

Developing an Integrated Crisis Context Approach for Crisis Management

Elizabeth Johnson Avery, Ph.D.
The University of Tennessee

Melissa Graham, Ph.D.
University of Central Oklahoma

Abstract

This research explores how unique situational factors, particularly challenges and opportunities within local governments and their operating environments, affect crisis management. Survey data was collected from local government officials ($n=307$) who manage communication functions in municipalities across the U.S. Results indicate partnerships with outside agencies were extremely important in successfully managing crisis. Also, organizational resources, crisis nature, audience culture, and nature of public response emerge as important domains for future crisis research. These findings broadly inform crisis management, as they may enable communities with scarce resources to utilize them more efficiently to reduce disparities in public safety. This study is a first step for crisis research with more diversity in crisis types sensitive to unique organization-centered crisis management challenges.

Introduction

Recent crises such as the Sandy Hook school shootings that killed 20 children and 6 adults underscore the importance of crisis planning for many organizational types, especially local governments. This most recent tragedy follows the 9/11 terrorist attack on New York City, Hurricane Katrina's devastation of New Orleans, and the massive flooding that plagued the east coast after Hurricane Sandy, all which highlight the importance of local governments' roles in managing crises. The local government is usually the first to respond when a crisis unfolds and is chiefly responsible for coordinating and deploying emergency management resources until the situation is under control (Frost & Sullivan, 2009).

The ambiguous nature of crises makes planning for them difficult at best; however, researchers agree that organizations that practice proactive crisis management will ameliorate the damage of a crisis (Penrose, 2000). Local governments must be prepared to serve as resources and as the backbone of support for their citizens (Ulmer, 2012). Communities need to develop communication infrastructures to communicate with and better meet the needs of their citizenry (Heath, Bradshaw, & Lee, 2002). Therefore, preparing a crisis plan is a valuable precaution that organizations of all types must take, especially local governments, despite the somewhat scant scholarly attention to their crisis management (Avery et al., 2010). Crises such as natural disasters cannot be prevented, but the effects of a disaster can be "mitigated by careful planning and through public and private partnerships that take advantage of existing resources" (Frost and Sullivan, 2009, p. 3). These partnerships are a focus of this paper and also

a focus of Palttala and Vos's (2011) work that tests a measurement system to improve performance during crises that affect public safety in large-scale emergencies. Most of the crises local governments face are managed by a network, not just a single organization. Thus, the utility of these partnerships are an important consideration in crisis management.

Also noted by Palttala and Vos (2011), much of the current crisis communication theory (Benoit, 1995; Coombs & Holladay, 1996; Coombs & Holladay, 2012) predominantly emphasizes strategic communication designed to protect threats to the image or reputation of an organization during a crisis. Two recent articles focus on image repair in a political context; Eriksson and Eriksson (2012) analyze face-to-face communication after a political scandal to extend image repair theory. Low et al. (2011) focus on the role of culture in image repair strategy to reveal interesting differences between a Western and an Asian government. While these broad theoretical bodies have been quite heuristic and very useful, they have rarely been used to provide local government practitioners with strategic recommendations to operate during a crisis when reputation maintenance is not the primary objective. Avery et al. (2010) note that crisis communication research in public relations should be more contextually diverse, more prescriptive, and more focused on goals beyond reputation maintenance. This research aims to provide a normative model for crisis communication with the ultimate goal of public safety to create more resilient organizations and communities with enhanced sense-making during crises.

Theoretically, this study extends extant crisis communication research literature by identifying how the nuances of the situation, particularly those challenges and opportunities

within the organization and its operating environment, affect crisis management. Crisis management models more sensitive to those considerations can account for the challenges that the organization faces while managing a crisis—such as limited human and financial resources as well as strained external partnerships. Pragmatically, this study is a first step in establishing a crisis model for different crisis types that takes into account the unique management considerations affecting the organization.

Literature Review

A crisis is an event (or combination of events) that threatens damage to the reputation of an organization (Barton, 1993). Ulmer, Sellnow, and Seeger (2007) define crisis communication as the way that local, state, and federal organizations use resources to disperse information to the public quickly during a crisis that can cause damage and threaten human life. The organization's primary goal in crisis communication is to inform the public about the impact of the crisis, and the perceived effectiveness of this response in turn affects its reputation. Public relations practitioners are responsible for communicating what the organization is doing to handle the crisis and advising management on what *should* be done to build and maintain a favorable reputation. Of course, a primary objective in that process, despite limited focus on it in crisis communication research (Avery, Lariscy, Kim, & Hocke, 2010), is protecting the public. As illustrated by FEMA's failures in managing the aftermath of Hurricane Katrina that resulted in harsh criticism as it did not safeguard publics effectively (Shoup, 2005), organizational reputation is compromised when publics perceive deficits in the effectiveness of response in

protecting and serving publics. As Coombs (2009) noted, in crisis communication, “the number one priority is protecting human life” (p. 99).

Over the past 20 years Benoit’s image restoration theory (Benoit, 1995 & 1997) and Coombs’ situational crisis communication theory (SCCT) (Coombs, 1995) have provided the dominant paradigms for crisis communication research in public relations. Situational crisis communication theory was developed as a model for managers in different crisis situations to use crisis response strategies to restore organizational reputation (Coombs, 2007). SCCT identifies how “a crisis might shape the selection of crisis response strategies and/or the effect of crisis response strategies on organizational reputation” (Coombs, 2004, p. 269), positioning crisis response and organizational reputation as central to SCCT. SCCT is built on a taxonomy of 13 crisis types, which have been divided into three clusters—victims, preventables, and accidents (Coombs, 2007). Each of the crisis types in a cluster share similarities with the others in terms of the levels of crisis responsibility (Coombs & Holladay, 2002). To guide response to each type of crisis, Coombs (2007) developed crisis response strategies appropriate for unique crisis situations. These response strategies have been extensively tested in public relations literature, but the applications in doing so have not been contextually diverse.

Crisis Communication in the Public Sector

Public relations crisis research is deficient in the area of crisis management in government contexts, particularly for local governments. In their quantitative review of crisis communication research in public relations, Avery et al. (2010) found that 47% of published studies focused on corporations and 26% on individuals. Only 3 of the 66 studies in the sample

had public agencies or departments as their contextual focus. Crisis situations present challenges to governments that can become risks *or* opportunities. When a crisis erupts, a government's image is at stake and its accountability is tested as it is responsible for saving lives, damage control, and rebuilding in the aftermath of the crisis (Benoit, 1997).

In one of the few and recent examples of crisis research in the local government sector, Avery and Hocke (2011) interviewed public health information officers at health departments across the country to reveal the most important considerations for their crisis management. Many factors emerged, including (among others) financial strain, staff limitations, time limitations, temporal nature of crisis (slow v. fast onset), culture, language, disease infection rates, and preparation. Avery and Hocke (2011) collapsed those factors five broader categories: resources, organizational partnerships, nature of crisis, nature of publics, and internal management. Although several of these factors have been studied in various forms in public relations research, usually in isolation, revealing how these variables cluster and affect crisis management can generate relevant categories for more nuanced crisis management models. Therefore, as a first exploratory step to that end, we ask:

RQ1: What, if any, underlying structure is there to the effects of the following variables on local governments' crisis management: time, money, staff, speed of crisis onset, unknowns, uncertainty, number affected, language, culture, public response to directives, and public understanding of crisis?

A notable, exploratory study on crisis communication in governments by Horsley and Barker (2002) proposed a synthesis model for crisis communication in the public sector. Their

research looked at state agencies to learn about government efforts in crisis communication. Five interconnected stages were proposed in their synthesis model: 1. ongoing public relations efforts; 2. identification of and preparation for potential crises; 3. internal training and rehearsal; 4. the crisis event; and 5. evaluation and revision of public relations efforts. While they acknowledge that many government agencies do not have the necessary resources to successfully implement all five stages of their model, the model provides a useful framework for how agencies can develop a plan for dealing with a crisis—before, during, and after the event (Horsley & Barker, 2002).

Yet, one contemporary, particularly pressing challenge to crisis management that local governments must navigate is the role of resources, including time, staff, and financial. Amidst budget deficits that strain personnel and money available to manage a crisis situation, government offices understaffed for even routine functions face formidable pressure during the management load added by crisis. Yet, it is at this very time that efficient, effective management is at its most critical. Given the strained resources with which local governments operate, effective utilization of public and private partnerships is extremely important in crisis management. In fact, public information officers at rural offices in the Avery and Hocke (2011) study reported that they were not equipped to even respond to larger crises without help from outside partners. Hospitals, emergency responders, and other government offices were among many partners mentioned by public information officers (PIOs) in that study; several PIOs mentioned how critical those partnerships were in successfully managing the H1N1 epidemic. Consistent understanding and dissemination of crisis information across partners were

identified as keys to successful crisis communication. As Palttala and Vos (2011) note, “in complex crises, response activities are initiated by several organizations that need to cooperate and to be coherent also in their communication with public groups” (p. 317). Effective partnerships also limit duplication of crisis response efforts and extend the reach and clarity of a message (Veil & Husted, 2012). Ultimately, evaluations of crisis management are based on how well the entire system works together to manage a crisis. To illustrate, Veil and Husted (2012) found that following Hurricane Katrina, the American Red Cross compromised the strength of its crisis response by failing to have adequate quantity and quality of partnerships with other organizations to manage a crisis of that magnitude and was in need of a clearer communication protocol with partners.

Further, the different crisis types governments face (e.g. a school shooting, a disease outbreak) necessitate utilization of different partnerships and affect the importance of those partners. Thus, we examine which relationships are identified as important in different crisis situations to build strategic partnerships. Crisis models that provide direction to local governments, as well as other organizational types, on how to create and maintain productive, efficient partnerships are needed. As a first step in revealing how resources and external partnerships affect local governments’ crisis management uniquely for different crisis types, we ask:

RQ2: Do resources (e.g., time, money, personnel) affect the management of different crisis types in unique ways?

RQ3: Do partnerships (e.g., with other public agencies, non-profits, state offices, federal offices, public health organizations, private health providers) affect the management of different crisis types in unique ways?

Unique Crisis Considerations for Governments

Rosenthal and Kouzman (1997, pp. 282-283) reveal four factors unique to government agencies facing crisis situations: first, they found that a crisis raises questions about why the government agency failed to prevent the crisis; second, frequency of government action or lack thereof does not necessarily reflect on how well or efficient it functions; third, in a political context crises can morph from opportunities for decision making to opportunities to restructure power; and, fourth, emergency organizations that are called into action during a crisis and are known to be effective may fail to be so during acute crisis situations. Failure in managing a crisis can lead to reorganization and reallocation of resources, thereby threatening the stability of established organizations.

Despite Coombs' (2009) note that public safety is the most important goal of crisis communication, this organizational priority is not well reflected in the research that his broad body of crisis work has generated. In their quantitative review of crisis communication literature, Kim, Avery, and Lariscy (2010) found that public safety/public health was the primary goal of crisis response in fewer than 2% of the comprehensive body of published crisis communication articles they analyzed. Interestingly, image repair was the focus of organizations' communication in 86% of those crisis communication articles. Mirroring this

heavy focus on image in public relations research, perhaps practitioners have also focused too much on reputation in crisis communication efforts. This lack of contextual and response diversity in research indicates a deficit in the utility of our crisis models for practitioners. Thus, we ask:

RQ4: What, if any, is the relationship between crisis type and how well city officials report managing that crisis?

Kent (2010) observes “most of the crisis strategies that have been studied presuppose large, corporate style organizations, rather than small or medium-sized organizations that often do not have abundant media access or resources” (p. 705) and asks “where is the research examining...any stakeholder outside of the organization itself?” (p. 707). We answer that question with research that offers a public-centered yet organizationally sensitive crisis approach.

Methods

Survey Administration

In order to investigate local governments’ crisis management, a private survey research firm that specializes in local government and public policy research administered a national survey to its database of more than 4,500 local government officials. The firm was selected based on its ability to reach the most broad and representative sample of government officials who serve a wide range of population sizes and are diverse in the form of their governments (mayor, manager, commission, etc.). Following IRB protocol, participants were sent a

solicitation email that requested their participation. If they chose to click on the survey link, participants were first asked to read a statement of informed consent then notified that by clicking to continue the survey they were expressing their consent. The survey data were stripped of identifying information and entered into an SPSS file prior to being given to the researchers. Data were then entered into SPSS, cleaned, and screened. As an incentive, participants were promised an aggregate summary of data for completing the survey.

Participants

An email request for survey participation was sent to 4,511 public officials and government employees who handle communication functions. The research firm sent the email with a cover letter from the lead researcher. This list is generated and constantly updated by the research firm through direct human research seeking local government officials' email addresses on the Internet and, in some cases, by calling the office directly to request contact information. A total of 307 government officials participated in the survey about their crisis management. There were 228 partial completions that were not included in this analysis, and 125 who started the survey but were disqualified as they did not meet criteria for participation (e.g., did not perform a communication function, did not recall a crisis). Overall, the response rate was 15%, which the research firm conducting the research reported as well above the industry average, especially given that the emails were sent to busy government officials with limited time for response to survey solicitations. Given that the sample was deemed to be representative and free from response bias, this rate was evaluated as very satisfactory by the researchers.

There was a broad range of job titles of participants, including the following and closely related titles: *public information officer, mayor, city administrator, director of administration, city manager, village manager, council member, director of public safety, president of council, village administrator, and town supervisor*. The most common titles were mayor and city manager. Ages range from 28-85, with 11 participants (3.6%) choosing not to answer. The age mean is 55, median is 57, and mode is 62. There are representatives from 44 states in the U.S. in the sample. Government officials representing population sizes from less than 5,000 people ($n=8$, 2%) to 300,000 or more ($n=1$, .3%) were represented in the sample, with the largest categories being populations of 10,000-29,000 ($n=130$, 42.3%) and 5,000-9,999 ($n=76$, 25%). Forms of government included board of trustees, commissions, council-manager/administrator/supervisor, major-councils, presidents, supervisor-councils, and village boards.

Measures and Factor Analysis Procedure

The nature of crisis, or crisis type, was measured in several different ways to capture a broad range of crises. In order to enhance the external validity of these findings and evaluate crisis management of an actual situation (instead of hypothetical or crises without the direct involvement of the respondent), participants were asked to consider a crisis that they had recently managed in their communities. If participants had not managed a recent crisis, they were directed to a portion of the survey related to general crisis communication. After reviewing relevant literature and popular press, a list of crisis types was generated that

included: public health, natural disaster, transportation, political, social, and act of violence.

Participants were also asked to describe the crisis to insure they had correctly and consistently categorized them prior to analysis.

Prior research with PIOs (Avery & Hocke, 2011) used open, depth interview questions to generate a list of considerations that affected their crisis management. They included the following: external partnerships (with emergency responders, private organizations, etc.), time/staff/financial resources, other government agencies, speed of crisis onset (gradual v. sudden), unknowns regarding the crisis, public uncertainty, number of those affected, language, cultural considerations, the public's ability to respond to directives, and public understanding of the crisis. To reveal the effects of each of those variables culled from the Avery and Hocke (2011) study *generally* in managing crises, participants were asked to respond on a 1-5 Likert scale, with 1 being "not at all" and 5 being "a great deal" for the extent of each variable's effect on their overall crisis management. Prior to the general measure, the same set of factors was evaluated for the extent of their effects on the specific recalled recent crisis event, which was reported on a 1-5 scale from "not at all" to "a great deal." The measures above also tap into and extend Coombs' (2007) extended domains of victims, accidents, preventables. To answer research questions 2 and 3, the partnerships and resources questions were used to assess their associations with specific crisis types. To answer research question 4, participants were asked to record their level of agreement on a 1-5 scale (with 1 being strongly disagree and 5 being strongly agree) with the statement "my office's overall crisis management of the situation was strong." The final survey was pilot tested with a representative sample, including crisis

communications practitioners and scholars, prior to survey administration to screen for problematic questions and threats to validity. Given that this is an initial attempt to describe and summarize variables' correlations during early development and testing of these and extensions of these scales, exploratory factor analysis was used.

Results

Regarding crisis types reported, the breakdown was as follows: 207 (67.4%) natural disaster such as flooding or tornado, 15 (4.9%) political, 14 (4.6%) public health crisis, 31 (10%) acts of violence, 13 (4.2%) financial, 8 (2.6%) transportation, 7 (2.3%) social such homelessness or religious, 5 (1.6%) environmental, and 3 (1%) other. The two new categories of "financial" and "environmental" were created through open coding by the researchers for crises reported and described that fell into those categories.

Analysis of Research Questions

Factor analysis was used to answer RQ1 and reveal any underlying structure in the importance of the following variables in local governments' crisis management: time, money, staff, speed of crisis onset, unknowns, uncertainty, number affected, language, culture, public response to directives, and public understanding of crisis. Principle components analysis with Varimax rotation was conducted. A four-component solution met the criteria of having eigenvalues greater than 1 and accounting for 75% of the total variance.

After rotation, the four components accounted for the following variance: 26% (component 1), 18% (component 2), 17%(component 3), and 15% (component 4). Component 1

consisted of four of the 11 variables, all of which loaded onto one of the four components: how many unknowns in crisis, how much uncertainty about crisis, how quickly crisis started, and how many people crisis affected. This component was named *Nature of Crisis* as each of the variables pertained to the characteristics of the crisis situation. Component 2 consisted of three of the 11 variables: time resources, staff resources, and financial resources. This component was named *Organizational Resources* as each related to a resource organizations manage during crisis. Component 3 consisted of two variables: cultural considerations and language barriers. This component containing variables specific to the nature of the community was named *Community Culture*. Finally, Component 4 consisted of two variables: how well publics respond to directives and how well publics understood the crisis situation itself. Since both are relevant to how publics manage crisis, this component was named *Public Response*. Table 1 presents the loadings for each variable on each component.

TABLE 1
Factor Analysis Components for Crisis Management Variables

	COMPONENT 1	COMPONENT 2	COMPONENT 3	COMPONENT 4
<i>Unknowns</i>	.877	.155	.016	.137
<i>Uncertainty</i>	.844	.063	.031	.151
<i>Speed</i>	.779	.191	.031	.151
<i>Number</i>	.663	.184	.128	.115
<i>Affected</i>				
<i>Money</i>	.101	.804	.075	.111

<i>Time</i>	.192	.795	-.038	-.048
<i>Staff</i>	.192	.781	-.004	.171
<i>Language</i>	.058	.025	.950	.094
<i>Culture</i>	.066	.001	.939	.149
<i>Public Response</i>	.155	.114	.155	.869
<i>Public Understanding</i>	.233	.085	.098	.867

MANOVA was conducted to answer RQ2 and determine group differences among different types of crises on the extent of the effects time, financial, and staff resources on crisis management. The Box's Test was consulted to determine which test statistic to use; because it was significant, Pillai's Trace was selected (Mertler & Vannatta, 2002). The main effect of crisis type on the combined dependent variables was significant (Pillai's Trace = .118, $F(21,873)=1.707, p<.05$), multivariate $\eta^2 = .039$), although the effect size was very weak. Univariate ANOVA results indicate that the effects on crisis management of time resources ($F(7,291)=1.048, p=.398$), staff resources ($F(7,291)=1.72, p=.101$), and financial resources ($F(7,291)=1.594, p=.139$) did not significantly differ by crisis type. Results showing that individual ANOVAs had a significant main effect on the combined DV but not in isolation indicates they are more meaningful when taken together than considered separately, since MANOVA accounts for DV intercorrelations.

MANOVA was then conducted to determine group differences among different types of crises on the extent of effect of the following partnerships: other public agencies, non-profit community groups, state offices, federal offices, public health organizations, and private health providers. The Box's Test was consulted to determine which test statistic to use; since it was not significant, Wilks' Lambda was chosen (Mertler & Vannatta, 2002). The main effect of crisis type on the combined dependent variables was significant (Wilks' $\lambda = .580$, $F(49,1415)=3.274, p<0.01$, multivariate $\eta^2 = .075$). Univariate ANOVA results indicate that the effects on crisis management of partnerships with public agencies ($F(7,284)=2.19, p<0.05$), non-profit groups ($F(7,284)=2.14, p<0.05$), emergency response personnel ($F(7,284)=9.04, p<0.05$), state offices ($F(7,284)=2.44, p<0.05$), public health organizations ($F(7,284)=7.55, p<0.05$), and private health providers ($F(7,284)=2.96, p<0.05$) were all significantly different by crisis type.

Post hoc analyses reveal that the effects of the following partnerships on crisis management were significantly different by crisis type (see Table 2 for a presentation of all means): for *emergency responders*, public health crises more than act of violence; natural disaster more than act of violence; natural disaster more than political; transportation more than act of violence; financial more than political; social more than act of violence; financial more than environmental; for *relationships with other state agencies*, public health more than transportation; natural disaster more than transportation; political more than public health; political more than natural disaster; for *public health relationships*, public health more than transportation; public health more than political; public health more than financial; public health more than act of violence; natural disaster more than political; natural disaster more

than financial; natural disaster more than act of violence; environmental more than act of violence.

TABLE 2
Means for Different Partnerships' Effects on Management by Crisis Type

PARTNERSHIP	CRISIS TYPE	MEAN
Other Public Agencies	Public Health	4.23
	Natural Disaster	3.80
	Transportation	3.27
	Political	3.27
	Social	3.88
	Financial	4.17
	Environmental	5.00
	Act of Violence	3.00
Non-Profit Organizations	Public Health	3.00
	Natural Disaster	3.11
	Transportation	1.86
	Political	2.40
	Social	3.25
	Financial	2.60
	Environmental	2.00
	Act of Violence	2.33
Emergency Response Pers.	Public Health	3.77
	Natural Disaster	4.35
	Transportation	3.86
	Political	2.87
	Social	4.13
	Financial	4.50
	Environmental	3.67
	Act of Violence	2.00
State Offices	Public Health	3.77
	Natural Disaster	3.22
	Transportation	3.43
	Political	2.00
	Social	3.38
	Financial	2.93
	Environmental	3.67
	Act of Violence	2.50
Federal Agencies	Public Health	3.15
	Natural Disaster	2.84
	Transportation	2.71
	Political	1.93
	Social	2.50
	Financial	2.53

	Environmental	2.33
	Act of Violence	1.75
Public Health Organizations	Public Health	3.62
	Natural Disaster	2.81
	Transportation	1.57
	Political	1.60
	Social	2.38
	Financial	1.83
	Environmental	4.00
	Act of Violence	1.25
Private Health Providers	Public Health	2.77
	Natural Disaster	2.42
	Transportation	1.43
	Political	1.47
	Social	1.88
	Financial	2.17
	Environmental	1.33
	Act of Violence	1.50

RQ4 was asked to analyze the relationship between crisis type and how well city officials report managing that crisis. A univariate ANOVA was conducted; main effect results reveal a statistically significant difference between crisis types on success of crisis management ($F(1,299) = 9.906, p < .001$). Tukey post-hoc tests revealed the following statistically significant differences across crisis types: public health better than political; natural disasters better than political; transportation better than political; social better than political; financial better than political; and acts of violence better than political. Table 3 presents the mean scores for each crisis type.

TABLE 3

Mean Scores for How Well Different Crisis Types Were Managed

(on a 1-5 scale, with 1 being not at all well and 5 being very well)

CRISIS TYPE	MEAN SCORE
Public Health	4.54
Natural Disaster	4.46
Transportation	4.00
Political	3.06
Social	4.25
Financial	4.42
Environmental	4.33
Acts of Violence	4.54

Discussion

Theories of public relations adopting situational perspectives have generated robust, vibrant streams of research with rich applied value. Grunig’s situational theory of publics (1983, 1989) segments publics to predict their attitudes and behaviors. Coombs’ (1995) situational crisis communication theory matches crises response strategy to crisis type to guide strategy for specific situations. This study adopts a novel perspective to extend Coombs’ (1995) broad body of crisis work by focusing on the dynamics within *and* around the organization to

make more situationally nuanced, tailored prescriptions for crisis management and advance a new line of crisis communication theory, the integrated crisis context model. This perspective adopts a joint focus on the public, organization, and the crisis itself to build a more dynamic lens for crisis communication research and management.

Implications for Practice

We argue that the operating environment of the organization managing a crisis has not received adequate attention as a moderator of crisis preparation, response, and recovery; whereas certainly the nature of the crisis affects its management, even the most tailored recommendations for crisis management are rendered somewhat useless if the organization is unable to implement them due to challenges such as limited budgets or inefficient partnerships, amidst the many other considerations explored here. The results of this study with local government officials can be extended to crisis managers in many contexts who face unique challenges based on the nature of their organizations' operating environments. The integrated crisis context research considers the joint effects of internal and external variables on crisis management to initiate a blueprint for a model for crisis managers to follow. With a holistic consideration of resources for crisis management and how to maximize efficiency of use of resources along with alleviating strains deficient areas impose, crisis managers are better equipped to minimize negative impacts of crisis. This integrated crisis model's nuanced lens is sensitive to organizational challenges such as resources and publics that extend far beyond the nature of the crisis itself, greatly increasing its applied utility beyond a one-size-fits-all approach

for a variety of organizations facing very unique situations. Specific directions and strengths of relationships between variables present rich heuristic value for future model development in crisis communication theory and practice.

Further, this integrated crisis context research is generated through an approach that enhances its applied utility, methodological rigor, and theoretical contribution. Many crisis communication studies have asked practitioners and audiences to consider one specific crisis event or a hypothetical crisis; this more novel, and we argue externally valid, approach asked city officials to consider a recent crisis they had actually managed in order to capture the realities of crisis management considerations they were forced to navigate across a broad range of crisis types. The rich results gleaned from this approach and its nationally representative sample of local government officials in a range of community types proffer strong and encouraging evidence of the importance of advancing this line of research in a range of organizational contexts and for crises with different management goals, especially public safety. Local governments' crisis management, as demonstrated in the recent crises reviewed earlier, is an important place to start.

Variables of Crisis across Organizational Types

As a first step to extend extant crisis management models and to capture the unique situational considerations of the organization, audience, and crisis itself, we explore the underlying structure of a broad range of crisis variables. More specifically, factor analysis analyzes whether the importance of time, money, staff, speed of crisis onset, unknowns,

uncertainty, number affected, language, culture, public response to directives, and public understanding of crisis group together in salient, meaningful ways based on their effects on crisis management. Four components emerged: nature of crisis, organizational resources, community culture, and public response. Four variables fell in the nature of crisis component—unknowns, uncertainty, speed of onset, and number affected by the crisis. The three resources measured—time, staff, and financial—grouped together in the organizational resources component with strong loadings. The community culture component included audience language and cultural considerations in crisis management, while public response to directives and understanding of the crisis fell together in the public response component.

Thus, this research holistically considers the nature of the crisis, organizational resources, the nature of the community, and the public response in studying crisis management; it can be tested and extended by examining these and other emerging variables' unique effects across different crisis types. For example, cultural considerations such as language barriers and cultures of different publics are rarely taken into consideration in crisis communication research and management recommendations. However, organizations must be aware of how to best reach non-English speaking audiences with specific, culturally tailored messages. Protocol and procedures may be received and interpreted differently by publics depending on these factors. If a crisis response message is misinterpreted, public safety is compromised. Further, public response to directives and understanding of the crisis itself grouped as another component that can moderate crisis management effectiveness.

Practitioners should identify how well their publics understand the situation and, generally, the extent to which publics are willing and able to follow important directives.

Taking unique characteristics of the crisis situation into account beyond the nature of the crisis itself, such as unknowns, uncertainty, speed of onset, and number affected, extend situational considerations of SCCT (Coombs, 1995). Charting these variables on continuums may enable practitioners to identify issues that are particularly pressing for different crisis types and that are especially sensitive to nuances of the situation at hand. Time, staff, and financial resources also grouped together, and these resources are perhaps so important together that while their joint effect on crisis management was significant, in isolation they were not significantly different. One explanation might be how interrelated these resources are; local governments with strained budgets are likely to have less staff capacity and thus time amidst crisis. Resources had a significant overall main effect on crisis type, though, and are thus affecting different crisis types in different ways. These relationships should be parceled out and explored in future research through the integrated crisis context approach advanced here to make recommendations for how practitioners can most efficiently manage limited resources and utilize resources amidst crisis.

Applied Recommendations: Utilizing Partnerships

One key to managing crises with strained resources may be the efficient and strategic use of partnerships. There were many significant differences in the importance of partnerships in managing various crisis types that present numerous opportunities for future research to

direct engagement of partners for managing crisis. The importance of partnerships with public agencies, non-profit groups, emergency response personnel, state offices, public health organizations, and private health providers significantly differed across different crisis types. Relationships with emergency first responders affected management of public health crises, natural disasters, social crises, and transportation crises more than acts of violence; natural disasters more than political crises; financial more than political crises; and financial crises more than environmental ones. It is particularly interesting that emergency responders partnerships had more effect on managing public health, natural disasters, transportation, and social crises than acts of violence. It would seem that partnerships with emergency responders would have the most at stake managing crises involving violence. However, perhaps in those crises local governments displace management to those responders, somewhat absolving their responsibility in the crisis situation. In the case of the Sandy Hook shootings, law enforcement likely played the most critical role in management.

However, given that Rosenthal and Kouzman (1997, pp. 282-283) note that crisis situations “raise questions about the ineffectiveness of governmental agencies and authorities in preventing the occurrence,” local governments have much at stake in effective management of an act of violence such as a shooting; not only does failure to do so put their publics at risk, but also it compromises their perceived effectiveness at both preventing and managing crises. Numerous other significant differences in effects of partnerships across different crisis types indicate pressing areas to extend this integrated crisis context theory that informs when and how to engage different partners in crisis management. Crisis managers should consider their

organizations' shortcomings in resources and how to supplement those by working with partners who can assist in those areas. Amidst the rush of a crisis, local governments need to strategically engage the most important partners for that particular situation.

Crisis Management Varies by Type

Perhaps most interesting, even challenging, are the differences revealed here in perceived success in management by crisis type. Public health, natural disasters, transportation, social, and acts of violence were all reported to be managed significantly better than political crises; these internal crises were the most plaguing to city officials. On one hand, this is surprising in that there is more control in addressing an internal situation. On the other, the fact that they are "so close to home" challenges effective management when reputation is more threatened due to the direct involvement and internal responsibility. The political crises reported include misuse of public funds, drug dealing among city employees, law enforcement mishandling of citations, embezzlement, controversial redevelopment, city official infidelity, misuse of city funds, and even a city administrator using a credit card for a cash advance at a casino. Perhaps local governments were better prepared for and equipped to manage crises that were external as it is hard to accept these types of transgressions can and will occur internally.

One limitation of this research is the response rate, which would ideally fall above 15%. However, in evaluating response rates, one should consider the nature of the target participants. In this case, they were busy government officials, many in senior roles, managing

communications in government offices with overextended resources. Thus, it can be expected that this population has less time to participate in surveys than general population members. This plus the fact that the survey firm said this rate was consistent with other response rates for its surveys alleviated this concern. Another limitation of this data is that it relies on recall of a crisis situation; however, we asked for a recent crisis to overcome some of this threat to validity and reliability. Further, to avoid artificial context testing while reaching a broad sample, it was deemed to be the best approach.

Overall, this study extends crisis theory and management into an exciting and promising new domain through the integrated crisis context approach through its holistic focus on the organization, its partners, and the crisis itself. Partnerships, organizational resources, crisis nature, audience culture, and public response emerge as important domains for future crisis research and analysis. We offer an exciting foundation for that research through an integrated crisis context theory with new components to measure in crisis management and communication research to create a model for crisis management directives. This analysis also documents the importance of strategically engaging various partners in different crises, which is particularly important given the economic climate local governments, among many other organizational types, face.

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