

LIBRARY Michigan State University

This is to certify that the thesis entitled

TESTING THE EFFECTS OF APOLOGY AND COMPASSION RESPONSE IN PRODUCT-HARM CRISES IN SITUATIONAL CRISIS COMMUNICATION THEORY

presented by

YING-HSUAN LIN

has been accepted towards fulfillment of the requirements for the

M.A.	_ degree in	Department of Advertising, Public Relations, and Retailing
		4
		لاسك
	Major Pr	ofessor's Signature
	De	(· 7th, 207

MSU is an affirmative-action, equal-opportunity employer

Date

PLACE IN RETURN BOX to remove this checkout from your record.

TO AVOID FINES return on or before date due.

MAY BE RECALLED with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE
-		

6/07 p:/CIRC/DateDue.indd-p.1

TESTING THE EFFECTS OF APOLOGY AND COMPASSION RESPONSE IN PRODUCT-HARM CRISES IN SITUATIONAL CRISIS COMMUNICATION THEORY

By

Ying-Hsuan Lin

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

Department of Advertising, Public Relations, and Retailing

2007

ABSTRACT

TESTING THE EFFECTS OF APOLOGY AND COMPASSION RESPONSE IN PRODUCT-HARM CRISES IN SITUATIONAL CRISIS COMMUNICATION THEORY

By

Ying-Hsuan Lin

This study examines the effects of apology and compassion crisis responses on crisis outcomes in product-harm crises in the context of Situational Crisis

Communication Theory. A one-way between subject experiment (crisis response: correction (control), correction + compassion, correction + apology, and correction + compassion + apology) was conducted to test the main effect of crisis response on crisis outcomes. This study found no significant difference in the effects of apology and compassion responses on crisis outcomes. Also, there was no significant difference in the scores of perceived apology and perceived compassion. The perceptions of apology and compassion were found to mediate the effect of crisis response on crisis outcomes, such that strategies generating a stronger perceived compassion produce positive effects (e.g., higher external crisis responsibility, more sympathy, positive reputation, and higher behavioral intentions), whereas strategies producing a stronger perceived apology have both positive effects (e.g., less anger) and negative effects (e.g., higher internal crisis responsibility, high level of anger). Theoretical and practical implications are discussed.

ACKNOWLEDGEMENTS

I am grateful for the support from many people while I completed this thesis. I am especially indebted to my mother and father who always gave me the most encouragement and love, and my grandfather who unconditionally assisted me to pursue my dream. I am also thankful for the support that my brother, Ying-Chun, provided while I studied away from home.

I would like to thank my advisor, Dr. Yoonhyeung Choi, for her guidance and support on my thesis and my graduate life. It was my pleasure to be her advisee. I also want to recognize those remarkable supports from who has granted me the most precious knowledge. Thank Dr. Hee Sun Park and Dr. Teresa Mastin for their significant comments and advices on my thesis, Dr. W. Timothy Coombs for his comments and guidance on the development of my study, and Dr. Yi-Hui Huang for her training on my research skills.

I appreciate the support and concern that my friends, De-Sheng Chen, Chao-Yuan Chou, and Ji-Shian Suen, expressed continuously from Taiwan. Last, friends from Michigan: Xiaoxiao Chen, Karina Garciaruano, Hyunjin Kang, Wei-Ting Kao, Eric Kou, Wan-Yun Lee, Chen Teng, Tzu-Chia Tseng, Hsiao-Yun Wen, and Ching-Yi Wu. All of your company, support, and friendship I will always cherish.

TABLE OF CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vi
CHAPTER I	
INTRODUCTION	1
CHAPTER II	
LITERATURE REVIEW	4
Situational Crisis Communication Theory	4
Crisis Type: Product-Harm Crises	4
Responding to Product-Harm Crises: Apology vs. Compassion	7
CHAPTER III	
METHOD	15
Design and Stimulus Materials	15
Participants	17
Measures	17
Procedures	18
Data Analysis.	18
CHAPTER IV	
RESULTS	20
Confirmatory Factor Analysis and Reliability	20
Test of Research Questions	21
CHAPTER V	
DISCUSSION	31
Comparing the Effects of Apology and Compassion	31
Revision of Situational Crisis Communication Theory	35
Limitation and Further Research	37
NOTE	40
APPENDICES	41
Appendix A: Stimulus Materials	41
Appendix B: A Sample of Questionnaire	4 4
REFERENCE	53

LIST OF TABLES

Γable 1.	The Comparison of Apology and Compassion	8
Гable 2.	The Measured Items of Crisis Outcome Variables	19
Γable 3.	The Results of ANOVA tests: Crisis Response Strategies on Crisis Outcomes	22
Γable 4.	The Correlations among Crisis Response Strategies, Perceived Apology and Compassion, and Crisis Outcomes	24

LIST OF FIGURES

Figure 1.	The Model of Situational Crisis Communication Theory Proposed by Coombs (2007a)	5
Figure 2.	The Proposed Model of Situational Crisis Communication Theory	13
Figure 3.	The Proposed Model of Situational Crisis Communication Theory with Mediated Effects of Perceived Apology and Perceived Compassion.	14
Figure 4.	Model #1: The Model of SCCT Proposed by Coombs (2007a)	28
Figure 5.	Model #2: The Revised Model of SCCT	29
Figure 6.	Model #3: The Revised Model of SCCT with Mediated Effects of Perceived Apology and Compassion	30

CHAPTER I: INTRODUCTION

In the past decade, crises have occurred more frequently, generating devastating business outcomes. According to the Institute of Crisis Management, the number of business crises increased by 66% from 1996 to 2006 (Institute of Crisis Management, 2007). With the growing number of crisis occurrences, it has become a critical concern for public relations professionals to better understand how to effectively respond to crises.

Crisis is generally defined as "an event that brings, or has the potential for bringing, an organization into disrepute and imperils its future profitability, growth, and, possibly, its very survival" (Lerbinger, 1997, p. 4). When a crisis hits an organization, a crisis team comprising professionals from the fields of law, public relations, marketing, and finance must work together to effectively respond to the crisis (Fitzpatrick, 1995; Lee, Jares, & Heath, 1999). As crises could raise potential legal concerns among the victims involved, a discussion between public relations professionals and legal departments is essential in selecting crisis response strategies.

The development of Situational Crisis Communication Theory (SCCT) provides a framework for understanding the dynamics among crisis type, crisis response strategy (CRS), and various crisis outcomes (e.g., crisis responsibility, reputation, emotions, behavioral intentions; see Coombs, 2004, 2007a, 2007b). Different crisis response strategies were identified ranging from denial, excuse, justification, correction to apology (see Allen & Caillouet, 1994; Benoit, 1995, 1997; Caillouet & Allen, 1996; Coombs, 1995, 1999a; Ray, 1999). Among the CRSs, previous studies have documented that apology (i.e., "the organization takes full responsibility for the crisis, and asks

forgiveness for the crisis," Coombs, 1998, p. 180) is effective in a crisis with an internal locus of control (e.g., product-harm crisis; Coombs, 1998; Lyon & Cameron, 2004). Some studies found that apology has positive effects on crisis outcomes such as reputation (e.g., Lyon & Cameron, 2004). However, concerns have been also raised. For instance, Snowden (1994) argued that apologies in the business world are seen as a financial liability, a welcome mat for lawsuits. An organization acknowledges the responsibility for the crisis when apologizing, and places itself in a legal dilemma (Benoit, 1995; Coombs, 1995). It is not surprising to observe that most corporate executives avoid apologizing in crises for the same reason (Tyler, 1997).

Englehardt, Sallot, and Springston (2004) proposed the strategy of "compassion without blame" as an alternative for apology, which is defined as expressing and showing concern for victims in crises without apology (Coombs, 1999b). Compassion without apology was found to generate positive effects on crisis outcomes (e.g., reputation, behavioral intentions; Coombs, 1999b). If compassion has more positive effects on crisis outcomes than apology does, or if compassion has the same effect on crisis outcomes as apology does, compassion may be a promising alternative strategy for apology. This is an important concern for organizations in that compassion avoids the problem of accepting responsibility and welcoming lawsuits, and, at the same time, repairs the damaged organizational reputation. Despite the significant implications of comparing apology to compassion, only one study (e.g., Coombs, Fediuk, & Holladay, 2006) was found that compares the effects of apology, sympathy (i.e., compassion), and compensation on people's anger, where the authors did not find any significant differences.

Drawn from the SCCT (Coombs, 2007a), the purpose of this study is to examine

whether apology and compassion have different effects on crisis outcomes (e.g., perceived crisis responsibility of an organization, perceived organizational reputation, emotions, and behavioral intentions) in product-harm crises that cause tremendous financial costs and have devastating impacts on the survival of corporations (Siomkos, 1989). Data came from an experiment at Michigan State University.

CHAPTER II: LITERATURE REVIEW

1. Situational Crisis Communication Theory

Based on Attribution Theory (see Weiner, 1986; Weiner, Amirkhan, Folkes & Verette, 1987), Coombs (2004, 2007a, 2007b) developed the Situational Crisis Communication Theory (SCCT) to help public relations professionals understand how publics perceive crises, how they might respond to organizations' crisis responses, and how to develop crisis response strategies (Coombs, 2004, 2007a, 2007b).

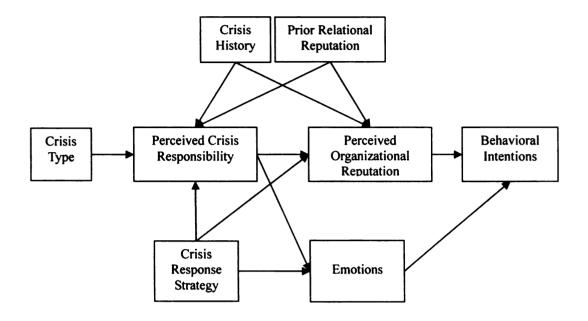
According to the SCCT (Figure 1), crisis type influences how people perceive the crisis responsibility of an organization (Coombs, 2007a). The perceived organizational crisis responsibility then affects people's perceived organizational reputation and emotions (e.g., anger, sympathy; see Coombs & Holladay, 2005) which influence behavioral intentions. The organization's crisis history and prior relational reputation were also proposed to influence how people perceive the organization's crisis responsibility and reputation. Public relations practitioners can utilize different CRSs to generate more favorable crisis outcomes, including perceived organizational crisis responsibility, perceived organizational reputation, emotions, and behavioral intentions. Thus, in this study, the crisis outcome variables in SCCT are employed as dependent variables in comparing the effects of apology and compassion.

2. Crisis Type: Product-Harm Crises

The SCCT posits that different crisis types are associated with different levels of initial crisis responsibility (Coombs, 2007b). In different types of crises, therefore, organizations should use different CRSs in order to effectively manage crises (Coombs, 1995).

Figure 1

The Model of Situational Crisis Communication Theory Proposed by Coombs (2007a)



The present study examines how different crisis responses influence crisis outcomes in product-harm crises for a couple of reasons. First, product-harm crises are defined as discrete, well-publicized incidents wherein products are found to be defective or dangerous (Siomkos & Kurzbard, 1994). The causes of product-harm crises range from manufacturer's negligence to product misuse to sabotage (Siomkos, 1989). No matter what the causes are, product-harm crises have devastating impacts on the survival of corporations. Tremendous financial costs come with product-harm crises because of the cost of potential product recalls, launching of replacement products, and brand equity loss (Dawar & Pillutla, 2000; Siomkos, 1989). Second, product-harm crises occur more frequently than ever before because of environmental changes such as stringent product-safety legislation, and demanding customers (Birch, 1994; Patterson, 1993).

Previous studies have developed several dimensions to categorize crises:

internal-external (Coombs, 1995), intentional-unintentional (Coombs, 1995), high-low deniability (Marcus & Goodman, 1991), concrete-diffuse victims (Marcus & Goodman, 1991), and remote-relevant environment (Egelhoff & Sen, 1992). Among the various categorizations, Coombs' (1995) dimensions of internal-external and intentional-unintentional are extensively used in crisis communication studies (e.g., Arpan & Sun, 2006; Englehardt et al., 2004; Lyon & Cameron, 2004). "Internal" refers to the crisis having occurred because of actions taken by the organization itself, whereas "external" indicates the crisis was caused by something outside the organization (Coombs, 1995). "Intentional" indicates the crisis was incurred purposely, whereas "unintentional" refers to a crisis not purposely brought about (Coombs, 1995).

When placing product-harm crises in Coombs's (1995) dimensions, they can be viewed as accidents (unintentional crises by internal actors), transgressions (intentional crises by internal actors), or terrorism (intentional crises by external actors). For instance, product defect is a type of accident, which is an unintentional action performed by internal actors (Coombs, 1995). However, if the corporation knowingly sells a defective product to consumers, this product-harm crisis is categorized as transgression (Coombs, 1995). When the product-harm is caused by actions made by external actors (e.g., food poisoning), the crisis is categorized as terrorism (Coombs, 1995). Product-harm crises with transgression are generally perceived as unethical since corporations have a higher controllability of transgression, should have prevented transgressions from happening, and should apologize for the crisis (Coombs, 1995; Russell, 1982). Hence, this study examines the effect of crisis response with a focus on accidental product-harm crises which reserve space for organizations to select the crisis response strategy.

3. Responding to Product-Harm Crises: Apology vs. Compassion

For public relations practitioners, how to respond to crises is a major factor determining success in dealing with product-harm crises (Siomkos, 1989). Siomkos (1989) found that corrective strategies such as voluntary recalls generate more positive effects than involuntary recalls. Unlike previous studies examining how product recalls affect crisis outcomes (e.g., Siomkos, 1989; Siomkos & Kurzbard, 1994; Siomkos & Shrivastava, 1993), this study considers the effects of other crisis response strategies in product-harm crises. The present study emphasizes the legal concerns in crises, and investigates whether apology and compassion generate different effects while the recalls are essential in product-harm crises.

Defining Apology and Compassion. Compassion is different from apology. To clarify the concepts of compassion and apology, the definitions and examples of compassion and apology are presented in Table 1. Apology is defined as the organization admitting to committing the offensive act, taking full responsibility for the crisis, and asking forgiveness for the crisis (Benoit, 1997; Coombs, 1998). Compassion refers to organizations' expressing and showing concern for victims in crises without apology (Coombs, 1999b). For example, the organization may say that it feels bad for victims. Englehardt et al. (2004) provided some examples of compassion:

Certainly our thoughts and prayers and our sincere emotions go out to the people who were on board the airplane, their families, their loved ones, their friends, that includes both the customers aboard that airplane and ValuJet's crew members. It is impossible to put into words how devastating something like this is to human beings who care. (p.138)

Table 1

The Comparison of Apology and Compassion

	Apology	Compassion
Definition	 The organization admits committing the offensive act, confesses and begs forgiveness (Benoit, 1997) The organization takes full responsibility for the crisis, and asks forgiveness for the crisis (Coombs, 1998). 	 The organization expresses and shows concern for victims in crises (Coombs, 1999b) The organization expresses compassion for individuals adversely affected in the crisis situation without accepting blame for the crisis (Englehardt, et al., 2004). The organization expresses regards, feelings, and/or sympathy without apologizing (Huang, Lin, & Su, 2005).
Elements	 Admit fault Take responsibility for crises Beg forgiveness 	 Show concern for victims or people affected Express sympathy
Examples	 "I apologize to all of you who were affected, directly or indirectly" (Benoit, 1997, p. 181). "I am deeply disturbed that AT&T was responsible for a disruption in communications service" (Benoit & Brinson, 1994). "We have made errors. But if we haven't done right up to now, we are sure going to try to do it now" (Brinson & Benoit, 1996, p. 36). "Exxon accepted responsibility for the tragic accident the day it occurred" (Tyler, 1997, p. 54). "Very clearly, one of the things we didn't do well" (Brinson & Benoit, 1996, p.36). 	 The organization acknowledges "it feels badly for workers and community members, pays for relocating community members, and continues to pay workers during the downtime to repair the crisis" (Coombs, 1999b, p. 132). "We at Exxon are especially sympathetic to the residents of Valdez and the people of the state of Alaska" (Tyler, 1997, p. 54) "Certainly our thoughts and prayers and our sincere emotions go out to the people who were on board the airplane, their families, their loved ones, their friends, that includes both the customer aboard that airplane and ValuJet's crew members. It is impossible to put into words how devastating something like this is to human beings who care" (Englehardt, et al., 2004, p.138). "I have no interest in talking about financial implications at this time. The concern of ValuJet's management team is for the human beings involved in the tragic accident and we will talk about financial matters at another time" (Englehardt, et al., 2004, p.139).

Huang, Lin, and Su's (2005) study provides support for the difference between compassion and apology. They conducted a principal component factor analysis of crisis communicative strategies, and found "apologize and/or ask for forgiveness" and "show regards and/or distress to express feelings" are located in different factors. Although Huang et al. (2005) did not name the strategy of "showing regards/sympathy" as compassion, their definition of showing regards/sympathy reflects the concept of compassion.

Effects of Apology and Compassion. Several studies have shown that apology has positive impacts on crises from an internal locus of control, either accidents or transgressions (Coombs, 1998; Lyon & Cameron, 2004). Coombs (1998), for instance, argued that apology is effective in transgression, when the organization did something wrong and knowingly placed the public at risk. Lyon and Cameron (2004) found the apologetic style of response had significant positive effects on respondents' attitudes and supportive behavioral intentions toward the organization, such as purchasing the company's products. Apology also is a suitable response strategy for transgression since the organization did something wrong intentionally (Coombs, 1995). By apologizing, however, the organization acknowledges responsibility for the crisis (Englehardt et al., 2004), which opens up the issue of liability (Coombs, 1999b; Fitzpatrick, 1995; Fitzpatrick & Rubin, 1995; Tyler, 1997). This legal concern tends to make organizations try to avoid apologizing in crises.

Compassion provides an alternative strategy for apology because compassion accepts a much lower responsibility, and protects organizations from lawsuits (Coombs, 1999b). Previous studies have documented the positive effects of compassion in internal

control crises such as product-harm and industrial accidents (Coombs, 1999b; Siomkos & Shrivastava, 1993). For instance, organizational reputation was reported to be significantly improved as the crisis responses showed more compassion for the victims in internal control crises (Siomkos & Shrivastava, 1993); more positive perception of organization reputation and behavioral intention were also found when compassion strategy was used (Coombs, 1999b). Although studies showed that compassion has positive effects in crises from an internal locus of control (Coombs, 1999b; Englehardt et al., 2004), it should be noted that it does not mean compassion works effectively in every crisis. In transgressions, for example, organizations committed a fault intentionally, and thus apology is necessary to the victims (Coombs, 1995). In the case of accident, however, the unintentional and generally random nature of accidents gives organizations an opportunity to choose to apologize or to choose not to apologize (Coombs, 1995).

Another reason for not apologizing comes from the characteristics of uncertainty in crises. Usually, in the beginning of a crisis, the situation is uncertain and unclear (Sellnow & Ulmer, 1995), and no one knows who should be responsible for the crisis. However, a week after the occurrence of a crisis is the critical period for crisis communication (Englehardt et al., 2004). Media and stakeholders demand immediate crisis responses from organizations during times of great uncertainty and surprise (Seeger, Sellnow & Ulmer, 2001). At this time, if the organization moves too quickly in accepting total responsibility for the crisis, apology will actually harm the organization more than benefit it (Sellnow & Ulmer, 1995).

From the above discussion, this study proposes compassion as an alternative strategy in the beginning of accidental product-harm crises and compares the effects of

compassion and apology on crisis communication outcomes. Among the various crisis response effect studies, Coombs, Fediuk, and Holladay's (2006) study compared the effects of accommodative crisis response strategies, including apology, sympathy (i.e., compassion) and compensation, on people's anger in accidents (i.e., chemical explosion), but found no significant difference. The methodological argument of possible mediating states in testing message effects made by O'Keefe (2003) may explain why no significant difference was found in the study.

In persuasive message effect study, researchers design different messages (e.g., strong vs. weak fear appeal message) to examine the effect of the message variation on communication outcomes, and treat the assessments of psychological states (e.g., the degree of fear aroused) as a message manipulation check. O'Keefe (2003) argued that researchers actually have examined the relationships between psychological states (e.g., aroused fear) and persuasive outcomes. According to O'Keefe, researchers then generate a conclusion that a message that arouses a high level of fear should be created to strengthen people's behavioral intentions without knowing what message attributes actually arouse a lot of fear, and how to produce the message (O'Keefe, 2003). He suggested developing messages with the definitions expressed in terms of intrinsic features and proposed that the assessment of psychological states can be possible variables mediating the effect of messages on the eventual outcomes. In a fear appeal study, for instance, a high possibility of occurrence (message feature) may arouse a high degree of fear (mediated state), and the aroused fear (mediated state) affects people's behavioral intentions (persuasive outcome).

Following O'Keefe's (2003) guidelines, the present study will construct apology

and compassion crisis response messages based on message features. Psychological states (i.e., how people perceive the apology and compassion response) will be measured to test whether there is a difference in how people perceive two crisis response strategies (i.e., perceived apology and perceived compassion). Thus, the following research question is proposed.

RQ1: Will organization's apology and compassion responses be perceived as intended by publics? In other words, will there be a difference in perceived apology and compassion after each message exposure?

In the SCCT, there are four crisis outcomes: crisis responsibility, organizational reputation, emotions, and behavioral intentions (Coombs, 2007a). Crisis responsibility is the extent to which people believe organizational actions caused the crisis (Coombs, 1995). Reputation is how well or poorly people perceive an organization to be meeting their expectations (Bromley, 2000; Wartick, 2002). Previous studies have found various emotions (e.g., anger, sympathy) aroused in crisis situation (Coombs & Holladay, 2005; Jorgensen, 1996). For instance, anger is evoked when the organization should have done something to prevent the crisis (e.g., product recall), whereas sympathy is aroused from non-victims when the organization is viewed as a victim of the crisis (Coombs & Holladay, 2005). This study concerns how apology and compassion responses generate different effects on the above crisis outcomes, and proposes the following research question.

RQ2: Will apology crisis responses generate more favorable effects on crisis outcomes than compassion crisis responses?

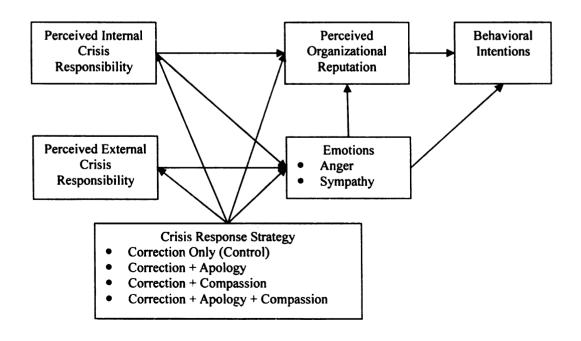
Situational Crisis Communication Theory was built to provide a common set of

concepts that allow researchers to integrate their findings on different aspects in crisis communication (Coombs, 2007b). Several studies have suggested a revision of the model of SCCT (e.g., Choi & Lin, 2007; Coombs, 2004). Choi and Lin (2007), for example, examined the relationships between emotions and crisis outcomes in SCCT, and found a significant path from emotions (e.g., anger) to organizational reputation. Coombs (2004) suggests that external control circumstances preventing the organization from controlling the event may be useful in predicting emotions. He also points out that external control may be a mitigating factor in the effect of crisis response strategy (Coombs, 2004). Therefore, this study adds a path from emotions to reputation and perceived external responsibility as a mediated variable from the crisis response strategy and emotions in the revised model of SCCT (Figure 2). The following research question is proposed.

RQ3: Will the revised model of SCCT in Figure 2 hold?

Figure 2

The Proposed Model of Situational Crisis Communication Theory

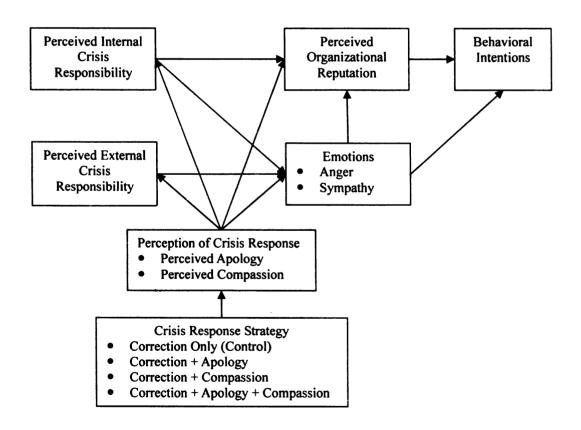


As O'Keefe (2003) argues, psychological states are possible variables mediating the effect of message features on persuasive outcomes. Therefore, the study proposes a model with perceived apology and compassion mediating the effects of crisis response on crisis outcomes (Figure 3), and the following research question.

RQ4: Will the model fit with mediated effects of perceived apology and compassion be better than that without the mediated effects?

Figure 3

The Proposed Model of Situational Crisis Communication Theory with Mediated Effects of Perceived Apology and Perceived Compassion



CHAPTER III: METHOD

1. Design and Stimulus Materials

A one-way between-subject design experiment was employed to test the proposed research questions. News stories were used as stimuli because news shapes consumers' perceptions of a company in crisis (Carroll & McCombs, 2003; Deephouse, 2000; Wartick, 2002). Each news story contained two aspects: the description of the crisis scenario, and the crisis response by the corporations involved in the crisis. Based on the same crisis scenario, crisis response was manipulated into four conditions: control, compassion, apology, and apology plus compassion.

Among various product-harm crises, product recall crises in the food industry were chosen as the scenario for two reasons. First, food is essential to people of any gender, at any age, and in any occupation. Second, food product recall occurs frequently in the United States. In 2006, for example, more than 200 recalls were announced by the Food and Drug Administration. Real crises announced in Recall.gov

(http://www.recalls.gov/food.html) and news stories related to the crises were referred to establish the crisis scenarios. Two crises involving defective products of milk and soup were retrieved and revised to establish the crisis scenarios. Two cases were used because of the concern that the conclusions drawn from a single-message design might be too unique to be generalized to others (see more discussion in Reeves & Geiger, 1994). The target products were chosen to make it relevant to the participants. Company and product names were replaced by fictitious names to eliminate the influence of crisis history and relationship history (Coombs, 1995). The cause of the incident was not mentioned in the crisis description in order to reflect the uncertain situation at the beginning of a crisis (see

Sellnow & Ulmer, 1995).

The stimulus materials were manipulated based on the definitions and examples found in the previous literature (see Table 1). Compassion was manipulated by emphasizing "showing concern for victims or people affected, and expressing sympathy"; apology by "admitting faults, taking the responsibility for crises, apologizing, and begging forgiveness." In the "compassion and apology" condition, the message content from compassion and apology were integrated and shown in crisis responses. The length of apology and compassion responses was carefully controlled (average = 49 words).

In crisis response strategy, product recall belongs to repair strategy under corrective action (Benoit, 1997). Instructing information (e.g., how to return products) should be provided to stakeholders with the organization's corrective actions (Coombs & Holladay, 2006). Since voluntary recalls are more effective than involuntary ones (Siomkos, 1989), responses containing voluntary product recall information were included with each crisis response. In other words, each crisis scenario was followed by the crisis response of correction (i.e., product recall information) plus "no other response" (control condition), "compassion," "apology," or "apology and compassion." A total of eight news stories were constructed to respond to two crisis scenarios (see Appendix A).

In order to check whether the level of legal concern between apology and compassion condition is different, two legal experts (professors in law school) were asked to independently check the manipulation of crisis responses with a special emphasis on the possibility of lawsuits. They verified that apologetic responses contain a high level of organizational crisis responsibility and have a high possibility of welcoming lawsuits, whereas compassionate responses contain a low level of crisis responsibility and have a

low possibility of welcoming lawsuits.

2. Participants

A total of 151 (60 males, 91 females) undergraduate students at Michigan State University participated in the experiment for extra credit. The average age of the participants was 21. Caucasian (83%), Asian (10%), Hispanic (3%), African American (2%), Native American (1%), and others (1%) made up the sample.

3. Measures

Measured variables in this study included perceived apology, perceived compassion, perceived crisis responsibility, perceived organizational reputation, emotions (i.e., anger and sympathy), and behavioral intentions. Each participant rated his or her answers on a 7-point scale anchored by 1 = strongly disagree and 7 = strongly agree.

Perceived apology and perceived compassion were measured using items developed based on the definitions of apology and compassion (Benoit, 1997; Coombs, 1998, 1999b; Coombs & Holladay, 2006; Coombs et al., 2006; Englehardt et al., 2004). The four measured items for *perceived apology* were (1) the company admitted its fault; (2) the company accepted responsibility for the crisis; (3) the company begged forgiveness; and (4) the company apologized for the crisis. *Perceived compassion* was measured using four items: (1) the company was concerned about people affected by the crisis; (2) the company was sympathetic about what happened; (3) the company cared about the feelings of people affected by the crisis; and (4) the company emphasized protecting the victims of the crisis.

Perceived crisis responsibility was measured using five items adapted from previous studies (Coombs & Holladay, 2002; Klein & Dawar, 2004). Perceived

organizational reputation was measured using five items obtained from Coombs and Holladay's (2002) study. Two emotions, anger and sympathy toward the organization, were measured in this study because they are salient emotions to crisis management (Coombs & Holladay, 2005). Six items adapted from previous studies (Coombs & Holladay, 2005; Jorgensen, 1996; Weiner et al., 1987) were used to measure anger and sympathy toward the organization. Behavioral intentions were measured by using four items (Coombs & Holladay, 1996, 2001; Lyon & Cameron, 2004). The measured items for the above variables are listed in Table 2.

4. Procedures

Each participant received a packet containing an informed consent form, two news stories with the same crisis response strategy, and questionnaires for each news story (see Appendix B). For example, participants in the compassion condition read two news stories containing food product-harm crisis information and compassion crisis responses, and answered questions after each exposure. Participants were asked to answer demographic questions after the completion of the questionnaire. Finally, each participant was debriefed and thanked.

5. Data Analysis

Data were entered into SPSS. The tests of reliability and confirmatory factor analyses were first conducted to test the validity and reliability of each scale. Later, the mean of each variable was computed from the items measured in the two cases. Analysis of variance (ANOVA) was used to test the effects of crisis response on crisis outcomes (RQ1 and RQ2). Path analysis (AMOS) was used to test the proposed model of SCCT, and to estimate the standardized path coefficients (RQ3 and RQ4).

Table 2

The Measured Items of Crisis Outcome Variables

Variables	Measured Items	References
Perceived Crisis Responsibility	 Perceived Internal Crisis Responsibility The incident is the fault of the company, The company should be held accountable for the incident The blame for the crisis lies with the company. Perceived External Crisis Responsibility Circumstances, not the company, are responsible for the crisis. The blame for the crisis lies in the circumstances, not the company.	Coombs and Holladay (2002); Klein and Dawar (2004)
Perceived Organizational Reputation	 The company is dishonest. I do not trust the company to tell the truth about the incident. Under most circumstances, I would be likely to believe what the organization says The company is concerned with the well-being of its publics. The company is not concerned with the well-being of its publics. 	Coombs and Holladay (2002)
Emotions	 Anger I have felt angry toward the company. I have been resentful at the way the company responded to the incident. The company has irritated me. Sympathy I have felt sympathy for the company. I have felt kind about the company. I have felt sorry for the company. 	Coombs and Holladay (2005); Jorgensen (1996); Weiner, et al. (1987)
Behavioral Intentions	 I would purchase the company's products. I would say nice things about this company. I would recommend the company's products to my friends. I would invest in this company. 	Coombs and Holladay (1996, 2001); Lyon and Cameron (2004)

CHAPTER IV: RESULTS

1. Confirmatory Factor Analysis and Reliability

The results of confirmatory factor analysis indicated that the measured items of perceived organization reputation, anger, sympathy, and behavioral intentions were loaded in their appropriate factors. The results of reliability analysis showed a Cronbach's alpha of .79 for reputation, .79 for anger, .88 for sympathy, and .89 for behavioral intentions.

Perceived Apology and Perceived Compassion. The results of confirmatory factor analysis showed that perceived apology and perceived compassion are two highly correlated factors. The 1-factor model of perceived apology and compassion had a poor fit, χ^2 (20) = 272.62, p < .001; CFI = .87; RMSEA = .21 1 , whereas the 2-factor model with the correlation between perceived apology and compassion had a better model fit than the 1-factor model, χ^2 (19) = 139.40, p < .001; CFI = .94; RMSEA = .15. The value of CFI increased to .94 from .87, and the value of RMSEA decreased to .15 from .21. The correlation between perceived apology and perceived compassion was .80 (p < .001). Thus, in later analysis, perceived apology and perceived compassion were treated as two correlated variables. The results of reliability analysis showed a Cronbach's alpha of .81 for perceived apology, and .94 for perceived compassion.

Perceived Crisis Responsibility. The results of exploratory factor analysis showed that the five items of the perceived crisis responsibility were loaded in two factors. Three items indicating that the blame lies with the company were loaded in one factor (i.e., perceived internal crisis responsibility), whereas two items indicating that crisis responsibility lay in the circumstances were loaded in another factor (i.e., perceived

external crisis responsibility). The two factors accounted for 78% of the variance. Each item was loaded on its appropriate factor; factor loadings ranged from .83 to .90.

The results of confirmatory factor analysis also indicated that internal crisis responsibility and external crisis responsibility are two highly correlated factors. The 1-factor model had a poor fit, χ^2 (5) = 133.08, p < .001; CFI = .76; RMSEA = .29, whereas the 2-factor model with the correlation between internal and external responsibility had a very good model fit, χ^2 (4) = 2.677, p = n.s.; CFI = 1.00; RMSEA = .00. The correlation between internal and external responsibility was -.37 (p < .001). Therefore, in later analysis, perceived crisis responsibility was separated into two correlated variables: perceived internal responsibility and perceived external responsibility. The Cronbach's alpha values in perceived internal responsibility and perceived external responsibility were .81 and .78, respectively.

2. Test of Research Questions

RQ1: Will organization's apology and compassion responses be perceived as intended by publics? In other words, will there be a difference in perceived apology and compassion after each message exposure?

The results of ANOVA (see Table 3) showed that there was a significant difference in perceived apology among four crisis response conditions, F(3, 147) = 8.67, p < .001. The results of Scheffe tests revealed significant differences between the control condition (M = 4.19, SD = 1.10) and the experimental conditions (apology: M = 5.34, SD = 0.86; compassion: M = 4.82, SD = 1.10; apology plus compassion: M = 5.02, SD = 0.96). However, no significant difference was found among the experimental conditions.

Table 3

The Results of ANOVA tests: Crisis Response Strategies on Crisis Outcomes

	Control	Apology	Compassion	Apology plus Compassion	Test of ANO	VA
	Mean	Mean	Mean	Mean		
Crisis Outcomes	(S.D.)	(S.D.)	(S.D.)	(S.D.)	F (df1, df2)	p
Perceived	4.19 a	5.34 ^b	4.82 ^b	5.02 b	F(3, 147) = 8.67	< .001
Apology	(1.10)	(0.86)	(1.10)	(0.96)		
Perceived	4.17 a	5.12 b	5.07 ^b	5.05 ^b	F(3, 147) = 6.23	.001
Compassion	(1.17)	(1.10)	(1.11)	(1.07)		
Perceived	4.31	4.57	4.61	4.27	F(3, 147) = 1.00	.395
Internal	(1.17)	(0.98)	(0.97)	(1.17)		
Crisis						
Responsibility						
Perceived	3.30	3.46	3.56	3.52	F(3, 147) = 0.43	.734
External	(1.15)	(1.10)	(0.95)	(1.09)		
Crisis						
Responsibility						
Perceived	4.77 a	5.36 b	4.99	4.96	F(3, 147) = 3.07	.030
Organizational	(1.00)	(0.84)	(0.81)	(0.84)		
Reputation						
Anger toward the	3.50	3.02	3.35	3.54	F(3, 147) = 1.90	.132
Organization	(1.02)	(1.05)	(1.14)	(1.08)		
Sympathy toward	3.27	3.58	3.74	3.72	F(3, 147) = 1.37	.253
the Organization	(1.39)	(1.05)	(0.94)	(1.07)	- · · ·	
Behavioral	2.54	3.14	2.83	3.13	F(3, 147) = 1.11	.349
Intentions	(1.17)	(1.02)	(1.10)	(0.75)	, ,	

For perceived compassion, ANOVA results showed that there was a significant difference in perceived compassion among the four crisis response conditions (F (3, 147) = 6.23, p < .01). The results of Scheffe tests revealed significant differences between the control condition (M = 4.17, SD = 1.17) and the experimental conditions (apology: M = 5.12, SD = 1.10; compassion: M = 5.07, SD = 1.11; apology plus compassion: M = 5.05, SD = 1.07). However, differences in perceived compassion among experimental groups were not significant.

RQ2: Will apology crisis responses generate more favorable effects on crisis outcomes than compassion crisis responses?

The ANOVA was conducted to test whether different crisis responses generate different effects on crisis outcomes (see Table 3). Results showed that there was no significant effect of response strategies on perceived internal crisis responsibility, F(3, 147) = 1.00, p = n.s., and perceived external crisis responsibility, F(3, 147) = 0.43, p = n.s.

A significant difference was found in perceived organizational reputation, F(3, 147) = 3.07, p < .05. The results of Scheffe tests showed that only participants in the apology condition (M = 5.36, SD = 0.84) perceived a more positive organizational reputation than those in the control condition (M = 4.77, SD = 1.00). However, the differences of perceived organizational reputation among the experimental groups were not significant (apology: M = 5.36, SD = 0.84; compassion: M = 4.99, SD = 0.81; apology plus compassion: M = 4.96, SD = 0.84). As for emotions and behavior intentions, no significant difference among the four crisis response conditions was found in anger toward the organization, F(3, 147) = 1.90, p = n.s., sympathy toward the organization, F(3, 147) = 1.37, p = n.s., and behavioral intentions, F(3, 147) = 1.11, p = n.s.

RQ3: Will the revised model of SCCT in Figure 2 hold?

Path analysis (AMOS) was used to test the models, and to estimate the standardized path coefficients. In order to test the effects of crisis response strategy, dummy variables were created. A one indicates the presence of the strategy, whereas a zero indicates no presence of the strategy. The correlations among all variables are shown in Table 4.

Table 4

The Correlations among Crisis Response Strategies, Perceived Apology and Compassion, and Crisis Outcomes

		2	3	4	5	9	7	∞	6	10	=
	1. Dummy: Compassion 1	34***	33***	02	=:	60.	.05	02	00.	80.	60'-
5.	2. Dummy: Apology	_	34**	.27***	.13	.07	00:-	.23**	18*	00.	60.
	Dummy: Apology plus		1 .09 .10 .03 .04 .10 .07 .08	60.	.10	60	.03	04	01.	.07	80.
4.	Perceived Apology			-	.72***	.22**	.02	.52***	24**	.12	80.
5.	Perceived Compassion				_	*81.	.12	.62***	21**	Ε.	.15*
9	6. Internal Responsibility					_	22**	.00	.17*	04	18*
7.	External Responsibility						-	. 00	.13	.37***	.37***
∞	Reputation							-	47***	=	1.
6	Anger								_	05	.07
10.	10. Sympathy										.50***
Ξ.	Behavioral Intentions										-

Note: * indicates p < .05, ** indicates p < .01, and ***indicates p < .001

Model #1 based on Coombs's (2007a) SCCT was tested first (see Figure 4). In this study, crisis type (i.e., product harm crisis) was fixed. The effect of organizational crisis history and prior relationship/reputation was eliminated because the present study used fictitious company and product names. The model fit indices indicated that model #1 has a poor fit, and led to a rejection of model #1, χ^2 (7) = 48.09, p < .001; CFI = .77; RMSEA = .20.

In model #2 (Figure 5), the paths from emotions to reputation were added, and the perceived external responsibility was placed as a mediated variable between crisis response strategy and emotions (see Figure 3). Although the results of the model test did not indicate that model #2 has a very good fit, χ^2 (7) = 19.52, p < .01; CFI = .94; RMSEA = .11, it is clear that model #2 has a better fit than model #1. The value of CFI increased to .94 from .77, and the value of RMSEA decreased to .11 from .20.

In model #2, the dummy variable for apology response was a significant predictor of reputation (standardized B = .18, p < .05), and anger toward the organization (B = .23, p < .05). Perceived internal crisis responsibility was a significant predictor of anger (B = .24, p < .01) although it did not significantly predict reputation (B = .09, p = n.s.) and sympathy (B = .03, p = n.s.). Perceived external responsibility was a significant predictor of both anger (B = .19, p < .05) and sympathy (B = .36, p < .001). While anger was a significant predictor of reputation (B = .46, p < .001), sympathy was not a significant predictor of reputation (B = .08, p = n.s.). Both anger and sympathy significantly predicted behavioral intentions (anger: B = .17, p < .05; sympathy: B = .49, p < .001). Perceived organizational reputation was a significant predictor of behavioral intentions (B = .16, D < .05).

RQ4: Will the model fit with mediated effects of perceived apology and compassion be better than that without the mediated effects?

In model #3 (Figure 6), perceived apology and perceived compassion were added to see whether the model with mediated states explains the dynamics better. The model fit indices indicated that model #3 has a good fit, χ^2 (24) = 35.84, p = n.s.; CFI = .97; RMSEA = .06.

As Figure 6 shows, all paths from dummy variables (i.e., compassion, apology, and compassion plus apology responses) to mediated variables (i.e., perceived apology and perceived compassion) were significant. Moreover, compared with model #2, model #3 has more significant paths. In other words, model #3 explains the paths among crisis outcome variables better than model #2. Therefore, it is better to include perceived apology and perceived compassion as mediated variables to explain the effects of crisis response strategy on crisis outcomes.

In model #3, perceived apology was a significant predictor of perceived internal crisis responsibility (B = .18, p < .05), and anger toward the organization (B = -.19, p < .05). Perceived compassion significantly predicted perceived external crisis responsibility (B = .23, p < .05) and organizational reputation (B = .49, p < .001). Internal crisis responsibility was a significant predictor of anger (B = .29, p < .001) although it was not a significant predictor of reputation (B = -.03, p = n.s.) and sympathy (B = .02, p = n.s.). External crisis responsibility was a significant predictor of both anger (B = .22, p < .01) and sympathy (B = .37, p < .001). While anger was a significant predictor of reputation (B = -.34, p < .001), sympathy was not a significant predictor of reputation (B = -.34, p < .001), sympathy was not a significant predictor of reputation (B = -.34, p < .001), sympathy significantly predicted behavioral intentions

(anger: B = .17, p < .05; sympathy: B = .49, p < .001). Perceived organizational reputation was a significant predictor of behavioral intentions (B = .16, p < .05).

Model #1: The Model of SCCT Proposed by Coombs (2007a)

Figure 4

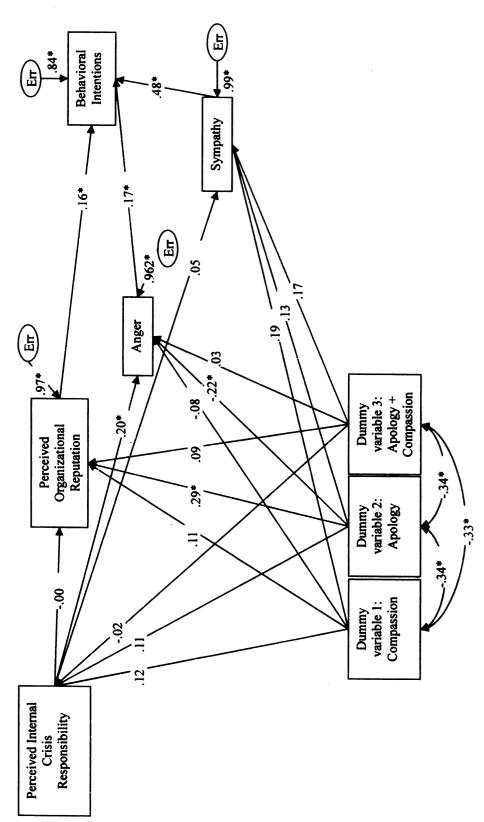
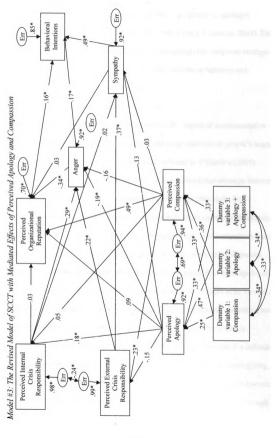


Figure 5

Model #2: The Revised Model of SCCT

88. Behavioral Intentions (E) Sympathy -.362 .030 Anger EFF 00. Apology + Compassion Dummy variable 3: Perceived Organizational Reputation 60 Dummy variable 2: Apology .05 Dummy variable 1: Compassion 7 60-0. Perceived Internal Responsibility Perceived External Responsibility Crisis Crisis

Figure 6



CHAPTER V: DISCUSSION

Some studies have examined how different CRSs (e.g., denial vs. apology) influence erisis outcomes in SCCT (e.g., Jorgensen, 1996; Lyon & Cameron, 2004). This study touched upon the important issue of liability in designing crisis response strategies and empirically tested the effects of apology (associated with more liability) and compassion (associated with less liability) in SCCT.

1. Comparing the Effects of Apology and Compassion

A previous study (Coombs et al., 2006) compared the impact of accommodative crisis response strategies (e.g., apology, sympathy, and compensation) on people's anger, but found no significant difference. The present study referred to O'Keefe's (2003) argument on testing the effect of message features, and considered that message features may not be perceived as intended by target audiences. Therefore, this study first examined whether people perceive compassion and apology crisis responses differently. The results indicate that participants perceived a stronger apology and compassion from the experimental groups than from the control group. In other words, crisis responses with apology or compassion would make people feel the organization is more apologetic and compassionate. This finding suggests that if an organization attempts to be viewed as an apologetic or compassionate organization, the organization should say something more than just providing correction information only (e.g., how to return the product).

Several scholars have indicated that plaintiffs can easily win lawsuits if a defendant has previously accepted responsibility (Fitzpatrick, 1995; Tyler, 1997). By apologizing, organizations publicly accept the responsibility for a crisis and open the door to lawsuits (Coombs, 1995; 1999b). Thus, organizations were found to avoid apologizing although

previous studies showed that apology generates positive effects across crisis types (Bradford & Garrett, 1995; Coombs, 1998; Lyon & Cameron, 2004). In this study, there was no significant difference in perceived apology and perceived compassion among the experimental groups. The findings imply that people may not perceive apology and compassion differently. Considering that apology arouses more legal concerns for organizations and compassion does not (Coombs, 1999b; Englehardt et al., 2004), public relations professionals should consider using compassion as an alternative strategy to apology at the beginning of product-harm crises.

Second, the effects of apology and compassion were tested by ANOVA and path analyses. The results of ANOVA showed a significant effect of apology on reputation, such that people perceived more positively about organizational reputation in responses with apology than responses with correction only. The path model (#2) also revealed an effect of apology response on perceived organizational reputation. The results of the two different tests are consistent with previous studies where researchers found apology had positive effects on organizational reputation in product-defect crises (Lyon & Cameron, 2004). However, no evidence was found to show that apology has a better effect on organizational reputation than compassion does.

As for other crisis outcomes, the results of ANOVA showed that there was no significant difference in crisis responsibility, emotions, and behavioral intentions among the four different crisis responses. The results of model #2 revealed an effect of apology response on anger toward the organization. People feel less anger when they are exposed to apology responses. Coombs et al. (2006) proposed that people would report less anger from accommodative crisis responses than information-only responses, but found no

support. The present finding of less anger generated from apology groups seems to support Coombs et al.'s (2006) hypothesis.

In sum, this study found no significant difference in the effects of apology and compassion. The findings suggest that it is possible that apology and compassion have the same effect on crisis outcomes. Considering the high legal concerns associated with apology, compassion has the potential to be an alternative strategy at the beginning of accidental product-harm crises. Further research is needed to validate the same effect of apology and compassion.

Drawn from O'Keefe (2003), this study also examined the possible mediated effects of perceived apology and compassion. The significant mediated effects of perceived apology and compassion suggest that public perception of organizational apology and compassion strategy should be considered by public relations professionals when designing crisis response messages. The results indicated that a higher perceived apology lessened people's anger, but, at the same time, a higher perceived apology increased perceived internal crisis responsibility which evoked people's anger. In other words, a higher perceived apology increases and decreases people's anger simultaneously. Moreover, although no significant direct path was found from perceived apology to reputation, the results indicated that reputation was predicted by anger which is consistent with the findings of previous studies (e.g., Choi & Lin, 2007). Participants perceived more negative reputation when they felt angrier. Considering the simultaneous positive and negative effects of perceived apology on anger, there were two possible paths from perceived apology to reputation: (1) when people perceived a higher apology, they perceived a stronger internal crisis responsibility, felt angrier, and then perceived a more

unfavorable reputation; and (2) a higher perceived apology lessened people's anger, and generated a more favorable reputation. In sum, organizations should be careful about the possible increase of anger when using strategies that may generate a higher perceived apology.

As for perceived compassion, people perceived a more positive organizational reputation when they perceived a higher compassion in crisis responses. Although first tested in this study, this finding seems to be in line with previous studies. For instance, Coombs (1999b) found that compassion strategy is beneficial to organizational reputation. In addition, the results of this study revealed a significant indirect path from perceived compassion through external crisis responsibility and sympathy to behavioral intentions. When people perceive a higher compassion in crisis response, they perceive a stronger external crisis responsibility, produce sympathy toward the organization, and have stronger supportive behavioral intentions (e.g., purchase intention). The findings suggest that strategies with higher perceived compassion not only help an organization repair its reputation, but also generate stronger external crisis responsibility, more sympathy toward the organization, and stronger behavioral intentions.

In sum, strategies generating a higher perceived apology made people consider the organization to have more responsibility for the crisis. On the contrary, strategies generating a higher perceived compassion made people attribute the responsibility to external causes (e.g., circumstances). Moreover, strategies with a higher perceived compassion generated people's sympathy, strengthening people's supportive behavior intentions; however, strategies with a higher perceived apology might produce or lessen people's anger, and anger made people perceive reputation less positively. Integrating the

findings of perceived apology and compassion, strategies generating a higher perceived compassion seem to be safer than the counterpart as perceived apology has both positive and negative effects on anger, which is a stronger predictor of organizational reputation.

2. Revision of Situational Crisis Communication Theory

This study proposed two revised models (i.e., model #2 and #3) of SCCT (see Figures 5 and 6). In model #2, the paths from emotions to reputation were added, and perceived external crisis responsibility was put as the mediated variable for crisis response strategies. The results revealed that model #2 (Figure 5) has a better model fit than the original model (model #1 in Figure 4). As Choi and Lin (2007) found, a strong path from anger to reputation was found in this study. When people feel angrier toward an organization, they perceive a more unfavorable reputation of the organization.

Moreover, the perceived external crisis responsibility was found to predict both sympathy and anger in model #2 although no significant path from crisis response strategies to external crisis responsibility was found. The findings of the paths from external crisis responsibility to emotions provide evidence for Coombs' (2004) assumption that external control for a crisis is useful in predicting emotions.

Comparing model #2, perceived apology and perceived compassion were placed as mediated variables for crisis response strategies. The results demonstrated that the model (#3) with the mediated effects explains more paths among variables in SCCT than the model without mediated effects (#2) does. This finding provides support for O'Keefe's (2003) argument. As O'Keefe (2003) suggested, the assessment of psychological states (i.e., perceived apology and compassion in this study) may be useful in examining potential mediating states when message variations are defined in terms of intrinsic

features (i.e., apology and compassion).

In model #2, apology response was a significant predictor of reputation. In model #3, perceived apology was not a significant predictor of reputation, whereas perceived compassion significantly predicted reputation. Comparing these two models, the findings suggest that apology actually influenced reputation through perceived compassion instead of perceived apology. This finding is particularly important in public relations. For instance, when designing crisis responses, public relations professionals should make more efforts to generate people's perceived compassion rather than perceived apology. It is also meaningful for organizations if public relations people can develop crisis responses which generate a high perceived compassion, but without apologizing.

Moreover, external crisis responsibility was found to mediate the effects of perceived compassion on emotions. This finding is consistent with Coombs' (2004) assumption that external control may be viewed as a mitigating factor of the effects of crisis response strategies.

This study tests the relationships among crisis outcomes using path analysis. The results of the study confirmed and extend the findings of previous studies. For instance, although Stockmyer (1996) found that sympathy has no influence on purchase intentions after a product tampering crisis, sympathy was found to be a strong predictor of behavior intentions in this study. This finding supports Coombs and Holladay's (2005) argument that "strong feelings of sympathy can make it easier for an organization to engender potential supportive behavior from stakeholders" (p. 274).

Some of the findings in this study stand in contrast to previous studies. Coombs et al. (2006), for example, found that anger and behavioral intentions are negatively related

in the crisis type of technical accident. In this study, a direct path from anger to behavioral intentions was found in product-harm crises, but the coefficient was positive. Simultaneously, an indirect path from anger through organizational reputation was found. When people are angrier toward the organization, they perceive a more negative organizational reputation, and weaken their supportive behavior intentions. The indirect path from anger to behavior intentions is in line with the findings of Choi and Lin (2007), but the direct path with positive coefficient from anger to behavior is contradictory to their findings of the negative coefficient. The contradictory findings on the relationship between anger and behavioral intentions should be further examined.

Unlike the findings of previous studies (e.g., Coombs, 1998, 1999b), the present study did not find significant direct associations between organizational crisis responsibility and organizational reputation. However, the results of model #3 suggest that organizational crisis responsibility has an indirect effect on reputation through anger. When people perceive a stronger crisis responsibility of an organization, they feel angrier toward the organization, and perceive a more negative organizational reputation.

3. Limitation and Further Research

This study proposed and tested compassion as an alternative strategy for apology at the beginning of product-harm crises. The results of this study revealed no significant differences of the effects of apology and compassion responses on crisis outcomes. It is possible that compassion and apology have the same effects. However, the "no" difference between the effects of apology and compassion is hard to prove in only one study. More research is needed to validate the finding of "no" difference using other samples. This study used non-victims (i.e., college students) as the sample. As Coombs

and Holladay (2005) suggested, victims may have a stronger involvement in crises, and generate more feelings toward the organization. A sample of victims rather than non-victims or a larger sample should be more powerful in comparing the effect of apology and compassion.

This study found that perceived apology and compassion mediated the effect of apology and compassion responses on crisis outcomes. Further research is needed to examine what message features in crisis responses would make people perceive stronger apology and compassion. Moreover, it would be valuable to investigate how to make people perceive the organization is apologetic and feel less angry, and, at the same time, not perceive a stronger internal crisis responsibility which evokes people's anger.

Several significant paths found in this study need to be researched in the future. For example, perceived compassion influenced external crisis responsibility, which evoked sympathy, and further influenced behavioral intentions positively through sympathy.

Compensation, offering money or gifts to victims (Coombs, 2006), is an action showing an organization's compassion and apology (Coombs, 1998, 1999b; Siomkos & Shrivastava, 1993). Compensation may be a useful strategy to elicit people's perceived compassion. Victimization may be an alternative strategy to elicit people's sympathy and strengthen perceived external crisis responsibility. Victimization is a message reinforcing the idea that the organization is a victim of the crisis (Coombs & Holladay, 2005).

Coombs and Holladay (2005) argued that people could feel sorry for the organization when it was being challenged. As a result, sympathy toward an organization may be elicited in this case. Thus, examining the effect of victimization and compensation in crises is a promising avenue for future studies.

As Coombs (1999b) emphasized, each crisis type has its own dynamic. In this study, the nature of accidental product-harm crises reserved the space for the organization to not apologize since the crisis was caused by an unintentional action by the organization. This may explain the fact that not many significant differences on the effects of apology and compassion were found. Moreover, the present study tested the effects of apology and compassion at the beginning of a crisis, which is a period full of uncertainty. It is possible that participants attributed the crises to an external cause and did not consider "apology" or "compassion" to be important assessments. In addition, previous studies have found that product category also influences how people perceive product-harm crises. For example, Mowen and Pollman (1981) found that people perceived an automobile defect more negatively than a defect in a lawn mower. Therefore, further research is necessary to know how compassion and apology work in other crisis types (e.g., technical accidents), and product-harm crises with a specific cause of crisis (either internal) or different defective products.

NOTE

1. Comparative Fit Index (CFI) values below .9 indicate a poor fit; values above .95 indicate a good fit (Bentler, 1990). The Root Mean Square Error of Approximation (RMSEA) with value > .10 indicates a poor fit, and with value < .05 indicates a good fit.

APPENDIX A

STIMULUS MATERIAL

Crisis Scenarios 1:

PEI Farm Announces Voluntary Recall of Milk

Lansing, Mich., Nov. 4, 2007 – PEI Farm Inc. today announced that it is voluntarily recalling all milk sold in the U.S. with a production code of "A24924A" stamped on the container. The recall is occurring because three consumers have reported stomach cramps and diarrhea after drinking the milk.

Crisis Responses for Case 1:

Control (Correction Only)

Consumers who may still have any of the PEI milk with a production code of "A24924A" should dispose of the product. Consumers are encouraged to return the products to any store for an exchange or full refund. Consumers also can call the PEI Consumer Center toll-free at 800-356-2222 (toll free).

Apology

Chris Goldman, PEI Farm's general manager, apologized to consumers for making them worry about the safety of the milk. "It is our fault. This problem should have been detected before the products were shipped. We take the full responsibility for the recall, and hope our consumers would forgive us."

Consumers who may still have any of the PEI milk with a production code of "A24924A" should dispose of the product. Consumers are encouraged to return the products to any store for an exchange or full refund. Consumers also can call the PEI Consumer Center toll-free at 800-356-2222 (toll free).

Compassion

"There are no words adequate to express the emotion we feel for the affected consumers. We express our genuine concern for them," said Chris Goldman, PEI Farm's general manager. "We have arranged our employees to visit them. We are doing our best to help those affected anyway we can."

Consumers who may still have any of the PEI milk with a production code of "A24924A" should dispose of the product. Consumers are encouraged to return the products to any store for an exchange or full refund. Consumers also can call the PEI Consumer Center toll-free at 800-356-2222 (toll free).

Apology Plus Compassion

Chris Goldman, PEI Farm's general manager, apologized to consumers for making them worry about the safety of the milk. "It is our fault. This problem should have been detected before the products were shipped. We take the full responsibility for the recall, and hope our consumers would forgive us."

"There are no words adequate to express the emotion we feel for the affected consumers. We express our genuine concern for them," said Chris Goldman, PEI Farm's general manager. "We have arranged our employees to visit them. We are doing our best to help those affected anyway we can."

Consumers who may still have any of the PEI milk with a production code of "A24924A" should dispose of the product. Consumers are encouraged to return the products to any store for an exchange or full refund. Consumers also can call the PEI Consumer Center toll-free at 800-356-2222 (toll free).

Crisis Scenarios 2:

EK Foods Voluntarily Recalls EK's Cheddar Soup

Lansing, Mich., Nov. 4, 2007 – EK Foods Inc. is voluntarily recalling a limited quantity of 18.8 ounce cans of EK Cheddar Soup. This recall is occurring because EK Foods has received three reports saying that the ingredients of EK Cheddar Soup present a choking hazard and cause injury if swallowed. To date, three consumers have reported injuries in and around the mouth.

Crisis Responses for Case 2:

Control (Correction Only)

Consumers who have purchased the EK Cheddar Soup with the can code JUL 08 2009 07097 should not eat this product. Consumers are encouraged to return the product to the store where they purchased it for an exchange or full refund. Consumers also can contact EK Foods at 888-453-2222 (toll free).

Apology

Leslie Walter, EK Foods' general manger, said in a press conference, "I have to admit that we made a critical mistake although we are still concluding the investigation, how it happened. EK Foods takes the full responsibility for this recall. We sincerely apologize to our consumers, and seek their forgiveness."

Consumers who have purchased the EK Cheddar Soup with the can code JUL 08 2009 07097 should not eat this product. Consumers are encouraged to return

the product to the store where they purchased it for an exchange or full refund. Consumers also can contact EK Foods at 888-453-2222 (toll free).

Compassion

"We express our sincere sympathy to the affected consumers. Their health is our primary concern. The most important thing right now is taking good care of them. We have sent our local managers to visit them and provide assistance," said Leslie Walter, general manager of EK Foods.

Consumers who have purchased the EK Cheddar Soup with the can code JUL 08 2009 07097 should not eat this product. Consumers are encouraged to return the product to the store where they purchased it for an exchange or full refund. Consumers also can contact EK Foods at 888-453-2222 (toll free).

Apology Plus Compassion

Leslie Walter, EK Foods' general manger, said in a press conference, "I have to admit that we made a critical mistake although we are still concluding the investigation, how it happened. EK Foods takes the full responsibility for this recall. We sincerely apologize to our consumers, and seek their forgiveness."

"We express our sincere sympathy to the affected consumers. Their health is our primary concern. The most important thing right now is taking good care of them. We have sent our local managers to visit them and provide assistance," said Leslie Walter, general manager of EK Foods.

Consumers who have purchased the EK Cheddar Soup with the can code JUL 08 2009 07097 should not eat this product. Consumers are encouraged to return the product to the store where they purchased it for an exchange or full refund. Consumers also can contact EK Foods at 888-453-2222 (toll free).

APPENDIX B

A SAMPLE OF QUESTIONNAIRE

Informed Consent Form

You hereby consent to take part in the study directed by Dr. Yoonhyeung Choi and Ying-Hsuan Lin in the department of Advertising, Public Relations, and Retailing at Michigan State University concerning how people process news stories.

Your participation is voluntary and you do not have to answer any of the questions. You are free to withdraw your participation in the research at any time. If you do not volunteer or if your participation is ended for any reason, you will not be penalized in anyway. In particular, your grade will not be affected by your decision on whether or not to participate.

You will read four news stories, and complete a questionnaire that will ask about your opinion on the news stories. It will take approximately 15 minutes.

There is no more risk involved in participating in this study than you would encounter in everyday life, and you might be benefited from this study by getting better tailored crisis communication.

If you have any questions about this research project, you may contact Dr. Yoonhyeung Choi by phone at (517) 432-7076 or via e-mail at choiyoo9@msu.edu. If you have any questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - Peter Vasilenko, Ph.D., Director of the Human Subject Protection Programs at Michigan State University, by phone: (517) 355-2180, fax: (517) 432-4503, e-mail: irb@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

By signing this, you confirm that you are at least 18 years old.

Print Name:	-
Sign Name:	
Date:	

Questionnaire

The purpose of the study is to examine how people process news stories. This questionnaire is for research purposes only, and therefore your information and comments will remain completely anonymous.

If you have any question, please raise your hand. The questionnaire administrator will help you to answer the question.

Please read the following story carefully, and answer the questions.

EK Foods Voluntarily Recalls EK's Cheddar Soup

Lansing, Mich., Nov. 4, 2007 – EK Foods Inc. is voluntarily recalling a limited quantity of 18.8 ounce cans of EK Cheddar Soup. This recall is occurring because EK Foods has received three reports saying that the ingredients of EK Cheddar Soup present a choking hazard and cause injury if swallowed. To date, three consumers have reported injuries in and around the mouth.

Leslie Walter, EK Foods' general manger, said in a press conference, "I have to admit that we made a critical mistake although we are still concluding the investigation, how it happened. EK Foods takes the full responsibility for this recall. We sincerely apologize to our consumers, and seek their forgiveness."

Consumers who have purchased the EK Cheddar Soup with the can code JUL 08 2009 07097 should not eat this product. Consumers are encouraged to return the product to the store where they purchased it for an exchange or full refund. Consumers also can contact EK Foods at 888-453-2222 (toll free).

Please answer the following questions with the news story you just read in mind.

Q1) P1	ease write down any emotions you have experien	ced while	e re	adii	ng t	he	nev	s story.
- ,	The following questions ask the extend to which on. Please rate using the 7-point scales provided by	•	ex	peri	enc	ed	a sp	pecific
		Strongly Disagree	_	•			_	Strongly Agree
2.	I have felt sympathy for the company.	l	2	3	4	5	6	7
3.	I have felt kind about the company.	1	2	3	4	5	6	7
4.	I have felt sorry for the company.	1	2	3	4	5	6	7
5.	I have felt angry toward the company.	1	2	3	4	5	6	7
6.	I have been resentful at the way the company responded to the incident.	1	2	3	4	5	6	7
7.	The company has irritated me.	1	2	3	4	5	6	7

Q8-12) The following questions ask about your thoughts on the company in the news story. Please answer the questions with the news story you just read in mind using the 7-point scales provided below.

8.	The company is dishonest.	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
9.	I do <u>not</u> trust the company to tell the truth about the incident.	1	2	3	4	5	6	7
10.	Under most circumstances, I would be likely to believe what the organization says.	1	2	3	4	5	6	7
11.	The company is concerned with the well-being of its publics.	1	2	3	4	5	6	7
12.	The company is <u>not</u> concerned with the well-being of its publics.	1	2	3	4	5	6	7

Q13-16) Please answer the following questions with the news story you just read in mind using the 7-point scales provided below.

		Strongly Disagree						Strongly Agree
13.	I would purchase the company's products.	1	2	3	4	5	6	7
14.	I would say nice things about this company.	1	2	3	4	5	6	7
15.	I would recommend the company's products to my friends.	1	2	3	4	5	6	7
16.	I would invest in this company.	1	2	3	4	5	6	7

Q17-25) Please answer the following questions with the news story you just read in mind using the 7-point scales provided below.

17.	The cause of the crisis is something the	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
17.	company could control.	,	2	J	7	J	U	,
18.	The cause of the crisis is something over which the company had power.	1	2	3	4	5	6	7
19.	The cause of the crisis is something that was manageable by the company.	1	2	3	4	5	6	7
20.	The cause of the crisis is something over which the company had <u>no</u> power.	1	2	3	4	5	6	7

21.	Circumstances, not the company, are responsible for the crisis.	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
22.	The blame for the crisis lies with the company.	1	2	3	4	5	6	7
23.	The blame for the crisis lies in the circumstances, not the company.	1	2	3	4	5	6	7
24.	The incident is the fault of the company.	1	2	3	4	5	6	7
25.	The company should be held accountable for the incident.	1	2	3	4	5	6	7

Q26-33) The company's response to the product recall showed that:

		Strongly Disagree						Strongly Agree
26.	The company admitted its fault.	1	2	3	4	5	6	7
27.	The company accepted responsibility for the crisis.	The state of the s	2	3	4	5	6	7
28.	The company begged forgiveness.	1	2	3	4	5	6	7
29.	The company apologized for the crisis.	1	2	3	4	5	6	7
30	The company was concerned about people affected by the crisis.	1	2	3	4	5	6	7
31.	The company was sympathetic about what happened.	1	2	3	4	5	6	7
32.	The company cared about the feelings of people affected by the crisis.	1	2	3	4	5	6	7
33.	The company emphasized on protecting the victims of the crisis.	1	2	3	4	5	6	7

Please read the following story carefully, and answer the questions.

PEI Farm Announces Voluntary Recall of Milk

Lansing, Mich., Nov. 4, 2007 – PEI Farm Inc. today announced that it is voluntarily recalling all milk sold in the U.S. with a production code of "A24924A" stamped on the container. The recall is occurring because three consumers have reported stomach cramps and diarrhea after drinking the milk.

Chris Goldman, PEI Farm's general manager, apologized to consumers for making them worry about the safety of the milk. "It is our fault. This problem should have been detected before the products were shipped. We take the full responsibility for the recall, and hope our consumers would forgive us."

Consumers who may still have any of the PEI milk with a production code of "A24924A" should dispose of the product. Consumers are encouraged to return the products to any store for an exchange or full refund. Consumers also can call the PEI Consumer Center toll-free at 800-356-2222 (toll free).

Please answer the following questions with the news story you just read in mind.

Q1) P	lease write down any emotions you have experier	nced while	e re	adiı	ng t	he	nev	vs story.
- ,	The following questions ask the extend to which on. Please rate using the 7-point scales provided by	•	ex ₁	peri	ienc	ed	a sı	ecific
	Promote and American Promote Prom	Strongly Disagree						Strongly Agree
2.	I have felt sympathy for the company.	1	2	3	4	5	6	7
3.	I have felt kind about the company.	1	2	3	4	5	6	7
4.	I have felt sorry for the company.	1	2	3	4	5	6	7
5.	I have felt angry toward the company.	1	2	3	4	5	6	7
6.	I have been resentful at the way the company responded to the incident.	1	2	3	4	5	6	7
7.	The company has irritated me.	1	2	3	4	5	6	7

Q8-12) The following questions ask about your thoughts on the company in the news story. Please answer the questions with the news story you just read in mind using the 7-point scales provided below.

8.	The company is dishonest.	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
9.	I do <u>not</u> trust the company to tell the truth about the incident.	1	2	3	4	5	6	7
10.	Under most circumstances, I would be likely to believe what the organization says.	1	2	3	4	5	6	7
11.	The company is concerned with the well-being of its publics.	1	2	3	4	5	6	7
12.	The company is <u>not</u> concerned with the well-being of its publics.	1	2	3	4	5	6	7

Q13-16) Please answer the following questions with the news story you just read in mind using the 7-point scales provided below.

		Strongly Disagree						Strongly Agree
13.	I would purchase the company's products.	1	2	3	4	5	6	7
14.	I would say nice things about this company.	1	2	3	4	5	6	7
15.	I would recommend the company's products to my friends.	1	2	3	4	5	6	7
16.	I would invest in this company.	1	2	3	4	5	6	7

Q17-25) Please answer the following questions with the news story you just read in mind using the 7-point scales provided below.

17.	The cause of the crisis is something the company could control.	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
18.	The cause of the crisis is something over which the company had power.	1	2	3	4	5	6	7
19.	The cause of the crisis is something that was manageable by the company.	1	2	3	4	5	6	7
20.	The cause of the crisis is something over which the company had <u>no</u> power.	1	2	3	4	5	6	7

21.	Circumstances, not the company, are responsible for the crisis.	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
22.	The blame for the crisis lies with the company.	1	2	3	4	5	6	7
23.	The blame for the crisis lies in the circumstances, not the company.	1	2	3	4	5	6	7
24.	The incident is the fault of the company.	1	2	3	4	5	6	7
25.	The company should be held accountable for the incident.	ansumminument in ein museum untersten i	2	3	4	5	6	7

Q26-33) The company's response to the product recall showed that:

		Strongly Disagree						Strongly Agree
26.	The company admitted its fault.	1	2	3	4	5	6	7
27.	The company accepted responsibility for the crisis.	1	2	3	4	5	6	7
28.	The company begged forgiveness.	1	2	3	4	5	6	7
29.	The company apologized for the crisis.	1	2	3	4	5	6	7
30	The company was concerned about people affected by the crisis.	1	2	3	4	5	6	7
31.	The company was sympathetic about what happened.	and the second s	2	3	4	5	6	7
32.	The company cared about the feelings of people affected by the crisis.	n managaman and an an angaman grain nam	2	3	4	5	6	7
33.	The company emphasized on protecting the victims of the crisis.	1	2	3	4	5	6	7

Demographic Questions

D1.	What	is your gender?
		Male
		Female
D2.	What	is your age?
D3.	What	is your ethnicity?
		Caucasian/ White
		African American/ Black
		Asian or Pacific Islander
		Hispanic/Latino
		Native American
		Other, please specify:
D4.	What	is your grade level?
		Freshman
		Sophomore
		Junior
		Senior
		Master's student
		Ph.D. Student
		Other: please specify:
D5.	What	is your major?
D.	7.7	CC 1.C
DO.	. Have	you ever suffered from or experienced any food product recall?
		_ Yes
		_No

Thank you very much for your participation. ©

KEFERENCE

- Allen, M. W., & Caillouet, R. H. (1994). Legitimation endeavors: Impression management strategies used by organization in crisis. *Communication Monographs*, 61, 44-62.
- Arpan, L. M., & Sun, H. (2006). The effect of country of origin on judgments of multinational organizations involved in a crisis. *Journal of Promotion Management*, 12, 189-214.
- Benoit, W. L. (1995). Accounts, excuses, apologies: A theory of image restoration discourse. Albany, NY: State University of New York Press.
- Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review*, 23, 177-86.
- Benoit, W. L., & Brinson, S. L. (1994). AT&T: Apologies are not enough. Communication Quarterly, 42, 75-88.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238-246.
- Birch, J. (1994). New factors in crisis planning and response. *Public Relations Quarterly*, 39, 31-34.
- Bradford, J. L., & Garrett, D. E. (1995). The effectiveness of corporate communicative responses to accusations of unethical behavior. *Journal of Business Ethics*, 14, 875-892.
- Brinson, S. L., & Benoit, W. L. (1996). Dow Corning's image repair strategies in the breast implant crisis. Communication Quarterly. 44, 29-41.
- Bromley, D. B. (2000). Psychological aspects of corporate identity, image and reputation. *Corporate Reputation Review*, 3, 240-252.
- Caillouet, R. H., & Allen, M. W. (1996). Impression management strategies employees use when discussing their organization's public image. *Journal of Public Relations Research*, 8, 221-227.
- Carroll, C. E., & McCombs, M. (2003). Agenda-setting effects of business news on the public's image and opinions about major corporations. *Corporate Reputation Review*, 6, 36-46.
- Choi, Y., & Lin, Y. H. (2007). Consumers' responses to Mattel product recalls in online bulletin boards: Exploring two types of emotion. Manuscript submitted to *Journal of Public Relations Research*.

- Coombs, W. T. (1995). Choosing the right words: The development of guidelines for the selection of the "appropriate" crisis response strategies. *Management Communication Quarterly*, 8, 447-476.
- Coombs, W. T. (1998). An analytic framework for crisis situations: Better responses from a better understanding of the situation. *Journal of Public Relations Research*, 10, 177-191.
- Coombs, W. T. (1999a). Ongoing crisis communication: Planning, managing, and responding. Thousand Oaks, CA: Sage.
- Coombs, W. T. (1999b). Information and compassion in crisis responses: A test of their effects. *Journal of Public Relations Research*, 11, 125-142.
- Coombs, W. T. (2004). A theoretical frame from post-crisis communication: Situational Crisis Communication Theory. In M. Martinko (Ed.), Attribution theory in the organizational sciences: theoretical and empirical contributions (pp. 275-296). Greenwich, CT: IAP-Information Age Pub.
- Coombs, W. T. (2007a). Protecting organization reputations during a crisis: The development and application of Situational Crisis Communication Theory. *Corporate Reputation Review*, 10, 163-176.
- Coombs, W. T. (2007b). Attribution Theory as a guide for post-crisis communication research. *Public Relations Review*, 33, 135-139.
- Coombs, W. T., & Holladay, S. J. (1996). Communication and attributions in a crisis: An experimental study of crisis communication. *Journal of Public Relations Research*, 8, 279-295.
- Coombs, W. T., & Holladay, S. J. (2001). An extended examination of the crisis situation: A fusion of the relational management and symbolic approaches. *Journal of Public Relations Research*, 13, 321-340.
- Coombs, W. T., & Holladay, S. J. (2002). Helping crisis mangers protect reputational assets: Initial tests of the Situational Crisis Communication Theory. *Management Communication Quarterly*, 6, 165-186.
- Coombs, W. T., & Holladay, S. J. (2005). An exploratory study of stakeholder emotions: Affect and crises. *Research on Emotion in Organizations*, 1, 263-280.
- Coombs, W. T., & Holladay, S. J. (2006). The protective powers of crisis response strategies: Managing reputational assets during a crisis. *Journal of Promotion Management*, 12, 241-260.
- Coombs, W. T., Fediuk, T., & Holladay, S. J. (2006). Further explorations of post-crisis communication and stakeholder anger: The negative communication dynamic model. Paper presented at the 10th International Public Relations Research Conference,

- March 8-12, 2006, South Miami, FL, USA.
- Dawar, N., & Pillutla, M. M. (2000). Impact of product-harm crises on brand equity: The moderating role of consumer expectations. *Journal of Marketing Research*, XXXVII, 215-226.
- Deephouse, D. L. (2000). Media reputation as a strategic resource: An integration of mass communication and resource-based theories. *Journal of Management*, 26, 1091-1112.
- Egelhoff, W.G., & Sen, F. (1992). An information-processing model of crisis management. *Management Communication Quarterly*, 5, 443-484.
- Englehardt, K. J., Sallot, L. M., & Springston, J. K. (2004). Compassion without blame: Testing the accident decision flow chart with the crash of ValuJet flight 592. *Journal of Public Relations Research*, 16, 127-156.
- Fitzpatrick, K. R. (1995). Ten guidelines for reducing legal risk in crisis management. *Public Relations Quarterly*, 40, 33-38.
- Fitzpatrick, K. R., & Rubin, M. S. (1995). Public relations vs. legal strategies in organizational crisis decisions. *Public Relations Review*, 21, 21-33.
- Huang, Y. H., Lin Y. H., & Su, S. H. (2005). Crisis communicative strategies in Taiwan: Category, continuum, and cultural implication. *Public Relations Review*, 31, 229-238.
- Institute of Crisis Management (2007). News coverage of business crises during 2006. Annual ICM Crisis Report, 16(1). Retrieved November 20, 2007, from http://www.crisisexperts.com/2006CR.pdf.
- Jorgensen, B. K. (1996). Components of consumer reaction to company-related mishaps: A Structural equation model approach. *Advances in Consumer Research*, 23, 346-351.
- Klein, J., & Dawar, N. (2004). Corporate social responsibility and consumer's attributions and brand evaluations in a product-harm crisis. *International Journal of Research in Marketing*, 21, 203-217.
- Lee, J., Jares, S. M., & Heath, R. L. (1999). Decision-making encroachment and cooperative relationships between public relations and legal counselors in the management of organizational crisis. *Journal of Public Relations Research*, 11, 243-270.
- Lerbinger, O. (1997). The crisis manager: Facing risk and responsibility. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lyon, L., & Cameron, G. T. (2004). A relational approach examining the interplay of prior

- reparation and immediate response to a crisis. *Journal of Public Relations Research*, 16, 213-241.
- Marcus, A. A., & Goodman, R. S. (1991). Victims and shareholders: The dilemmas of presenting corporate policy during a crisis. *Academy of Management Journal*, 34, 281-305.
- Mowen, J. C., & Pollman, S. (1981). An exploratory study investigating order effects in reporting negative corporate communications. *Advances in Consumer Research*, 8, 215-220.
- O'Keefe, D. J. (2003). Message properties, mediating states, and manipulation checks: Claims, evidence, and data analysis in experimental persuasive message effects research. *Communication Theory*, 13, 251-274.
- Patterson, B. (1993, November). Crises impact on reputation management. *Public Relations Journal*, 49, 47-48.
- Ray, S. J. (1999). Strategic Communication in Crisis Management: Lessons from the Airline Industry. Westport, CT: Quorum Books.
- Reeves, B., & Geiger, S. (1994). Designing experiments that assess psychological responses to media messages. In A. Lang (Ed.), *Measuring psychological responses to media messages* (pp. 165-180). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Russell, D. (1982). The causal dimension scale: A measure of how individuals perceive causes. *Journal of Personality and Social Psychology*, 42, 1137-1145.
- Seeger, M. W., Sellnow, T. L., & Ulmer, R. R. (2001). Public relations and crisis communication: Organizing and chaos. In R. Heath (Ed.), *Handbook of public relations* (pp. 155-166). Thousand Oaks, CA: Sage.
- Sellnow, T. L., & Ulmer, R. R. (1995). Ambiguous argument as advocacy in organizational crisis communication. *Argumentation and Advocacy*, 31, 138-150.
- Siomkos, G. J. (1989). Managing product-harm crises. *Industrial Crisis Quarterly*, 3, 41-60.
- Siomkos, G. J., & Kurzbard, G. (1994). The hidden crisis in product harm crisis management. *European Journal of Marketing*, 28, 30-41.
- Siomkos, G. J., & Shrivastava, P. (1993). Responding to product liability crises. *Long Range Planning*, 26, 72-79.
- Snowden, L. (1994, June). The lost art of apology. Redbook, 183, 60-62.
- Stockmyer, J. (1996). Brands in crisis: Consumer help for deserving victims. Advances in Consumer Research, 23, 429-435.

- Tyler, L. (1997). Liability means never being able to say you're sorry: Corporate guilt, legal constraints, and defensiveness in corporate communication. *Management Communication Quarterly*, 11, 51-73.
- Wartick, S. L. (2002). Measuring corporate reputation: Design and data. *Business and Society*, 41, 371-392.
- Weiner, B. (1986). An attribution theory of motivation and emotion. New York: Springer-Verlag.
- Weiner, B., Amirkhan, J., Folkes, V. S., & Verette, J. A. (1987). An attributional analysis of excuse giving: Studies of a naïve theory of emotion. *Journal of Personality and Social Psychology*, 52, 316-324.

