the community accuses the organization of this wrongdoing. This causes a legitimacy crisis to arise, which makes up the third stage. In the fourth stage, the organization responds, by apologizing for its wrongful actions. If the community perceives the apology as correct, the social cultural order is re-established, and the organization is again seen as a legitimate actor (Hearit, 2006; Frandsen & Johansen, 2007).

Situational Crisis Communication Theory (SCCT). SCCT Theory represents a strategic approach to crisis management, and it is stated how:

"A crisis can be viewed as the perception of an event that threatens important expectancies of stakeholders and can impact the organization's performance. Crises are largely perceptual. If stakeholders believe that there is a crisis, the organization is in a crisis unless it can successfully persuade stakeholders it is not. A crisis violates expectation; an organization has done something stakeholders feel is inappropriate" (Coombs, 2009, p. 100).

SCCT theory is rooted in attribution theory, and it utilizes this approach in order to evaluate the reputational threat caused by a pending crisis (Coombs, 2014a). Three factors determine the size of a reputational threat: Crisis type, crisis history and prior reputation. Crisis type refers to the type of incident in question, for instance challenges by stakeholders, rumors, or human-error accidents (Coombs, 2014a). Depending on the locus of the reputational threat, crisis types can be divided into clusters that are differentiated by the level of attribution of crisis responsibility. The clusters are; the victim cluster, which encompass types of crises for which the organization has very little crisis responsibility, the accidental cluster, where the organization has a low attribution of crisis responsibility, and the preventable cluster, in which the organization face strong attributions of responsibility. Off course, a crisis for which the organization faces a strong

attribution of guilt represents the most severe threat, as "stronger attributions of crisis responsibility produce greater reputational damage" (Coombs, 2014a, p. 151).

The second factor used to evaluate the size of a reputational threat is crisis history, which relates to how a reputational threat is much greater, if an organization has had a similar crisis in the past. And lastly, if an organization has a prior bad reputation, crises are likely to increase in severity. This is known as the velcro effect, a concept opposite to the halo effect, which may shelter an organization with a good reputation, when faced by a reputational threat (Coombs & Holladay, 2006).

On the basis of the evaluation of the crisis type, and pending reputational threat, SCCT outlines ten response strategies that an organization may leverage in order to repair reputational damage from a crisis. The ten response strategies are a synthesis of prior work, and as such SCCT incorporates both the perspectives of corporate apologia and image repair theory in its framework (Coombs, 2014a). The ten strategies are divided into four, overarching postures as illustrated in figure 2:

Denial posture		
Attacking the accuser	The crisis manager confronts the person or group that claims that a crisis exists. The	
	response may include a threat to use force against the accuser	
Denial	The crisis manager states that no crisis exists. The response may include explaining why	
	there is no crisis	
Scapegoating	Some other person or group outside of the organization is blamed for the crisis	
Diminishment posture		
Excusing	The crisis manager tries to minimize the organizations responsibility for the crisis.	
Justification	The crisis manager tries to minimize the perceived damage associated with the crisis	
Rebuilding Posture		
Compensation	The organization provides money or other gifts to the victims	
Apology	The crisis manager publically states that the organization take full responsibility for the	
	crisis and ask for forgiveness	
Bolstering posture		
Reminding	The organization tells stakeholder about its past good works	
Integration	The organization praises stakeholders	
Victimage	The organization explains how it too is a victim of the crisis.	

Figure 2. Crisis Response strategies (Coombs, 2014, p. 145)

The choice of the appropriate crisis response strategy depends on the nature of the crisis threat, and it is outlined how "as the reputational threat increases, crisis teams should use more accommodative strategies" (Coombs, 2014a, p. 151).

Organizational renewal theory. Seeger, Sellnow and Ulmer (1998) state that organizational crises encompass "specific, unexpected, and non-routine events or series of events that [create] high levels of uncertainty and threat or perceived threat to an organization's high priority goals" (p. 233). Consequently, crises are viewed as large, disruptive events. Reputation and image are recognized as important organizational concepts, however it is argued that they do not play a central role in resolving organizational crises (Ulmer, Seeger & Sellnow, 2011). Rather rebuilding, learning, and opportunity are the elements to focus on in the event of an organizational crises, due to an inherent potential for organizational renewal in crisis situations.

Organizational renewal theory criticizes response theories, such as image restoration theory and SCCT Theory, for focusing on the past and having a retrospective approach that focuses too much the attribution of responsibility. Instead, it is stressed that organizations should employ prospective approaches, manifested through the four central objectives of organizational learning, ethical communication, prospective visions and sound organizational rhetoric. On this basis, it is positioned that organization should emerge from crisis situations with "(...) a fresh sense of purpose and direction" (Ulmer, Sellnow & Seeger, 2011, p. 213). Consequently, organizational renewal stresses a focus on seizing the moment and capitalizing on the opportunities that are also inherent in the wake of a crisis.

Managing organizational crises

The previous account of the four major strings of research within crisis management reflects how organizational crisis management is a vast theoretical field. Image restoration theory maintains a rhetorical and text oriented approach, while SCCT theory is more oriented towards strategy and context. Corporate apologia and organizational renewal theory share an emphasis on context, but the definition of what an organizational crisis entails varies across all four perspectives. Consequently, the major theories are intertwined, but also distinct. This uniformity reflects how crisis management theory is in constant state of flux, because the theoretical

frameworks, and their application, changes vis-à-vis the changes in the communicative environment of organizations.

It has been argued that the Internet has revolutionized crisis communications management (Gonzales-Herrero & Smith, 2010), and the rise of social- and digital media has certainly brought significant changes to the communicative environment of contemporary organizations. However, this does not mean that crisis management strategies have become obsolete. Rather, these changes underline the necessity of effective crisis management strategies (Veil, Buehner & Palenchar, 2011). As Coombs and Holladay (2012) puts it:

"A common claim by groups trying to sell seminars on crisis communication is that social media has revolutionized crisis communication so drastically that all previous crisis communication knowledge is obsolete and useless. While social media does have serious implications for crisis communication tactics, strategy rarely goes out of style" (Coombs & Holladay, 2012, p. 410).

Consequently, the following sections account for the changes in the communicative environment and the implications for present day crisis management.

Social media's impact on the communicative environment

Contemporary organizations operate in a media landscape where the development of digital technologies has led to a new ecology of communication (Jin, Liu & Austin, 2011; Austin, Fischer & Jin, 2012; Hanna, Rohm & Crittenden, 2011). The Internet has radically changed the way businesses and communications are managed, and it has evolved to become one of the most popular ways that an organization communicates with its stakeholders (Gonzales-Herrero & Smith, 2008; Haig & Wigley, 2015).

This change was onset by the rise of Web 2.0, a concept that does not refer to a specific technical change "(...) but rather a fuller realization of the true potential of the web" (O´Reilly, 2007, p. 34). Thus, Web 2.0 refers to a platform where content is not published by organizations or individuals, but continuously modified by all users in a collaborative fashion (Kaplan & Hanlein, 2010). The co-creation of content among users is the fundamental building block of social media,

and the reason why social media has been defined as "a group of internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user generated content" (Kaplan & Hanlein, 2010, p. 61). Another definition is provided by Jin, Liu, and Austin (2011) who operationalize the concept of social media as "various digital tools and applications that facilitate interactive communication and content exchange among and between publics and organization" (p. 75).

Such broad definitions are needed because the concept of social media is made up of a fragmented and very diverse set of technologies and platforms; from blogs, wikis, online forums, online game environments, and video sharing tools to Social Networks Sites (SNS) such as Twitter, Facebook, and LinkedIn (Treem & Leonardi, 2012; Austin, Liu & Jin; 2012). There are literally thousands of networks, technologies, and platforms that offer various technological affordances, which could be fitted within the category of social media (Coombs, 2014b). Consequently, some clarification is needed.

Following Boyd and Ellison (2008), this thesis refers specifically to social networks sites, when using the term "Social media". Social network sites are defined as:

"Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (Boyd & Ellison, 2008, p. 211).

Subsequently, the use of the term "social media crises" refers specifically to situations that unfold in, or have as the primary locus, social network sites. However, it is important to stress how the emergences of social media crises are dependent on, shaped by, and interconnected with the implications of Web 2.0 on the media landscape of today.

The loss of the agenda setting monopoly

It used to be, that traditional media, such as newspapers and televised news broadcasts, had an almost monopoly power over the tools of content creation and distribution. This allowed traditional media to be the central gatekeeper over the passive news reading public (Meras,

2009). Barros (2014) argues how "traditionally, newspaper editors had almost complete control over topic selection and change, including what was and what was not considered news" (p. 1214). It was during this time that the classic theories of mass media research such as the hypodermic needle theory, the two-step flow of communication, and agenda-setting theory were conceived. Hence, mass media used to be considered one-way communication channels with anonymous receivers, and a mean of one-to-many communication, with a clear distinction between producers and receivers (Croteau & Hoynes, 2013).

However, digitalization and the Internet have changed the way people use media, and media convergence has blurred the lines between the different types of classic mass media (Sparks, 2007). Furthermore, the emergence of WEB 2.0 has upset the media landscape, because users now act as co-developers of social networks, create and share their own content, and have unlimited access to information (O'Reilly, 2007). Therefore, the traditional content producers no longer control information, and it has been found that "the traditional media's agenda setting power is no longer universal or singular within citizen media outlets" (Meras, 2009, p. 701).

Today, the formerly passive consumer has become an active distributor of content. Anyone can share content with his or her network through different social media channels, and if the content goes viral, it could reach millions (Veil et al., 2012). Furthermore, many customers turn to social media to vent frustrations and seek retribution after being slighted by a company (Gregorie, Salle & Tripp, 2015). Also, social media have decreased the cost and limitations to monitoring corporate behavior, and made it easier for consumers and activists to call attention to, and mobilize opposition against, corporate action (Lyon & Montgomery, 2013). Thus, social media can "act as either triggers of crises, a simple enabler of them, as a new cause for crises, or as an additional channel through which the company's stakeholders can obtain their information" (Gonzales-Herrero & Smith, 2008, p. 152). Consequently, it is derived that stakeholders have become more empowered, because it is possible to leverage social media in order to bring attention to a perceived issue.

A viral spread of a stakeholder's message is in no way guaranteed, but the diminishment of the agenda setting monopoly represents a fundamental shift in the ecology of communication. However, it is important to underline that the agenda setting influence of traditional media has not evaporated. Rather, traditional mass media are now just one of several competing forces of influence within agenda setting (Meras, 2009; Gonzales-Herrero & Smith, 2008).

Organizational crises may now originate online and escalate onto traditional media, which upsets the traditional gatekeeping role of traditional media (Pang et al, 2014; Gruber, Smerek, Thomas-Hunt & James, 2015). Conversely, conventional organizational crises that originate in traditional media often have a prominent social media dimension. As a result, it has been found that 92% of communication practitioners believe that blogs and social media influence mainstream news coverage (Veil et al., 2011). This interplay between social and traditional media in the event of organizational crisis represents a fundamental change, and therefore also a shift in the way crisis management must be conducted (Coombs, 2014a).

Jin, Liu and Austin (2014) argue that "Organizations no longer have a choice about whether to integrate social media into crisis management; the only choice is how to do so" (p. 76). Furthermore, It has been found that social media can indeed improve risk- and crisis communication efforts (Veil et al., 2011). However, the introduction of social media also introduces an added complexity to crisis management (Ott & Theunissen, 2015). Consequently, social media has been characterized as a double-edged sword, because social media on the one hand provide new platforms and means for organizations to communicate with stakeholders, while they on the other can further escalate crises for the affected organization (Siah, Bansal & Pang, 2010).

Acknowledging the importance of social media in contemporary crisis management, Liu, Jin, Briones, and Kuch (2012) developed the social-mediated crisis communication model (SMCC) that focus on the interrelationship between social media, traditional media, and offline word-of-mouth communication. The SMCC model explains how the source and form of crisis information affects an organizations response options, as well as recommend social-mediated response strategies. As such, the SMCC model builds on the SCCT framework, while also acknowledging the importance of communication form in relation to crisis management (Jin et al., 2014)

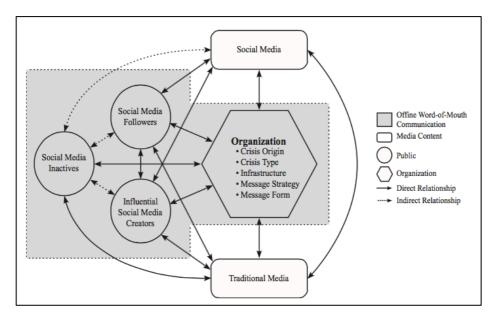


Figure 3. Social-Mediated crisis communication model (Liu et al., 2012, p. 368)

At the center of the model is an organization in any given crisis. The organization is considered a source of information, however a third party outside the organization may also function as a source of information in the event of a crisis. This is imperative, because it acknowledges how several actors may influence a stakeholder's perception of a crisis in the social media environment. The SMCC model further outlines how an organization interact with three key types of publics who produce and consume crisis information; social media creators, social media followers, and social media inactives. Hence, it is outlined how social media distributes information directly and indirectly between social media creators, followers, and inactives, and how information is transmitted between traditional and social media (Jin et al., 2014).

According to Austin, Liu and Jin (2012), five factors affect how organizations may communicate information before, during, and after crises; crisis origin, crisis type, infrastructure, message strategy, and message form. Consequently, the SMCC model illustrates the interplay between old and new media in the event of an organizational crisis, while acknowledging that traditional crisis response strategy frameworks may be leveraged to mitigate reputational threats.

However, social media has not just changed traditional organizational crisis management in a number of key areas, it has also introduced entirely new reputational threats (Coombs, 2014b). And these are what have become known as social media crises.

thus, the following sections account for the nature of the social media crisis, the current research on social media crisis management, and how these areas are related to the literature on organizational crisis management.

The underlying factors of social media crises

It has been outlined how social media influences agenda setting in the communicative environment. Furthermore, the co-creation of content and the empowerment of stakeholders were identified as key drivers of a reformation of the communicative environment. However, it was also outlined how crisis response strategies, and other theoretical frameworks, continue to hold validity, although some may need adaptation to suit the digital environment (Gonzales-Herrero & Smith, 2010). Such adaptions are needed in order to take into account a number of key factors that are paramount to the development, and management, of social media crises. The following sections outline these key factors, as they make up the functional building blocks of a social media crisis. On this basis, an assessment of the nature of a social media crisis is conducted, before turning to the management of such crises.

The absence of time and geographic barriers. The technological affordances of the Internet diminish physical distance as a hindrance for engaging in communication with both peers and organizations (Gonzales-Herrero & Smith, 2010). Digitalization means that information can be shared, accessed, and interacted with across a multiplicity of devices and media, which enables the public to interconnect regardless of geographical boundaries or time zones (Pang et. al., 2014). Therefore, it has been argued that social media has emerged as "(...) an alternative to other means of personal and interpersonal communication" (McQuail, 2010, p.40). Furthermore, Janssen and Kies (2005) found that online spaces enable decentralized many-to-many communication, as each communicative participant is entitled to comment or raise a new question regardless of the available resources. This means that the potential number of communicating stakeholders drastically multiplies, which further complicates the management of social media crises.

The fragmentation of audiences and stakeholders. Not only does the number of communicating stakeholders drastically multiply in the social media environment. Stakeholders may also be communicating via different platforms and media. Coombs and Holladay (2014) argue that an organizational crisis unfold in a rhetorical arena where various crisis actors discuss and

communicate about the crisis. While organizational representatives may engage in crisis communication in this arena, and gauge the effectiveness of their communication, they need also to recognize that "crisis publics contribute to the communication within the arena and may influence interpretations of organizational messages as well as messages generated by other participants" (Coombs & Holladay, 2014, p. 41). Consequently, other actors and stakeholder must be considered crisis communicators as well, because all communication in the rhetorical arena shapes the perception of a given crises. However, social media fragments the rhetorical arena by introducing distinct sub-arenas, which are separate, crisis-relevant spaces of online discourse (Duhé, 2015). Perceptions may vary across these sub arenas, for instance two distinct platforms such as Facebook and LinkedIn, and consequently crisis managers must analyze and engage differently across several sub-arenas simultaneously (Coombs & Holladay, 2014).

Nevertheless, not all sub-arenas or crisis publics are equally important, as some publics are more likely to influence others. Utz, Schultz and Glocka (2013) outline how "(...) It is important to study also the willingness of publics to share or forward messages, so-called secondary crisis communication" (p. 41). This is because active publics are more likely to influence others by actively selecting, transmitting, and acquiring crisis information than are other publics (Kim & Grunig, 2011). Consequently, crisis managers must both identify active and aware publics, and communicate with them in the relevant sub-arenas in order to perform effective crisis management in the social media environment.

The accessibility of crisis information. As the previous section outlines, netizens have become more empowered to generate crisis information (Pang, 2013). However, another fundamental factor of crisis management on social media is the accessibility of crisis information. Coombs and Holladay (2012) note how:

"In the past, challenges began when stakeholders petitioned the organization and asked that their concerns be addressed. If the organization refused, the stakeholders would try to attract public attention by employing media advocacy (...) the hope was to attract media attention as a means of spreading awareness of and interest in the concern to other stakeholders" (p. 408).

Conversely, stakeholders can now petition an organization in full view of other stakeholders by leveraging social media. Consequently, social media empowers stakeholders to challenge corporate behavior faster and more directly (Trittin, 2013). Also, social media holds the potential for much better information sharing and coordination across publics and stakeholders (Lyon & Montgomery, 2015). Therefore, the barriers for challenging organizational behavior, and for these challenges to gain traction and evolve into crisis, have decreased due to the heightened visibility to other stakeholders. Moreover, all crisis communication efforts that are undertaken by the affected organization, and the communication of other stakeholders, are fully visible in the digital environment. Consequently, the accessibility of crisis information has heightened in the social media environment. All stakeholders may look up relevant information, partake in the conversation, and form their own opinion without the hindrance of editorial filtering. Therefore, it has been argued that crises on social media are fundamentally risks being managed in full public view (Coombs, 2014b).

The dialogic nature of social media. Building of the work of Grunig and Hunt's classic (1984) public information model, Morsing and Schultz (2006) identified three main types of corporate stakeholder communication:

- The Stakeholder information strategy: A one-way communication process in which stakeholders are viewed as important, but are seen as passive recipients of information.
- The Stakeholder response strategy: Two-way, but asymmetric, communication. The sender seeks a response from stakeholders, but that response does not shape the nature of the communication that is delivered.
- The Stakeholder involvement strategy: A process of two-way, symmetric, communication.
 Ideally, the sender and the receiver jointly create an understanding and assessment of their relationship.

Lyon and Montgomery (2013) note that there is also a fourth strategy: "That of defaulted communication, in which a firm opts to not communicate at all on a given topic" (p. 751). Collaboratively, these strategies represent different views on the goals of corporate communications, and ultimately the nature of an organizations relationship with its stakeholders.

While Schultz and Morsing's (2006) framework was developed to specifically analyze corporate social responsibility communication, it is a valuable tool for illustrating how the dialogic nature of social media is a key component of organizational communication, and crisis management, in the social media environment. This because social network sites, such as Twitter, LinkedIn, or Facebook, are platforms that allow for communication that is very close to two-way symmetric communication between organizations and stakeholders (Lyon & Montgomery, 2013; Briones et al., 2011; Sanderson et al., In press).

Major strings of research, for instance image restoration theory, reflects the time in which they were conceived by primarily focusing on providing one-way communication in a time of crisis. In fact, this is true for large parts of the crisis communication literature, as many theories and frameworks assume a rather large organizational control over channels and messages. This reflects a past communicative environment where traditional channels, such as print media or televised broadcasts, primarily afforded one-way communication where stakeholders merely functioned as receivers of messages. However, present day customers and other stakeholders want organizations to listen and respond to them, and social media has therefore shifted public relations to encompass two-way interaction in the social media environment (Sanderson et al., In Press; Kietzman et al., 2011). Consequently, it has even been noted how the "environment spawned by social media have led to what might be seen as a change of paradigm in corporate communication – or at least an opportunity for such a change (Lillqvist & Salminen, 2014, p. 4).

Social media is fundamentally dialogic in nature, and it has been found that "Consumers increasingly use digital media not just to research products and services, but to engage the companies they buy from, as well as other consumers who may have valuable insights" (Hanna, Rohm & Crittenden, 2011). Consequently, the dynamics of social media "marginalize the role of organizations in terms of information distribution and meaning construction, and social media therefore change the role of stakeholders from passive information recipients to active senders" (Trittin, 2013, p. 4). Furthermore, social media enable third parties to influence organizations by co-constituting organizational assets such as reputation or legitimacy (Veil et al., 2012). It is therefore inadequate to adapt an instrumental communication perspective, where communication is understood, and used, as a one-sided transmission tool for messages (Trittin, 2013). Instead, organization must embrace the dialogic capabilities offered by Web 2.0

technologies, and social media, in order to utilize them for their legitimation vis-à-vis society (Inauen, Schoeneborn & Scherer, 2014).

Virality. Among the most important factors that make possible a social media crisis is the viral spread of content online. Mills (2012) explains how:

"The term 'viral' connotes infection: rapid spreading across individuals and communities, growing exponentially with each cycle. The key to such rapid and successive spreading is that the virus is contagious and therefore distribution is both self-propelled and exponential" (p. 163).

In the context of social media, virality refers specifically to the exponential spread of information in social networks (Gonzales-Herrero & Smith, 2010; Gregorie et al., 2015). Within advertising, having a campaign 'go viral' is one of the highest levels of achievement a marketer can attain (Mills, 2012). However, virality is a double-edged sword. Social networks may also breed a rapid dissemination of misinformation that may tarnish an organizations image (DiStasoa et al., 2014; Veil et al., 2012). Furthermore, negative content and information can easily spread, and may eventually turn into an organizational crisis, due to previously unimagined network effects among stakeholders (Coombs & Holladay, 2012; Coombs, 2014a; Lyon & Montgomery, 2013). Such reputational risks are further increased because programming algorithms of social network sites favor posts and content with high levels activity, regardless of whether the activity is positive or negative (Ott & Theunissen, 2015).

Porter and Golan (2006) concluded that for a message to go viral the content must be provocative enough to engage unpaid receivers to spread the information through their social network. Furthermore, research has indicated that virality is driven by physiological arousal (Berger & Milkman, 2012). Thus, content that evokes high arousal levels, such as anger or awe, is much more likely to go viral than content that evokes, for instance, sadness. Other drivers of virality are surprise, interest or usefulness, and how often content is featured by external drivers of attention (Berger & Milkman, 2012).

Consequently, virality is an amplifier effect that has serious implications for crisis management on social media. And virality is a basic prerequisite for social media crises, as a stakeholder challenge on social media is unlikely to turn into a social media crisis without a viral

spread. Thus, secondary crisis communication, the willingness of publics to share or forward messages, is positioned as an important driver of social media crises (Utz, Schultz & Glocka, 2013).

The speed of development. The last underlying factor of a social media crisis is the speed of development. Social media have resulted in a more dynamic communications ecosystem, where information can be spread at previously impossible speeds. Consequently, local issues can become global in a matter of seconds (Gruber et al., 2015; Gonzales-Herrero & Smith, 2008). Pfeffer et al. (2014) notes how:

"Real-time messages in social media create a constant flow of communication in which the next piece of information displaces the former one. In case of highly attractive information, many people can be reached within a short period of time. This can result in a temporal dominance of a single topic that, consequently, leads to a large volume of communication" (p. 120).

While social networks sites does create novel opportunities for organizations to bolster their reputations, the combination of speed and virality also represents an unprecedented vulnerability (Lillqvist & Salminen, 2014). Traditional media has an inherent latency, whereas social media is instant and ever evolving. Therefore, the Internet accelerates crises extraordinarily, and in the social media environment "the affected companies and institutions need to react in hours or minutes" (Pfeffer & Zorbach, 2014, p. 120). It is plausible that crises, which have been labeled as social media crises, would have developed without the existence of the Internet. However, the development would have been at a significantly slower pace. Consequently, it has been noted how the increased speed adds another dimension to crisis management (Gonzales-Herrero & Smith 2008).

Collaboratively, the absence of time and geographic barriers, the fragmentation of stakeholders and audiences, the accessibility of crisis information, the dialogic nature of social media, virality, and the speed of development make up the six functional building blocks of a social media crisis. These factors are of paramount importance, as each of these factors have implications for how organizations should approach crisis management in the social media environment. Figure 4 illustrates the functional building blocks of a social media crisis.

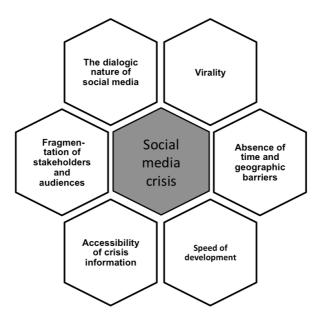


Figure 4: The functional building blocks of a social media crisis

The social media crisis

The underlying factors outlined in figure 4 reflect the technological affordances of social media, and as such they provide the basic conditions for a social media crises to develop. And in recent years, many have.

A notable example was when Taco Bell faced public outrage in June 2013, because an employee posted a photo of himself licking taco shells online (Broderick, 2013). Also, KitchenAid mistakenly published a condescending tweet about President Obama's dead grandmother that led to an Internet outcry in October 2012 (Hernandez, 2012). Additionally, Walmart experienced its fair share after a woman had been browsing the Halloween section of Walmart's online store on the evening of the 26th of October 2014. She noticed how a subcategory of the online store, containing plus size adult costumes, had been labeled as "fat girl costumes". Outraged by the insensitive nature of this labeling, she tweeted her network and notified the online blog Jezebel. Based on this, Jezebel published an article with the headline "Walmart's website features a section of 'Fat Girl Costumes'" at 9.50am on the morning of the 27th of October (Merlan, 2014). Reaching more than 150.000 unique visitors within the first 24 hours of publication, the article spread like wildfire on both social media and other online news sites. Although the "fat girl costumes" section was removed by 11.15am, the damage had been done (Harvey-Jenner, 2014). The story had gone viral.

Thousands of tweets emerged using the hashtag #fatgirlcostumes, and Walmart's Facebook page was flooded with negative comments by outraged customers. People swore to never shop at Walmart again, demanded an explanation, and questioned the legitimacy of the organization. Media outlets ranging from the Huffington Post to Bloomberg picked up the story, and nationwide US broadcast networks such as CNN, ABC News and CBS featured the story (Paul, 2014). Eventually, the crisis was resolved following a statement by Walmart that expressed apology and a promise that such occurrences would not happen again (Zarrel & Maheshwari, 2014).

The "Fat girl costume crisis" is just one example of a social media crisis. Arguably, it could even be considered a full-blown organizational crisis. However, defining and characterizing crises, which have social media as their primary locus, is not a simple task. There are multiple approaches within the literature, and accordingly the following sections outlines how social media crises have been theorized, how they develop, and what characterizes a social media crisis.

The social media crisis defined. According to Coombs (2014a), the overall term of an 'organizational crisis" can be divided into traditional crises and social media crises. The two types are related, but traditional crises "focus more on issues of public safety and welfare along with disruptions of organizational operations" (p. 22). Conversely, social media crises are primarily reputational concerns in which the affected organizations experiences large attributions of guilt. Therefore, Coombs (2014a) define social media crises as "Events that can harm an organization and arise in or are amplified by social media" (p. 22). The definition is derived from Owyang (2011) who further posits how "A social media crisis is a crisis issue that arises in or is amplified by social media, and results in negative mainstream media coverage, a change in business process, or financial loss" (p. 17). While Owyang's (2011) definition is more precise, it is still quite broad, and therefore Coombs (2014a) further divides social media crisis into three, distinct categories:

- Organizational misuse: A social media crisis caused by an organizational misuse of a social media channel.
- Dissatisfied customers. A social media crisis caused by a customer relation's problem.
- Challenges: A social media crisis that happens because an organization's behavior and/or policies are perceived as inappropriate or irresponsible.

The division of social media crisis into distinct categories is useful, as such a division allows for a more accurate classification of different events that crisis managers face.

In general, definitions of social media crises are very broad, and the concept is intertwined with several other pseudonyms and closely related concepts. For instance, Pfeffer et al. (2014) argue for the use of the term "online firestorms". The concept of a social media crisis is interchangeable with an online firestorm as the latter is defined as "The sudden discharge of large quantities of messages containing negative WOM and complaint behavior against a person, company, or group in social media networks" (p. 118). Furthermore, the use of the ill-named term 'Shitstorm' has gained popularity amongst practitioners and managers in northern Europe (Faller & Schmit, 2013). Shitstorms may involve both individuals and organizations and it refers to "(...) a radical form of scandalization process that involves quickly increasing outrage via social media" (Trittin, 2013, p. 2). Lastly, social media crises have also been described as a product of social media hype, a concept described as "Netizen-generated hype that causes huge interest that is triggered by a key event and sustained by a self-reinforcing quality in its ability for users to engage in conversation" (Pang, 2013, p. 333). However, the concept of a social media crisis remains the most accepted and used term across the academic literature. Consequently, this thesis utilizes the definition of a social media crisis as presented by Owyang (2011), while recognizing the inherent plurality that this definition entails.

The development of a social media crisis. As the previous section outlines, a social media crisis is a distinct form of organizational crisis that encompass several different categories. Such crises have become a possibility due to the changes in the communicative environment and the technological affordances of social media. Consequently, the developments of social media crises are also shaped by these factors.

Coombs (2014a) notes how "The idea that crises have an identifiable life cycle is a consistent theme that permeates the crisis management literature" (p. 6). This is also true for social media crises, and several scholars have studied how the lifecycle of a social media crisis plays out (e.g. Pang et al., 2013; Siah et al., 2010; Gonzales-Herrero & Smith, 2008). Furthermore, numerous practitioners have explored the topic, and Haug (2014) presented a five-stage model that outline the typical flow of a social media crisis:

- Triggering: A triggering event happens on a social network site, typically Facebook or Twitter.
- 2. Amplification: The criticism or challenge spreads via social media fuelled by netizens engagement such as liking, sharing, commenting or re-tweeting. If handled correctly, the threat might be mitigated at this stage.
- 3. Escalation: The event, and the following buzz, reaches a critical mass that leads to online media outlets picking up on the story.
- 4. Climax: In the case of a substantial event, or a high-profiled organization, the crisis may spread to TV, radio and print media. Traditional media outlets function as amplifiers, which multiplies the number of active stakeholders and severity of the crisis drastically. A resolution is demanded.
- 5. Phase Out: Media attention stagnates, and criticism on social media decreases. Often as a result of crisis management performed by the affected organization.

The five-stage model is an accurate depiction of how many social media crises unfold, and it resonates with a number of other theoretical frameworks. For instance, Pang et al. (2014) presents a very similar model, and it is noted "how crises can be triggered online, how different social media tools escalate crises, and how issues become legitimized when they transit to mainstream media" (p. 112). The interplay between traditional and social media is paramount to the development of social media crises, as a social media crisis often is a combined result of both traditional and social media (Pfeffer et al., 2014; Liu et al., 2012) However, social media crises will only transit onto mainstream media, if the newsworthiness criteria and gatekeeping of traditional media is passed (Pang et al., 2014; Siah et al., 2010). Such a development may seem implausible for many organizations, however research has found that incidents of online crisis reaching mainstream media have seen a ten fold increase in recent years (Owyang, 2011).

The Paracrisis. Coombs 2014a divides organizational crisis management into the phases of precrisis, crisis response and postcrisis. It is a simple division into before, under, and after a crisis. However, social media crises introduce a complication to this division because of an increased visibility of stakeholder challenges (Coombs, 2014b). In the social media environment, challenges are petitioned in full view of other stakeholders due to the public availability of social media sites.

Therefore, such challenges may easily become a crisis, if other stakeholders attach significance and attention to it (Coombs & Holladay, 2012). Consequently, challenges via social media are positioned as a distinct form of crisis threat that blur the line between precrisis and crisis response (Coombs, 2014a). Such a threat is called a paracrisis, which is defined as "A publicly visible crisis threat that charges an organization with irresponsible or unethical behavior (Coombs & Holladay, 2012, p. 409). A paracrises can develop into an organizational crisis, and therefore have a significant impact. It is explained how:

"The term 'para' means resembling or protection from something. A paracrisis resembles a crisis because it threatens the organization's reputation and related assets. However a paracrisis would not require the activation of the crisis team and does not disrupt the organization. Still, a paracrisis warrants attention because neglect or mismanagement could create an actual crisis" (Coombs, 2014a, p. 27).

Coombs (2014b) positions the term paracrisis as a refined replacement of the concept of a social media crisis. In this view, a social media crisis is not an organizational crisis. Rather, it is an early warning sign of an impending organizational crisis that; looks very much like a crisis, requires similar crisis management, and may transcend onto other platforms if not managed appropriately (Coombs & Holladay, 2012). However, the concept of a paracrisis is predominantly focused on specific stakeholder challenges that signal a legitimacy gap between organizational values or behaviors and stakeholder expectancies. Consequently, the conceptualization of the paracrisis does not incorporate social media crisis categories, such as organizational misuse or dissatisfied customers, which makes it too narrow to apply throughout this thesis. Nevertheless, the perspective holds instrumental value to the management of social media crisis. Furthermore, It underlines the importance of effective crisis- and risk management in the social media environment, and how crisis threats may be mitigated before becoming true organizational crises. Haug (2014) acknowledges that treats may mitigated in the amplification stage of the five-stage model, and as such effective management may hinder both escalation and an impending development to the climax stage. Therefore, a review of the current knowledge of social media crisis management is conducted in the following section.

Social media crisis management

As the literature review conducted up until this point has shown, an extensive body of knowledge exits within the area of organizational crisis management. However, rapid and continuous changes in the communicative environment have serious implications for how organization manage crises both online and offline (Gonzales-Herrero & Smith, 2010; Veil et al., 2011; Pang et al., 2014). And the nature of crises change vis-à-vis the technological affordances of contemporary media (Siah et al., 2009). Consequently, both researchers and practitioners struggle with the difficulty of assessing, evaluating, and managing a rapidly moving target.

Furthermore, there is an inherent lag in academic research, and research is always trying to catch up with practice (Coombs, 2014b). Meanwhile, crises are becoming increasingly frequent and severe (James, Wooten & Dushek, 2011). Therefore, it has been problematized how "(...) this aspect of communication research is under populated in public relations journals yet increasingly important and complex in practice" (Duhé, 2015, p. 162). Furthermore, the specific area of social media crisis management is becoming increasingly multifaceted, which have caused scholars to realize how "social media is the driving force in the bleeding edge of crisis communication" (Coombs, 2014b, p. 7).

Off course, this does not mean that all prior research and knowledge has been rendered useless, or that no relevant research exists. In fact, a wide array of research is very relevant to the study of social media crises, as the present literature review outlines. However, relatively few studies have examined social media as a specific tool for crisis communication (Ki & Nekmat, 2014; Duhé, 2015). And even fewer have explored how organizations manage, or should manage, social media crises specifically.

This is problematic considering how social media crises are a serious reputational threat (Coombs & Holladay, 2012; Ott & Theunissen, 2015), and reputation is regarded as a valuable, intangible asset relevant for the financial success of the organization (Fombrun, Gardberg & Barnett, 2001). Consequently, as a research field, the area of social media crises lacks evidence-based guidelines that outline how desired effects from crisis communication efforts, such as "minimizing reputational damage from a crisis, maintaining purchasing intention, and preventing negative word-of-mouth" (Coombs & Holladay, 2008, p. 40) can be achieved. Therefore, it has been argued how crisis communication research should be "heeding the call of evidence-based

management and seeking to use systematic research to guide the practice of crisis communication" (Coombs, 2015, p. 147).

Ultimately, researchers have yet to explore numerous areas within social media crisis management. This thesis aims to supplement the current knowledge by enhancing the current understanding of how communication strategy and form affects reactions and perceptions to crisis communication on social media. Consequently, the following section outlines the current research within the specific field of social media crisis management, before turning to the identification of a particular gap in the literature, which the conducted research seeks to address.

Best practice approaches. Several researchers have proposed guidelines for managing social media crises based on so-called best practice evaluations of the academic literature. For instance Veil et al. (2011) presented a comprehensive analysis that showed how "social media can be used to assist organizations in following best practices in risk and crisis communication" (p. 118). Furthermore, Champoux et al. (2012) outlined how business may reduce the ramifications of a social media crisis by leveraging the sevens steps of; having a team in place, track company mentions on the internet, act quickly, manage ongoing dialogue, take responsibility, fix the situation, and move on. Also, Coombs 2014b uses a synthesis of literature to present six overall guidelines for social media crisis management.

Case study approaches. Gonzales-Herrero and Smith (2008) presented a model for crisis management in the virtual world consisting of the four phases of issue management, planning-prevention, crisis, and post crisis. Correspondingly, they outlined specific management actions for each phase, based on case examples and relevant literature. Siah et al. (2010) further developed this model into the 'New media crisis communication model' that outlines organizational guidelines for each of the four stages, based on the examination of four different cases. Pang et al. (2014) also utilized a multiple case study method, and identified a number of key ideas for organizational management of crises in the social media environment, based on the new media crisis communication model.

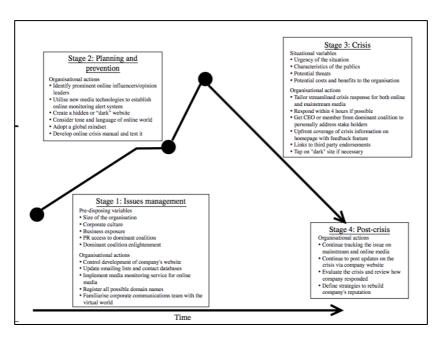


Figure 5: New Media Crisis Communication Model (Siah et al., 2010)

The case study methodology has also been used to analyze how organizations utilize different strategies in relation to crises on social media. For instance, it was found that when confronted with social media risks, organizations generally follow one of four overall strategies: absence, presence, attendance or omnipresence (Aula, 2010). The absence strategy follows a traditional one-way communication approach. Conversely, a strategy of omnipresence embraces the idea of multi-logging that recognize how "interaction with the public is complex, overlapping, and continuous" (p. 48). Consequently, a strategy of omnipresence embraces the idea of multifaceted communications, which aligns with Coombs and Holladay (2014), who argued for the importance of examining multiple sub-arenas in the social media environment. Correspondingly Gruber et al. (2015) found that it is critical to be present, listen, and to engage everywhere stakeholders are talking about the organization, as "the myriad of social media platforms that are being used in today's business environment offer multiple touch points for leaders and organizations to engage in meaningful discourse and real-time sense making" (p. 170). Further supporting a dialogic approach, Veil et al., (2012) noted that when organization deals with social media crises they should both monitor the Internet vigorously, and engage and talk with consumers rather than at them. Also, organizations should practice both media and social media surveillance, and recognize that responding to a crisis through the same medium as it was distributed trough is imperative.

Several scholars have also used situational crisis communication theory (SCCT) (Coombs, 2009) as a framework for determining the effectiveness of different crisis response strategies in the social media environment, by applying the case study methodology. For instance, Ki and Nekmat (2014), presented findings indicating that 'justification' and 'apology' were the most commonly used strategies within the framework of situational crisis communication theory among fortune 500 companies. Similarly, Ott and Theunissen (2015) concluded that effective and non-effective approaches to social media crises management exist among the response strategies within SCCT. It was found that organizations often employed tactics of negotiation and persuasion combined with traditional crisis response strategies, like denial and justification, rather than engaging in genuine dialogue. Conversely, Hosseinali-Mirza et al. (2015) found that organizations apply apology and compensation response strategies when engaging in social media crisis management. However, none of these studies introduce communication form or medium as variable that may affect outcomes.

Experimental approaches. Austin et al. (2012) criticizes dominant crisis communication theories, such as SCCT or Image Repair Theory, for not addressing how communication form can impact the behaviors of crisis communication publics. This critique is based on frameworks such as the social mediated crisis model (Lin, Jiu & Austin, 2011) that show how the medium used affects the impact of crisis communication. Consequently, the SMCC model (Jin, Liu & Austin, 2014) explains how the source and form of crisis information affects an organizations response options, as well as recommend social-mediated response strategies. As such, the SMCC model acknowledges the value of crisis response strategies, as argued by SCCT, while also recognizing the importance of communication form in relation to crisis management (Jin et al., 2014).

Altogether, this makes an important point, as emerging research suggests that communication form may in fact be an imperative factor when organizations engage in crisis communication.

Schultz et al. (2011) noted how "Crisis communications research mainly deals with the interrelationships between crisis situations, communications strategy and crisis perceptions" (p. 20). And while it has been established that different crisis response strategies does affect outcomes in relation to organizational reputation (Coombs, 2014), Schultz et al. (2011) presented findings indicating that when using social media in crisis communication "The medium matters more than the message" (p. 25). The basis of this argumentation was an experimental analysis

that measured how different combinations of strategy and media affected "the recipients' perceptions of reputation; and (...) the effects of crisis responses on the recipients' secondary crisis communications (e.g., sharing information and leaving a message) and reactions (e.g., willingness to boycott)" (p. 20). It was observed that on the measures of reputation, secondary crisis communication and effect, apparent effects of medium occurred. Furthermore, it was determined how message only had significant effects in relation to secondary crisis reactions.

As such, these findings challenge classical crisis communication theories by showing that the medium used affects the impact of crisis communication (Utz et al., 2013).

A gap in the literature. Schultz et al. (2011) used three types of media: newspaper articles, blog posts, and tweets as variables in relation to crisis response strategies, while simulating an organizational crisis. However, their research did not focus on a social media crisis. Rather they simulated an organizational crisis an added a social media element, as to investigate the effect of communication form. Nevertheless, their findings have implications for the management of social media crises.

Social media crises have social media sites as their primary locus, and organizations may engage in crisis communication via social media, even before the crisis transcends onto traditional media channels. Haug (2014) outlined how crisis treats may be mitigated at the amplification stage, and Coombs and Holladay (2012) argued how social media crisis are reputational threats that mimics organizational crises, which must be managed accordingly. Therefore, it is insufficient to consider social media as just one media type or communication form.

This is because Social Network Sites afford a variety of communication forms that may be leveraged to mitigate crisis threats or incipient social media crises. For instance, an organization may respond to an inquiry or challenge on social media using either video, a link to a press release, a statement by senior staff, a direct reply, or by redirecting to another means of communications. As such, the technological affordances of social network sites allow various communication forms that may affect stakeholder perceptions and reactions. However, to the author's knowledge, no research has explored or investigated this particular area of social media crisis management up until this point.

It is hypothesized that stakeholder reactions and perceptions may indeed be affected by communication form, especially it the message is kept consistent. Consequently, this study

investigates whether, for example, a direct reply to a challenge expressing an apologetic strategy is more effective than publishing an official statement via social media that communicates the same message. If, for instance, a direct reply to a stakeholder lowers the enticement of that stakeholder, or other stakeholders, to engage in secondary crisis communication, such as commenting or re-sharing, it may have wide implications for the following development of the crisis. This is because social media crises are fueled by engagement, as algorithms favor posts with high levels of activity (Ott & Theunissen, 2015). Furthermore, research has shown that effective crisis management on social media may have positive effect on corporate reputation, as all information is available to all stakeholders (Einwiller & Steinen, 2015).

Consequently, the study of the effects of communication strategy and communication form in relation to reactions and perceptions to crisis communication on social media is relevant for both practitioners and scholars alike.

Philosophy of Science

The philosophy of science adopted as the basis of research contains a number of important assumptions of what constitutes acceptable knowledge (i.e. the nature of knowledge) and the process by which this is developed (i.e. the development of knowledge). Such assumptions underpin the methodology of the research conducted, and it is therefore important to specifically emphasize how this thesis subscribes to the principles of critical rationalism.

Critical rationalism is a philosophical system developed by the British philosopher, Roy Bhaskar, in collaboration with a number of other social theorists such as Margaret Archer and Andrew Collier (Gorski, 2013). It assumes that the aim of social science research is to explain social change, by assessing how social forms evolve and why particular outcomes occur (Bhaskar, 1998). Critical rationalism is recognized as a viable and relevant philosophical paradigm for conducting social science research, as research methodologies based on critical realism offer new opportunities to investigate complex organizational phenomena in a holistic manner (Wynn & Williams, 2012). This is because critical realism developed by way of argument against both empiricist views of science, as embodied in positivism, idealist views of science, such as constructivism or interpretivism, and postmodernist and irrealist viewpoints (Mingers, Mutch and Willcocks, 2013). Consequently, critical realism is a philosophy of science that has developed as an

alternative to both positivism and interpretivism, which hold several epistemological and ontological differences (Smith, 2006).

Whereas positivism concerns a single concrete reality, and interpretivism concerns multiple realities, critical realism embraces the idea of multiple perceptions of a single, mind-independent reality (Healy & Perry, 2000). Therefore, reality is perceived both as intransitive, existing independently of humans and our knowledge, and stratified. The stratified reality is made up of three ontologically distinct realms: The empirical, the actual and the transcendental. The empirical is experiences, the actual is events that are the objects of experience, and the transcendental is non-actual or deep structures or mechanisms and associated powers (Dobson, Myles & Jackson, 2007). Consequently, critical realism defines the ontology of reality as "an open stratified system of natural objects with causal powers (mechanisms), which under some conditions are actualized to produce events some of which are experienced in the domain of the empirical" (Morton, 2006, p. 2). As Lawson (1997) explains, this means that:

"The world is composed not only of events and our experience or impression of them, but also of (irreducible) structures and mechanisms, powers and tendencies, etc. that, although not directly observable, nevertheless underlie actual events that we experience and govern or produce them" (p. 8).

The underlying structures cause observable events, and the social world may only be understood if researchers also understand the underlying structures that generate events. This is important in a research context, as it allows for the distinction between an event and the structure that caused it. Therefore, an individual conducting a research study create the conditions (the observable event) but the underlying laws and mechanisms (the unobservable structures) cause the results. Consequently, critical realism states that knowledge (epistemology) is different from being or existence (ontology) (Mingers, et al., 2013). Critical realism seeks to posit descriptions of reality based on an analysis of the experiences observed, and the resulted knowledge claims "are focused on specifying and describing those elements of reality which must exist in order for the events and experiences under examination to have occurred" (Wynn & Williams, 2012, p. 792).

There is no prescribed method for conducting research based on critical realism, as the adaption of a realist ontology and epistemology does not prelude the use research techniques from either natural science or social constructivism (Mingers et al. 2014). However, when studying social science, researchers are dealing with something fundamentally different from natural world, which warrants an adaption of strategy. Human structures change because culture and society are generated by human activities. As such, society is applicable to change, and no rules of culture or society can therefore be universal, but rather context dependent. Consequently, critical realism requires a rich understanding of any given social situation, based on both the observable and an investigation of the underlying mechanisms that caused any event (Dannermark et al., 2001).

Methodology

This section outlines the rationale for applying specific procedures, and the approach taken to investigate the research question. As such, the methodology section outlines answers for the four basic questions of: (1) What research approach was taken, (2) how was the study designed?, (3) how was the data collected, and (4) how was it analyzed?

Research Approach

The research undertaken applied a deductive approach, which entails that the researcher "on the basis of what is known about in a particular domain and of theoretical considerations in relation to that domain, deduces a hypothesis (or hypotheses) that must then be subjected to empirical scrutiny" (Bryman, 2012, p. 24). Following Robson's (2002) framework of deductive research, the research followed the five stages of:

- 1. Deducing hypotheses from the theory
- 2. Expressing the hypotheses in operations terms, which propose a relationship between specific variables
- 3. Testing the operational hypotheses
- 4. Examining the specific outcomes of the inquiry
- 5. Modifying existing theory in the light of the findings, if necessary

Consequently, the following section outlines eight hypotheses that were deducted on the basis of the literature review. The experimental testing of these hypotheses makes up the background for the examination of the research question. As such, the research conducted in this thesis builds on the foundation of current academic knowledge. Furthermore, it is attempted to supplement the body of knowledge, by actively addressing the lacking understanding of the effects of various communication forms afforded by social network sites.

The hypotheses were formulated on the basis of recommendations by Wimmer and Dominick (2013), who outline how a hypothesis "Should be compatible with current knowledge in the area, it should be logically consistent, it should be stated concisely, and it should be testable" (p. 292). Furthermore, a deliberate choice to not state null hypotheses was made, as each research hypothesis has a logical alternative (Wimmer & Dominick, 2013).

Hypotheses

It has been found that the characteristics of postings in the social media environment have significant impact. For instance, Coyle, Smith and Platt (2008) found that "(...) postings that tried to solve consumer problems led to stronger perceptions of company trustworthiness, company benevolence, and attitude towards the brand than postings that merely acknowledged a problem exists" (p. 32). Furthermore, it has been argued that "social media is not just a channel for distributing corporate communications; social media is an arena for participation in which organizations interact with the public" (Aula, 2010, p. 45). Thus, it is hypothesized that organizations must both recognize, and utilize, how social media allows for communication that is very close to the two-way symmetric form of communication, in order to undertake more successful crisis management in the social media environment. Consequently, the following hypotheses are positioned, based on the assumptions outlined in the section concerning the dialogic nature of social media:

Hypothesis 1a: Some combinations of communication strategy and communication form will have significant impact on perceptions of reputation

Hypothesis 1b: Some combinations of communication strategy and communication form will have significant impact on the effectiveness of crisis communication on social media

The next hypotheses concern strategy in relation to social media crisis management. It was previously positioned how social media crises are primarily reputational concerns, in which the affected organizations experiences large attributions of guilt (Coombs, 2014a). The attribution of guilt is important, as the perceived level of fault for the crisis attributed to the organization influences how it may react to crisis threats (Jin et al., 2014). In the event of high attributions of guilt, it is recommended to use more accommodative strategies, as those embedded in the rebuilding posture of the SCCT framework (Coombs, 2014a; Ki & Nekmat, 2014). Therefore, it is deducted that a rebuilding posture should be more effective than that of a diminishment posture, in the event of a social media crisis. Accordingly, the second pair of hypotheses is derived:

Hypothesis 2a: Communication strategy will have a significant effect on perceptions of reputation

Hypothesis 2b: Communication strategy will have a significant effect on the effectiveness of crisis communication on social media

The next hypotheses are based on the findings of Veil et al. (2012), who argued that it is imperative to respond to hoaxes in the social media environment through the same medium in which they were distributed. While their study concerned a hoax video, the case also fits the definition of a social media crisis. Consequently, it is hypothesized that their findings may be valid for other types of social media crises as well. Furthermore, the reasoning correlates with the assumptions outlined in the section concerning accessibility of crisis communication. In that particular section, it was described how all crisis communication efforts are potentially fully visible to all stakeholders in the digital environment. However, if an organization utilizes another channel of communication for crisis communication, all stakeholders may no be subjected to the organizational message(s). Thus, they lack the organization's perspective, which may affect how the organization as a whole is perceived. Consequently the following hypotheses are derived:

Hypothesis 3a: Communication form will have a significant effect on perceptions of reputation

Hypothesis 3b: Communication form will have a significant effect on the effectiveness of crisis communication on social media

The final hypotheses are based on the underlying factor of virality. The willingness of publics to share or forward messages was positioned as an important driver of social media crises, and it has been argued that virality is driven by physical arousal such as anger, provocation or surprise (Schultz et al., 2013; Berger & Milkman, 2013). However, if a crisis response successfully reduces the offensiveness of the event, the crisis threat may be mitigated (Coombs, 2014a). Therefore, it is deduced that appropriate crisis management might reduce stakeholder intentions of engaging in secondary crisis communication. This is of paramount importance for the further escalation of a crisis, as social media crises are fueled by stakeholder engagement (Trittin, 2013). Consequently, the following hypotheses are derived:

Hypothesis 4a: Some combinations of communication strategy and communication form will have significant effect on stakeholder likelihood of engaging in the secondary crisis communication of liking or commenting on content

Hypothesis 4b. Some combinations of communication strategy and communication form will have significant effect on stakeholder likelihood of engaging in the secondary crisis communication of sharing information with their network

Collaboratively, the eight hypotheses guided the design of the study that was undertaken. Hence, the study design needed to produce data that would expose causal relations between specific variables in relation to both communication form and strategy, in order to confirm or falsify the proposed hypotheses. Consequently, a quantitative research approach was chosen. The reasoning for applying this approach is outlined in the following section.

Quantitative research

Bryman (2012) describes quantitative research as "a research strategy that emphasizes quantification in collection and analysis of data" (p. 35). As such, the aim is to explain phenomena by collecting numerical data that are analyzed using mathematically based methods, such as statistics (Muijs, 2010). Therefore, in order to test the hypotheses, a quantitative research method was applied. Specifically, the approach of survey research was utilized, based on the experimental vignette methodology. The survey research approach was chosen due to the possibility of studying relationships between variables, and because a quantitative survey allowed for easy comparability amongst groups of respondents and quantification.

Experimental vignette methodology. The vignette technique is a method that can elicit perceptions, opinions, belief norms, and attitudes from responses to scenarios and situations (Finch, 1987). Atzmüller and Steiner (2010) outline how a quantitative vignette study consists of two components:

"(a) A vignette experiment as the core element, and (b) a traditional survey for the parallel and supplementary measurement of additional respondent, specific characteristics, which are used as covariates in the analysis of vignette data" (p. 128).

As such, the experimental vignette methodology consists of presenting participants to carefully constructed and realistic scenarios, in order to assess dependent variables such as intentions, attitude and behaviors (Aguinis & Bradley, 2014). A vignette is defined as "a short, carefully constructed description of a person, object, or situations, representing a systematic combination of characteristics" (Atzmüller & Steiner, 2010, p. 128). Importantly, the vignettes may be presented in a variety of formats, such as written text, images, or video, and either independently or as a combination of different media types (Aguinis & Bradley, 2014). Atzmüller and Steiner (2010) distinguish between three types of vignette experiments, and that of a within-subject design, where each participant judges only one vignette, was chosen as the basis of the research design. Furthermore, the research took the form of a 'paper people study', where participants were asked to make explicit judgments based on a vignette consisting of both images and text that represented a hypothetical situation (Aguinis & Bradley, 2014).

This approach fostered the possibility of assessing the effects of communication strategy and communications form in relation to reactions and perceptions to crisis communication on social media.

Research context. In a Danish context, numerous organizations have faced social media crises in recent years. Organizations such as Danske Bank, TDC, Bilka, The Copenhagen Zoo, Netto, Bremerholms Blomster, Movia, Cover Magazine, ILVA, Telenor, Tivoli, Nykredit, Lego, Legoland, Just Eat, Kähler and Jensen's Bøfhus have all experienced how the rise of new, digital media have enabled their stakeholders to turn inquiries or challenges into crises. As such, social media crises are a well-known phenomena in Denmark. And Denmark is arguably home to a number of the most prevalent examples of social media crises. Nevertheless, frequent occurrence was merely an underlying argument for investigating the research question in a Danish context.

Rather, Denmark was chosen as a research context on the basis of the contributing factors of: (1) Having one of Europe's highest levels of active social media penetration (Statistica, 2015), (2) consisting of a relatively small, homogenous population, and (3) having a very well developed media ecosystem that warrants a high probability of online content gaining traction, and escalating onto traditional media. Collaboratively, this made focusing on social media crises in Denmark an ideal context for further developing the body of knowledge.

Focal point. Facebook is the largest social network site in the world with more than 1.55 billion monthly active users worldwide (Statistica, 2016). 62% of the Danish population use Facebook every day, which by far surpasses other social network sites such as Instagram, Twitter, or LinkedIn that are used daily by 9%, 4%, and 3%, respectively (DR medieforskning, 2015). Consequently, Facebook is the principal social network site in Denmark.

Furthermore, Facebook is the most multifaceted of the larger social network sites, as it allows a wide range of functionalities for both users and organizations (Kietzman et al., 2011). It is a platform that affords high levels of information and network access to its users, and it does not only afford peer to peer interactions, but also opportunities for 'pervasive awareness', as individuals regularly broadcast and receive information from their networks (Hampton, Lee & Her, 2011). Halpern and Gibbs (2013) explain how:

"Facebook users are automatically notified about content updates in their news feeds and have immediate access to information posted or "liked" by their contacts. When users for instance comment (...) the message becomes public not only to the users who are participating (...) but also to their social networks, forming more "open" communities through bounded contacts, since Facebook users are informed based on their network's activities" (p. 1161).

Furthermore, the programming algorithms, which shape the news feed of users, favor posts with high activity, regardless of the sentiment (Ott & Theunissen, 2015). As such, Facebook facilitate information flows amongst users that may develop into social media crises. Additionally, negative user-generated Facebook content may have major impact, as it has been found that stakeholders' perceptions of organizations were significantly less positive after having been exposed to negative Facebook posts (Haig & Wigley, 2015). Consequently, Facebook was determined as the most relevant medium for investigating the research question.

While several studies have examined the implications of Twitter for crisis management (e.g. Gruber et al., 2015; Brumette & Sisco, 2015; Schultz et al., 2011), the scarcity of the use of the medium in a Danish context, led to a limiting the study to only focus on Facebook. This choice was further supported by the technical limitations of twitter, and significantly more varied options of communication forms on Facebook.

Study Design

In order to investigate both the research question, and the corresponding hypotheses, a factorial experimental design was utilized. This approach was chosen because a factorial design allows for the simultaneous investigation of two, or more, independent variables (Wimmer & Dominick, 2013). Furthermore, a factorial experimental design allows researchers to explore the possibility that the employed independent variables are interdependent in their effects on the dependent variables. Wimmer and Dominick (2013) further outline three imperative advantages of applying experimental research:

1. The approach provides evidence of causality, whereby it is possible to establish a cause and effect relationship between variables.

- 2. The approach has a conceivable potential for replication. Consequently, future researchers will be able to reaffirm the findings of the given study.
- 3. The approach allows researchers high levels of control. Both in terms of the settings of the study, the recruitment of participants, and variables.

Therefore, a factorial experimental design study was undertaken.

The study had a 2 (strategy: apology, justification) x 3 (communication form: wall post statement, direct reply on original inquiry, redirect to alternative channel of communication) design. Six distinct vignettes were used as independent variables, and the dependent measures consisted of measures divided within the three categories of (1) reputation, (2) effectiveness of crisis communication, and (3) secondary crisis communication. The dependent measures were collected on the basis of 7-point Likert scales, using the anchors of "strongly agree" and "strongly disagree". The reasoning for applying this design is outlined in the following sections.

Independent variables. It was chosen to limit the study to a 2 x 3 design, although a larger design might have produced a richer dataset. This was a deliberate choice, as a confined design allowed for a more thorough and meticulous analysis of the dataset, within the scope of a master thesis. Furthermore, several authors (e.g. Schultz et al., 2011; Liu et al., 2013; Utz et al., 2013) have based their research on similar designs. Accordingly, the design consisted of two types of crisis response strategies combined with three types of communication form.

Crisis response strategies. It was chosen to utilize response strategies from the SCCT framework for several reasons. First and foremost, the SCCT framework was chosen because it is a widely acknowledged, and experimentally tested, theory. SCCT is based on a synthesis of prior work, and it incorporates both the perspectives of corporate apologia and image restoration theory. Furthermore, SCCT was specifically designed to provide organizational communicators with scientific evidence to help guide their decisions in the event of a crisis situation (Coombs, 2014a). Consequently, SCCT theory is applicable to real-life scenarios, and very accessible, which made it an ideal fit for the conducted research.

SCCT theory claims that an organization should accept its assigned responsibility of a crisis, and highlight its responsibility, in the communication response to its stakeholders. This translates to four distinct organizational postures, into which the specific crisis response strategies are

grouped. Accordingly, utilizing SCCT strategies representing different organizational postures allowed for the construction of vignettes that were congruent in terms of message, but adjustable across communication forms, and representative of two different strategies.

Ki and Nekmat (2014) found that among fortune 500 companies, justification and apology were the most commonly used crisis response strategies on social media. These finding reflects SCCT's suggestion that organizations experiencing crises with high attributions of guilt, which is often the case in the event of social media crises, should use less defensive and more accommodative crisis response (Coombs, 2014a). Accordingly, it was found relevant to use the strategies of justification and apology in the present research, as these strategies are embedded in the distinct postures of diminishment and rebuilding, respectively. Consequently, the study leveraged the strategies of:

- Apology: Where the crisis manager publically states that the organization takes full responsibility for the crisis and asks for stakeholder forgiveness.
- 2. Justification: Where the crisis manager tries to minimize the perceived damage associated with the crisis, by justifying organizational actions.

Forms of communication. On Facebook, organizations have profiles that are fairly similar to those of individual users, called pages. Pages are in essence profiles that allow businesses, brands and organizations to share content, connect with people, host events, and engage in various forms of communication. A page consists of three parts; (1) Informative features such as the profile picture, cover photo, the about section, and the "like" counter, (2) The wall, where pages may publish status updates, pictures, or videos that are both shown to visitors of the page, and published to the news feeds of page followers (users who have "liked" the page"), and (3) interactive features such as the review section (where users can rate the page), the visitor post section (where individual users may post text, pictures and video to the page, publically), and the message function. Furthermore, pages can comment on both their own posts, and those of users.

In relation to crisis management on Facebook, organizations may for utilize the communication forms of (a) private direct messaging, (b) commenting directly on the post of an inquiry or challenge, (c) various statements or messages published on its own page wall, (d) video,

(e) images, (f) uploading a press releases or other fixed formats on its wall, or (g) redirecting stakeholders to another channel of communication. In order to investigate the research question, and test the hypotheses, three distinct forms of communication were chosen:

- 1. A statement, published on the wall of the affected organization (Wall post)
- 2. A textual comment directly on the stakeholder inquiry (Direct reply)
- 3. A redirect to an alternative channel of communication (Redirect)

These forms of communications were chosen, as they represent various approaches to stakeholder communication in the social media environment. Whereas a textual comment directly on the stakeholder inquiry implies symmetric two-way communication, the official statement wall post implies two-way, asymmetric communication. Conversely, redirecting to an alternative channel of communication, such as a customer service hotline or the organizational website, represents one-way communication.

Vignettes. A total of six vignettes were designed, and used as independent variables, corresponding with the 2 x 3 design:

Table 1
2 x 3 vignette design

	Crisis response strategy						
	Apology: Wall post (statement published on the wall of the affected	Justification: Wall post (statement published on the wall of the affected					
	organization)	organization)					
Communication	Apology: Direct reply (comment	Justification: Direct reply (comment					
form	directly on the stakeholder inquiry)	directly on the stakeholder inquiry)					
	Apology: Redirect (redirect to an	Justification: Redirect (redirect to an					
	alternative channel of communication)	alternative channel of					
	communication)						

Each vignette was designed to mimic the interface of Facebook, in order to make the scenario as realistic as possible. A professional art director was contracted to do mockups of each situation using Adobe Photoshop CS6 and Adobe Illustrator CS6. Therefore, it was possible to present participants with a realistic scenario that visualized interaction between an organization and stakeholders on Facebook. Each vignette reflected the assigned crisis response strategy by moderating the semantics and contents of the organizational message. Furthermore, the

communication form was incorporated in the design of the each vignette, by carefully imitating the layout of the actual Facebook interface, as to correspond with the desired form. A visualization of the design of each vignette is available in Appendix A.

In accordance with the Danish research context, it was chosen to formulate the vignettes in Danish. This ensured that language proficiency was not a hindrance for participating in the survey. Furthermore, the use of Danish was determined as an important prerequisite for making the vignettes, and the corresponding scenario, as realistic as possible.

Crisis situation. In order to determine the effects of communication strategy and communication form, a fictional crisis situation was created. The scenario concerned the fictitious flower company "Vores Blomster" (Our Flowers). The organization was modeled after Interflora, which is the largest florist chain in Denmark. Interflora has more than 450 stores nationwide, and offers a wide range of flowers, bouquets, and other gifts such as wine or chocolate. Products are sold both in-store and online, and nationwide delivery is offered. Interflora has a customer service hotline, a website, and a well-developed Facebook presence with approximately 22.000 followers (Interflora, N.D.).

While Interflora could have been used in the fictional scenario, it was determined that the use of a real company would implicate the results of the survey. Coombs (2014a) outline how the factors of crisis history and prior reputation directly affects the size of the reputational threat, and therefore it was determined that basing the scenario on Interflora, which is a widely recognized brand, would affect how participants reacted to its crisis communications efforts. Furthermore, it is plausible that stakeholder perceptions of Interflora would influence how participants evaluated the measures of reputation and secondary crisis communication. Consequently, the use of a fictitious company was chosen, while recognizing the converse implications for the results. Additionally, this approach ensured that no intellectual property rights were violated in the data collection process.

In order to measure the effects of communication form and strategy, a fictional social media crisis for Vores Blomster to face was created. To ensure realism, it was chosen to design the scenario on the basis of a real social media crisis that happened in November 2013.

The crisis unfolded after a customer, Pernille Caroline Lotus, had visited a Copenhagen based florist, Bremerholm Blomster, on the morning of November 11th, 2013. While waiting in line, she

witnessed an interaction between Bremerholm Blomster's staff and an elderly man. The old man had purchased a plant intended as a gift, and asked the clerk if she would mind wrapping it in a piece of paper. The clerk responded by stating that this was not possible. Confused, the elderly man asked why not, and pointed to the large stack of wrapping paper on the counter in front of him. The clerk responded by stating that it was not their policy to wrap plants. Then, the old man asked if it was possible to purchase a piece of paper, and wrap it on his own. The clerk responded by stating that this was not possible either. Perplexed, Pernille Caroline Lotus, pointed out the ridiculousness of not wanting to help a customer, whereto another clerk stated "We sell flowers, not paper". Enraged by interaction, Pernille Caroline Lotus published a Facebook post referencing what had happened, and stating that she was shocked by the actions of Bremerholm Blomster, the lack of respect for the elderly, and the insensitive nature of the interaction. Also, she swore to never shop at Bremerholm Blomster again.

The post spread like wildfire on Facebook, and eventually reached more than 12.000 likes, 4500 shares, and almost a 1000 comments. Furthermore, the crisis transcended onto other online media, and eventually experienced national news coverage in Denmark. As such, the case of Bremerholm Blomster warrants classification as a social media crisis. However, as Bremerholm Blomster is a small, local florist it is not active on Facebook. Consequently, no crisis management was undertaken on Facebook. Nevertheless, the situation is very relevant, as it fits the definition of a social media crisis. Furthermore, it a clear example of a stakeholder challenge based social media crisis, which was described as "a crisis that happens because an organization's behavior and/or policies are perceived as inappropriate or irresponsible" (Coombs, 2014a, p. 23).

Consequently, it was deduced that a stakeholder challenge, similar to the one experienced by Bremerholm Blomster, combined with a large, organizational setup, such as Interflora's, would be the ideal situation to base the testing of the proposed hypotheses on. This lead to setting up a scenario, where the fictitious Vores Blomster was exposed to a critical post on its Facebook page by Pernille Caroline Lotus. As such, each vignette presented participants with a distinct crisis response by Vores Blomster.

Dependent measures. The effects of various communication strategies and forms of communication were measured on the basis of a total of eight measures, divided into three distinct categories. The dependent measures were collected on the basis of 7-point Likert scales,

using the anchors of "strongly disagree" and "strongly agree" (Bryman, 2012). Each response was assigned a numerical value that corresponded with the level of agreement. As such, strongly disagree was translated to a value of one, disagree a value of two, slightly disagree a value of three, neither agree or disagree a value of four, slightly agree a value of five, agree a value of six, and strongly agree a value of seven. The categories, and their respective measures, were as follows.

Reputation. Reputation was measured by adapting the short-form measure of corporate reputation as suggested by Ponzi, Fombrun & Gardberg (2011). According to this framework, a measure of corporate reputation may consist of three attribute statements, designed to elicit the company's emotional appeal. Consequently, the measurement of reputation consisted of the three items of:

- 1. Vores Blomster is a company I have a good feeling about.
- 2. Vores Blomster is a trustworthy company.
- 3. I have respect for Vores Blomster, and their way of conducting business.

Effectiveness of crisis communication. The measurement of the effectiveness of the crisis communication was added as to determine whether participants felt that the organizations had handled the situation in an acceptable manner. The measurement of effectiveness consisted of the items of:

- 1. Vores Blomster handled the situation well.
- 2. Vores Blomster responded in a communicatively, appropriate way.
- 3. This interaction has not made me think less of Vores Blomster.

Secondary crisis communication. To assess intentions of engaging in secondary crisis communication, the measures of Schultz et al. (2011) was adapted. However, to reflect possibilities of secondary crisis communication afforded by the Facebook platform, the measurement was reduced to the two items of:

- 1. Facebook users are likely to engage in the situation by liking or commenting on content.
- 2. Facebook users are likely to share information about the situation with their network.

While the measures aimed at identifying the likeliness of stakeholders to engage in secondary crisis communication, the items were deliberatively formulated to distance the judgment requested from the respondents from their personal circumstances, as recommended in relation to vignette studies, by Finch (1987).

Consequently, the study applied the following conceptual model:

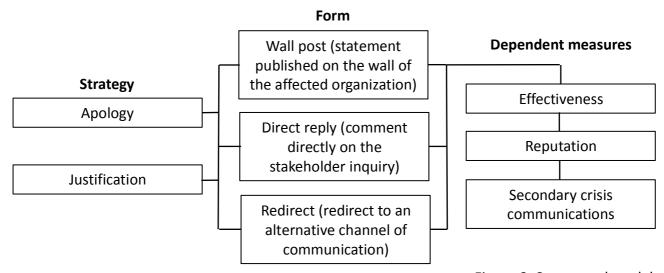


Figure 6: Conceptual model

Demographic measures. In addition to the dependent measures, participants were asked to provide the basic demographic info of age, gender and occupation. Also, a control question determining whether the participants were familiar with Vores Blomster prior to participating in the survey was added. This was done because the fictional case was based on a real scenario, which implies a risk of participant bias, as participants could potentially recall the original case.

Procedure. The survey was constructed as an online survey using the SurveyXact tool that is made available for students by Copenhagen Business School. Initially, it was intended to incorporate all participants into one survey, however neither SurveyXact nor other tools such as SurveyMonkey, Google Forms, Survey Gizmo or Qualtrics could facilitate an appropriate flow throughout the survey, given that there were six vignettes. It was either impossible to assign participants randomly to one of six conditions, or not possible to expose participants to the same

items after having been exposed to one of six conditions. Consequently, it was chosen to create six surveys, which varied only in the vignette presented to the participant, and consolidate the data into one dataset following the completion of the data collection. However, this created the apparent problem of having to distribute six surveys, while hindering large variations in the population sample. Consequently, a randomizer app was programmed, which consisted of a JavaScript application running on the NodeJS platform.

The randomizer app was essentially an empty website which had the sole purpose of assigning visitors to one of six different URL's that corresponded with one of the six surveys. The process worked automatically and instantly, and ensured that every participant entered the surveys using the same link. An algorithm distributed participants that clicked the invite link evenly amongst the six surveys, thereby ensuring a uniform sample population for each survey. Thus, participants following the invite link were unaware that a random assignment to one of six conditions had taken place.

The randomizer app allowed all participants to enter the online survey by following the same link, which was distributed via Facebook. After a short introduction, participants were provided with background info about case the company, Vores Blomster. Vores Blomster was presented as one of Denmark's largest flower chains with numerous stores across the country. Furthermore, a brief introduction to the situation was provided, and participants were asked to imagine being exposed to the following scenario in their own Facebook feed.

On the next page, participants were exposed to the triggering event, a message posted by Pernille Caroline Lotus directly to the page wall of Vores Blomster. The triggering event was depicted as if Pernille Caroline Lotus' post had shown up in a news feed (Appendix B). Accordingly, the like-, share-, and comment count was depicted, and a number of peer comments displayed. The comments shown were taken from the original Bremerholm Blomster post, as to ensure authenticity.

After having been exposed to the situation, participants were exposed to one of the six vignettes, representing a crisis response by Vores Blomster (Appendix A). Following exposure to one of the vignettes, participants answered the items relating to reputation, effectiveness of crisis communication and secondary crisis communication. Lastly, demographic information was collected, followed by the control question.

Pretest. A pretest was conducted before the survey was distributed in order to identify any ambiguities or inconsistencies in the survey (Wimmer & Dominick, 2013). The pre-test sample consisted of three participants that screened two vignettes each, and the corresponding item questions in SurveyXact. The participants were recruited within the researchers network, and minor corrections were made on the basis of their input. For instance, some questions were slightly rephrased, and the section containing background information on the case was reduced in length.

Data collection

Participants. Participants were recruited using snowball sampling via Facebook (Reinard, 2006). An invitation to participate that contained a short description of the contents of the survey, and the context of the research, prompted respondents to participate in the survey. Participants were also invited to share the survey with their network. The invitation was published to Facebook by the author and a total of 11 other people. The eleven collaborators were chosen to distribute the survey on the basis of their demographic diversity. Consequently, the invitation to participate was published in the Facebook networks of various demographic groups such as students, private-and public sector employees, and pensioners, all of various age groups. This was done to ensure an accurate sample of the total population. The invitation to participate was followed up by a reminder that was published on Facebook on the day after the initial invitation. As the survey was estimated to take less than five minutes to complete, no incentives were provided.

The population was determined to be all Facebook users in Denmark, as every Facebook user has the potential to both witness and participate in a social media crisis. Therefore, it was intended to utilize a sample that reflected the overall, demographic composition of the Danish Facebook user base. While Facebook does not make the specific demographic composition of its user base public, it has been found that 51,5% of users are female and 48,5% male (Danmarks Statistik, 2015). Furthermore, Facebook penetration divided by age is: 93% (16-24), 87% (25-34), 69% (35-44), 60% (45-54), 47% (55-64), 30% (65-74) and 15% (75-89), according to Danmarks Statistik (2015). Consequently, more participants from younger segments of the user base were expected.

Demographic composition of the sample. A total of 227 (N = 227) participants completed the survey, and the demographic information for the study's participants is depicted in table 2.

Table 2

Demographic information

Demographic injormation							
Gender							
Male, <i>n</i> (%)	104 (45.8%)						
Female, n (%)	123 (52,2%)						
Total, <i>N</i> (%)	227 (100%)						
Age, M (SD)	33.08 (12.136)						
16-24, n (%)	34 (15%)						
25-34, n (%)	121 (53.3%)						
35-44, n (%)	27 (11.9%)						
45-54, n (%)	30 (13.2%)						
55-64, n (%)	10 (4.4%)						
65-74, n (%)	2 (.9%)						
75-89, n (%)	3 (1.3)%						
Total, <i>N</i> (%)	227 (100%)						
Profession							
Student, n (%)	85 (37.4%)						
Employee, public, n (%)	29 (12.8%)						
Employee, private, n (%)	100 (44.1%)						
Unemployed, n (%)	9 (4%)						
Pensioner, n (%)	4 (1.8%)						
Total, N (%)	227 (100%)						

As table 2 shows, all age groups were represented in the sample. However, a majority of participants were represented in the age groups of 16-24 (15%) and 25-34 (53.3%). This was to be anticipated, as Facebook penetration in Denmark is significantly higher within these age groups. Also, the decreasing percentile of participants in the older age groups correlates with how actual Facebook penetration decreases with age. 53.3% of participants in the survey were female, and 47.5% were men. Consequently, the sample had a slight female bias, however a minor variation from the actual gender composition of the Facebook user base was to be expected, due the applied data collection method. No data was available as to determine the demographic composition of Facebook's users database in relation to profession. Nevertheless, the participants

in the study had varied professional backgrounds, with students (37.4%) and private sector employees (44.1%) being the most frequently represented. Due to the data collection method, no response rate could be calculated.

Samples, according to conditions. When applying statistics to a population sample, Reinard (2006) recommends at least 25 people per group, per level of independent variable. This recommendation is based on the argument that:

"When one looks at tables used for testing statistical significance (such as the t table) at a frequently used level (p < .05), the critical values seem to round to the same numbers (at least to the nearest tenth) whether they come from samples of about 30 or an infinite sample size. There is a catch, however. This reasoning assumes that the sampling is truly random" (Reinard, 2006, p. 37).

While it is recognized that snowball sampling does not produce a truly random sample of the population, it was chosen to accept Reinard's (2006) recommendation. The reason being how participants were not exclusively recruited within the researchers own network, and how collaborators were chosen to spread the questionnaire on the basis of their demographic diversity. Furthermore, the sample size of the study exceeded the threshold of 25 participants per condition significantly. The number of participants allocated to each vignette is depicted in table 3. Although the randomizer app worked, the number of participants in each condition varies due to the removal of incomplete entries in the data screening process.

Table 3

Participant allocation

Vignette	Crisis response strategy	Communication form	Participants (n)
1	Apology	Wall post (statement published on the wall of the affected organization)	43
2	Justification	Wall post (statement published on the wall of the affected organization)	36
3	Apology	Direct reply (comment directly on stakeholder inquiry)	38
4	Justification	Direct reply (comment directly on stakeholder inquiry)	39
5	Apology	Redirect (redirect to an alternative channel of communication)	36
6	Justification	Redirect (redirect) to an alternative channel of communication	35

Data Analysis

The survey data from the six individual surveys was exported from SurveyXact, and imported as one combined dataset for further analysis in IBM SPSS 22.0. Correspondingly, all data was analyzed using IBM SPSS 22.0.

Data Screening. Missing data, or missing values, occur when no data value is stored for the variable in an observation. While missing data is a common occurrence, it can have a significant effect on the conclusions that can be drawn from the data (Fidell & Tabachnick, 2003). Therefore, responses with missing data were removed as the first step in preparing the data for analysis. This was done manually, as the data set was of a limited size. Furthermore, the survey was set up so that all items required an entry, which meant that all missing values were due to participants having only partially completed the questionnaire.

Reliability and Validity. Muijs (2012) notes that validity and reliability are key concepts in quantitative methods, which both relate to measurement.

Reliability. Reliability is the extent to which a measuring procedure will generate similar results, if it is repeated. Furthermore, a study may be considered reliable, if it is internally consistent (Muijs, 2012). Therefore, it is imperative that the measures applied in a study yield consistent results, and that the measurements used are reliable. Consequently, Cronbach's alpha (α) was used as a measurement of internal consistency. Ideally, reliability coefficients should be as close to 1.00 as possible, however; .60 and under is considered an unacceptable reliability, .60 - .69 is a marginal reliability, .70 - .79 is fair reliability, .80 - .89 is a good reliability, and .90 and above is considered highly reliable (Reinard, 2006).

Validity. Validity concerns whether a study is measuring what it is intended to measure (Muijs, 2010). As such, the validity of the study is closely related to the procedures applied in the analysis. Wimmer and Dominick (2013) outline three concepts of validity that are relevant to this study, namely; face validity, construct validity, and concept validity.

Face validity involves determining how well an instrument measures the key construct on a superficial level (Muijs, 2010). Accordingly, the undertaken pretest, the similarity with other studies, and the theoretical foundation ensured the face validity of the undertaken study.

Construct validity refers to whether the measures are measuring the construct the claim to be measuring (Wimmer & Dominick, 2013). Furthermore, construct validity involves the ability to

generalize from the item measures used in a particular study (Muijs, 2012). Therefore, the research must show that such relationships are in fact present (Wimmer & Dominick, 2013). In the present study, three items measured reputation, three items measured effectiveness, and two items measured intentions of engaging in secondary crisis communication. Accordingly, construct validity was achieved by combining items into one measure for each concept, pending the calculation of satisfactory internal reliability coefficients. However this was not done for the items concerning secondary crisis communications, as these items measured significantly different concepts. Consequently, only the measured items for the categories of reputation and effectiveness were combined. This was done using the formula of:

$$\frac{(\mu 1 + \mu 2 + \mu 3)}{3}$$

Thus, the scores of the relevant items were combined into one mean score of reputation and one mean score of effectiveness, for each participant. Correspondingly, this approach allowed for a determination of whether the items used to measure the variables loaded under one factor, and if so, to use these measures as the basis of comparison (Muijs, 2010).

Lastly, content validity refers to the extent to which a measure embodies all components of a construct (Wimmer & Dominick, 2013). Content validity is commonly evaluated by establishing a panel of experts who assess the employed measures, and by reviewing relevant literature (Wimmer & Dominick, 2013). In the case of this study, the thesis supervisor evaluated the measures, in order to determine their validity.

Significance level. The researcher must set a probability level, or significance level, against which the null hypothesis is tested (Muijs, 2012). It is common practice in mass media research studies to set the probability level at .01 or .05, which means that either one or five times out of a 100, significant results of the study occur because of random error or chance (Wimmer & Dominick, 2013). Following evaluation of the size of the sample, and the size of differences, the .05 level of significance was applied (Muijs, 2012). Consequently, for a measure to be considered statistically significant, $p \le .05$.

One-Way ANOVA. While a *t*-test only allows researchers to investigate the effects of one independent variable on two samples, a one-way ANOVA "(...) can be used to simultaneously

investigate several independent variables (also called factors)" (Wimmer & Dominick, 2013, p. 335). Therefore, the use of the one-way ANOVA allowed the researcher to test for significant differences among the means of each condition (vignettes). Additionally, an ANOVA breaks down the total variability of data into its different sources of variation (Wimmer & Dominick, 2013). As such, the ANOVA was utilized in order to explain the sources of variance among the dependent variables. Furthermore, a conjunction of the one-way ANOVA and Tukey's HSD test, allowed for the identification of means that were significantly different from each other, if relevant.

Two-way ANOVA. Whereas a one-way ANOVA test for main effects, simply the influence of an independent variable on a dependent variable, a two-way ANOVA allows for the test of interaction effects among several independent variables on a dependent variable (Muijs, 2012). As such, a two-way ANOVA allows a researcher to test for the concomitant influences of two independent variables on a dependent variable (Wimmer & Dominick, 2013). This was considered important, as the study utilized a 2 x 3 design, which meant that each condition (vignette) in reality reflected two independent variables: communication strategy and communication form. Consequently, the two-way ANOVA was used to test for the effects of strategy and form separately, as well as interaction effects. This choice was further based on Atzmüller and Steiner's (2010) recommendation of using ANOVA to analyze variances in relation to the analysis of vignette studies.

Findings

The following sections outline the findings of the conducted study. The findings are presented according to the hypotheses that the study sought to test. Afterwards, a discussion is undertaken as to depict the implications of the findings for the academic literature, and the management of social media crises. Relevant results and calculations are presented in the text, and full SPSS 22.0 outputs are available in Appendix C.

Cronbach's Alpha was calculated for the items of both reputation and effectiveness in each condition. The results are presented in Table 4.

Table 4
Cronbach's Alpha for items

Condition	Vignette	Reputation	Effectiveness
1	Apology, wallpost (statement published on the wall of the affected organization)	$\alpha = .920$	$\alpha = .821$
2	Justification, wallpost (statement published on the wall of the affected organization)	$\alpha = .887$	$\alpha = .840$
3	Apology, direct reply (comment directly on stakeholder inquiry)	$\alpha = .843$	$\alpha = .839$
4	Justification, direct reply (comment directly on the stakeholder inquiry)	$\alpha = .897$	$\alpha = .890$
5	Apology, Redirect (redirect to an alternative channel of communication)	$\alpha = .863$	$\alpha = .893$
6	Justification, Redirect (redirect to an alternative channel of communication)	$\alpha = .909$	$\alpha = .906$

Remembering how reliability coefficients ranging from .80-.89 is considered a good reliability, and how .90 and above is considered highly reliable, the item measures were deemed fit for combination into factors (Reinard, 2006). Consequently, table 4 depicts the means of reputation and effectiveness for each condition. Also, the means of both secondary crisis communication measures is depicted. SCC (eng.) represents participant willingness to engage in the situation by commenting of liking content, whereas SCC (share inf.) represents participant willingness to share information about the situation with their network. Additionally, standard deviations are shown. A means table outlining the means of each measured item is supplied in appendix D.

Table 4:
M and SD for conditions

Condition	1		2	2	3	3	4	ļ	5	,	ϵ	j .
Vignette	Apol Wall p	logy ost ^(a)	Justific Wall p		Apo Direct i		Justific Direct r		Apol Redire		Justifio Redir	
Variables	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Reputation	4.23	1.46	3.81	1.53	4.36	1.35	3.62	1.70	3.35	1.43	3.41	1.68
Effectiveness	4.29	1.59	3.64	1.67	4.48	1.59	3.27	1.80	2.87	1.41	2.93	1.80
SCC (eng.)	5.35	1.66	5.56	1.42	5.45	1.57	5.41	1.50	5.89	1.06	5.77	1.50
SCC (share inf.)	4.60	1.68	5.0	1.66	4.45	1.66	4.92	1.60	5.56	1.05	5.20	1.50

⁽a) n = 43 (b) n = 36 (c) n = 38 (d) n = 39 (e) n = 36 (f) n = 35

Hypothesis 1a

Hypothesis 1a suggested that some combinations of communication strategy and communication form would have significant impact on perceptions of reputation. A one-way ANOVA, with reputation as the dependent variable, found that there was a significant effect on the measure of reputation F(5, 221) = 2.889, p = 0.015. Participants evaluated the reputation of

Vores Blomster highest following exposure to condition 3 (apology, direct reply) (M= 4.36, SD = 1.35) and condition 1 (apology/wall post) (M = 4.23, SD = 1.46). Furthermore, participants exposed to conditions 5 (apology, redirect) (M= 3.35, SD = 1.43) and 6 (justification, redirect) (M= 3.41, SD = 1.68) evaluated the reputation of Vores Blomster the lowest. Consequently, hypothesis 1a was supported. Figure 7 depicts a means plot of reputation, according to each condition (vignette).

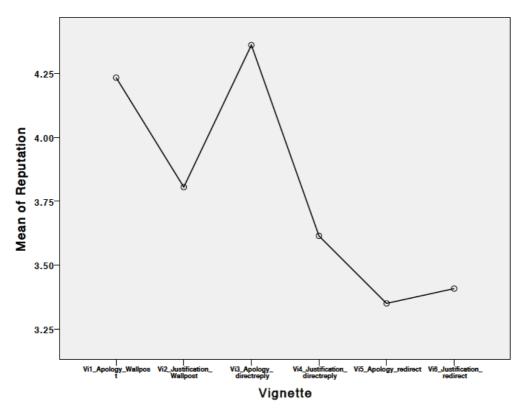


Figure 7. Means of reputation

Tukey's HSD Post Hoc analysis revealed that the largest differences of means were found between condition 3 (apology, direct reply) and condition 5 (apology, redirect) (MD = 1.01). However, no statistically significant differences between any specific pairs of conditions, at the $p \le .05$ level, were found. Nevertheless, Figure 7 illustrates how conditions that employed the communication forms of wall post and direct reply produced higher scores of reputation for Vores Blomster, than did conditions that applied the communication form of a redirect. This finding is interesting, as it indicates an apparent effect of communication form in relation to crisis management on social media. This indication is further discussed in the subsequent sections. Furthermore, strategy did seem to influence perceptions of reputation. However, higher scores for

conditions that employed an apologetic strategy were not consistent across all communication forms.

Hypothesis 1b

Hypothesis 1b queried that some combinations of communication strategy and communication form would have significant impact on the effectiveness of crisis communication on social media. A one-way ANOVA was conducted, with effectiveness as the dependent variable, in order to compare the effects of the various conditions on the measure of effectiveness. The analysis found that there was a significant effect of the conditions on the evaluation of effectiveness, F(5, 221) = 6.581, P = 0.000. Participants who were exposed to condition 3 (apology, direct reply)(M = 4.48, SD = 1.59), were the most in agreement with the statements concerning that Vores Blomster handled the situation well, responded in a communicatively appropriate way, and that the interaction had not made them think less of Vores Blomster. Also, participants evaluated effectiveness higher for conditions 1 (apology, wall post)(M = 4.29, SD = 1.59), 2 (justification, wall post) (M = 3.64, SD = 1.67), and 4 (Justification, direct reply)(M = 3.27, SD = 1.80), compared to conditions 5 (apology, redirect) (M = 2.87, SD = 1.41) and 6 (justification, redirect) (M = 2.93, SD = 1.68). Thus, Hypothesis 1b was supported.

Post hoc comparison using the Tukey HSD test indicated that the means score for condition 1 (apology, wallpost) (M = 4.29, SD = 1.59) was significantly different from condition 5 (apology, redirect) (M = 2.87, SD = 1.41) and condition 6 (justification, redirect) (M = 2.93, SD = 1.83) at the $p \le .05$ level. However, condition 1 (apology, wall post) were not significantly different from condition 2 (M = 3.64, SD = 1.67), condition 3 (justification, direct reply) (M = 4.48, SD = 1.59), and condition 4 (justification, direct reply) (M = 3.27, SD = 1.80). Condition 2 (justification, wallpost) was not significantly different from any specific conditions. Conversely, condition 3 (apology, direct reply) was significantly different from conditions 4, 5, and 6. Condition 4 (justification, direct reply) was only significantly different from condition 3. Lastly, Condition 5 (apology, redirect) was significantly different from conditions 1 and 3. As were condition 6 (justification, redirect).

These findings indicate that an apparent effect of form is also present in relation to effectiveness, as the conditions that utilized the communicative forms of a wall post, or a direct reply, had higher means than the redirect conditions. These variations are depicted in figure 8.

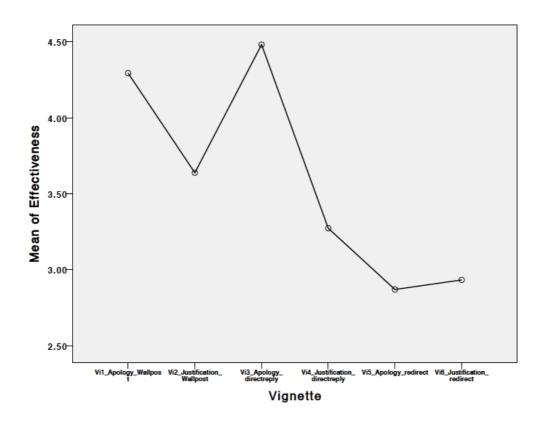


Figure 8: Mean of effectiveness

Hypotheses 2a and 3a

Hypothesis 2a queried that communication strategy would have a significant effect on the perceptions of reputation. As such, hypothesis 2a concerned whether a significant main effect of strategy existed in relation to perceptions of reputation. Furthermore, hypothesis 3a queried that communication form would have a significant effect on perceptions of reputation. Consequently, hypothesis 3a investigated whether a significant main effect of form was present in relation to stakeholder evaluations of reputation for Vores Blomster. The findings presented in the section concerning Hypothesis 1a implied that such an effect might exist, however the then applied oneway ANOVA did not specifically calculate this.

Consequently, a factorial (two-way) ANOVA was conducted to compare the main effects of communication strategy and communication form, as well as the interaction effect between communication strategy and communication form, on the dependent variable of reputation.

Communication strategy included two levels (apology, justification) and communication form consisted of three levels (wallpost, direct reply, redirect). The main effect for communication

strategy yielded an F ratio of F(1, 221) = 3.326, p = 0.070. Consequently, strategy did not have a significant effect on the perception of reputation, as p > 0.05. Thus, no statistically significant differences were found between the strategies of apology (M = 4.23, SD = 1.47) and justification (M = 3.61, SD = 1.63). Consequently, hypothesis 2a was rejected.

The main effect for communication form produced an F ratio of F(2, 221) = 4.406, p = 0.019. Thus, communication form did have a significant effect on perceptions of reputation, as p < 0.05. This finding means that there was significant difference between the communication forms of wall post (M = 4.04, SD = 1.50), direct reply (M = 3.98, SD = 1.57), and redirect (M = 3.38, SD = 1.55). A post hoc test further revealed that the communication form of redirect was significantly different from those of a wall post (MD = -0.638, p = 0.012) and direct reply (MD = -.607, p = 0.017), as illustrated in figure 9. Consequently, hypothesis 3a was supported.

Pairwise Comparisons

Dependent Variable: Reputation

	_	Mean Difference (I-			95% Confidence Interval for Difference ^b			
(I) Form	(J) Form	J)	Std. Error	Sig.b	Lower Bound	Upper Bound		
Wallpost	Direct reply	.032	.245	.898	452	.515		
1	Redirect	.638*	.251	.012	.144	1.132		
Direct reply	Wallpost	032	.245	.898	515	.452		
1	Redirect	.607*	.252	.017	.111	1.103		
Redirect	Wallpost	638*	.251	.012	-1.132	144		
1	Direct reply	607 [*]	.252	.017	-1.103	111		

Based on estimated marginal means

Figure 9. Pairwise comparisons

However, no significant difference was found between the communication forms of wall post and direct reply (MD = .032, p = 0.898). Nevertheless, it is an interesting finding, as the differences implies that responding to a stakeholder inquiry, using the same communication form as the original inquiry, is of importance. As such, this finding has implications for both theory and practice. This point is further elaborated in the discussion section. Lastly, interaction effects between communication form and communication strategy was analyzed, however the interaction effect was not significant F(2, 221) = 1.281, p = 0.280. Figure 10 depicts the estimated marginal means of reputation, with communication strategy as separate lines, and communication forms on the horizontal axis.

^{*.} The mean difference is significant at the

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

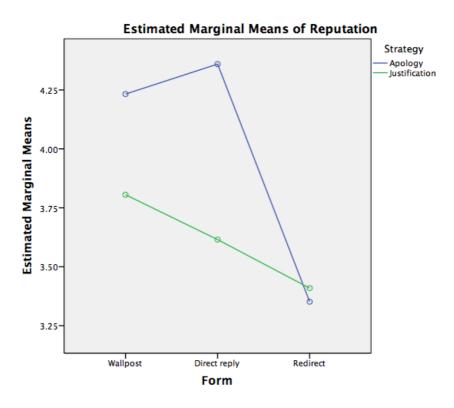


Figure 10. Mean plot, estimated marginal means of reputation

Hypotheses 2b and 3b

Hypothesis 2b queried that communication strategy would have a significant effect on the effectiveness of crisis communication on social media. As such, hypothesis 2a concerned whether a significant main effect of strategy was present. Conversely, hypotheses 3b inquired that communication form would have a significant effect on the effectiveness of crisis communication on social media. Therefore, hypothesis 3b investigated whether a significant main effect of form was present, in relation to effectiveness.

A procedure similar to that undertaken in the section concerning hypothesis 2a and 3a was applied. A factorial, two-way ANOVA was conducted to compare the effects of communication strategy and communication form, as well as the interaction effect between communication strategy and communication form. However, in this instance, the dependent variable was that of effectiveness. Again, communication strategy included two levels (apology, justification) and communication form consisted of three levels (wallpost, direct reply, redirect).

The main effect for communication strategy yielded an F ratio of F(1, 221) = 7.511, p = 0.007. Thus, communication strategy did have a significant effect on effectiveness, as p < 0.05. As such, the main effect for communication strategy indicated a significant difference between apology (M = 3.92, SD = 1.68) and justification (M = 3.28, SD = 1.76). A pairwise comparison post hoc test was conducted to further elucidate the differences, and a mean difference (MD) of .601, p = 0.007 was found between apology and justification. Consequently, a significant effect of strategy was found. Correspondingly, hypothesis 2b was supported.

For communication form, the main effect yielded a F ratio of F(2, 221) = 9.418, p = 0.000. Consequently, communication form also had a significant effect on effectiveness, as p < 0.05. This indicated significant differences between the communication forms of wall post (M = 4.00. SD = 1.65), direct reply (M = 3.87, SD = 1.80) and redirect (M = 2.90, SD = 1.60). Thus, hypothesis 3b was supported. The results of a pairwise comparison following post hoc testing are depicted in figure 11.

Pairwise Comparisons

Dependent Variable: Effectiveness

		Mean Difference (I-			95% Confidence Interval for Difference ^b		
(I) Form	(J) Form	J)	Std. Error	Sig.b	Lower Bound	Upper Bound	
Wallpost	Direct reply	.089	.264	.737	432	.610	
l	Redirect	1.065*	.270	.000	.533	1.597	
Direct reply	Wallpost	089	.264	.737	610	.432	
l	Redirect	.976 [*]	.271	.000	.442	1.510	
Redirect	Wallpost	-1.065*	.270	.000	-1.597	533	
	Direct reply	976 [*]	.271	.000	-1.510	442	

Based on estimated marginal means

Figure 11. Pairwise comparison

The pairwise comparison shows how the communication form of redirect was significantly different from that of a wall post (MD = -1.065, p = 0.000) and direct reply (MD = -0.976, p = 0.000). However, wallpost and direct reply were not significantly different (MD = -0.089, p = 0.737).

The two-way ANOVA also tested for interaction effect between communication strategy and communication form on the dependent variable of effectiveness. The interaction affect yielded an F ratio of F(2,221) = 2.761, p = 0.065. Consequently, no significant interaction effect was found.

^{*.} The mean difference is significant at the

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Figure 12 depicts a plot of the estimated marginal means of effectiveness, with strategy as separate lines, and communication form on the horizontal axis.

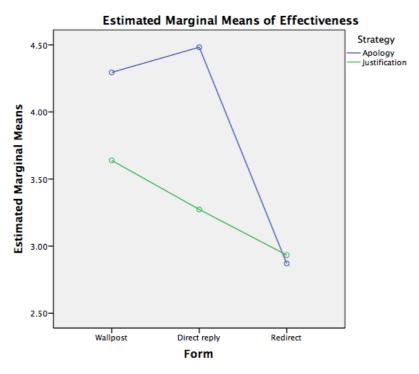


Figure 12. Mean plot, marginal means for effectiveness

Hypothesis 4a

H4a suggested that some combinations of communication form and communication strategy would have significant effect on stakeholder likelihood of engaging in the secondary crisis communication of liking or commenting on content. While slight descriptive variances were found among the means, no significant effects was found, as F(5, 221) = 1.747, p = 0.547. Thus H4a was rejected.

Figure 13 outlines the means plots for each conditions. While the variances, on the face of it, may seem substantial, note that the means varies from M=5.35 in condition 1 to M=5.89 in condition five. Therefore, no statistically significant differences exist among the means of the conditions. Nevertheless, it is noteworthy how the communication forms of a wall post and direct reply does have lower averages than that of a redirect, regardless of strategy.

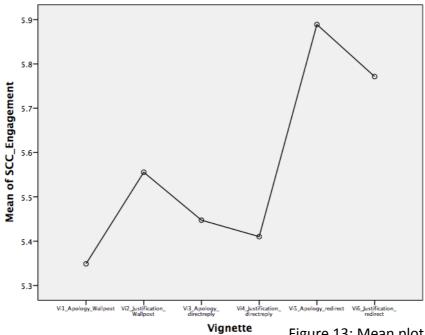


Figure 13: Mean plot, SCC Engagement

Hypothesis 4b

Hypothesis 4b suggested that some combinations of communication form and communication strategy would have significant effect on stakeholder likelihood of engaging in the secondary crisis communication of sharing information. However, a one-way ANOVA found no significant effects F(5, 221) = 2.524, p = 0.30. Thus, hypothesis H4b was rejected. A means plot for the secondary crisis communication of sharing information is depicted in figure 14.

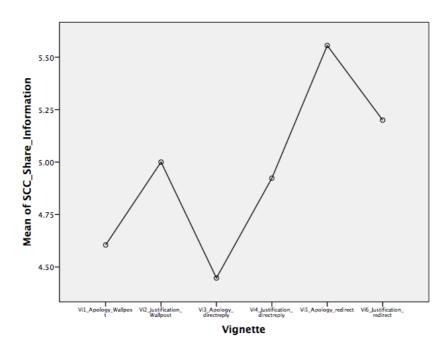


Figure 14: Means plot, SCC Share information

While hypothesis 4b was rejected, there did seem to be a notable dispersion among the means of SCC share information. This was especially apparent for the communication forms of wall post and direct reply, compared to the communication form of redirect. Also, the calculated significance level of P = 0.030 was barely not significant. Consequently, it was decided to run as factorial two-way ANOVA to establish whether a main effect of communication form was in fact present. The main effect for communication form yielded an F ratio of F(2, 221) = 4.196, p = 0.016, whereas the main effect for communication strategy was F(1, 221) = 0.0697, p = 0.405, and the interaction effect was F(2, 221) = 1.604, p = 0.203. Thus, there was a main effect of communication form on the willingness of participants to share information about the situation with their network, as illustrated in figure 15.

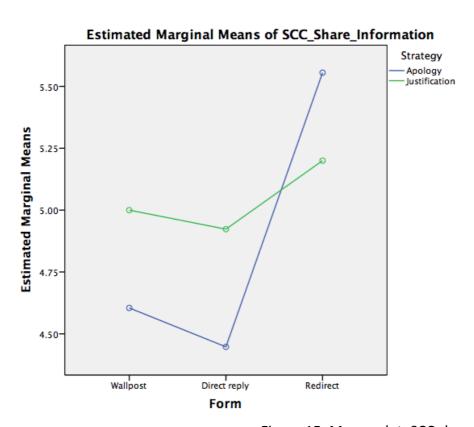


Figure 15: Means plot, SCC share information

Post hoc analysis using Tukey's HSD test revealed that there was as significant difference between the communication forms of a direct reply and a redirect (MD = -0.69). As such, participants were less inclined to share information about the situation with their network following exposure to a direct reply.

Discussion

The discussion section expands on the results of the study by discussing both the theoretical- and practical implications of the findings. It is divided into four, distinct sections. The first section provides a comprehensive summary of the study's results. The second section discusses the theoretical implications of the study, and its contribution to the crisis communication literature. The third section explains the study's implications for practice. Finally, the fourth section outlines the limitations of the study, and future directions for research regarding crisis management in the social media environment.

Summary of results

The undertaken study sought to investigate the effects of communication form and communication strategy in relation to reactions and perceptions to crisis communication on social media. The study utilized a 2 x 3 experimental design, which focused on the effects of the specific conditions (vignettes) on the measures of reputation, effectiveness, and the two measures concerning secondary crisis communication. The study resulted in a number of interesting findings, and these findings are summarized and discussed in subsequent sections, according to the effects per dependent variable.

Reputation. The one-way ANOVA found that participants evaluated the reputation of Vores Blomster significantly different depending on the condition they had been exposed to. In itself, that is an interesting finding, because it implies that the organizational approach to crisis management, in the social media environment, affects stakeholder perceptions of reputation. As such, the findings of the study shows that the organizational approach to the management of a social media crisis, does affect stakeholder perceptions of the organization.

Furthermore, the results showed an interesting pattern, as an apologetic strategy combined with either the communication form of a wall post or a direct reply, produced the highest scores of reputation. Conversely, the communication form of a redirect produced the lowest evaluations of reputation for Vores Blomster. This implied an apparent effect of form, which was confirmed by the two-way ANOVA that found a main effect of communication form in relation to the measure of reputation. Consequently, the undertaken study found that communication form is of utmost importance in relation to the management of social media crises.

Interestingly, it was found that condition 3 (apology, direct reply) (M = 4.36) yielded the highest score of reputation. The direct reply, in this case a comment directly on the stakeholder inquiry, is a two-way, symmetrical form of communication. Therefore, the results infer that in relation to social media crisis management, the utilization of communication form that embrace the dialogic nature of social media creates more positive evaluations of reputation for the affected organization. Furthermore, the second highest reputation mean was that of condition 1 (apology, wallpost) (M = 4.23), followed by condition 2 (justification, wall post) (M = 3.82) and condition 4 (justification, direct reply) (M = 3.62). Conversely, the lowest evaluations of reputation were reported following exposure to conditions 5 (apology, redirect) (M = 3.35) and 6 (justification, redirect) (M = 3.41).

Conditions 1 and 2 utilized the communication form of a wall post, a two-way, asymmetric form of communication, whereas conditions 5 and 6 represented one-way communication, by utilizing the communication form of a redirect. As such, it was found that utilizing a two-way form of communication has a more positive effect on evaluations of organizational reputation than employing a one-way form of communication. This further underlines the importance of embracing the dialogic nature of social media, and how organization must accept stakeholders as active participants, rather than passive information recipients, in the social media environment.

Also, the findings of the study emphasize the importance of undertaking crisis management in the same medium as the original inquiry occurred in. This argumentation is based on how the conditions where Vores Blomster opted to redirect stakeholders to its website and customer service hotline, rather than to engage stakeholder directly on Facebook, scored lower evaluations of reputation. Thus, the finding of this study indicate that organizations should undertake crisis management directly on social media, in the event of a social media crisis, in order to assure the least possible reputational damage from the crisis threat.

The two-way ANOVA found no main effect of strategy on the measure of reputation. Therefore, it is deduced that in relation to reputation, the form is more important than the strategy. However, this finding is not sufficient to conclude that strategy does not matter in relation to stakeholder perceptions of reputation. This is because the study did find differences in relation to stakeholder evaluations of the reputation for Vores Blomster, depending on the strategy utilized by the organization. Especially for the communication forms of a wall post and a

direct reply, there were notable differences in stakeholder evaluations of reputation, albeit not statistically significant, F(1, 221) = 3.326, p = 0.070. However, while the apologetic strategy produced higher evaluations of reputation for the communication forms of wall posts and direct replies, the study produced converse results for the communication form of redirect (Figure 9). Here, justification yielded higher evaluations of Vores Blomster's reputation, though the difference between the apologetic strategy and the justification strategy was very small (MD = -0.0576). Hence, it should be noted how the communication form of a redirect involves that the organization redirects stakeholders to another channel of communication. Thus, the strategy was not as outspoken in the redirect condition, as it was for wall post and direct reply conditions. This may explain why participants exposed to condition 5 (apology, redirect) (M = 3.35) and condition 6 (justification, redirect)(M = 3.41) evaluated the reputation of Vores Blomster similarly.

A reasonable inquiry is therefore that there is at least a possibility of the researcher having made a type 2 error, which implies that the researcher accepts the null hypothesis although it is false for the population (Muijs, 2012). However, the data analysis did not find a main effect for strategy, and thus it cannot be argued that strategy has a significant effect in relation to stakeholder evaluations of reputation, on the basis of the collected data. Consequently, the descriptive variances of the means are noted, however no effect of strategy can be inferred in relation to organizational reputation, on a more general level, on the basis of the conducted study.

Effectiveness. The measure of effectiveness was designed to gauge participant's evaluations of the effectiveness and appropriateness of Vores Blomster's crisis communication. As such, participants were asked if they thought Vores Blomster handled the situation well, responded in a communicatively appropriate way, and whether the interaction had made them think less of Vores Blomster. Collaboratively, this formed the dependent measure of effectiveness, following a combination into a single factor. The effectiveness measure is important, because the findings have both practical and theoretical implication for the management of social media crises.

The one-way ANOVA found that the conditions did have a significant effect on the dependent measure of effectiveness. As such, there were significant differences among the means of effectiveness, caused by the conditions that participants had been exposed to. Consequently, the study demonstrates that the approach to crisis management employed by the affected

organization does affect how stakeholders perceive the organization in the event of a social media crisis.

The study found main effects for both communication strategy, F(1, 221) = 7.511, p = 0.007 and communication form F(2, 221) = 9.418, p = 0.000. Consequently, it was found that both communication strategy and communication form had a significant effect on the measure of effectiveness. However, no significant interaction effect was found, F(2,221) = 2.761, p = 0.065.

That communication strategy had a significant effect on the measure of effectiveness is an interesting finding, as it implies that the crisis response strategy, utilized by the affected organization, influence stakeholder perceptions. Furthermore, the study found a significant difference between the estimated marginal means of apology (M = 3.92) and justification (M = 3.28). Thus, it was found that the strategy of apology produced higher scores of effectiveness (MD = 0.007). Therefore, the findings indicate that organizations should utilize a crisis response strategy of apology, rather than a strategy of justification, when engaging in social media crisis management.

It is also important to recognize how the effect of strategy was most apparent for the communication forms of a wall post and a direct reply. The means of conditions 1 (apology, wall post)(M = 4.29) and 2 (justification, wall post)(M = 3.64) were significantly different, and the apology condition had the highest score of effectiveness. Similarly, condition 3 (apology, redirect) (M = 4.48) and condition 4 (justification, redirect)(M = 3.27) were different, with the apology condition having a significantly higher score of effectiveness. However, condition 5 (apology, redirect)(M = 2.87) and condition 6 (justification, redirect)(M = 2.93) produced converse results, as justification had the highest score of effectiveness, although the mean difference was marginal (MD = -0.0629). The same pattern was observed for the measure of reputation, and similarly this may be attributable to the communication form a redirect rendering the strategy less apparent in the vignette. As such, the finding that an apologetic strategy is more effective than a justification strategy remains valid.

The study also found a main effect of communication form in relation to effectiveness. Interestingly, it was found that the scores for the communication form of a redirect were significantly different from those of a wall post and a direct reply (figure 10). Consequently, the

findings demonstrate how communication form is imperative for the effectiveness of the crisis response in relation to the management of a social media crisis.

It was found that condition 3 (apology, direct reply) (M = 4.48) yielded the highest score of reputation. This infers that in relation to social media crises management, the use of a two-way symmetric form of communication is the most effective. Furthermore, the means of effectiveness for conditions 1 (apology, wallpost)(M = 4.29), 2 (justification, wallpost) (M = 3.64) and 4 (justification, redirect)(M = 3.27) were significantly different, and higher, than those of conditions 5 (apology, redirect)(M = 2.87) and 6 (justification, redirect)(M = 2.93). Consequently, the findings in relation to the effectiveness measure emphasize how two-way communication are more effective than one-way communication in relation to the management of social media crises.

The findings further highlights how organization must recognize that utilizing the dialogic capabilities of social media is a prerequisite for successful crisis management in the social media environment. This point is further supported by the corresponding findings in relation to organizational reputation, which was outlined in prior sections. Similarly, the importance of undertaking crisis management in the same medium as the original inquiry occurred in, was also found to be true for the measure of effectiveness. Again, this argumentation is based on how the conditions where Vores Blomster opted to redirect stakeholder to its website and customer service hotline, rather than to engage stakeholder directly on Facebook, yielded lower scores of effectiveness. Thus, the findings of a main effect of communication form for both the dependent measures of reputation and effectiveness collaboratively make a strong case for the importance of communication form.

Secondary Crisis Communication. The measures of secondary crisis communications were designed to gauge stakeholder reactions to crisis communications on social media. The first item asked participants whether Facebook users would be likely to engage in the situation by commenting or liking content. The second asked if Facebook users would be likely to share information about the situation with their network.

Secondary crisis communication, engagement. The conducted one-way ANOVA found no significant variances among the means of SCC (eng.), as F(5, 221) = 1.747, p = 0.547. The p value was even the highest of all the measures of in the study, indicating that the minor variations among the means are very likely to have occurred due to chance (Wimmer & Dominick, 2013).

Hence, none of the conditions significantly lowered or heightened participant's enticement to engage in the situation. However, the relatively high means across the conditions does bear mentioning. The means vary from M = 5.35 for condition 1 (apology, wall post) to M = 5.89 in condition 5 (apology, redirect). An indication of "slightly agree" equaled the numeric value of five, and the indication of "agree" equaled a numeric value of six. Therefore, the results illustrate the viral potential of the case. In other words, it is likely that people would have engaged in the situation, although the scenario concerned a fictional company. Albeit, this was to be expected, as the case was deliberately based on a real scenario that had a considerable viral spread.

Furthermore, finding no significant variances among the means is a finding in itself, as the findings indicate that no combination of communication strategy or communication form impacted the virality of the situation. It was hypothesized that if a crisis response succeeded in reducing the offensiveness of the event, it could potentially decrease the virality of the situation. However, this was not the case. Consequently, the question remains as to whether it is even possible to reduce virality in the social media environment. Demonstrating such an effect would have drastic implication for both theory and practice. Thus, it should be a topic of interest for further research. This point is further elaborated in the section concerning limitations and directions for further study.

Secondary crisis communication, share information. The study found no significant variances among the means of SCC (Share inf.), F(5, 221) = 2.524, p = 0.30), following a one-way ANOVA with the vignettes as the independent variable. However, a two-way ANOVA that included the two levels of strategy, and the three levels communication form, did find a main effect for communication form, F(2, 221) = 4.196, p = 0.016. Conversely, communication strategy had no significant effect, F(1, 221) = 0.0697, p = 0.405. Thus, the study found that the organizational approach to crisis communication on social media does have an effect on stakeholder reactions. This is because the communication form of direct reply, in this case a comment directly on the stakeholder inquiry, was found to lower participant enticement to engage in the secondary crisis communications of sharing information, compared the communication form of a redirect.

This implies that a two-way, symmetrical form of communication leads to the least amount of the secondary crisis communication of sharing information. However, whether this is a good thing for the affected organization is ambiguous, as the study did not investigate what the

sentiment of such communication would be. It could either be of a positive nature, praising the organization for the great handling of the case, or the opposite. Considering the findings of the present study, it is plausible that differences exist depending on the utilized communication form. However, further research is needed in order to determine whether this is in fact the case.

Implications for theory

Coombs (2014b) argued that social media is the driving force in the bleeding edge of crisis communication. Furthermore, Ki and Nekmat (2013) noted how few studies have explored how organization manage, or should manage, social media crises. Therefore, the undertaken study supplement the body of knowledge by supplying evidence of the importance of both communication form and communication strategy in relation to the management of social media crises.

Haig and Wigley (2015) found that negative user-generated Facebook posts significantly impact stakeholders. This argument was based on how stakeholders' perceptions of the organizations were significantly less positive after having been exposed negative Facebook posts. Attitudes toward the organization, perceptions of the relationship, perceptions of corporate social responsibility, and organizational reputation, were all variables that were eroded by negative, user-generated content on Facebook. Consequently, they stress how "(...) organizations must have a plan for handling negative, user-generated content" (p. 73). The undertaken study is a valuable addition to these findings, as it illustrates how such a plan must take into account both communication form and communication strategy. Especially, the choice of communication form is of paramount importance, as the applied form has implications for both organizational reputation and effectiveness of the crisis communication.

Collaboratively, the findings of this study highlight the effect of communication form in relation to both stakeholder perceptions and reactions on Facebook. Schultz et al. (2011) presented findings indicating that the medium mattered more than the message. However, their research considered a social network site one, unison medium, and did not account for the various communication forms that social network sites affords to both stakeholders and organizations. Conversely, this study focused specifically on the technological affordances of Facebook, and

proved how a social network site, such as Facebook, should not be considered one, homogenous channel of communication.

It is important to emphasize that this study does not contradict the findings of Schultz et al. (2011). Rather, it expands their findings by adding another, deeper layer of analysis. Hence, the undertaken study should be considered an extension of prior research, which support the notion that the effect of medium should be considered of importance. Consequently, the findings of the study indicate a need to extend classic crisis communication theories, such SCCT or image restoration theory, by focusing more on the communication form used to convey crisis messages, as also agued by, for instance, Austin et al. (2014).

The study also supports the notion that social media has facilitated a change that allows for more synchronous and interactive crisis communication between organizations and stakeholders (Lillqvist & Salminen, 2014). The findings of this study showed that in relation to both reputation and effectiveness, the two-way symmetric form of communication proved the most effective. Conversely, the one-way communication form of a redirect resulted in the least favorable stakeholder perceptions. Therefore, the study supports the belief that social media is not just a channel for distributing corporate communication, it is an arena for participation, in which organization interact with the public, as outlined by Aula (2010) and Trittin (2013). Stakeholders should to be talked with rather than talked at in the social media environment. Thus, the findings of this study also infer that crisis communication theory, at least in relation to social media, must reflect the shift from a one-way dissemination of information, to two-way interactions that include a variety of stakeholder voices (Sanderson et al., in press).

Implications for the paracrisis. A number of important distinctions must be made to accurately place the findings of this study within the literature on crisis communication and social media crisis management. Here, Coombs and Holladay's (2012) concept of the paracrisis is of importance. In this view, a social media crisis is a distinct form of crisis threat that resembles an organizational crisis. Accordingly, it requires similar organizational management, but it is not an organizational crisis, yet. Rather, it is a distinct type of crisis threat that may evolve into an organizational crisis, if not handled properly. This explains why Coombs (2014a) define a social media crises as "events that can harm an organization and arise in or are amplified by social media" (p. 22), thereby recanting Owyang's (2011) definition that outlines how "a social media

crisis issue that arises in or is amplified by social media, and results in negative mainstream media coverage, a change in business process, or financial loss" (p. 17).

Consequently, what Owyang (2011) describes is rather a social media crisis that have already transcended into an organizational crisis, in Coombs and Holladay's (2012) perspective. Whereas a social media crises is primarily a reputational concern (Coombs, 2014b), organizational crises are far worse for the organization, as they encompass "specific, unexpected, and non-routine events or series of events that [create] high levels of uncertainty and threat or perceived threat to an organization's high priority goals" (Ulmer, Sellnow & Seeger, 1998, p. 233). Thus, organizational crises are large, disruptive events, whereas "a paracrisis would not require activation of the crisis team, and does not disrupt the organization" (Coombs, 2014a, p. 26).

The reason this is distinction is important, is how Coombs and Holladay (2012) argue that the threat of the social media crisis may be mitigated before it reaches the critical level of being an organizational crisis. In relation to Haug's (2014) lifecycle of a social media crisis, this means that the threat might be mitigated at the amplification stage. As such, it is plausible that appropriate management, in the social media environment, may lower the media interest in the story. This is because a social media crisis only transcends into an organizational crisis, if the news criteria of traditional media are passed (Pang et al., 2014). Consequently, the findings of this study have paramount importance in relation to hindering a further escalation of a crisis. Also, the findings of this study emphasize how stakeholder perceptions are influenced by the organizational crisis response. Therefore, the findings holds instrumental value for the management of social media crises, and provides a valuable addition to the literature concerning the management of paracrises.

The strength of the experimental approach. In relation to social media crises, Ott and Theunissen (2015) found that "accommodative strategies appear to be more successful than denial or diminishing strategies—especially if they are combined with actions that demonstrate the organization is listening to its critics" (p. 115). Their findings was based on an analysis of three case studies, and showed how effective and non-effective approaches to social media crisis management exist among the crisis response strategies suggested by SCCT. The findings of this study corroborate Ott and Theunissen's (2015) findings. Furthermore, this study significantly

strengthens Ott and Theunissen's (2015) arguments, because the conducted study was experimental in nature, rather than case study based.

While a case study is a valuable tool for investigating various phenomena, the case study methodology suffers from not being amenable to generalization (Wimmer & Dominick, 2013). Ott and Theunissen 2015 recognizes this limitation by stating how their study only "allows for 'naturalistic generalization' where the responsibility for generalization is shifted to the readers, ergo what they make of the findings" (p. 98). Thus, it is apparent how the study conducted in this thesis has significant implications, due to the application of a method that does allow for generalization. The importance of such studies in relation to crisis communication is emphasized by Coombs and Holladay (2008), who describes how:

"Most post-crisis communication research has utilized case study methods. While providing useful descriptive data, case studies offer little insight into how stakeholders actually respond to crisis response strategies. Moreover, the case studies often provide minimal theoretical insight into crisis communication" (p. 252).

Consequently, the conducted study heeds the call for evidence-based research in relation to the effects on stakeholder perceptions and reactions caused by crisis response strategies (Coombs, 2014b). And the undertaken study has relevance, and implications for theory, especially because the findings are based on experimental testing, rather than case studies. Therefore, it is also a central finding that a main effect for communication strategy was only present for the measure of effectiveness, and not organizational reputation.

Coombs (2014a) posits that as crisis responsibility increases, the level of accommodation of the selected reputation repair strategy should also increase. However, since the accommodation level of the strategy did not significantly impact the organizational reputation score in this study, this assumption was only partly supported. Furthermore, it bears mentioning that Ott & Theunissen found that "a dialogical approach is only effective if the users are affected by the crisis" (p. 101). The conducted research suggests otherwise, and thus the undertaken study has brought new insights that have implications for theory concerning the management of social media crises.

Implications for practice

The findings of the present study have several implications for public relations practitioners. While no combinations of communication form and communication strategy were found to significantly lower stakeholder intentions of engaging in the secondary crisis communication of liking of commenting on content, it was found that the communication form of a direct reply lowered stakeholder intentions of sharing information with their network. Furthermore, the findings, in relation to reputation and effectiveness, infer that practitioners should manage social media crises in the medium in which they occur. Telenor, a case that was mentioned in the introduction to this thesis, did just the opposite by simply stating that customer service inquiries could not be answered on Facebook. Considering how the findings of this study indicate that communication form influences stakeholder perceptions of the organization, Telenor might have benefitted from engaging stakeholders in dialogue directly on Facebook.

Furthermore, Einwiller and Steinen (2015) found that large companies do not fully embrace the opportunities of social media to demonstrate their willingness to interact with, and assist, their stakeholders. Hence, it was outlined how the "responsiveness was only moderate, and companies often try to divert complaint away form the social network site" (p. 195). Importantly, the present research suggests that practitioners should rather manage inquires directly on the social network site, instead of trying to divert stakeholders. Supporting this argument is how the crisis management efforts undertaken by the affected organization then become, and remain, visible to all stakeholders. Therefore, crisis managers must carefully weigh their options when engaging in crisis communication of social media. And the results of this study infer that these choices directly affects stakeholder perceptions.

Champoux et al. (2012) recommended that businesses should have a social media crisis management plan in place, and outlined seven steps that businesses can employ in order to reduce the ramifications of a Facebook social media crisis. The steps are to (1) have a team in place, (2) track company mentions on the Internet, (3) act quickly, (4) manage ongoing dialogue, (5) take responsibility, (6) fix the situation, and finally (7) move on. The present study does not have implications for steps 1-3, but in step number four it is outlined how "two-way conversations fueled Facebook's rapid rise in popularity. In times of crisis, companies must use Facebook to join the conversation" (p. 28). The finding of this study highlighted how utilizing communication forms

that implied either symmetric- or two-way asymmetric stakeholder dialogue produced higher scores of both reputation and effectiveness. Thus, the findings support how practitioners should engage stakeholders in dialogue. Furthermore, condition 3 (apology, direct reply), which was a comment directly on the stakeholder inquiry, produced the highest scores of reputation and effectiveness for Vores Blomster. Accordingly, practitioners should acknowledge how they effectually can engage directly in the comment thread of the original inquiry.

The fifth step outlined by Champoux et al. (2012) is that the organization should take responsibility and apologize, even if the company is not directly to blame. This recommendation is based on the notion that "If a complaint ends up on a company's wall, the company is perceived to have directly caused the problem" (p. 36). This study tested the effect of both a justification strategy and an apology strategy, and there was found significant differences in stakeholder perceptions. While no main effect was found for strategy in relation to reputation, there was a significant difference between the two strategies in relation to the effectiveness measure. Here, the apology strategy yielded higher scores, and it is therefore considered more favorable as opposed to the justification strategy. Therefore, the findings imply that practitioners should leverage an apologetic approach when managing a social media crisis, in correspondence with the recommendation by Champoux et al. (2012).

Lastly, a dialogic approach somewhat suggests that the organization is trying to fix the situation, as the organization is engaging its stakeholders. Thus, the findings of this study does lend support to the recommendation that practitioners must try to fix the situation, which it outlined as step 6 by Champoux et al. (2012). However, the finding does not corroborate or disprove the recommendation of moving on, as outlined in step 7.

Limitations and directions for future research

While this thesis does advance insights to the effects of communication form and communication strategy, there are also some limitations of the undertaken research that must be addressed. Furthermore, because this study was among the first to specifically examine the effects of communication form on Facebook, addressing these limitation also serves as a catalyst for future research within the area of social media crisis management.

The case and the case company. The findings of this study were based on one, fictitious case. Coombs (2014a) argues that crisis type, crisis history, and prior reputation determine the size of the reputational threat. And while the study omitted crisis history and prior reputation by using a fictional case company, it is plausible that these factors influence stakeholder perceptions in relation to social media crises. Therefore, more research is needed in order to fully understand how for instance a good or bad prior reputation affects organizational crisis management in the social media environment. Thus, future research should seek to confirm the finding of this study, on the basis of social media crises involving other organizations.

Similarly, the study was based on only one crisis situation. Social media crises come in all shapes and sizes, and encompass the three categories of organizational misuse, dissatisfied customers, and challenges (Coombs, 2014a). The case of Vores Blomster falls within the category of a challenge social media crisis, which happens because an organization's behavior and/or policies are perceived as inappropriate or irresponsible. Arguable, this type of crisis is the most common, however it would certainly be recommendable to test the findings of this study in relation to other categories of social media crises.

Lastly, the online survey employed a control question that asked participants whether they knew Vores Blomster prior to participating in the survey. 78.9% (n = 179) of participants stated that they had no knowledge of Vores Blomster prior to taking the survey, however 21.1% (n = 48) stated that they did know Vores Blomster. Thus, the manipulation was not successful. This is a limitation, as it implies that some participants might have been biased by prior knowledge. However, the case was based on a very prominent, real social media crisis that unfolded in 2013, and the original inquiry, stakeholder comments, and the organizational responses were adapted from the Bremerholm Blomster case. Therefore, an indication of prior knowledge of Vores Blomster might simply imply that participants remembered the case. A one-way ANOVA was conducted with the control measure as the independent variable, as to determine whether the indication of prior knowledge had an effect on the findings, and no significant differences were found between the two groups of participants, as F(1, 225) = 0.628, p = 0.429 for reputation, F(1, 225) = 0.34, p = 0.854 for effectiveness, F(1, 225) = 1.445, p = 0.231 for SCC (eng.), and F(1, 225) = 0.528, p = 0.468 for SCC (share inf.). Consequently, it is not believed to have impacted the finding

of this study that a number of participants indicated prior knowledge of Vores Blomster. Nevertheless, it is a limitation that must be considered when applying the findings.

The study design. The study utilized a 2 x 3 design that included two levels of strategy, and three levels of communication form. It was chosen to limit the design to these levels, in order to assure a rigorous data analysis within the frame of a master thesis. However, the SCCT framework outlines 10 distinct strategies, across four organizational postures. The strategies utilized in the study were chosen because they represent different postures, and because they represent the most common strategies in relation to crisis management on social media (Ki & Nekmat, 2014). Nevertheless, the findings are not exhaustive, and as such future research may test the effects of other strategies. This is especially relevant because a main effect for strategy was found only in relation to the measure of reputation.

Also, Facebook affords more communication forms than this study investigated the effects of. For instance, video is a communication form that may have a significant effect, as Veil et al. (2012) found that in the case of the Dominos Hoax, the restoration of legitimacy was aided by utilizing the communication form of a video. Thus, it is plausible that the communication form of a video may effect stakeholder perceptions. Future research could employ a larger multiplicity of communication forms such as images, direct messaging, video, or the upload of a press release. Such research would indeed be recommendable, considering how this study found that communication form is of paramount importance in relation to the management of social media crises.

Another limitation of this study is that it did not employ a control condition, in which participants were exposed to no crisis communication by the affected organization. The introduction of such a control group would have provided valuable insights, as Lyon and Montgomery (2013) outline how an organization may make a deliberate choice to "not communicate at all on a given topic" (p. 751). Furthermore, Hosseinali-Mirza et al. (2015) notes how a social media crisis can happen for all organizations, regardless of their social media employment and engagement. For instance, this was the case for Bremerholm Blomster, whose social media crisis this study adapted. Consequently, it could have provided valuable insights, if the study had measured the effects of no crisis communication on a control group.

Lastly, the study did not account for all factors that may influence stakeholder perceptions and reactions in relation to crisis communication on social media. Apart from prior reputation and prior crisis history, factors such as crisis response timing (Hosseinali-Mirza et al., 2015; Pfeffer & Zorbach, 2014), crisis origin (Austin et al., 2012; Veil et al., 2012), communication in other sub arenas (Coombs & Holladay, 2014), and media coverage (Pang et al., 2014) may also impact how stakeholders perceive an organization in the event of a social media crisis. Thus, future research could advance the findings of this study by introducing these factors to the study design.

Data collection method and sample size. The study utilized snowball sampling to recruit participants, an approach that has been heavily criticized for not producing a truly random population sample (Wimmer & Dominick, 2013). While several steps, such as having 11 demographically different individuals share the survey, was taken to make the sample as random as possible, the limitation that this data collection method entails must be acknowledged.

Nevertheless, the sample did reflect the overall demographic composition of the Facebook, and the sample was diverse in terms of age, gender and professions. Thus, it is estimated that the utilized sample was appropriate for the conducted research, and that the study's results were not heavily influenced by participant bias. However, future research should seek to determine if a more generalizable sample impact the results outlined in this study.

The conducted study had 227 participants (N = 227), which surpassed the recommendation of Reinard (2006) to include at least 25 people per group, per level of independent variable. However, considering that the relevant population was determined to be all Facebook users in Denmark, a population of 3.5 million people (DR Medieforskning, 2015), the sample was of limited size. Consequently, the undertaken study does have a rather large margin of error, which is a limitation that also must be considered when applying the findings of this study.

Secondary crisis communication. This survey found that no combination of communication form and communication strategy had a significant effect on stakeholder reactions in terms of liking or commenting on content. Throughout the thesis, it has been argued that virality is among the predominant factors that drive the development of a social media crisis. Thus, determining whether specific organizational approaches to crisis management has an impact on the virality, would be of utmost importance for both practice and theory. While the conducted study did not

produce any significant results, it is plausible that some crisis responses may have an effect, and consequently future research could investigate this particular area.

The study did find a main effect for communication form, and that utilizing the communication form of a direct reply lowered stakeholder likeliness of sharing information with their network. However, the study did not investigate the sentiment of this communication. As such, the results are ambiguous. Therefore, future research should specifically determine the sentiment of the secondary crisis communication of sharing information, in relation to social media crises.

Conclusion

This study provides valuable insights to the management of social media crisis. Utilizing a 2 (communication strategy: apology, justification) x 3 (communication form: wall post, direct reply, redirect) design, it was found that the organizational approach to crisis communication on social media has effects in relation to both stakeholder reactions and perceptions. First and foremost, the study showed how communication form is of utmost importance. Crisis managers should not consider a social networks site as one, homogenous medium of communication. Rather, it must be recognized that social network sites, such as Facebook, affords a variety of communication forms, and that the utilized communication form affects stakeholder perceptions.

The study also found that the communication forms of a wallpost, a direct reply, and a redirect yielded statistically significant differences in relation to both organizational reputation and effectiveness of crisis communication. The highest scores for both organizational reputation and effectiveness were reported following exposure to the condition that employed an apologetic strategy in combination with the form of a direct reply. Thus, the finding of the study underlines how organizations must utilize the dialogic capabilities of social media, in order to undertake more efficient crisis management in the social media environment. Also the communication forms of a wall post and a direct reply yielded more positive evaluations than that of a redirect. This implies that undertaking crisis management in the medium in which the crisis originates is of utmost importance.

The study also brought insights to the effects of communication strategy in relation to social media. For organizational reputation, no main effect was found for communication strategy.

Therefore, strategy had no significant effect on stakeholder perceptions of reputation, in relation to crisis communication on social media. However, a main effect of strategy was found for the effectiveness measure, and it was found that an apologetic strategy had a more positive effect on stakeholder perceptions than a justification strategy. Consequently, communication strategy was found to influence stakeholder perceptions in relation to crisis communication of social media.

Interestingly, the study found no significant effect of communication form or communication strategy in relation to the stakeholder reaction of liking or commenting on content (secondary crisis communication). Thus, the findings imply that neither the communication form or communication strategy employed by the affected organization impact the virality of a social media crisis. However, the study did find a main effect of form in relation to the alternate secondary crisis communication of sharing information with network. The results inferred that stakeholders were less likely to share information about the situation pending exposure to the communication form of a direct reply, compared to a redirect. However, the study did not investigate the sentiment of this communication, and as such no recommendations could be derived from this finding.

Collaboratively, the findings of this study have significant importance for the management of social media crises, and implications for both theory and practice. It underlines how the ecology of communication have changed, and how organizations must recognize, adapt to, and utilize both the possibilities and risks brought on by the rise of social media. Ultimately, communication technology continues to evolve, and crises on social media will not disappear in the coming years. Rather, it is likely that we will see more elaborate and sophisticated crisis evolve in the future. Therefore, the continuous creation of knowledge in relation to the management of social media crises must be considered essential in the years to come.

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APPENDIX A: VIGNETTE DESIGN

Vignette 1

Communication strategy: Apology

Communication form: Wall post (statement published on the wall of the affected organization)



Communication strategy: Justification

Communication form: Wall post (statement published on the wall of the affected organization



Communication strategy: Apology

Communications form: Direct reply (comment directly on the stakeholder inquiry)

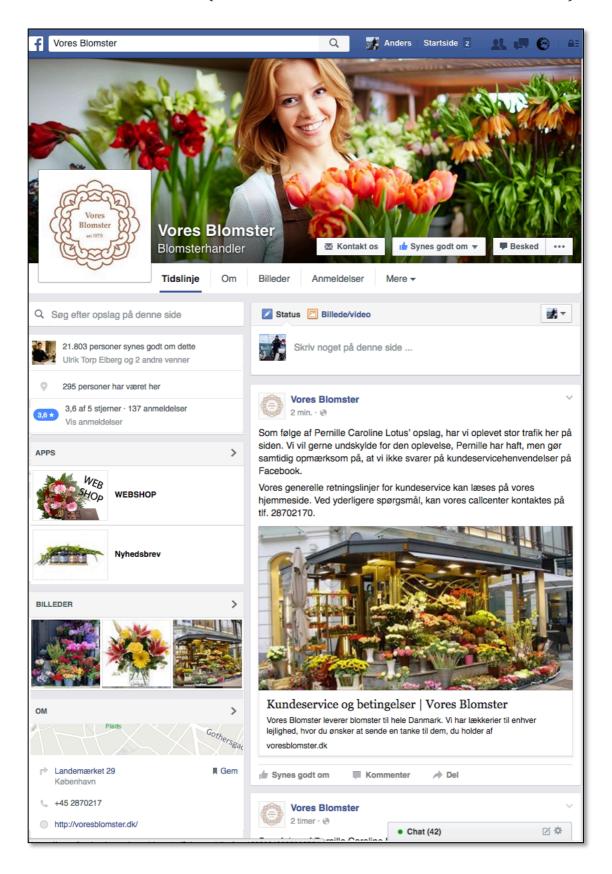


Communication strategy: Justification

Communication form: Direct reply (comment directly on the stakeholder inquiry)

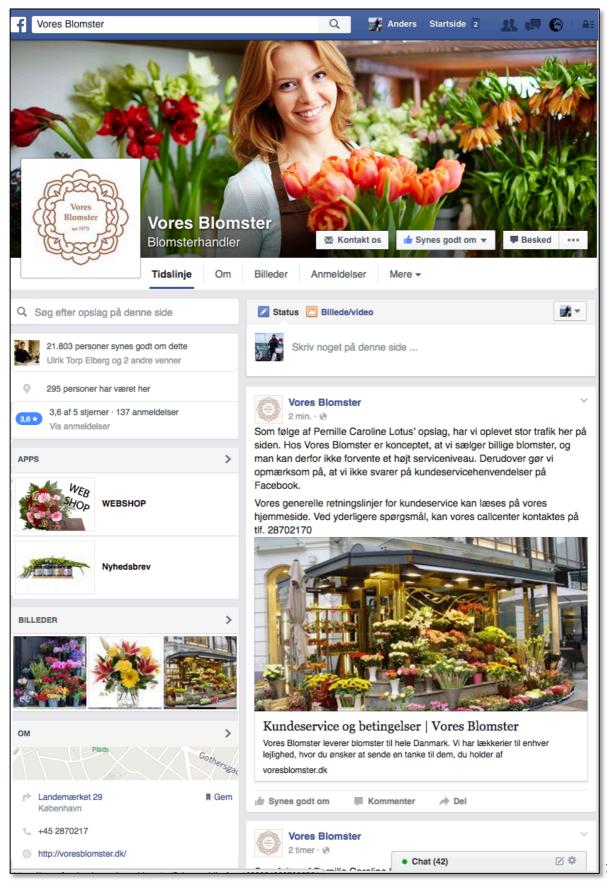


Vignette 5
Communication strategy: Apology
Communication form: Redirect (redirect to an alternative channel of communication)



Communication strategy: Justification

Communication form: Redirect (redirect to an alternative channel of communication)



APPENDIX B: TRIGGERING EVENT

Post by Pernille Caroline Lotus, on the wall of Vores Blomster, as depicted on stakeholder timeline



APPENDIX C: SPSS 22.00 OUTPUTS

One-way ANOVA

Independent variable: Vignette (condition)

Dependent variable: Reputation

Descriptives

Reputation

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Vi1_Apology_Wallpost	43	4.2326	1.46301	.22311	3.7823	4.6828	1.67	7.00
Vi2_Justification_Wallpost	36	3.8056	1.52519	.25420	3.2895	4.3216	1.00	6.33
Vi3_Apology_directreply	38	4.3596	1.35208	.21934	3.9152	4.8041	1.00	6.67
Vi4_Justification_directreply	39	3.6154	1.69888	.27204	3.0647	4.1661	1.00	6.00
Vi5_Apology_redirect	36	3.3519	1.43415	.23903	2.8666	3.8371	1.00	6.00
Vi6_Justification_redirect	35	3.4095	1.68439	.28471	2.8309	3.9881	1.00	7.00
Total	227	3.8135	1.56126	.10362	3.6093	4.0177	1.00	7.00

Test of Homogeneity of Variances

Reputation

Levene Statistic	df1	df2	Sig.
1.764	5	221	.121

ANOVA

Reputation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	33.803	5	6.761	2.889	.015
Within Groups	517.080	221	2.340		
Total	550.883	226			

Robust Tests of Equality of Means

Reputation

	Statistic ^a	df1	df2	Sig.
Welch	3.089	5	102.183	.012
Brown-Forsythe	2.881	5	212.174	.015

a. Asymptotically F distributed.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Reputation

Tukey HSD

·						nfidence
		Mean	- 1			rval
/1) \ /; === =±±=	(I) View atta	Difference	Std.	C:-	Lower	Upper
(I) Vignette	(J) Vignette	(I-J)	Error	Sig.	Bound	Bound
Vi1_Apology_Wallpost	Vi2_Justification_Wallpost	.42700	.34555	.819	5664	1.4204
	Vi3_Apology_directreply	12709	.34056	.999	-1.1062	.8520
	Vi4_Justification_directreply	.61717	.33824	.452	3552	1.5896
	Vi5_Apology_redirect	.88071	.34555	.115	1127	1.8741
	Vi6_Justification_redirect	.82303	.34823	.174	1781	1.8241
Vi2_Justification_Wallpost	Vi1_Apology_Wallpost	42700	.34555	.819	-1.4204	.5664
	Vi3_Apology_directreply	55409	.35576	.627	-1.5769	.4687
	Vi4_Justification_directreply	.19017	.35353	.995	8262	1.2065
	Vi5_Apology_redirect	.45370	.36053	.807	5828	1.4902
	Vi6_Justification_redirect	.39603	.36310	.885	6478	1.4399
Vi3_Apology_directreply	Vi1_Apology_Wallpost	.12709	.34056	.999	8520	1.1062
	Vi2_Justification_Wallpost	.55409	.35576	.627	4687	1.5769
	Vi4_Justification_directreply	.74426	.34866	.273	2581	1.7466
	Vi5_Apology_redirect	1.00780	.35576	.056	0150	2.0306
	Vi6_Justification_redirect	.95013	.35836	.090	0801	1.9804
Vi4_Justification_directreply	Vi1_Apology_Wallpost	61717	.33824	.452	-1.5896	.3552
	Vi2_Justification_Wallpost	19017	.35353	.995	-1.2065	.8262
	Vi3_Apology_directreply	74426	.34866	.273	-1.7466	.2581
	Vi5_Apology_redirect	.26353	.35353	.976	7528	1.2799
	Vi6_Justification_redirect	.20586	.35615	.992	8180	1.2298
Vi5_Apology_redirect	Vi1_Apology_Wallpost	88071	.34555	.115	-1.8741	.1127
	Vi2_Justification_Wallpost	45370	.36053	.807	-1.4902	.5828
	Vi3_Apology_directreply	-1.00780	.35576	.056	-2.0306	.0150
	Vi4_Justification_directreply	26353	.35353	.976	-1.2799	.7528
	Vi6_Justification_redirect	05767	.36310	1.000	-1.1015	.9862
Vi6_Justification_redirect	Vi1_Apology_Wallpost	82303	.34823	.174	-1.8241	.1781
	Vi2_Justification_Wallpost	39603	.36310	.885	-1.4399	.6478
	Vi3_Apology_directreply	95013	.35836	.090	-1.9804	.0801
	Vi4_Justification_directreply	20586	.35615	.992	-1.2298	.8180
	Vi5_Apology_redirect	.05767	.36310	1.000	9862	1.1015

Homogeneous Subset

Reputation

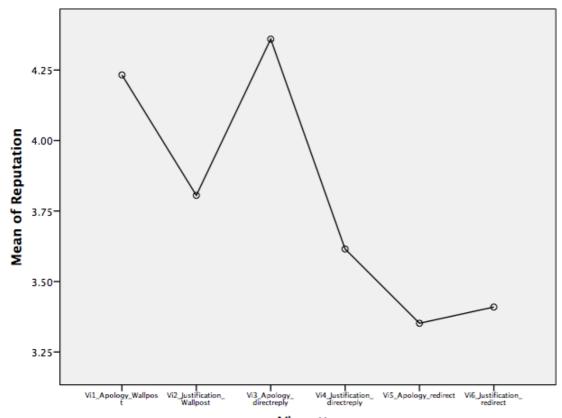
Tukey HSD^{a,b}

Tukey 1130		Subset for alpha = 0.05
		Subset for alphia – 0.03
Vignette	N	1
Vi5_Apology_redirect	36	3.3519
Vi6_Justification_redirect	35	3.4095
Vi4_Justification_directreply	39	3.6154
Vi2_Justification_Wallpost	36	3.8056
Vi1_Apology_Wallpost	43	4.2326
Vi3_Apology_directreply	38	4.3596
Sig.		.052

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 37.655.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Means Plots



Vignette

APPENDIX C: SPSS 22.00 OUTPUTS

One-way ANOVA

Independent variable: Vignette (condition)

Dependent variable: Effectiveness

Descriptives

Effectiveness

					95% Con Interval f			
			Std.	Std.	Lower	Upper		
	N	Mean	Deviation	Error	Bound	Bound	Minimum	Maximum
Vi1_Apology_Wallpost	43	4.2946	1.58900	.24232	3.8056	4.7836	1.67	7.00
Vi2_Justification_Wallpost	36	3.6389	1.66643	.27774	3.0751	4.2027	1.00	7.00
Vi3_Apology_directreply	38	4.4825	1.59334	.25847	3.9587	5.0062	1.00	7.00
Vi4_Justification_directreply	39	3.2735	1.80135	.28845	2.6896	3.8574	1.00	6.00
Vi5_Apology_redirect	36	2.8704	1.40583	.23431	2.3947	3.3460	1.00	5.67
Vi6_Justification_redirect	35	2.9333	1.79651	.30367	2.3162	3.5505	1.00	6.67
Total	227	3.6109	1.74557	.11586	3.3826	3.8392	1.00	7.00

Test of Homogeneity of Variances

Effectiveness

Levene Statistic	df1	df2	Sig.
1.232	5	221	.295

ANOVA

Effectiveness

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	89.242	5	17.848	6.581	.000
Within Groups	599.385	221	2.712		
Total	688.627	226			

Robust Tests of Equality of Means

Effectiveness

	Statistic ^a	df1	df2	Sig.
Welch	6.954	5	102.280	.000
Brown-Forsythe	6.573	5	213.178	.000

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Effectivness

Tukey HSD

						nfidence rval
		Mean	Std.		Lower	Upper
(I) Vignette	(J) Vignette	Difference (I-J)	Error	Sig.	Bound	Bound
Vi1_Apology_Wallpost	Vi2_Justification_Wallpost	.65568	.37204	.492	4139	1.7252
	Vi3_Apology_directreply	18788	.36667	.996	-1.2420	.8662
	Vi4_Justification_directreply	1.02107	.36416	.061	0259	2.0680
	Vi5 Apology redirect	1.42420*	.37204	.002	.3546	2.4938
	Vi6 Justification redirect	1.36124*	.37492	.005	.2834	2.4391
Vi2_Justification_Wallpost	Vi1_Apology_Wallpost	65568	.37204		-1.7252	.4139
	Vi3_Apology_directreply	84357	.38303	.241	-1.9447	.2576
	Vi4_Justification_directreply	.36538	.38063	.930	7289	1.4597
	Vi5_Apology_redirect	.76852	.38817	.357	3474	1.8845
	Vi6_Justification_redirect	.70556	.39093	.465	4183	1.8294
Vi3_Apology_directreply	Vi1_Apology_Wallpost	.18788	.36667	.996	8662	1.2420
	Vi2_Justification_Wallpost	.84357	.38303	.241	2576	1.9447
	Vi4_Justification_directreply	1.20895*	.37539	.018	.1298	2.2881
	Vi5_Apology_redirect	1.61209*	.38303	.001	.5109	2.7132
	Vi6_Justification_redirect	1.54912*	.38583	.001	.4399	2.6583
Vi4_Justification_directreply	Vi1_Apology_Wallpost	-1.02107	.36416	.061	-2.0680	.0259
	Vi2_Justification_Wallpost	36538	.38063	.930	-1.4597	.7289
	Vi3_Apology_directreply	-1.20895*	.37539	.018	-2.2881	1298
	Vi5_Apology_redirect	.40313	.38063	.897	6911	1.4974
	Vi6_Justification_redirect	.34017	.38345	.949	7622	1.4425
Vi5_Apology_redirect	Vi1_Apology_Wallpost	-1.42420*	.37204	.002	-2.4938	3546
	Vi2_Justification_Wallpost	76852	.38817	.357	-1.8845	.3474
	Vi3_Apology_directreply	-1.61209*	.38303	.001	-2.7132	5109
	Vi4_Justification_directreply	40313	.38063	.897	-1.4974	.6911
	Vi6_Justification_redirect	06296	.39093	1.000	-1.1868	1.0609
Vi6_Justification_redirect	Vi1_Apology_Wallpost	-1.36124*	.37492	.005	-2.4391	2834
	Vi2_Justification_Wallpost	70556	.39093	.465	-1.8294	.4183
	Vi3_Apology_directreply	-1.54912*	.38583	.001	-2.6583	4399
	Vi4_Justification_directreply	34017	.38345	.949	-1.4425	.7622
	Vi5_Apology_redirect	.06296	.39093	1.000	-1.0609	1.1868

^{*.} The mean difference is significant at the 0.05 level.

Homogeneous Subsets

Effectiveness

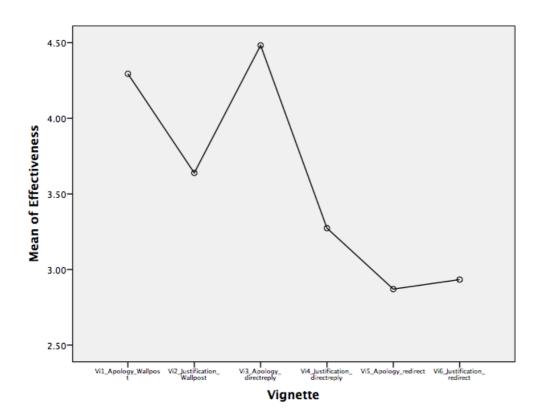
Tukey HSD^{a,b}

		Subset for alpha = 0.05				
Vignette	N	1	2	3		
Vi5_Apology_redirect	36	2.8704				
Vi6_Justification_redirect	35	2.9333				
Vi4_Justification_directreply	39	3.2735	3.2735			
Vi2_Justification_Wallpost	36	3.6389	3.6389	3.6389		
Vi1_Apology_Wallpost	43		4.2946	4.2946		
Vi3_Apology_directreply	38			4.4825		
Sig.		.332	.081	.232		

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 37.655.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Means Plots



One-way ANOVA

Independent variable: Vignette (condition)
Dependent variable: SCC Engagement

Descriptives

SCC Engagement

					95% Confidence Interval for Mean			
			Std.	Std.	Lower	Upper		
	N	Mean	Deviation	Error	Bound	Bound	Minimum	Maximum
Vi1_Apology_Wallpost	43	5.35	1.660	.253	4.84	5.86	1	7
Vi2_Justification_Wallpost	36	5.56	1.423	.237	5.07	6.04	2	7
Vi3_Apology_directreply	38	5.45	1.572	.255	4.93	5.96	1	7
Vi4_Justification_directreply	39	5.41	1.499	.240	4.92	5.90	2	7
Vi5_Apology_redirect	36	5.89	1.063	.177	5.53	6.25	2	7
Vi6_Justification_redirect	35	5.77	1.497	.253	5.26	6.29	2	7
Total	227	5.56	1.469	.098	5.37	5.75	1	7

Test of Homogeneity of Variances

SCC Engagement

Levene Statistic	df1	df2	Sig.	
2.604	5	221	.026	

ANOVA

Reputation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.733	5	1.747	.806	.547
Within Groups	479.214	221	2.168		
Total	487.947	226			

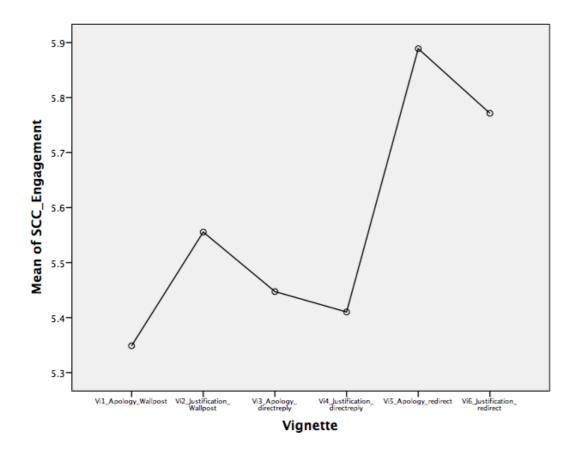
Robust Tests of Equality of Means

SCC Engagement

	Statistic ^a	df1	df2	Sig.
Welch	.994	5	102.510	.425
Brown-Forsythe	.816	5	212.593	.539

a. Asymptotically F distributed.

Means Plots



One-way ANOVA

Independent variable: Vignette (condition)
Dependent variable: SCC Share information

Descriptives

SCC Share information

SCC Share information								
					95% Confidence Interval for Mean			
			Std.	Std.	Lower	Upper		
	N	Mean	Deviation	Error	Bound	Bound	Minimum	Maximum
Vi1_Apology_Wallpost	43	4.60	1.678	.256	4.09	5.12	1	7
Vi2_Justification_Wallpost	36	5.00	1.656	.276	4.44	5.56	2	7
Vi3_Apology_directreply	38	4.45	1.655	.269	3.90	4.99	1	7
Vi4_Justification_directreply	39	4.92	1.596	.256	4.41	5.44	2	7
Vi5_Apology_redirect	36	5.56	1.054	.176	5.20	5.91	3	7
Vi6_Justification_redirect	35	5.20	1.511	.255	4.68	5.72	1	7
Total	227	4.94	1.573	.104	4.73	5.14	1	7

Test of Homogeneity of Variances

SCC Share information

Levene Statistic	df1	df2	Sig.	
2.029	5	221	.076	

ANOVA

SCC Share information

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	30.205	5	6.041	2.524	.030
Within Groups	528.932	221	2.393		
Total	559.137	226			

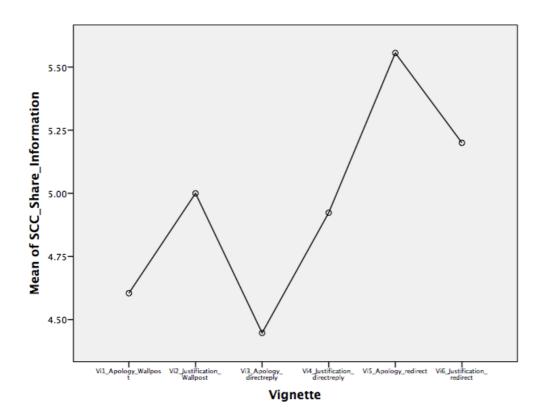
Robust Tests of Equality of Means

SCC Share information

	Statistic ^a	df1	df2	Sig.
Welch	3.306	5	102.285	.008
Brown-Forsythe	2.550	5	209.911	.029

a. Asymptotically F distributed.

Means Plots



Two-way, factorial ANOVA

Level 1: Communication strategy: Apology, justification

Level 2: Communication form: Wall post, direct reply, redirect

Dependent variable: Reputation

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Strategy	1	Apology	117
	2	Justification	110
Form	1	Wallpost	79
	2	Direct reply	77
	3	Redirect	71

Descriptive Statistics

Strategy	Form	Mean	Std. Deviation	N
Apology	Wallpost	4.2326	1.46301	43
	Direct reply	4.3596	1.35208	38
	Redirect	3.3519	1.43415	36
	Total	4.0028	1.47358	117
Justification	Wallpost	3.8056	1.52519	36
	Direct reply	3.6154	1.69888	39
	Redirect	3.4095	1.68439	35
	Total	3.6121	1.63207	110
Total	Wallpost	4.0380	1.49737	79
	Direct reply	3.9827	1.57270	77
	Redirect	3.3803	1.55154	71
	Total	3.8135	1.56126	227

Levene's Test of Equality of Error Variances^a

Dependent Variable: Reputation

F	df1	df2	Sig.
1.764	5	221	.121

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.^a

a. Design: Intercept + Strategy + Form + Strategy * Form

Tests of Between-Subjects Effects

Dependent Variable: Reputation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	33.803 ^a	5	6.761	2.889	.015	.061
Intercept	3255.179	1	3255.179	1391.263	.000	.863
Strategy	7.783	1	7.783	3.326	.070	.015
Form	18.934	2	9.467	4.046	.019	.035
Strategy * Form	5.996	2	2.998	1.281	.280	.011
Error	517.080	221	2.340			
Total	3852.111	227				
Corrected Total	550.883	226				

a. R Squared = .061 (Adjusted R Squared = .040)

Estimated Marginal Means

1. Strategy

Estimates

			95% Confidence Interval	
Strategy	Mean	Std. Error	Lower Bound	Upper Bound
Apology	3.981	.142	3.702	4.261
Justification	3.610	.146	3.322	3.898

Dependent Variable: Reputation

		Mean Difference			95% Confidence Interval for Difference ^a	
(I) Strategy	(J) Strategy	(I-J)	Std. Error	Sig. ^a	Lower Bound	Upper Bound
Apology	Justification	.371	.204	.070	030	.772
Justification	Apology	371	.204	.070	772	.030

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Reputation

						Partial Eta
	Sum of Squares	df	Mean Square	F	Sig.	Squared
Contrast	7.783	1	7.783	3.326	.070	.015
Error	517.080	221	2.340			

The F tests the effect of Strategy. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

2. Form

Estimates

			95% Confidence Interval		
Form	Mean	Std. Error	Lower Bound	Upper Bound	
Wallpost	4.019	.173	3.679	4.360	
Direct reply	3.988	.174	3.644	4.331	
Redirect	3.381	.182	3.023	3.738	

Dependent Variable: Reputation

		Mean Difference			95% Confidence Interval for Difference ^b	
(I) Form	(J) Form	(I-J)	Std. Error	Sig. ^b	Lower Bound	Upper Bound
Wallpost	Direct reply	.032	.245	.898	452	.515
	Redirect	.638*	.251	.012	.144	1.132
Direct reply	Wallpost	032	.245	.898	515	.452
	Redirect	.607*	.252	.017	.111	1.103
Redirect	Wallpost	638 [*]	.251	.012	-1.132	144
	Direct reply	607 [*]	.252	.017	-1.103	111

Based on estimated marginal means

- *. The mean difference is significant at the
- b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Reputation

						Partial Eta
	Sum of Squares	df	Mean Square	F	Sig.	Squared
Contrast	18.934	2	9.467	4.046	.019	.035
Error	517.080	221	2.340			

The F tests the effect of Form. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

3. Strategy * Form

				95% Confidence Interval	
Strategy	Form	Mean	Std. Error	Lower Bound	Upper Bound
Apology	Wallpost	4.233	.233	3.773	4.692
	Direct reply	4.360	.248	3.871	4.849
	Redirect	3.352	.255	2.849	3.854
Justification	Wallpost	3.806	.255	3.303	4.308
	Direct reply	3.615	.245	3.133	4.098
	Redirect	3.410	.259	2.900	3.919

Post Hoc Tests

Form

Multiple Comparisons

Dependent Variable: Reputation

Tukey HSD

		Mean Difference			95% Confide	ence Interval
(I) Form	(J) Form	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Wallpost	Direct reply	.0553	.24495	.972	5227	.6333
	Redirect	.6577*	.25014	.025	.0675	1.2479
Direct reply	Wallpost	0553	.24495	.972	6333	.5227
	Redirect	.6024*	.25167	.046	.0085	1.1963
Redirect	Wallpost	6577*	.25014	.025	-1.2479	0675
	Direct reply	6024*	.25167	.046	-1.1963	0085

Based on observed means.

The error term is Mean Square(Error) = 2.340.

Homogeneous Subsets

Reputation

Tukey HSD^{a,b,c}

		Subset		
Form	N	1	2	
Redirect	71	3.3803		
Direct reply	77		3.9827	
Wallpost	79		4.0380	
Sig.		1.000	.973	

Means for groups in homogeneous subsets are displayed.

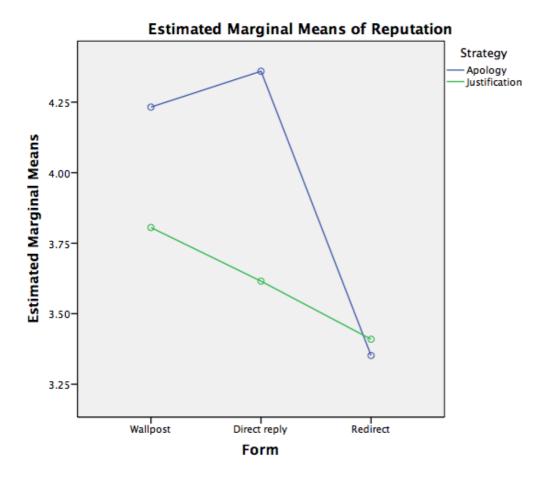
Based on observed means.

The error term is Mean Square(Error) = 2.340.

- a. Uses Harmonic Mean Sample Size = 75.510.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha =

^{*.} The mean difference is significant at the

Profile Plots



Two-way, factorial ANOVA

Level 1: Communication strategy: Apology, justification

Level 2: Communication form: Wall post, direct reply, redirect

Dependent variable: Effectiveness

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Strategy	1	Apology	117
	2	Justification	110
Form	1	Wallpost	79
	2	Direct reply	77
	3	Redirect	71

Descriptive Statistics

Strategy	Form	Mean	Std. Deviation	N
Apology	Wallpost	4.2946	1.58900	43
	Direct reply	4.4825	1.59334	38
	Redirect	2.8704	1.40583	36
	Total	3.9174	1.67864	117
Justification	Wallpost	3.6389	1.66643	36
	Direct reply	3.2735	1.80135	39
	Redirect	2.9333	1.79651	35
	Total	3.2848	1.76374	110
Total	Wallpost	3.9958	1.64732	79
	Direct reply	3.8701	1.79681	77
	Redirect	2.9014	1.59900	71
	Total	3.6109	1.74557	227

Levene's Test of Equality of Error Variances^a

Dependent Variable: Effectiveness

F	df1	df2	Sig.
1.232	5	221	.295

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.^a

a. Design: Intercept + Strategy + Form + Strategy * Form

Tests of Between-Subjects Effects

Dependent Variable: Effectiveness

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	89.242 ^a	5	17.848	6.581	.000	.130
Intercept	2899.182	1	2899.182	1068.961	.000	.829
Strategy	20.372	1	20.372	7.511	.007	.033
Form	51.088	2	25.544	9.418	.000	.079
Strategy * Form	14.978	2	7.489	2.761	.065	.024
Error	599.385	221	2.712			
Total	3648.333	227				
Corrected Total	688.627	226				

a. R Squared = .130 (Adjusted R Squared = .110)

Estimated Marginal Means

1. Strategy

Estimates

			95% Confidence Interval		
Strategy	Mean	Std. Error	Lower Bound	Upper Bound	
Apology	3.882	.153	3.582	4.183	
Justification	3.282	.157	2.972	3.592	

Dependent Variable: Effectiveness

		Mean Difference			95% Confidence Interval for Difference ^b	
(I) Strategy	(J) Strategy	(I-J)	Std. Error	Sig. ^b	Lower Bound	Upper Bound
Apology	Justification	.601*	.219	.007	.169	1.032
Justification	Apology	601 [*]	.219	.007	-1.032	169

Based on estimated marginal means

- *. The mean difference is significant at the
- b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Effectiveness

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	20.372	1	20.372	7.511	.007	.033
Error	599.385	221	2.712			

The F tests the effect of Strategy. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

2. Form

Estimates

			95% Confidence Interval		
Form	Mean	Std. Error	Lower Bound	Upper Bound	
Wallpost	3.967	.186	3.600	4.333	
Direct reply	3.878	.188	3.508	4.248	
Redirect	2.902	.195	2.517	3.287	

Dependent Variable: Effectiveness

		Mean Difference			95% Confidence Interval for Difference ^b	
(I) Form	(J) Form	(I-J)	Std. Error	Sig. ^b	Lower Bound	Upper Bound
Wallpost	Direct reply	.089	.264	.737	432	.610
	Redirect	1.065*	.270	.000	.533	1.597
Direct reply	Wallpost	089	.264	.737	610	.432
	Redirect	.976 [*]	.271	.000	.442	1.510
Redirect	Wallpost	-1.065 [*]	.270	.000	-1.597	533
	Direct reply	976 [*]	.271	.000	-1.510	442

Based on estimated marginal means

Univariate Tests

Dependent Variable: Effectiveness

						Partial Eta
	Sum of Squares	df	Mean Square	F	Sig.	Squared
Contrast	51.088	2	25.544	9.418	.000	.079
Error	599.385	221	2.712			

The F tests the effect of Form. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

3. Strategy * Form

				95% Confidence Interval	
Strategy	Form	Mean	Std. Error	Lower Bound	Upper Bound
Apology	Wallpost	4.295	.251	3.800	4.790
	Direct reply	4.482	.267	3.956	5.009
	Redirect	2.870	.274	2.329	3.411
Justification	Wallpost	3.639	.274	3.098	4.180
	Direct reply	3.274	.264	2.754	3.793
	Redirect	2.933	.278	2.385	3.482

^{*.} The mean difference is significant at the

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Post Hoc Tests

Form

Multiple Comparisons

Dependent Variable: Effectiveness

Tukey HSD

		Mean Difference			95% Confidence Interval	
(I) Form	(J) Form	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Wallpost	Direct reply	.1257	.26373	.882	4967	.7480
	Redirect	1.0944*	.26931	.000	.4589	1.7299
Direct reply	Wallpost	1257	.26373	.882	7480	.4967
	Redirect	.9687*	.27096	.001	.3293	1.6081
Redirect	Wallpost	-1.0944*	.26931	.000	-1.7299	4589
	Direct reply	9687 [*]	.27096	.001	-1.6081	3293

Based on observed means.

The error term is Mean Square(Error) = 2.712.

Homogeneous Subsets

Effectiveness

Tukey HSD^{a,b,c}

		Subset		
Form	N	1	2	
Redirect	71	2.9014		
Direct reply	77		3.8701	
Wallpost	79		3.9958	
Sig.		1.000	.886	

Means for groups in homogeneous subsets are displayed.

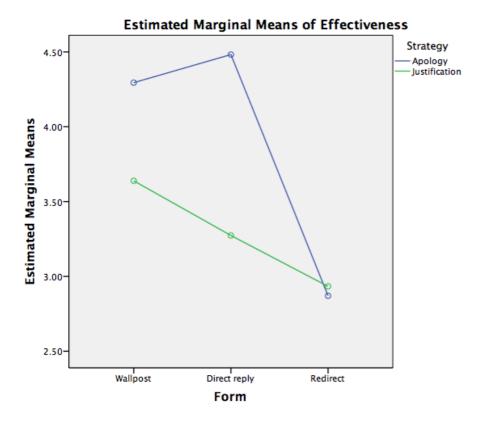
Based on observed means.

The error term is Mean Square(Error) = 2.712.

- a. Uses Harmonic Mean Sample Size = 75.510.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha =

^{*.} The mean difference is significant at the

Profile Plots



Two-way, factorial ANOVA

Level 1: Communication strategy: Apology, justification

Level 2: Communication form: Wall post, direct reply, redirect

Dependent variable: SCC Share information

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Strategy	1	Apology	117
	2	Justification	110
Form	1	Wallpost	79
	2	Direct reply	77
	3	Redirect	71

Descriptive Statistics

Strategy	Form	Mean	Std. Deviation	N
Apology	Wallpost	4.60	1.678	43
	Direct reply	4.45	1.655	38
	Redirect	5.56	1.054	36
	Total	4.85	1.568	117
Justification	Wallpost	5.00	1.656	36
	Direct reply	4.92	1.596	39
	Redirect	5.20	1.511	35
	Total	5.04	1.579	110
Total	Wallpost	4.78	1.669	79
	Direct reply	4.69	1.632	77
	Redirect	5.38	1.302	71
	Total	4.94	1.573	227

Levene's Test of Equality of Error Variances^a

Dependent Variable: SCC_Share_Information

F	df1	df2	Sig.
2.029	5	221	.076

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.^a

a. Design: Intercept + Strategy + Form + Strategy * Form

Tests of Between-Subjects Effects

Dependent Variable: SCC_Share_Information

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	30.205 ^a	5	6.041	2.524	.030	.054
Intercept	5547.344	1	5547.344	2317.809	.000	.913
Strategy	1.668	1	1.668	.697	.405	.003
Form	20.085	2	10.043	4.196	.016	.037
Strategy * Form	7.679	2	3.839	1.604	.203	.014
Error	528.932	221	2.393			
Total	6095.000	227				
Corrected Total	559.137	226				

a. R Squared = .054 (Adjusted R Squared = .033)

Estimated Marginal Means

1. Strategy

Estimates

			95% Confidence Interval		
Strategy	Mean	Std. Error	Lower Bound	Upper Bound	
Apology	4.869	.143	4.587	5.152	
Justification	5.041	.148	4.750	5.332	

Dependent Variable: SCC_Share_Information

		Mean Difference			95% Confiden Differ	
(I) Strategy	(J) Strategy	(I-J)	Std. Error	Sig. ^a	Lower Bound	Upper Bound
Apology	Justification	172	.206	.405	578	.234
Justification	Apology	.172	.206	.405	234	.578

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: SCC_Share_Information

						Partial Eta
	Sum of Squares	df	Mean Square	F	Sig.	Squared
Contrast	1.668	1	1.668	.697	.405	.003
Error	528.932	221	2.393			

The F tests the effect of Strategy. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

2. Form

Estimates

			95% Confidence Interval		
Form	Mean	Std. Error	Lower Bound	Upper Bound	
Wallpost	4.802	.175	4.458	5.147	
Direct reply	4.685	.176	4.338	5.033	
Redirect	5.378	.184	5.016	5.740	

Dependent Variable: SCC_Share_Information

		Mean Difference			95% Confidence Interval for Difference ^b	
(I) Form	(J) Form	(I-J)	Std. Error	Sig. ^b	Lower Bound	Upper Bound
Wallpost	Direct reply	.117	.248	.638	372	.606
	Redirect	575 [*]	.253	.024	-1.075	076
Direct reply	Wallpost	117	.248	.638	606	.372
	Redirect	693 [*]	.255	.007	-1.194	191
Redirect	Wallpost	.575 [*]	.253	.024	.076	1.075
	Direct reply	.693*	.255	.007	.191	1.194

Based on estimated marginal means

- *. The mean difference is significant at the
- b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: SCC_Share_Information

						Partial Eta
	Sum of Squares	df	Mean Square	F	Sig.	Squared
Contrast	20.085	2	10.043	4.196	.016	.037
Error	528.932	221	2.393			

The F tests the effect of Form. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

3. Strategy * Form

				95% Confidence Interval	
Strategy	Form	Mean	Std. Error	Lower Bound	Upper Bound
Apology	Wallpost	4.605	.236	4.140	5.070
	Direct reply	4.447	.251	3.953	4.942
	Redirect	5.556	.258	5.047	6.064
Justification	Wallpost	5.000	.258	4.492	5.508
	Direct reply	4.923	.248	4.435	5.411
	Redirect	5.200	.261	4.685	5.715

Post Hoc Tests

Form

Multiple Comparisons

Dependent Variable: SCC_Share_Information

Tukey HSD

		Mean Difference			95% Confidence Interval	
(I) Form	(J) Form	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Wallpost	Direct reply	.10	.248	.920	49	.68
	Redirect	60	.253	.051	-1.19	.00
Direct reply	Wallpost	10	.248	.920	68	.49
	Redirect	69 [*]	.255	.019	-1.29	09
Redirect	Wallpost	.60	.253	.051	.00	1.19
	Direct reply	.69*	.255	.019	.09	1.29

Based on observed means.

The error term is Mean Square(Error) = 2.393.

Homogeneous Subsets

SCC_Share_Information

Tukey HSD^{a,b,c}

		Subset				
Form	N	1	2			
Direct reply	77	4.69				
Wallpost	79	4.78				
Redirect	71		5.38			
Sig.		.922	1.000			

Means for groups in homogeneous subsets are displayed.

Based on observed means.

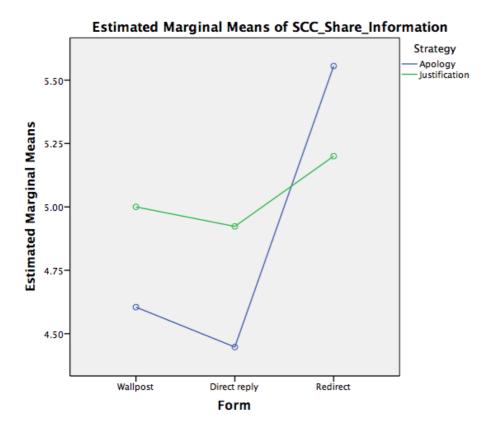
The error term is Mean Square(Error) = 2.393.

- a. Uses Harmonic Mean Sample Size = 75.510.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

c. Alpha =

^{*.} The mean difference is significant at the

Profile Plots



APPENDIX D

M and SD for conditions, per item

Condition	1	L	2	2	3	3	4	1	Ľ,	5	6	6
Vignette	Apology Wall post ^(a)		Justification Wall post ^(b)		Apology Direct reply ^(c)		Justification Direct reply ^(d)		Apology Redirect ^(e)		Justification Redirect ^(f)	
Variables	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Vores Blomster is a company I have a good feeling about.	4.07	1.52	3.47	1.70	4.37	1.62	3.26	1.73	2.94	1.51	3.14	2.02
Vores Blomster is a trustworthy company.	4.23	1.56	4.06	1.64	4.50	1.43	4.0	1.72	3.75	1.63	3.83	1.65
I have respect for Vores Blomster, and their way of conducting business.	4.40	1.65	3.89	1.77	4.21	1.60	3.59	2.12	3.36	1.71	3.26	1.80
Reputation	4.23	1.46	3.81	1.53	4.36	1.35	3.62	1.70	3.35	1.43	3.41	1.68
Vores Blomster handled the situation well.	4.33	1.89	3.64	1.82	4.39	1.94	3.08	1.91	2.61	1.46	2.86	2.07
Vores Blomster responded in a communicative ly, appropriate way.	4.23	1.56	4.06	1.64	4.50	1.43	4.00	1.72	3.75	1.63	3.83	1.65
This interaction has not made me think less of Vores Blomster.	4.40	1.65	3.89	1.77	4.21	1.60	3.59	2.12	3.36	1.71	3.26	1.80
Effectiveness	4.29	1.59	3.64	1.67	4.48	1.59	3.27	1.80	2.87	1.41	2.93	1.80
SCC (eng.)	5.35	1.66	5.56	1.42	5.45	1.57	5.41	1.50	5.89	1.06	5.77	1.50
SCC (share inf.)	4.60	1.68	5.0	1.66	4.45	1.66	4.92	1.60	5.56	1.05	5.20	1.50

(a) n = 43 (b) n = 36 (c) n = 38 (d) n = 39 (e) n = 36 (f) n = 35