The Tendency To Tell: Understanding Publics’ Communicative Responses To Crisis Information Form and Source

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Through 22 in-depth interviews and an experiment with 162 college students, this study applies the social-mediated crisis communication (SMCC) model to understand why and how publics communicate about crises. Specifically, the study focuses on how the source and form of the initial crisis information publics are exposed to affect their crisis communication. The findings confirm the validity of the SMCC model’s core components related to publics’ crisis communicative tendencies under the influence of traditional media, social media, and offline word-of-mouth communication. The results also indicate that traditional media, compared to other media forms, seems to exert a stronger influence on how publics communicate about crises.

News consumption is a shared social experience, making people’s relationships with news portable, personalized, and participatory, largely due to the rise of social media (SM; Purcell, Rainie, Mitchell, Rosentiel, & Olmstead, 2010). In the United States, SM use increased 230% between 2007 and 2010, with two-thirds of Americans using SM and 43% visiting sites multiple times per day (Diana, 2010). During crises, SM consumption increases with publics seeking immediate and in-depth information (Bates & Callison, 2008; Sweetzer & Metzgar, 2007). Public relations scholars have begun to examine the impact of SM, largely focusing on how practitioners and organizations use SM (e.g., Diga & Kelleher, 2009; Eyrich, Padman, & Sweester, 2009; Hathi, 2009), as opposed to how and why individuals use SM. Crisis management literature also has only just begun to explore the effects of SM, compared to other media types, on crisis communication (e.g., Coombs & Holladay, 2009; Palen, Starbird, Vieweg, & Hughes, 2010; Wigley & Fontenot, 2010; Yates & Paquette, 2011). As Schultz, Utz, and Göritz (2011) stated, “The effects of different media and especially SM on recipients in crisis situations are still
understudied’’ (p. 20). Therefore, more theory-driven research is needed to understand publics’ use of social and traditional media (TM) in relation to organizational crises.

Consequently, this study builds on a model that helps organizations understand how publics use SM: the social-mediated crisis communication model (SMCC; Jin & Liu, 2010, Liu, Jin, Briones, & Kuch, 2012). Through 22 in-depth interviews and a within-subjects experiment with 162 participants, this study tests the SMCC model’s core: how publics engage with SM, as a communicative tool, after learning about a given organizational crisis.

LITERATURE REVIEW

In this section, we first define SM. We then review the two primary research streams that led to our research questions.

SM Defined

SM is ‘‘an umbrella term that is used to refer to a new era of Web-enabled applications that are built around user-generated or user-manipulated content, such as wikis, blogs, podcasts, and social networking sites’’ (Pew Internet & American Life, 2010). In this study, we operationalize SM broadly as various digital tools and applications that facilitate interactive communication and content exchange among publics and organizations online. Along the same lines, Wright and Hinson (2010) noted that SM encompass ‘‘a number of different forms including text, images, audio, and video’’ (p. 1).

Why Individuals Use SM

Previous research identified three overall reasons why individuals seek out SM independent of a crisis context: social motivation, self-expression, and utilitarian purposes. Social motivation drives publics to create their own content, as well consume and disseminate existing content (Daugherty, Eastin, & Bright, 2008; Madden, 2007). For example, the participatory nature of SM has led to 37% of Internet users contributing to the creation of news, commenting about news, and/or disseminating news via SM (Purcell et al., 2010). For young adults, the need for connectedness spurs SM consumption, in addition to a need for self-expression and, to a lesser extent, utilitarian purposes (Behairy, Mukherjee, Ertimur, & Venkatesh, 2006; Phillips, 2008). Examining one prominent type of SM, blogs, there are six primary motivators: information seeking and media checking, convenience, personal fulfillment, political surveillance, social surveillance, and expression and affiliation (Kaye, 2005). Finally, examining another prominent type of SM, online opinion exchange forums, five motivations have been identified (Goldsmith & Horowitz, 2006; Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004): (a) topic-related utility—making contributions to add value to the community; (b) consumption utility—using contributions from other community members to the user’s own benefit; (c) approval utility—feeling satisfaction when commended by others; (d) moderator-related utility—acting as a third-party to aid community members in lodging complaints; and (e) homeostasis utility—maintaining balance in users’ lives.
More narrowly examining why individuals use SM during crises, research indicates that SM provide unfiltered, timely, and in-depth communication (Johnson & Kaye, 2010; Procopio & Procopio, 2007; Taylor & Kent, 2007). Examining blogs only, Macias, Hilyard, and Freimuth (2009) further found that blogs are used during crises for four different main functions. First, blogs are used to communicate about crises, such as to share information about missing individuals, document experiences, and communicate with others directly (Macias, Hilyard, & Freimuth, 2009). Second, blogs are used for political functions, such as to critique government or other entities’ response to crises. Third, blogs are used for information, such as sharing news, seeking information about damages to the area and the status of crises. Last, blogs are used to provide social support for individuals experiencing crises and organization of rescue help. Procopio and Procopio found similar results in their study of Internet use after Hurricane Katrina in New Orleans: Internet use helped create and maintain social capital, support geographically-based communities, activate social networks, reduce uncertainty, and achieve both expressive and instrumental communication goals.

Publics’ SM use often increases during crises (Pew Internet & American Life, 2006). During crises, publics can perceive SM coverage as more credible than TM coverage, especially publics who are active SM users (Horrigan & Morris, 2005; Procopio & Procopio, 2007; Sweetser & Metzgar, 2007). Publics also can find third-person blogs and blogs sponsored by organizations experiencing crises to be equally credible in times of crisis (Bates & Callison, 2008). Further, perceived interactivity of the medium affects individuals’ positive attitudes of the organization; thus, more interactive forms of media during crisis may encourage publics to have a more positive attitude about the organization (Yang, Kang, & Johnson 2010). In addition, SM provide emotional support, allowing for individuals to virtually band together, share information, and demand resolution (Choi & Lin, 2009; Stephens & Malone, 2009). Publics also go online to find crisis information they cannot get elsewhere and to collectively solve problems (Booz Allen Hamilton, 2009; Bucher, 2002; Taylor & Perry, 2005). SM, however, complement—not replace—TM during crises (Jin & Liu, 2010; Palen et al., 2010). As Palen et al. noted during a flooding threat, individuals still seek official sources of information during crisis, such as local emergency management officials and local news stations; however, individuals complement this information with other individuals’ stories and second-hand accounts via sources such as Twitter.

SM in Crisis Communication Theory

In a review of over 30 years of crisis communication research in public relations journals, An and Cheng (2010) highlighted the need for more theory-building crisis research, a call that was echoed by Avery, Lariscy, Kim, and Hocke (2010). Current dominant crisis communication theories explain how organizations can effectively respond to crises, rather than how publics consume crisis information from organizations and other parties (Avery et al., 2010) and whether this consumption varies by type of media. Theories, such as the situational crisis communication theory (SCCT; Coombs, 2012) and image repair theory (Benoit, 1997, 2004), do not address how information form (TM, SM, or offline word-of-mouth [WOM] communication) can impact publics’ crisis communication behaviors. For example, SCCT does not distinguish the effect of media type on publics’ acceptance of crisis response strategies, instead stating that the effect of media type is minimal (Coombs & Holladay, 2009). Yet, emerging research has begun to
suggest that the medium may be as important as—or more important than—the actual message in times of crisis response (Jin & Liu, 2010; Schultz, Utz, & Göritz, 2011). In particular, the SMCC model (Jin & Liu, 2010; Liu et al., 2012; see Figure 1), describes the interaction between an organization experiencing a crisis and three types of publics who produce and consume crisis information via SM, TM, and offline WOM communication: (a) influential SM creators, who create crisis information for others to consume; (b) SM followers who consume the influential SM creators’ crisis information; and (c) SM inactives, who may consume influential SM creators’ crisis information indirectly through offline WOM communication with SM followers and/or TM who follow influential SM creators and/or SM followers. The model further describes how information is distributed by SM directly and indirectly. For example, crisis information is transmitted directly from influential SM creators to SM followers, but potentially indirectly from influential SM followers to SM inactives. Following up on research explaining why publics use SM and the SMCC model’s crisis information flow explanation, this study seeks to add depth to current understanding of:

RQ1: How, if at all, do publics communicate about crises on and offline? RQ2: What factors affect whether publics communicate about crises?

Further, to examine the influence of two key factors on publics’ responses to crisis information via TM, SM, and offline WOM communication, this study examines information source and information form. As conceptualized in the SMCC model (Jin & Liu, 2010; Liu et al., 2012), information source is where the crisis information originates from: either the organization(s) experiencing the crisis or a third party such as an influential SM creator or journalist. Crisis
experts have noted that research needs to expand beyond a single organization focus to examine the larger landscape of actors engaged in a crisis response (Heath, 2010; Waymer & Heath, 2007). Information form is whether the crisis information is transmitted via TM, SM, and/or offline WOM communication (Liu et al., 2012), which, as previously noted, has been ignored by dominant crisis communication theories, but recently is gaining attention from crisis communication scholars (e.g., Jin & Liu, 2010; Schultz et al., 2011).

As defined in the SMCC model, TM comprise information produced by journalists including broadcast, print, and online news (Jin & Liu, 2010), and historically have been considered the most reliable sources for accurate crisis information (Littlefield & Quenette, 2007). SM, as defined before, are various digital tools and applications that facilitate interactive communication and content exchange among publics and organizations online (Pew Internet & American Life, 2010; Wright & Hinson, 2010). Offline WOM communication comprises the interpersonal communication channels through which information is conveyed, shared, and processed (Jin & Liu, 2010). The SMCC model includes both institutional and everyday WOM communication, indicating that WOM communication can be initiated by organizations (in the case of institutional WOM communication) or by publics not associated with the organizations being discussed (in the case of everyday WOM; Carl, 2006; Carl & Noland, 2008).

The SMCC model also distinguishes between online WOM communication and offline WOM communication. Online WOM communication encompasses the crisis information produced by influential SM creators and consumed directly and indirectly by SM followers and SM inactives. Offline WOM communication encompasses offline interpersonal communication channels used by all publics to consume and share crisis information. Other researchers also have distinguished between offline and online WOM, importantly noting that publics typically engage in offline WOM communication with people whom they have stronger prior relationships with, compared to the people they engage with in online WOM communication (e.g., Dellooracas 2003; Goldsmith & Horowitz 2006; Sen & Lerman 2007). As a consequence of these often looser online relationships, there is less social pressure for accuracy, which increases the possibility for inaccurate information to be shared rapidly through online WOM (e.g., Bailey, 2005; Barabasi & Bonabeau, 2003; Lee & Youn, 2009). Despite this increased likelihood of inaccuracy online, in a crisis context publics may be forced to prioritize crisis information from online WOM communication as information may not be available through offline WOM communication or TM (Jin & Liu, 2010; Johnson & Kaye, 2010; Procopio, & Procopio, 2007). Therefore, we ask:

RQ3: How does the source and form affect how publics communicate about crises?

METHODS

To answer the three research questions, we focused on a single public, college students, and conducted 22 interviews and an experiment with 162 college students. Although adults are using SM with increasing frequency, young adults—specifically college students—are more frequent users of SM, and their SM use often sets trends for how the broader culture views technology (ECAR, 2008; Lenhart, Purcell, Smith, & Zickuhr, 2010). We posed research questions instead of hypotheses because current dominant crisis communication theories do not include source and form as variables to predict crisis message acceptance (e.g., Avery et al., 2010; Coombs, 2012;
Coombs & Holladay, 2009), limiting our ability to make predictions. In addition, although previous research and this study’s interview findings clearly indicated that information source and form are relevant (Jin & Liu, 2010; Schultz et al., 2011), there remains insufficient data to generate hypotheses.

As the first phase of research, 22 college students were interviewed about their SM use when exposed to crises. Research phase two was included an experiment with 162 college students. The interviews addressed the how and why questions, providing key insights for the experimental design. The experiment allowed us to examine the effects of crisis information form and source on publics’ responses and communicative behavioral intentions as posited by the SMCC model.

Study 1: Interviews

Interview participants were recruited in March 2010 through convenient and purposive means. Before conducting the interviews, we launched an online questionnaire via a participant pool system at a large East Coast university. Thirty-nine students answered this brief questionnaire about daily media habits, yielding 37 valid responses. Subsequently, we invited 22 of these students, based on their media consumption habits, to participate in in-depth, in-person interviews, which were digitally recorded and fully transcribed. We stopped conducting interviews once the major categories displayed depth and variations (Corbin & Strauss, 2008). The interviews lasted, on average, 26 min with a range of 15 to 45 min, not including time taken to explain the study’s purpose, obtain informed consent, and answer any questions. Interviewees received extra credit for their participation.

The interview guide asked eight open-ended questions with additional probes related to the SMCC model. Participants were asked to describe recent crises and then discuss their information seeking and communication behaviors. Questions asked included: ‘‘How did you first learn about the crisis?’’ and ‘‘Did you talk about this crisis with friends, family, and/or coworkers?’’

Analysis occurred during and after data collection. During data collection, we shared transcripts, observer comments, and memos. This cocurrent data collection and analysis allowed us to capture early themes and identify needs for shifting questions or approaches. Once the interviews were completed, we systematically analyzed the transcripts through Miles and Huberman’s (1994) data analysis procedures: data reduction, data display, and conclusion drawing/verification. During data reduction, interview transcripts were coded using the computer programs Atlas.ti and Excel. First, using Atlas.ti, we coded for comments relevant to the SMCC model, as well as data that did not fit into the propositions, developing new codes for outliers. During data display, we merged related codes into common themes and then exported the data into an Excel spreadsheet for each theme. Last, during conclusion drawing/verification, we reviewed the Excel spreadsheets to identify the multiple meanings that emerged from the data, noting commonalities as well as discrepancies.

Study 2: Experiment

The effects of crisis information form and source were examined via a 3 (crisis information form: TM vs. SM vs. offline WOM communication) × 2 (crisis information source: organization vs. third-party) within-subjects experiment. The first factor tested was crisis information form: offline WOM versus SM versus TM. The operational definitions of the first factor, information
form, were developed based on insights from the interviews: an online student newspaper article, a Facebook post, and a town-hall meeting were identified as representative of TM, SM, and offline WOM communication form when it came to getting information about the University. The second factor tested crisis information source (third-party vs. the organization directly experiencing the crisis). As operationalized in the SMCC model from publics’ points of view, crisis information source refers to either the organizations (official crisis information reported by the organization(s) at the center of the crisis) or a third party (any groups or individuals outside the organization, including other publics and media; Jin & Liu, 2010; Liu et al., accepted for publication). In this experiment setting, the organization was the university and third party sources were groups that were outside the university.

Based on the interview findings, we wrote six fictitious crisis scenarios for the experiment, each about a different crisis situation the university faced (see Table 1). To ensure that each scenario was clearly and consistently written, a pretest of 128 college students was conducted. The pretest results suggested that the written scenarios successfully incorporated experimental conditions.

For the formal experiment, 162 participants completed the study in May 2010 using the same participant pool at a large East Coast university. The crisis situation stimuli were presented in six different orders by using counterbalance to randomly distribute variables. The participants were randomly assigned to one of the orders. Because this experiment used a within-subjects design exposing each participant to all condition combinations of crisis information form and source, the individual served as his or her own control for individual differences, decreasing the need for a larger participant pool and accounting for extraneous variables such as IQ, interest and familiarity levels, and demographics. The experiment was administered online and on average took 41 min to complete. Students who had participated in the interviews were blocked from participating. Each participant completed the experiment protocol individually and received extra credit.

After reading each crisis scenario, participants were asked to respond to a series of statements about their communicative behavioral intentions after learning about the crisis. Participants were asked to circle the number between pairs of words and phrases with opposite meanings (e.g., from 1 = very negative(ly) to 7 = very positive(ly)) that best represented how, if at all, they would communicate about the crisis. If any of the questions were irrelevant to their personal experience (e.g., they never use Facebook or blogs), they had the option to circle N/A. The

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<th>Scenario Conditions</th>
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<tr>
<td>Bomb threat (TM + Third Party)</td>
<td>Campus newspaper</td>
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<tr>
<td>Riots (SM + Third Party)</td>
<td>Facebook update from friend</td>
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<tr>
<td>Blizzard (WOM + Third Party)</td>
<td>Phone call from friend</td>
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<tr>
<td>Disease outbreak (SM + Organization)</td>
<td>Facebook update from the University</td>
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<tr>
<td>Embezzlement (WOM + Organization)</td>
<td>Town hall meeting at the University</td>
</tr>
<tr>
<td>Violent partying (TM + Organization)</td>
<td>Press statement transcript in campus newspaper</td>
</tr>
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Note. WOM = Offline word-of-mouth communication. SM = Social media. TM = Traditional media.
communication intention options were: (a) speak ______ of the university to people you know; (b) speak ______ of the university if interviewed by a journalist; (c) write ______ comments about the university on your Facebook page; (d) share ______ comments about the university on friends’ Facebook pages; (e) write ______ blog posts about the university on a personal blog; (f) post ______ comments about the university on others’ blogs; (g) tweet ______ about the university; and (h) make ______ comments about the university on online videos.

To validly manipulate the two independent variables, two manipulation check items were included to determine whether the participants perceived the crisis information form and source in the same direction as the stimuli being manipulated. To ascertain whether the experimental manipulations were effective, one-way ANOVAs were performed using the Scheffé procedure. For crisis information form, participants were asked to respond to, “In this scenario, the information about what happened was delivered by/came from . . . .”, selecting the number that best indicated their agreement with each of the three listed items (i.e., offline WOM communication, Facebook, and online news), where 1 = strongly disagree, and 7 = strongly agree. A MANOVA found significant differences between every pair of the three crisis information forms—WOM condition: WOM 5.50, SM 4.77, TM 4.39, $F(2, 959) = 26.63, p < .001$, par. $\eta^2 = .053$; SM condition: WOM 3.88, SM 5.62, TM 3.95, $F(2, 959) = 78.44, p < .001$, par. $\eta^2 = .141$; TM condition: WOM 3.89, SM 3.99, TM 5.39, $F(2, 959) = 54.03, p < .001$, par. $\eta^2 = .101$. For crisis information source, participants were asked to respond to, “In this scenario, the information about what happened was delivered by/came from the university” (as opposed to a nonuniversity source), selecting the number that best indicated their agreement where 1 = strongly disagree, and 7 = strongly agree. ANOVA results showed significant difference between the third-party source and university source in the tests—third party condition: third party 4.01, organization 5.42, $F(1, 964) = 127.413, p < .001$, par. $\eta^2 = .117$. Therefore, the manipulations were successful.

A series of $t$-tests were run to determine if there were any problematic order effects on all dependent measures and manipulation check measures. With the overall high possibility of significant differences, given that we ran 390 $t$-tests, the fact that only 35 instances were found suggests no problematic order effects. We then proceeded with a series of repeated measures ANOVAs, analyzing the effects of crisis information source and form on how participants seek further information after being exposed to crisis information, how they perceive the received crisis information, and their tendencies for communicating with others.

RESULTS

Study 1: How Crises Are Communicated

RQ1 asked how, if at all, publics communicate about crises on- and offline and RQ2 asked what factors affect whether publics communicate about crises. The interview guide first asked participants to talk about their preferred communication vehicles for crises in general. Then, the guide asked participants to select any recent organizational crisis and discuss how they communicated during that crisis. Responses to these two questions revealed that participants primarily communicate about crises through offline WOM followed by Facebook and text messaging. On a more limited basis, participants sometimes communicate about crises through phone calls.
(mostly with relatives) and e-mail (mostly with parents). Four themes explain why participants prefer offline WOM communication, Facebook, and text messaging: humor value, insider information, social norms, and privacy concerns.

Participants repeatedly mentioned how they would joke about crises with their friends. For example, one participant said, “With my friends, we would just say jokingly like if someone coughed they would automatically assume that you have swine flu.” However, humor value also explained why participants often would not communicate about crises, especially via Facebook. For example, another participant said,

I don’t know. I don’t think people want to put their [Facebook] statuses as “I have swine flu, leave the area.” It’s really awkward. . . . I guess Facebook status would be like joking or getting food before the storm [blizzard] or things like that.

Having or seeking information seemed to be the primary motivator for communicating about crises. For example, one participant said, “Well both my roommates are from Potomac, so they knew a lot more about it [metro crash]. So, I just talked to them more about it to ask them what really happened.” Another participant noted, “I used Facebook [during the blizzard] because my friends from high school were like, ‘How is it? Do you have power? Are you okay?’”

Almost all of the participants mentioned social norms as an explanation for why they might use Facebook rather than other SM. For example, one participant said, “I would never go on Facebook to look up information on a crisis unless there are groups; like I joined a Haiti group I think just to raise awareness because I got sent something.” In other words, if participants’ friends use a particular type of SM for communicating about crises, then they are more likely to use the same SM. For example, one participant said, “Well the reason why I don’t use Twitter is, I signed up for an account but most of the people I know don’t use it. It’s kind of like a celebrity gossip thing, like to see what the celebrities are doing.” When participants did use SM during crises, more often than not it was because a news source mentioned a blog or a Web search pulled up a blog.

Indeed, none of the participants sent tweets or posted on blogs about crises, which can be explained by a final theme: privacy concerns. More than half of the participants mentioned being wary of Twitter and blogs because they do not want their online posts to be misrepresented. For example, one participant noted:

One of the reasons I don’t use Twitter is that a lot of times employers are searching through your social media sites and that’s not okay. As private as you make your profile, with hackers they can look at anything.

Interestingly, only one participant raised similar concerns about Facebook, and that participant was the only one that did not have a Facebook account. Participants frequently expressed that conversations via SM can be easily misinterpreted, potentially turning unnecessarily negative. This negativity encouraged participants to be more private with their opinions by not discussing them via SM. For example, one participant said,

I guess because a lot of times with bloggers the responses are sometimes very not professional, and it’s not like a conversation that it ends up being; it’s like someone is attacking you for your opinion. I guess it’s kind of discouraging.
Study 2: How Crises Are Communicated by Publics

Following up on the interview insights about what factors affect whether publics communicate about crises (RQ2), the experiment focused on two factors: the form and source of crisis information (RQ3). Except for three sets of main effects, the rest of the findings were evident as significant interaction effects (see Table 2). As a whole, the findings indicate that individuals are most likely to communicate positively about crises when receiving information from the organization via TM. In contrast, they are more likely to communicate negatively about crises if they hear about crises through the organization’s offline WOM communication. SM seem to trigger more positive communicative behaviors over the blogosphere, such as posting positive blog posts, commenting on others’ blogs, and tweeting positively about the crises, regardless of crisis information source. More detailed results are delineated in the following.

First, significant interaction effects of crisis information form and source were evident in participants’ offline communication, $F(2, 316) = 9.55, p < .001$, par. $\eta^2 = .06$. Participants were most likely to engage in positive offline communication about crises when the information was sent by the organization experiencing the crisis via TM ($M = 4.79, SE = .12$), but they were most likely to engage in negative offline communication when they heard crisis information from the organization via offline WOM ($M = 3.15, SE = .14$).

Second, significant interaction effects of crisis information form and source were evident in how participants would talk to journalists about crises, $F(2, 312) = 8.81, p < .001$, par. $\eta^2 = .05$. Participants were most likely to engage in positive conversations with journalists about crises when the information was sent by the organization via TM ($M = 4.84, SE = .12$), but they were most likely to engage in negative conversations with journalists about crises when they heard the crisis information from the organization via WOM ($M = 3.22, SE = .14$).

Third, significant interaction effects of crisis information form and source were evident in participants’ personal Facebook updates, $F(2, 316) = 6.39, p < .01$, par. $\eta^2 = .04$. Participants were most likely to engage in their own Facebook updates in a positive way about a given crisis when the information was sent by a third party via TM ($M = 5.05, SE = .13$), yet they were most likely to engage in negative personal Facebook updates when they heard the crisis information from the organization via WOM ($M = 3.22, SE = .14$).

Fourth, significant interaction effects of crisis information form and source were evident in participants’ comments on friends’ Facebook pages, $F(2, 316) = 5.17, p < .01$, par. $\eta^2 = .03$. Participants were most likely to comment on their friends’ Facebook pages in a positive way when the information was sent by a third party via TM ($M = 4.94, SE = .13$), yet they were most likely to post negative comments when they heard information from the organization via WOM ($M = 3.65, SE = .17$).

Fifth, significant main effects of crisis information form were evident in participants’ tendency to post on their own blogs about crises, $F(2, 318) = 7.34, p < .005$, par. $\eta^2 = .04$. Participants were less likely to post positive posts on their blogs when they heard crisis information from WOM ($M = 5.43, SE = .18$) than when they heard it from either SM ($M = 5.85, SE = .16$, $p < .005$) or TM ($M = 5.77, SE = .15$, $p < .05$). No main effects of crisis information source were detected.

Sixth, significant interaction effects of crisis information form were evident in participants’ tendency to comment on others’ blogs, $F(2, 318) = 3.03, p = .05$, par. $\eta^2 = .02$. Participants were most likely to comment on others’ blogs in a positive way when the information was sent by the
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<tr>
<th>Interactions (F)</th>
<th>WOM + Third Party</th>
<th>WOM + Organization</th>
<th>SM + Third Party</th>
<th>SM + Organization</th>
<th>TM + Third Party</th>
<th>TM + Organization</th>
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<tbody>
<tr>
<td>Offline communication 8.89***</td>
<td>3.52*** (.13)</td>
<td>3.15*** (.14)</td>
<td>4.23*** (.14)</td>
<td>4.75*** (.13)</td>
<td>4.57*** (.13)</td>
<td>4.79*** (.12)</td>
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<td>Talk to traditional media about 8.36***</td>
<td>3.64*** (.12)</td>
<td>3.22*** (.14)</td>
<td>4.31*** (.14)</td>
<td>4.75*** (.13)</td>
<td>4.66*** (.13)</td>
<td>4.84*** (.12)</td>
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<tr>
<td>Comment on personal Facebook page 6.39**</td>
<td>3.83** (.16)</td>
<td>3.61** (.17)</td>
<td>4.37** (.15)</td>
<td>4.75** (.13)</td>
<td>5.05** (.13)</td>
<td>4.72** (.14)</td>
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<tr>
<td>Comment on friends’ Facebook page 5.17**</td>
<td>3.91** (.16)</td>
<td>3.65* (.17)</td>
<td>4.42** (.15)</td>
<td>4.76** (.14)</td>
<td>4.68** (.14)</td>
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<tr>
<td>Comment on others’ blogs 3.03*</td>
<td>5.37* (.19)</td>
<td>5.39* (.20)</td>
<td>5.64* (.18)</td>
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<tr>
<td>Comment on online videos 3.21*</td>
<td>5.08* (.19)</td>
<td>4.89* (.21)</td>
<td>5.11* (.18)</td>
<td>5.56* (.17)</td>
<td>5.43* (.18)</td>
<td>5.55* (.16)</td>
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*Note. Cell entries are estimated marginal means. Standard errors are in parentheses. Significance for the F is based on estimates of the marginal means for the Wilk’s Lamda statistic. WOM = Offline word-of-mouth communication. SM = Social media. TM = Traditional media.  
*p < .05, **p < .01, ***p < .001.
organization via SM ($M = 5.94, SE = .17$); they were most likely to post negative comments when they heard information from a third party via WOM ($M = 5.37, SE = .19$).

Seventh, significant main effects of crisis information form were evident in participants’ tendency of tweeting about crises, $F(2, 316) = 7.151, p < .005$, par. $\eta^2 = .043$. Participants were less likely to tweet positively when they heard crisis information from WOM ($M = 5.89, SE = .16, p < .005$) than when they heard it from either SM ($M = 5.50, SE = .19, p < .05$) or TM ($M = 5.57, SE = .15, p < .05$). No main effects of crisis information source were detected.

Eighth, significant interaction effects of crisis information form and source were evident in participants’ tendency to comment on online videos, $F(2, 302) = 4.01, p < .05$, par. $\eta^2 = .03$. Participants were most likely to comment on online videos in a positive way when the information was sent by the organization via SM ($M = 5.56, SE = .17$), and they were most likely to comment negatively when the information was sent by the organization via WOM ($M = 4.90, SD = .21$).

DISCUSSION AND CONCLUSIONS

The findings primarily provide insights into why and how publics communicate about crises, clearly highlighting the importance of proactively selecting form and source. We now discuss the findings’ implications, concluding with the study’s limitations and recommended future research.

Why Publics Communicate about Crises

The interviews revealed that humor value and having/seeking insider information motivate participants to communicate online about crises as predicted by the SMCC model (Jin & Liu, 2010; Liu et al., 2012). Examining one prominent type of SM, blogs, there are six primary motivators: information seeking and media checking, convenience, personal fulfillment, political surveillance, social surveillance, and expression and affiliation (Kaye, 2005). These findings provide initial insights into two factors that motivate publics to become influential SM content creators, but future research is needed to determine whether other factors motivate different public types.

A primary factor not originally identified in the SMCC model that often causes interview participants to avoid communication online is social norms, which includes: (a) whether their family and friends frequently use particular SM and (b) level of comfort with and trust of SM. These findings provide initial insights into two factors that discourage publics from becoming influential SM creators, instead sometimes leading publics to becoming SM inactives. The second social norm, comfort level, confirms publics’ regular media consumption habits influence how they assign source credibility (e.g., Johnson & Kaye, 2004). For the crisis most frequently discussed (riots after a major athletic victory), interview participants frequently mentioned posting comments and sharing pictures/videos on Facebook, which sometimes were later picked up by local news and the campus newspaper. This crisis, in particular, seemed to create a hot-issue public as conceptualized by the situational theory of publics (J. E. Grunig, 1997) or influential SM creators as conceptualized by the SMCC model, even for participants who reported lower involvement in the issue by stating that the crisis did not affect them personally. As a consequence, interview participants that mentioned this crisis reported active
communication primarily in person, via Facebook, and text messaging. This finding seems to confirm that issue relevance and emotional venting/support motivate publics to use SM during a crisis as predicted by the SMCC model, also confirming the SMCC model’s interaction loop of offline WOM communication and SM consumption. Further, the findings support previous research, indicating that a primary driver for using computer-mediated communication is having or seeking unique information (Caplan, Perse, & Gennaria, 2007; Walther, 1996). In our study, this insider perspective was a primary driver for overcoming reservations about using and creating SM during crises, such as social norms and privacy concerns.

How Publics Communicate about Crises

RQ1 and RQ2 explored how, if at all, publics communicate about crises and what factors affect their communication. Interview participants’ preferred methods for communicating about crises were in person, followed by text messaging and Facebook. Interview participants frequently mentioned discussing crises with friends and family, indicating that these groups are influential for our participants. Channel complexity theory at least partially explains why participants preferred interpersonal communication on- and offline. This theory draws on selective exposure and uses and gratifications theories, predicting that publics select channels based on congruency (Dutta-Bergman, 2006). In other words, individuals use media for similar functions during crises, which certainly is true for this study: Participants were most likely to share their thoughts about crises interpersonally via offline WOM communication followed by interpersonally via Facebook. This finding further supports the indirect relationship between offline WOM communication and communication via SM identified in the SMCC model. This finding also concurs with previous research that found in a consumer context publics engage in offline WOM communication with people they have strong relationships with such as family and friends (e.g., Dellarocas 2003; Goldsmith & Horowitz 2006; Sen & Lerman 2007), thereby extending this finding into a crisis context.

The experiment extended the interview findings by explaining when, and under what conditions, each communication method is preferred. First, TM plays a central role in predicting whether participants are likely to positively communicate about an organization experiencing a crisis. For example, participants were more likely to engage in positive offline WOM communication when information was conveyed by the organization experiencing the crisis via TM (e.g., an article in a student newspaper). When participants learned about the crisis from the organization via offline WOM communication (e.g., at a town hall meeting), they were more likely to engage in negative offline WOM communication with journalists. Also, participants were more likely to post positive Facebook updates when the crisis information was sent by a third party via TM. Thus, this study indicates that although publics may be increasingly using SM, TM play an integral role in predicting whether publics in our study are likely to positively communicate about organizational crises via SM or offline WOM communication. These findings extend previous research indicating that publics place high trust in crisis information produced by journalists (e.g., Littlefield & Quenette, 2007; Liu, 2010), suggesting that this trust may foster an increased likelihood for publics to positively communicate about crisis information obtained from TM. Further, this finding support previous research concluding that SM complements rather than replaces TM as a crisis information source (e.g., Jin & Liu, 2010; Palen et al., 2010).
Unlike TM, offline WOM communication generally had negative effects on participants’ anticipated online communication about crises, perhaps because participants perceived crisis information transmitted by offline WOM communication as less trustworthy than the same information transmitted via TM. For example, participants were less likely to post positive comments to their blogs when they learned about the organizational crisis via offline WOM communication than when they heard about the crisis from SM or TM. Also, participants were most likely to post negative comments on others’ blogs when they learned about the crisis from a third party via offline WOM communication. Similarly, participants were less likely to positively tweet when they learned about an organizational crisis via offline WOM communication than from either social or TM. Finally, if participants learned about a crisis from the organization via offline WOM, they were more likely to engage in negative conversations with journalists. Combined with the interview findings that participants prefer communicating about crises via offline WOM, these findings could have important implications. These findings suggest that organizations experiencing crises should proactively encourage key publics to discuss and share crisis information published in TM immediately after crises begin. For example, posting links to news articles about crises in SM may encourage publics to discuss the crisis more positively than posting links to media releases or holding townhall meetings.

Only two trends emerged explaining significant effects of SM on publics’ crisis communication. First, participants were most likely to comment positively on online videos when they learned about the crisis from the organization via SM than from offline WOM communication. Second, participants were more likely to post positive comments on others’ blogs when they learned about a crisis directly from the organization experiencing the crisis than from a third party. These findings provide insights into how organizations can play a proactive role in encouraging publics to engage in positive online communication. When it comes to generating positive comments about online videos and blog posts, the findings suggest that organizations do not have to rely on TM.

LIMITATIONS AND FUTURE RESEARCH

This study is limited by several factors that impact applying the results to practice. First, the interview results are not generalizable. Second, the study included only one public: college students at a single university. Like all publics, this public has unique characteristics, including being predominantly located within a small geographical area and sharing a modest age range. Thus, future research is needed to gather detailed and generalizable knowledge about other publics’ crisis communication behaviors. Third, the study focused on how publics use SM during crises and additional research is needed to test SM use before and after crises. Therefore, to triangulate and extend our findings we propose (a) interviews with different publics, (b) experiments with national populations, and (c) surveys with organizations that frequently experience crises. In addition, future research is needed to examine factors beyond crisis information form and source that affect publics’ crisis communication, including crisis origin, crisis type, organizational infrastructure, and message strategy as highlighted in the SMCC model (Liu et al., accepted for publication). Through additional research scholars can provide a science-based, theory-driven approach for proactively managing crisis communication in the evolving media landscape.
REFERENCES


