

How Social Media Is Changing Crisis Communication Strategies: Evidence from the Updated Literature

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By incorporating social media strategies into the traditional framework of crisis communication strategies (CCS), this article presents a comprehensive review of the scholarship on CCS within a global context. Through a content analysis of articles published in 11 journals listed in the Social Science Citation Index (SSCI), 73 articles focusing on the social-mediated crisis management (SMCM) are identified. Findings show that new strategies such as enhancing and transferring from the organizational perspective are added, the stakeholders and their desired strategies are analysed and an asymmetrical CCS pattern from a contextual perspective is proposed within the SMCM research. Results also point out some weaknesses within the current literature. An interactive crisis communication (ICC) model is proposed for future research agenda.

1. Introduction

Defined as 'a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0' (Kaplan & Haenlein, 2010, p. 61), the types of social media such as Wikipedia, Twitter, Facebook, Pinterest, Flickr and Google Plus are ushering in a new era of crisis communication between the organizations and its public(s). On the one hand, organizations can efficiently utilize social media to interact with the massive and diverse stakeholders (Bennett & Iyengar, 2008). On the other hand, with the emergence and exchange of user-generated contents, social media create a breeding ground for crises or risks (Coombs, 2014a). Studies of 16 international companies (e.g., the United States, China, France, Germany and Mexico) found that 36% of crises were caused by digital security failures or negative new media publicities (Burson-Marsteller and PSB, 2011).

With the increasing use of social media, what crisis communication strategies (CCS) may be applied to

manage social-mediated events? How would the organizations apply CCS in different phases of crises? Have new strategies ever emerged and substituted the traditional CCS spectrum? These questions have attracted numerous discussions among global scholars (Jin & Liu, 2010; Liu, Jin, Briones & Kuch, 2012; Taylor & Perry, 2005; Utz, Schultz & Glocka, 2013), whose research mainly focused on the field of social-mediated crisis management (SMCM), which was referred to as the social-mediated 'dialog between the organization and its public(s) prior to, during, and after the negative occurrence' (Fearn-Banks, 2011, p. 2).

Considering the large amount of relevant literature on the SMCM in public relations or in the field of communication, this study conducted a content analysis of research articles published in 11 journals listed in the Social Science Citation Index (SSCI). Seventy-three articles focusing on the SMCM research in the period from 2002 to October 2014 were identified. This study examined the crises and CCS addressed in

these journal articles. Findings contributed to the theoretical advancement from three dimensions: (a) the enrichment of crisis communication theories by creating a summary list to incorporate the SMCM research findings into the traditional framework of CCS [e.g., image repair strategies, situational crisis communication theory (SCCT) and the corporate communicative response model], (b) the extension of the crisis communication research by offering a comprehensive CCS toolkit for the use of organization and (c) the suggestions for future research by creating an 'interactive crisis communication' (ICC) model, which integrated organizations, social media and stakeholders as three main players.

2. Literature review

Over the last couple of decades, much of the academic literature has addressed the crisis, disaster and risk communication (Houston et al., 2015), among which crisis communication is organizational and public relations-focused. Scholars in this area discussed what a crisis is, how organizations apply different strategies to manage crises under various circumstances (Benoit, 1995; Coombs, 2007, 2014a, 2014b, 2015; Jin & Liu, 2010) and what tools can be used to measure the effectiveness of crisis communication (Austin, Liu & Jin, 2012; Cheng, 2016a).

2.1. The definition of crises

As Jaques (2009) stated, the many definitions of crisis communication can be categorized into two types: one is to define the crisis as an event (Coombs, 2007, 2015; Fearn-Banks, 2011; Sohn & Lariscy, 2014); the other is to regard the crisis as part of a process (Pauchant & Mitroff, 1992; Roux-Dufort, 2007; Shrivastava, 1993). For the sake of this study, Coombs's (2015) definition regarding the crisis as 'an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organization's performance and generate negative outcomes' (p. 3) is adopted. Two main reasons are presented below. First, by coding crises as events, this study not only directly identifies the name of a crisis, but also analyses variables of a crisis such as types of crises and the time of crisis events, which serve as important dimensions to provide a holistic examination of the nature of a crisis (Pearson & Mitroff, 1993). Second, by following Coombs's (2015) widely applied categorization, this study can clearly divide the crisis into three stages for analysis, which include pre-crisis (signal detection, prevention and preparation), crisis event (recognition and containment) and post-crisis (evaluation, learning and follow-up communication).

2.2. Crisis communication strategies

The ideal situation for an organization could be no crises. However, few organizations can successfully avoid all unpredictable crises and the possible damage of images. Therefore, previous scholars (Benoit, 1997; Bradford & Garrett, 1995; Coombs, 2007, 2014b, 2015; Sturges, 1994) developed several theories or models of crisis management to help organizations eliminate or minimize the damage endured through crises.

Earlier on, Sturges (1994) described three types of communication strategies (i.e., instructing, adjusting and internalizing information). In particular, instructing information was telling people how to physically react to the crisis; adjusting information was helping people emotionally code with the crisis; and internalizing information was formulating a positive image of the organization. In the crisis communication model, Sturges (1994) used the term 'individuals' to describe stakeholders and applied the tonality of public opinion to measure the effectiveness of communication. In 1995, Bradford and Garrett conducted a management research and proposed four corporate CCS (i.e., denial, excuse, justification and concession) under four different scenarios (i.e., commission, control, standards and agreement). Their empirical research demonstrated that the concession strategy was the most effective communicative option.

In turn, Benoit's (1995) image repair theory (IRT) and Coombs's (2007) SCCT, and the updated master list of crisis response strategies (2014b) provided a goal-oriented framework of CCS to help organizations repair damaged images.

2.3. Image repair theory

Based on the symbolic approaches of 'apologia' and 'accounts', Benoit (1995) developed the IRT and argued that an attack with two dimensions (i.e., an offensive act and an accusation of responsibility for the action) might threaten the image of the organization. He proposed five main strategies to help organizations maintain positive reputation. The first strategy is denial (simple denial or shifting the blame), which means 'the communicator can simply deny that the incident happened or shift the blame in hopes of absolution of culpability' (Benoit, 1995, p. 75). The second one is evasion of responsibility, which can be applied under four situations such as defeasibility, provocation, accidental and good intentions. Moreover, the third strategy is reducing offensiveness, which includes six sub-strategies such as bolstering, minimization, differentiation, transcendence, attacking accuser and compensation. For instance, Benoit (1995) suggested that organizations can 'bolster, or mitigate, the negative

effects on the actor by strengthening the audiences' positive effect on the rhetor' (p. 77) or 'to minimize the amount of negative effects associated with the offensive act' (p. 78). The fourth strategy is corrective action, which is used to 'mend one's ways' (Benoit, 1995, p. 79). The last strategy is mortification, which means that organizations can apologize for act. However, a major problem of this approach is that the descriptive rhetorical case studies on individuals or organizations (e.g., Queen Elizabeth, AT&T and USAir) cannot support the causal relationship between the application of CCS and the image repair of organizations (Holtzhausen & Roberts, 2009). Also this theory failed to provide public relations practitioners the clear direction on when and how to choose the right strategy in a certain crisis.

2.4. *Situational crisis communication theory*

To explore the patterns of the use of crisis responses, Coombs developed SCCT, as a dominant approach of CCS since the year of 1995. Originated and developed from the IRT, which emphasized CCS as symbolic resources (Benoit, 1997), SCCT included the attribution theory (Weiner, 2006) and developed situation-oriented CCS based on experimental studies. Its basic assumption was: when crises occurred, stakeholders involved in the crisis made attributions about the crisis responsibility. Depending on the level of responsibilities (minimum, low and high) that stakeholders attributed for organizations, different situations (victim, accident and preventable crises) would match with adopted CCS (Coombs, 2007). For example, when an organization shared minimum crisis responsibility, which was referred to as the accident crisis situation, crisis managers could adopt strategies such as denial or excuse instead of full apology.

SCCT also arrays CCS according to the level of accommodation. According to Coombs (2007), the stance that an organization took lied between a pure advocacy and pure accommodation continuum, which in turn drove the CCS. For example, Coombs (2014b) listed CCS from the least to the most accommodative level, which included attacking the accuser (organization conflicts with the party who claims a fault of the organization), denial (organization denies a crisis), scapegoat (organization blames the supplier of the crisis), excuse (organization claims inability to control the events), justification (organization minimizes perceived damage), remind (organization reminds stakeholders of its past good work), ingratiation (organizations praise stakeholders), compensation (organization offers money or other gifts to victims) and apology (organization takes full responsibility for the crisis).

To maximize the effectiveness of the communication strategies, Coombs (2007) suggested the more defensive crisis response strategies could be used when attributions of crisis responsibility to an organization decreased. In the pre-crisis stage, Coombs (2007) also mentioned the importance of providing instructing and adjusting information to the public, and showing sympathy to the victims. SCCT approach provides a good situational framework to answer the question of when to use certain kinds of CCS. Meanwhile, it can be effectively combined with IRS and provides a systematical CCS analysis in case studies (Coombs, 2014a; McCoy, 2014). However, SCCT did not fully investigate the influence of media, especially the social media effects on the crisis communication (Jin & Liu, 2010); it still focused on the perspective of organizations and used the general term 'stakeholders' to describe the other key parties. The strategies and crisis response forms of stakeholder desired strategies were ignored, which might significantly influence the decision-making of crisis management teams (Stephens & Malone, 2009).

2.5. *Social media and CCS*

By reviewing the above-mentioned key approaches within the history of crisis response research, this study found that all the above-mentioned theories and models failed to consider the impact of social media, which was changing the field of crisis communication by creating risks or crises and meanwhile bringing the interactive, dialogic and fast communication between the organization and stakeholders (Schultz, Utz & Göritz, 2011). The large amount of SMCM literature was discussing some new strategies and contexts (Kim & Liu, 2012; Veil & Yang, 2012b), the interactive crisis response form, the stakeholder desired strategies on the Internet (Stephens et al., 2009) and the social media strategies on the recipients' perceptions of reputation (Schultz et al., 2011). However, in the current literature of public relations, few studies ever reviewed the updated SMCM research and summarized the impact of social media on CCS. Thus, this study intended to fill the gap by synthesizing traditional studies on CCS and the SMCM research. Three research questions were presented to explore the crises and strategies being discussed, and how social media was changing CCS in the SMCM research.

RQ1: What were the crises (e.g., crisis types, region, time, stakeholders) involved in the SMCM research?

RQ2: What were the typical CCS examined in the SMCM research?

RQ3: How social media was changing CCS in the SMCM research?

3. Method

3.1. Data collection

Eleven academic journals in SSCI and two mainly relevant academic disciplines (public relations and communication) were selected for full screening (time range covers from 2002 to October 2014). Six highly ranked journals based on the 5-year impact factors of the SSCI in communication were first identified (i.e., *Journal of Communication* and *Communication Research* focused on the broad field of communication; *Computers in Human Behavior*, *Journal of Computer-Mediated Communication*, *Cyberpsychology, Behavior, and Social Networking*, and *New Media & Society* that particularly emphasized new media technologies in communication). Then, two major journals in public relations field were chosen (i.e., *Journal of Public Relations Research* and *Public Relations Review*). Three journals relevant to the field of applied communication were added (i.e., *Journal of Applied Communication Research*, *Journal of Contingencies and Crisis Management*, and *Management Communication Quarterly*). The keyword screening method was applied to filter related articles. Articles with the following keywords in titles, abstracts or keywords sections were selected for review: any of 'social media', 'new media', 'blog', 'micro-blog', 'Facebook', 'Twitter', 'video' or 'Web', and any of 'crisis' or 'crises'. Seventy-three articles in 11 journals exclusively focusing on the SMCM were confirmed as directly relevant to the purpose of this study and added for final analysis. Table I provides an overview of the quantity of published articles in according 11 journals [SSCI]. Findings demonstrated an increasing attention to 'SMCM' over the past 13 years, with a vast number of articles published between the year of 2011 and 2014 (32 articles, 44%).

3.2. Measures and coding schemes

Three broad categories were applied to code each article. The first category was the publication year and the name of the journal. The second codes the study's research subjects, including the name of the crisis, types of crises, the focal region of the study, major research perspective (i.e., organizational, social media or stakeholders), types of organizations (i.e., governments, corporations, non-profit organizations) and types of social media (e.g., Blog, Twitter, Facebook, Bookmark, YouTube, Wikipedia, Flickr and World of Warcraft) involved in the crisis. The third category codes CCS (e.g., bolstering, minimization, differentiating, attacking the accuser and transcendence) and the time of its application (i.e., pre-crisis, crisis event and post-crisis) specified by the researcher. Twenty-two articles (30%) were randomly selected for a reliability check, and the result of composite inter-coder reliability reached 0.92 by applying Krippendorff's alpha (Hayes & Krippendorff, 2007).

4. Findings

4.1. Crises discussed in the SMCM

To answer the RQ1, this study conducted a board review of variables of crises (e.g., crisis types, time, regions and stakeholders) in the SMCM research. Data showed that among types of crises, the most common one was managerial misconduct crisis (22 articles, 30%) such as melamine-contaminated milk powder of Sanlu in 2008, and Mattel's 2007 product recall. Other crisis types included natural crises (e.g., Hurricane Irene in 2011; Sichuan earthquake in 2008); public health crises (e.g., SARS in 2003; Flu pandemic in 2009); terrorism (e.g., 9/11 attacks in 2001); social media crises (e.g., Domino's YouTube crisis in 2009);

Table I. The Number of SMCM Research Articles in Journals [SSCI]

Source	No. of articles			Total	%
	2002–2006	2007–2010	2011–2014		
<i>Communication Research</i>	–	1	–	1	1
<i>Cyberpsychology, Behavior, and Social Networking</i>	–	1	–	1	1
<i>Management Communication Quarterly</i>	–	–	1	1	4
<i>Computers in Human Behavior</i>	–	–	4	4	1
<i>New Media & Society</i>	2	1	1	4	4
<i>Journal of Applied Communication Research</i>	–	3	1	4	4
<i>Journal of Communication</i>	–	–	2	2	2
<i>Journal of Computer-Mediated Communication</i>	1	3	1	5	5
<i>Journal of Contingencies and Crisis Management</i>	1	–	2	3	3
<i>Journal of Public Relations Research</i>	–	7	3	10	10
<i>Public Relations Review</i>	5	16	17	38	38
Total	9	32	32	73	100

and business and economic crisis (financial crisis in 2008). The above-mentioned crises occurred from the year of 1999 to 2011 and mostly took place in the United States (43 articles, 58%). Fifteen papers (21%) discussed crises in the mainland China and Korea; 15 articles (21%) focused on other regions such as Egypt, Israel, Mexico, Germany, Australia, Finland, Haiti and New Zealand.

Within the SMCM research, organizations, social media and stakeholders, as three major research perspectives, were clearly identified. Among these, the stakeholders and their media use have become the most dominant research perspective in the crisis communication (29 of 73 articles, 40%). Researchers showed increasing interests towards the stakeholders and widely discussed their motivation of social media use, emotions, identification and generated online contents in crises (Choi & Lin, 2009; Fortunato, 2011; Procopio & Procopio, 2007; Stephens et al., 2009).

For the types of organizations, governments and corporations were mostly discussed in the SMCM research (95%), while only four of 73 articles (5%) discussed non-profit organizations. Concerning to the types of social media, Blog, Twitter and Facebook (Kim et al., 2012) were most discussed (29%); Bookmark, YouTube and Wikipedia as the research focus appeared in five papers (7%), while few scholars analysed photograph (e.g., Flickr), virtual game worlds (e.g., World of Warcraft) and virtual social worlds (e.g., Second Life).

4.2. CCS in the SMCM research

To answer the RQ2, this study provided a summary list (as shown in Table 2) to include both traditional CCS spectrum and the new strategies added from the SMCM research along a defensive–accommodative continuum across crises phases. It was found that IRT (Benoit, 1995, 1997) and SCCT (Coombs, 2007, 2014b, 2015), as two major theories for crisis responses (Avery, Lariscy, Kim & Hocke, 2010), still dominated the SMCM research. However, the corporate communication response model (Bradford et al., 1995) and the model of crisis communication content (Sturges, 1994) received little attention in recent 10 years.

The majority of SMCM research did not modify or challenge traditional CCS. For instance, image repair strategies such as corrective action and bolstering were said to be the most frequently used in fraud crises (Caldiero, Taylor & Ungureanu, 2009). Other strategies such as denial (e.g., Veil, Sellnow, & Petrun, 2012a), apology (e.g., Muralidharan, Dillistone & Shin, 2011), modification (e.g., Cho & Cameron, 2006) and excuse (Moody, 2011) were also applied on social

media to repair images. SCCT as another paradigm was widely used in the SMCM research as well (e.g., Brown & Billings, 2013; Freberg, 2012; Kim et al., 2012; Schwarz, 2012).

4.3. New findings from the SMCM research

Through a comprehensive review of CCS in the SMCM research, this study summarized and presented new findings from the organizational, stakeholders' and contextual perspectives.

4.3.1. The organizational perspective

Scholars from the organizational perspective continuously revised SCCT and proposed new CCS and crisis communication models (Jin et al., 2010; Kim & Liu, 2012; Liu et al., 2012; Taylor et al., 2005). Earlier on, Taylor et al. (2005) studied 92 organizations' use of the Internet for the crisis communication and provided five best practices in mediated crisis responses, which included online chatting, dialogic communication, connecting links, real-time monitoring and multimedia effects.

In turn, Kim et al. (2012), through a quantitative content analysis of 13 corporate and government organizations' responses to the 2009 flu pandemic, revised SCCT, operationalized the base crisis responses (i.e., instructing information, adjusting information) and added new strategies such as enhancing and transferring. Different from the strategy of bolstering in SCCT, the enhancing strategy was defined as telling stakeholders about an organization's 'current' instead of past good works (Kim et al., 2012, p. 82). In addition, the transferring strategy was used to transfer a third party's credibility onto organizations themselves by supporting a credible third party's crisis responses.

From 2010 to 2012, scholars (Jin et al., 2010; Liu et al., 2012) combined SCCT (Coombs, 2007) with rumour psychology theory (DiFonzo, 2008) and continuously constructed the blog-mediated crisis communication (BMCC) model and the social-mediated crisis communication (SMCC) model, which suggested that the origin of crisis affected the attribution of responsibility and further influenced the adoption of CCS. For example, if a crisis was originated from internal organizations, the stakeholder may expect that organizations should take more responsibilities and adopt accommodative strategies. Together with the SMCC model, Liu et al. (2012) also generated blog-mediated crisis response strategies by rumour generation phase. Across the four stages of rumour (generation, belief, transmission and crisis recovery), six response options were listed, which included the base, deny, diminish, rebuild, reinforce and punish. This model categorized the adapting information into two

sub-strategies such as the correction action and emotion (as shown in Table 2) in the earlier stage of rumour phases (generation) and added the legal action and separation strategies in the middle stage (transmission and diminish).

4.3.2. *The stakeholders' perspective*

With increasing research focusing on the stakeholders in crises, the SMCM research provided us an interesting view of exploring the perspective of stakeholders, which included the public motivation of social media use (e.g., Austin et al., 2012; Lev-On, 2011; Procopio et al., 2007; Westerman, Spence & Van Der Heide, 2014), response forms and stakeholder desired strategies on social media (Brown et al., 2013; Stephens et al., 2009). For example, the SMCC model (Austin et al., 2012) discussed how the audiences sought information in crises. Findings showed that the convenience, involvement and personal recommendations encouraged social and traditional media use, while information overload, low credibility, humour and attitudes about the purpose of social media discouraged the social media use.

Brown et al.'s (2013) study revealed that when sports fans became surrogates for organizational crisis response on Twitter, the most likely adopted stakeholder-based strategies were ingratiation, reminder, attacking the accuser and diverting attention strategies, which closely mirrored, but extended those being introduced by SCCT. Moreover, Brown et al. (2013) found that the crisis response forms of stakeholders (i.e., the magnitudes, style and longitudinal elements) on social media could be very different from those applied by organizations. For example, a huge heavy use of ingratiation could allow fans to unite together and cope with the scandal, while the same strategy applied in organizations may not generate similar effects.

Stephen and Malone's study (2009) also focused on the perspective of stakeholders. In the 2007 pet food recall crisis, they examined stakeholder desired social support strategies and technical translation techniques on social media. Findings showed two different technical translation techniques between the emotional and informational support strategies: when stakeholders mostly adopted the desired emotional support strategy on social media, they did not include any types of technical explanation in messages, while when stakeholders intended to seek information support and assure no crises to happen again, rectification was applied and more elaborate forms of technical translation were adopted.

4.3.3. *The contextual perspective*

Within the SMCM research, the pattern of CCS has been increasingly expanded with specific categories applied in China. Different from the ideal 'two-way'

symmetrical model in Western societies (Grunig, 1992), governments and corporations in China pertained a dominant and asymmetrical relationship with stakeholders (Cheng, Huang & Chan, 2016). Accommodative CCS such as apology and correction action were avoided in the crisis management (Cheng, 2016b).

In the pre-crisis stage, information providing or adapting was seldom applied; instead, new strategies (see Table 2) such as media manipulation and covering up (unethical practices such as offering bribes, lying and deception) were utilized. For example, in the 2003 SARS epidemic in Guangdong, China, Tai and Sun (2007) found that local officials highly controlled the transmission of information by lying and covering up the number of infected people. The similar situation occurred in corporations. In the Sanlu milk contamination crisis, instead of admitting the quality problem of products, the company utilized its relationship with the local government and media to delete the negative publicities online (Veil & Yang, 2012b). These above-mentioned strategies such as covering up and manipulation supported an asymmetrical dimension of CCS, which brought tremendous disasters to the whole industry of Chinese dairy. Sales of hundreds of dairy companies continually dropped down within the past 10 years (Veil & Yang, 2012b).

4.4. *The impact of social media on CCS*

The SMCM literature provided two contradictory patterns in evaluating the effects of social media on the crisis communication, which answered the RQ3. On the one hand, some scholars were optimistic about the effective function of social media. For example, Kim et al. (2012) found that social media was more frequently used than the traditional one in the organizational crisis management. Utz et al. (2013) argued that crisis types (victim and intentional) had almost no direct effects; instead, the media channels (Twitter, Facebook and newspaper) had a strong impact on the effectiveness of CCS. Through experimental analysis of the effects of CCS (i.e., information, sympathy and apology) via social media in comparison with traditional media, Schultz et al. (2011) also found that the strategy of information on social media resulted in fewer negative crisis reactions than via traditional newspapers: newspapers might be credible to present issues, while Twitter had positive effects on secondary crisis communication (e.g., sharing and posting newspaper messages) and reactions (e.g., willingness to boycott). Moreover, CCS on social media may result in different effects. It was found that the strategy of information resulted in fewer negative crisis reactions than the strategies of apology and sympathy. While previous findings argued that the 'information' strategy could not overcome the reputation problems, instead apology and sympathy positively

shaped recipients' perceptions of the organization (Coombs & Holladay, 2009).

Meanwhile, scholars in the SMCM research have realized the empowering function of social media (Brown et al., 2013). More accurate, transparent, consist and dialogic online CCS were suggested to accommodate the increasingly stronger public agenda. Scholars advised that organizations could effectively utilize the 'interactivity' of social media, by creating dialogues with stakeholders, paying more attention to citizen-generated contents, adopting stakeholder desired strategies, cultivating opinion leaders on social media and creating texts, pictures or videos online in the same way for organizational legitimacy (Choi & Lin, 2009; Greer & Moreland, 2003; Stephens et al., 2009; Veil & Yang, 2012b).

On the other hand, it was found that social media might not help, but bring new challenges such as the image management issues, fragmented media channels and dynamics process for the crisis communication (Gilpin, 2010; Liu & Fraustino, 2014; Moody, 2011). For example, Gilpin (2010) found that image construction was nonlinear on social media, as each channel could address different dimensions of an organization's projected image.

5. Discussion and conclusion

To recap, this study reviewed crises and CCS in the SMCM research and showed how the social media was changing the traditional CCS through fragmented channels and new types of communication. Based on the comprehensive review of the literature, findings below also presented several weaknesses of previous research and posited an interactive crisis communication (ICC) model to synthesize traditional theories of CCS and the new emerged SMCM literature.

First, as the SMCM research suggested, the emancipated stakeholders on social media deserved more attention (Choi & Lin, 2009; Greer et al., 2003), and the ICC model responded to this call and emphasized the importance of measuring stakeholders in the crisis. As shown in Figure 1, Hallahan's (2000) types of stakeholders were adopted as the crisis situation was dynamic and accordingly the key publics might need a new identification based on their knowledge and involvement about a particular topic. The four proposed categorizations of stakeholders, which included active, aware, aroused and especially inactive publics, should all be measured on the social media platforms (Hallahan, 2000). Crisis response form (i.e., large in quantities, chaos in leadership, great in magnitude) and stakeholder desired strategies such as emotion support, information seeking, remediation, rectification and diverting attention (Brown et al., 2013; Stephens et al., 2009) were also included.

As Taylor and Kent (2007) said, within a certain 'time', organizations' monitoring and interaction with audiences could effectively prevent a look-like crisis. Thus, the ICC model suggested that monitoring, analysing and understanding stakeholders' needs and desires in crises might be the first step before making any decisions of crisis responses. In the new media era, when organizations traced online data such as 'likes', 'links' and 'organic views', and already censored growing negative emotions or information needs shared from stakeholder-created contents, crisis managers should immediately evaluate the likelihood and degree of devastation of a potential crisis and adopt the right strategy to manage the situation (Fearn-Banks, 2011).

Second, from the summary list in Table 2, this study found inconsistencies between previous studies. On the one hand, scholars had different comments on

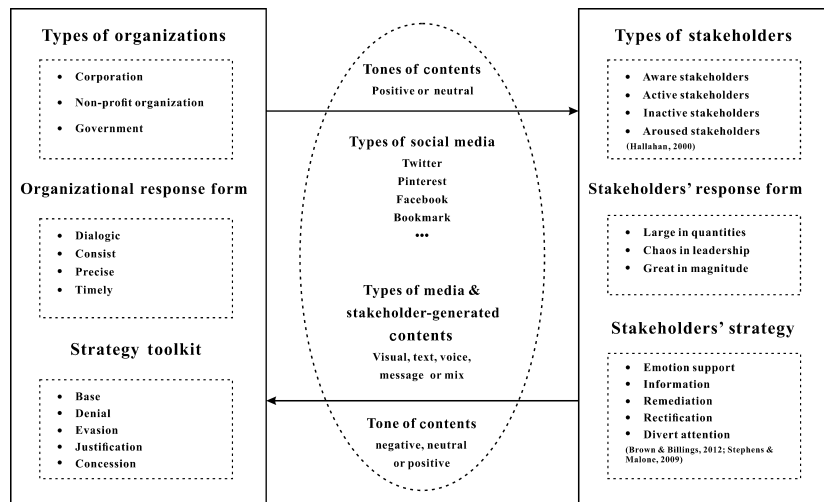


Figure 1. The interactive crisis communication model on social media.

certain strategies. For example, Sturges’s (1994) model emphasized on the three types of information needs. In the SMCM research, the ‘information’ strategy was found to be more effective than ‘apology’ (Utz et al., 2013), while Benoit (1997) did not even mention the ‘information’ strategy in his IRT. On the other hand, researchers failed to agree with each other when they classified CCS. For instance, Benoit (1997) categorized ‘attacking the accuser’ into the strategy of ‘reduction of offensiveness’, which was a more accommodative strategy than ‘denial’. However, in Coombs’s (2014b) updated master list of CCS, ‘attacking the accuser’ was the top one defensive strategy (see Table 2), being even more defensive than ‘denial’. Also within the image repair strategies’ spectrum, strategies from SCCT response strategies such as reminder, showing the sympathy, scapegoat and ingratiation were not mentioned. In SCCT, strategies such as shifting the blame, differentiation and minimization from IRT were excluded.

To fill the gap among previous scholarship of CCS, the ICC model proposed an integrated strategy toolkit to synthesize all the above-mentioned strategies by generating five main crisis responses (base, denial, evasion, justification and concession) and 28 strategies (e.g., attacking the accuser, denial, ignore, scapegoat, excuse, provocation, defeasibility, accidental, good intentions, stealing thunder, compensation and apology) across the crisis phases. As shown in Table 3, three types of information strategies such as instructing, adjusting and internalizing information were included (Liu et al., 2012; Sturges, 1994). Besides, the ICC model added new strategies such as enhancing, transferring, manipulation and covering up (not recommended), and divergence from the SMCM research, which were not covered by traditional crisis communication theories. Moreover, the ICC model highlighted the ‘dynamics’ in applying this toolkit on the social-mediated crisis. Along the defensive–accommodation continuum, the organization could choose any

Table 3. An Integrated Strategy Toolkit for Organizational CCS

Crisis response	Stance	Advocacy	<In between>		
	CCS		Pre-crisis	Crisis event	Accommodation
					Post-crisis
1. Base	Information providing (instructing, adjusting, and internalizing information)	X		X	
	Monitoring	X			
	Manipulation; covering up (reduce media coverage and stakeholder involvement)	X			
	Sympathy	X			
2. Denial	Legal action		X		
	Attack the accuser		X		
	Deny		X		
	Ignore		X		
3. Evasion	No comments		X		
	Scapegoat		X		
	Excuse			X	
	Provocation			X	
	Defeasibility			X	
	Accidental			X	
4. Justification	Good intentions			X	
	Shifting the blame			X	
	Enhancing				X
	Bolstering				X
	Transferring				X
	Reminder				X
	Ingratiation				X
	Minimizing				X
5. Concession	Differentiating				X
	Divergence				X
	Transcendence				X
	Stealing thunder	X			
	Compensation				X
	Apology				X

Same CCS applied here

of its stance and strategy in a specific crisis context. Crisis managers might also need to observe the stakeholder desired strategy and accordingly position the organization on the continuum.

Third, previous SMCM research always emphasized the 'interaction' or 'dialogue' between the organization and stakeholders (Gilpin, 2010; Macias, Hilyard & Freimuth, 2009; Moody, 2011; Yang, Kang & Johnson, 2010). However, few research specifically elaborated when and how to interact, and what types (visual or textual or mix) and level of valence of messages (positive, negative or neutral) could be used for the interaction. With the rapid transmission of social media, a negative dialogue or a wrong time to interact might quickly arouse a social-mediated crisis instead of preventing the risk (Cheng et al., 2016).

In the ICC model, social media was positioned between the organization and stakeholders and worked as an interactive platform for both parties in the crisis. Instead of linearly accepting and transmitting messages at one time from one side, ICC recommended a long-time 'positive dialogue' between the organization and stakeholders, by connecting links with the third credible party, or chatting online to promote the 'positive' feedback (Taylor et al., 2005).

The ICC model also identified the contents between the organization and stakeholders. As shown in Figure 1, through a reciprocal loop between them, types of media and stakeholder-generated contents (e.g., visual, text, voice messages or mix) on social media (e.g., Twitter, Pinterest, Facebook and Bookmark) were exchanged. Meanwhile, the organization continuously sends positive media contents to the public and maintains a good relationship. It is expected that the more positive the dialogue that an organization holds with its stakeholder, the more likely a high level of CCS effectiveness can be achieved if the prior reputation, relational characteristics with the public and situational variables are controlled.

In the SMCM research, it was also found that the new 'digital' time frame of online media landscape has greatly shortened the length of time during which organizations were expected to react (Gilpin, 2010). Thus, controlling of the messages became more unpredictable on the social media than before. As only 13 of 73 articles (18%) discussed response time or phases in crises (Muralidharan et al., 2011; Veil et al., 2012a) and few of them specified a critical response time, the ICC model strongly suggested that future studies could emphasize the variable of 'time' in the conceptualization of research design and conduct a longitudinal study to test the stability of existing patterns and possible changes over time, which

might help identify the critical response time in each stage of crisis (i.e., pre-crisis, crisis event and post-crises).

Overall, based on the above-mentioned weaknesses such as the inconsistency between crisis communication theories, the ambiguous 'interactive' strategy and the lack of a synthesized strategy toolkit and stakeholders' perspective within the current literature, this study posited the interactive crisis communication (ICC) model, within which both organizational and stakeholders' strategies and response forms were included; the critical organizational response time and a long-time 'positive dialogue' between the organization and stakeholders were emphasized; meanwhile, an integrated strategy toolkit to synthesize all important CCS was suggested. As Coombs (2014c) mentioned, social media has become the 'driving force in the bleeding edge of crisis communication' (p. 2), and it is expected that through synthesizing both traditional CCS and the updated SMCM research, this integrated ICC model can be tested in future research and provides more theoretical and practical guidance on the social-mediated crisis communication.

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