The Effects of Crisis Response Strategies on Relationship Quality Outcomes

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Abstract
This study investigated the effects of crisis response strategies on the attribution of an organization's crisis responsibilities and relationship quality outcomes and determined the linkages among relationship quality outcome indicators. This study found that none of the tested crisis response strategies were helpful in reducing public blame surrounding the featured organization's responsibility in the crisis. This study also found that the presence of crisis itself tends to negatively affect the relationship quality and that the publics examined were not influenced by the use of crisis response strategies.

Since crises strain organization-public relationships (OPRs), it is essential to cultivate and maintain pre-crisis ties (Coombs, 2007a; Fearn-Banks, 2007). An organization's efforts to cultivate relationships with its publics can influence how those publics perceive both the crisis and the organization involved. These relationships shape how organizations will respond during and after a crisis. Coombs (2000) developed a proposed framework for applying the relational paradigm to crisis communication using attribution theory, the basis for his Situational Crisis Communication Theory (SCCT). Since Coombs's contribution, scholars have continued to expand the theoretical basis behind the relational approach to crisis communication (e.g., Lee, 2007; Taylor, 2007).

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Although research has linked relationship outcomes and crisis communication with a specific focus on crisis response strategies, no effort has been made to explore which of the relationship quality outcomes—satisfaction, trust, and commitment—are most influenced by certain crisis response strategies. Recently, the importance of the linkage between satisfaction, trust, and commitment has been raised (Ki & Hon, 2007b; Morgan & Hunt, 1994; Selnes, 1998). The studies confirmed that satisfaction influences trust, which in turn affects the commitment. In the scholarship, no evidence has been established to indicate which crisis response strategies have the greatest impact on which relationship outcomes. Therefore, this study explores the effects of crisis response strategies on the linkages between/among satisfaction, trust, and commitment. This study will help crisis managers by providing more evidence for the need to maintain and restore relationships during times of crisis and provide insight into which response strategies influence stakeholders' satisfaction with, trust in, and commitment to organizations during and after a crisis.

Literature Review

Crisis Response Strategies

Coombs (2004, 2007a) defined crisis response strategies as what an organization does and says after a crisis has hit, identifying three components of an effective crisis response. First, a successful response should provide instructing information that tells stakeholders how to protect themselves physically during the crisis. Second, the response should provide adjusting information that conveys to stakeholders exactly what happened to cause the crisis as well as a description of the events of the crisis. The instructing and adjusting information must be given in a timely and consistent manner, and the organization must be open and honest with its stakeholders (Huang, 2008). Last, only after the organization has provided instructing and adjusting information to its stakeholders in a timely manner, can it begin to employ responses to manage its reputation with its stakeholders (Coombs, 2007a).

The crisis response type can help or hinder an organization's reputation recovery. When focusing on managing and repairing a reputation, a crisis response should be related to the crisis situation (Coombs, 2007a). To articulate the need for appropriate crisis responses to certain crises, crisis management theorists have suggested that managers need to (a) form a taxonomy of crisis types, (b) form a taxonomy of crisis responses, and (c) develop a system to match appropriate crisis responses to crisis situations (Coombs, 2004). Little research had been done in terms of matching crisis types to crisis responses until Coombs (2007b) fully developed his SCCT. The underlying connection of crisis response to crisis type in SCCT draws on attribution theory.

Attribution Theory

Attribution theory represents individuals' attempts to place responsibility on themselves or others when faced with successful or unsuccessful events (Weiner, 1985).

When faced with an event, individuals search for causes to effectively deal with them. Attribution theory allows us to understand and anticipate how people cope with events based on the amount of responsibility people attribute to the individual or group responsible (Coombs, 2000). McAuley, Duncan, and Russell (1992) developed a measure of attribution of responsibility and isolated the following three causal dimensions of attribution:

Stability indicates whether the cause of the event occurs frequently (stable) or infrequently (unstable). If the individual or group is frequently involved in similar events, then they have a higher stability, meaning that people are more likely to attribute the cause of the event to that individual or group.

External control is the likelihood that outside sources or agents other than the individual or group involved had some responsibility for causing the event in question. The higher the external control, the less likely the event will be attributed to the individual or group involved.

Locus/personal control refers to the likelihood that the individual or group in question could have done something to prevent the event. This explores whether the person or group in question caused the event. If the locus/personal control is high, more responsibility will be attributed to the person or group in question.

The SCCT model posits that the selection of the most appropriate crisis response strategy will influence the attribution of crisis responsibility (Coombs, 2007b). Despite recommendations by Coombs (2007a, 2007b), only a few studies have been conducted to test whether certain crisis response strategies work for certain crisis types (e.g., Jeong, 2009; Sisco, Collins, & Zoch, 2010). For example, Jeong (2009) explained the public's responses to Samsung Company, which caused oil spill accident through the lens of SCCT. The outcome of the study confirmed SCCT in that public has a tendency of making higher internal and lower external attributions if low distinctive information was provided. Sisco et al. (2010) applied SCCT to investigate the crisis response strategies of the American Red Cross. They found that crisis situations could be more effectively resolved with more specific crisis response strategies.

Therefore, the following research question is proposed to establish a comparison with previous studies:

Research Question 1: Which crisis response strategies most effectively reduce the attribution of crisis responsibility to an organization?

The SCCT Model: Linkage Between Attribution and Relationship. Coombs's (2007a) SCCT model suggests that to determine which crisis response strategy is best, the reputational threat of the crisis must be examined. Three factors shape the examination of reputational threat—initial crisis responsibility, crisis history, and prior relational reputation (Coombs, 2007b). The initial crisis responsibility refers to the framing of the crisis or the crisis type. The type of crisis can predict the initial level of attribution the stakeholders will place on the organization. Crisis history examines whether or not

Table 1. Coombs's (2007a) Crisis Response Strategies based on SCCT Theory.

Crisis Response Postures and Explanations	Crisis Response Strategies
Denial Posture: Strives to remove any connections an organization had with a crisis	• Attacking the accuser • Simple denial • Scapegoating
Diminishment Posture: Attempts to reduce attributions of organizational control and reduce negative effects of the crisis	• Excusing • Justification
Rebuilding Posture: Attempts to improve the organization's reputation	• Compensation • Apology
Bolstering Posture: Seeks to build a positive connection between an organization and its publics	• Reminding • Ingratiation • Victimage

the organization has been involved in similar crises in the past, which, in definition, is related to the stability of the organization involved in the crisis. The prior reputation refers to the organization's treatment of its stakeholders in the past. This has been defined as the relationship history between the organization and its stakeholders (Coombs & Holladay, 2001) and is referred to as "prior relational reputation" (Coombs, 2007b). The prior relational reputation also is related to the stability of the organization involved in the crisis. Once the degree of reputation threat has been established, the crisis team selects the crisis response strategy it will use. The advantage to this approach is that SCCT theory considers how an organization's stakeholders will perceive and react to the crisis (Coombs, 2007a; see Table 1).

Initially, an unfavorable crisis history or prior relational reputation can intensify attributions of crisis responsibility, which will have an impact on the reputational threat of the crisis (Coombs, 2007b). Evidence has supported the effects of prior relationship history on the attribution of crisis responsibility prior to the selection of crisis response strategies (Brown & White, 2011; Coombs & Holladay, 2001); however, there is little evidence regarding the impact of the attribution of crisis responsibility following the implementation of certain strategies on the relationship. Although the main purpose of this study is to examine the linkages between the attribution of crisis responsibility and OPR indicators, the following hypothesis will be tested and compared with prior research.

> **Hypothesis 1:** Attribution of crisis responsibility will negatively be associated with the organization-public relationship after crisis response strategies are employed.

Relationship Quality Outcomes

Scholars in crisis management have stressed the importance of building and maintaining quality pre-crisis relationships (Fearn-Banks, 2007; Seeger, 2006). Cultivating

such relationships provides several advantages during the time of crisis. First, cultivating positive relationships with publics help mitigate the effects of a crisis (Kim, 2001; Kim & Lee, 2005). Publics with positive relationships are more likely to become advocates and provide support for an organization in crisis (Ulmer, 2001). On the other hand, negative relationships can seriously damage an organization's reputation and financial well-being, causing an organization to lose much needed support (Coombs, 2000; Park & Reber, 2011). Second, positive relationships with publics can help crisis managers better understand the crisis situation by applying relationship history to the dynamic factors of a crisis in an effort to form a better crisis response (Coombs & Holliday, 2001).

To measure OPRs, this study adopts a scale developed by Hon and Grunig (1999). The measure was created under the premise that the value of public relations lies in the relationships created and cultivated by this field. They concluded that the four dimensions—control mutuality, satisfaction, trust, and commitment—are indicators of successful relationships.

Control mutuality is relevant to the decision-making process and the degree to which the opinion of parties involved influences in the final decision. The sense of control mutuality between the parties involved in the relationship is essential to interdependence and relationship stability (Stafford & Canary, 1991). In public relations, control mutuality is defined as "the degree to which parties agree on who has rightful power to influence one another" (Hon & Grunig, 1999, p. 19). To form a relationship, there must be some mutual degree of influence and control between the organization and its stakeholder groups (Hon & Grunig, 1999).

Satisfaction is "the extent to which one party feels favorably toward the other because positive expectations about the relationship are reinforced" (Hon & Grunig, 1999, p. 20). A satisfying relationship occurs when one party exhibits positive relationship cultivation behaviors toward the other (Hosmer, 1996; Miles, Patrick, & King, 1996) or when the benefits of the relationship outweigh the costs (Jo, Hon, & Brunner, 2004; Kelley & Thibaut, 1978).

Trust is "one party's level of confidence in and willingness to open oneself to the other party" (Hon & Grunig, 1999, p. 19). Trust has been regarded as one of the most valuable dimensions, and it is built based on the integrity, dependability, and competence of each party.

Commitment is "the extent to which one party believes and feels that the relationship is worth spending energy to maintain and promote" (Hon & Grunig, 1999, p. 20). Commitment is known to have two underlying dimensions—continuance commitment and affective commitment (Meyer & Allen, 1984). Continuance commitment refers to "commitment to continue a certain line of action" (Meyer & Allen, 1984, p. 373), and affective commitment entails positive emotional attachment (Hon & Grunig, 1999, p. 20). Ledingham and Bruning (1998) emphasized corporate social responsibility as evidence of commitment and defined it as "the organization being committed to the welfare of the community."

Based on Hon and Grunig's (1999) definition of satisfaction, an organization with high levels of attribution of crisis responsibility is in danger of compromising or
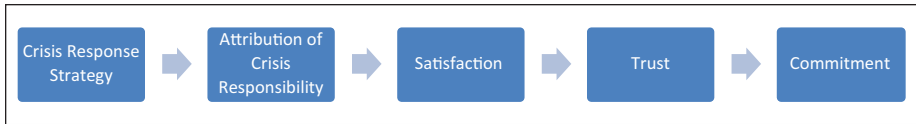
Figure 1. Proposed model.

destroying its relationships due to negative impacts on stakeholders' expectations of the organization. Coombs (2000) stated that a crisis can serve to damage the OPR because the organization acts inconsistently with the expectations of the relationship. Attribution of crisis responsibility could have an effect on a stakeholder's satisfaction with an organization during a crisis (Park & Reber, 2011). Accordingly, the following hypothesis and research question are proposed.

> **Hypothesis 2:** Attribution of crisis responsibility will negatively be associated with the degree of satisfaction in the organization-public relationship.
> **Research Question 2:** Which crisis response strategies are most effective to maintain relationship quality linkages among relationship dimensions?

Scholars tested the linkages among the relationship dimensions. Selnes (1998) claimed that when parties within a relationship have positive experiences over time, a sense of satisfaction with the relationship develops. This satisfaction helps the two sides build trust with one another. Morgan and Hunt (1994) provided evidence that trust can influence commitment. They posited that since making a commitment entails a sense of vulnerability, individuals will only commit to trustworthy people and organizations. In public relations, Ki and Hon (2007b) tested linkages among satisfaction, trust, and commitment and confirmed that satisfaction is a predecessor to trust, which is a predecessor to commitment in OPRs. The two parties in an OPR gain positive experiences with each other as time passes (satisfaction), which in turn facilitates development of trust between the two sides. Once that trust is earned, the two parties are willing to sacrifice and make commitments to each other. The effects of a crisis on the attributes of an OPR and the links among them have not been tested. Using the model tested by Ki and Hon (2007b), the following hypotheses were proposed from a crisis communication perspective (see Figure 1):

> **Hypothesis 3:** The degree of satisfaction will positively influence the degree of trust.
> **Hypothesis 4:** The degree of trust will positively influence the degree of commitment.

Methodology

Research Design

Crisis communications researchers are moving away from using case studies and adopting experimental designs due to the control they provide researchers over

several factors. In addition, experimental designs offer a clearer understanding of the effects of certain crisis stimuli (Coombs & Holladay, 2008). The study used a between-subject experimental design conveyed through a questionnaire featured on a web-based site.

Participants

Participants included 352 students enrolled in various mass communication courses at two large public universities in southeastern United States. All students participated in the experiment voluntarily, though they received extra credit.

Each student drawn from the pool was randomly assigned to each of four stimuli and one manipulation material. Each of them was given one of five web addresses that directed them to one of five questionnaires.

Measures

This study considered three variables: crisis response strategy, attribution of crisis responsibility, and relationship quality outcomes.

Crisis Response Strategy. This study defined crisis response strategy as "the specific frame that the organization's spokesperson used to respond to the crisis situation," which is an independent variable. The article selected for this variable reported a financial crisis that threatened the cancellation of several classes for the upcoming semester and a delay in graduation for several students in the university. This crisis was chosen given the harsh reality of this type of situation at several universities and the dynamic and direct impact of this crisis on the students themselves. The stories were manipulated using statements from a university spokesperson that used one of four SCCT crisis response strategies chosen from each posture. As shown in the appendix, four statements were constructed to represent the four strategies chosen, and the manipulation articles were identical excluding the crisis response manipulations, which are stimuli in this study. In addition, a control article was created that presented all information included in the other four articles, with no crisis response manipulation present. The crisis response strategy presented to each participant was manipulated through the use of four fictitious news articles each containing one specific response strategy.

Attribution of Crisis Responsibility. This study operationalized "attribution of crisis responsibility" as "the observation and measurement of the amount of responsibility and blame placed on the organization for causing the crisis situation." This study adopted a measure of attribution developed by McAuley et al. (1992) and modified it to fit the context of the situation presented in this study. This study employed a 7-point Likert-type scale for the 9-item measures of attribution. The attribution of crisis responsibility was measured after the participants were exposed to the manipulation articles and was used primarily as an independent variable (with the exception of Research Question 1). After the elimination of items found to be irrelevant to the scale

item, the reliability was .70.[1] Mean scores of the composite scores were used for all analysis. Higher scores indicated greater organizational responsibility for causing the crisis situation.

Relationship Quality Outcome. This study defined "relationship quality outcome" as "the observation and measurement of the public's assessment of the relationship between them and the organization based on the factors that are indicators of successful OPRs." This study used an actual OPR. The organizations identified were large southeastern state universities, and the publics consisted of their student bodies. Although several scholars disapprove of the use of student populations for research, this relationship is obviously vital to universities that depend on their student populations academically, financially, and socially. To measure this variable, this study used the short version of Hon and Grunig's (1999) scale with a total of 16 items. Concepts representing four dimensions of relationship quality outcomes—control mutuality (four items), satisfaction (four items), trust (four items), and commitment (four items)—were measured using a 7-point Likert-type scale ranging from *strongly disagree* (1) to *strongly agree* (7).

This variable was measured before and after the participants were exposed to the manipulation stimuli and was used as a dependent variable. The reliabilities of the relationship outcomes were as follows: pre-measure—satisfaction .87, trust .79, commitment .85, control mutuality .78; post-measure—satisfaction .89, trust .86, commitment .90, and control mutuality .83. Mean scores of composite scores for each relationship indicator were used for all analysis. Higher scores indicated a more positive relationship between the university and the students.

Comprehension and Manipulation Checks. After participants read an article, they were asked to answer the following three questions to recall certain facts about the article: (1) The class reductions are a result of the university's budget cuts. (2) Both introductory-level and upper-division courses are threatened by the class reductions. (3) Class reductions for spring 2010 are a possibility. The comprehension items were measured along a 7-point Likert-type scale. The analysis of variance (ANOVA) test showed that the five groups were not significantly different in terms of the comprehension check except the last item.

After the comprehension checks, the participants were asked a manipulation check item to recall what the spokesperson stressed in the statement based on the crisis response strategy used in that article. The ANOVA was conducted to evaluate the mean difference of a manipulation check across the five groups, and it was found that the groups were not significantly different, and all means were above 4, which means that participants recognized the response strategies and agreed they were present.

Procedure

The Web experiment was conducted in four parts. Participants received an email invitation directing them to one of the five possible groups, four experimental groups and

one control group. During the first stage, participants completed a questionnaire designed to evaluate their relationship perceptions toward the university. In the second part, conducted after the relationship measure, participants were exposed to the fictitious news article containing one of the four crisis response strategies' manipulations or a control response. The third part evaluated manipulation and comprehension checks, the attribution of crisis responsibility, and relationship perceptions of the participants. The final portion provided a debriefing statement to inform the students that the news article was fictitious.

Demographic Profile

Demographic questions were asked. Of the 352 respondents, 61.4% were female ($n = 216$) and 38.6% were male ($n = 136$). The enrollment status of the respondents were 29.0% senior ($n = 102$), 25.9% ($n = 91$) freshman, 20.5% ($n = 72$) sophomore, 23.3% ($n = 82$) junior, and 1.5% ($n = 5$) others. A majority of (88.4%) of the participants indicated that they were Caucasian ($n = 311$), 6.0% responded African American ($n = 21$), and 3.7% chose either Asian American or Other. The average age of the participants was 20 years, ranging from 17 to 54 years.

Results

Effect of Crisis Response Strategies on Attribution of Organization's Crisis Responsibility

To test which of the four crisis response strategies most effectively reduces the attribution of crisis responsibility to an organization (Research Question 1), an ANOVA test was performed for the five groups—scapegoating, justification, apology, reminding, and control group—to determine difference in terms of attribution scores, the mean values of the attribution measures. The analysis did not reveal any significant differences of the attribution mean scores across the five groups.

The Relationship Between Attribution and Relationship Quality Outcome

Hypotheses 1 and 2 considered whether there is any negative association between attribution and relationship perception after members of a public learned about the crisis. In particular, Hypothesis 2 addressed whether there is any association between attribution and satisfaction. To test these hypotheses, this study used correlations. Unlike the proposed hypotheses, all the relationship quality outcome variables were significantly and positively associated with the attribution: satisfaction ($r = .36$), trust ($r = .37$), commitment ($r = .33$), and control mutuality ($r = .36$; $p < .001$ for all). This outcome of correlation indicates that more blame the public placed on the organization about the crisis situation, the higher levels of satisfaction, trust, commitment, and control mutuality public would perceive. Therefore, the hypotheses were not supported.

The Effect of Crisis Response Strategies on Relationship Quality

To test which of the four crisis response strategies most effectively maintains the relationship quality between an organization and its publics (Research Question 2), this study measured public perception of relationship quality twice, both before and after the respondents read the news articles relevant to each of the crisis response strategies. The *relationship score* was computed based on the difference between the post- and pre-relationship mean scores for each of the four relationship indicators. An ANOVA test was performed for each of the five groups—scapegoating, justification, apology, reminding, and control—as well as for the four *Relationship Scores*. However, the analysis indicated that the crisis response strategies had no significant impact on the relationship quality outcomes. As shown in Table 2, however, the mean scores for post-measures of the relationship outcomes were lower than those determined by the pre-measures across all five groups.

Linkages Among Relationship Quality Outcomes

The last two hypotheses considered whether the degree of satisfaction would positively influence the degree of trust (Hypothesis 3) and if the degree of trust would positively influence the degree of commitment (Hypothesis 4) among the relationship indicators. These causal relationships were tested using path analysis with maximum likelihood estimation. In this test, satisfaction is an exogenous variable, and trust and commitment are endogenous variables. The last two hypotheses were supported. For Hypothesis 3, satisfaction was revealed to be a significant predictor of trust ($\beta = .53$, $e = .05$, $p < .001$), and trust is a significant predictor of commitment ($\beta = .47$, $e = .06$, $p < .001$). Several important fit indices, including comparative fit index (.91), goodness-of-fit index (.96), and normed fit inded (.91), demonstrated levels that indicate an adequate model fit.

Post Hoc Analysis

Analysis addressing Research Question 2 found that the post-measure mean scores of the relationship outcomes were lower than those determined by the pre-measures across all five groups. To test if this decrease between pre- and post-measures of relationship outcomes was statistically significant, a paired sample *t* test was performed. As shown in Table 3, the *t* test showed that the post-measure of relationship scores was statistically significantly lower than those of the pre-measure across three relationship indicators—satisfaction, trust, and commitment. The difference between pre- and post-measures of relationship for control mutuality was not found to be significantly different. This indicates that after participants learned about the existence of a crisis in the organization, their perceptions of their relationship with organization were more likely to be negatively affected. However, the correlation analysis between pre- and post-measures of relationship outcomes across the four indicators showed a strong positive association.

Table 2. Mean of Pre- and Post-Measure of Relationship on the Crisis Response Strategies.

Crisis response strategies	Satisfaction			Trust			Commitment			Control mutuality		
	Pre M (SE)	Post M (SE)	Post–pre	Pre M (SE)	Post M (SE)	Post–pre	Pre M (SE)	Post M (SE)	Post–pre	Pre M (SE)	Post M (SE)	Post–pre
Scapegoat (n = 78)	5.14 (0.14)	5.02 (1.30)	–.12	4.88 (0.14)	4.76 (1.31)	–.12	5.03 (0.13)	4.97 (1.31)	–.06	4.70 (0.142)	4.61 (1.44)	–.09
Justification (n = 60)	5.05 (0.12)	4.72 (1.10)	–.33	4.78 (0.13)	4.57 (1.14)	–.21	4.84 (0.14)	4.54 (1.16)	–.30	4.42 (0.156)	4.18 (1.22)	–.24
Apology (n = 66)	5.46 (0.12)	5.29 (1.12)	–.17	5.26 (0.11)	5.07 (0.99)	–.19	5.33 (0.12)	5.20 (1.04)	–.13	4.88 (0.134)	4.90 (1.12)	.02
Reminding (n = 94)	5.09 (0.11)	4.98 (1.08)	–.11	4.91 (0.11)	4.83 (1.06)	–.08	4.96 (0.20)	4.91 (1.12)	–.05	4.64 (0.115)	4.75 (1.14)	–.11
Control (n = 54)	5.14 (0.06)	4.92 (1.46)	–.22	4.82 (0.17)	4.64 (1.23)	–.18	4.72 (0.20)	4.59 (1.46)	–.18	4.55 (0.179)	4.48 (1.32)	–.07
	Not significant			Not significant			Not significant			Not significant		

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Table 3. Comparison Between Pre- and Post-Measure of Relationship Perceptions.

	Pre-SA	Post-SA	Pre-TR	Post-TR	Pre-Com	Post-Com	Pre-CM	Post-CM
M	5.14	4.96	4.94	4.79	4.99	4.87	4.64	4.58
t (df = 349)	4.569***		3.558***		3.340**		Not significant	
r	.83***		.77***		.84***		.80***	

Note. r = correlation; SA = satisfaction; TR = trust; Com = commitment; CM = control mutuality.
***p < .001. **p < .05.

Discussion and Conclusion

This study investigated the effects of crisis response strategies on the attribution of an organization's crisis responsibilities and relationship quality outcomes and determined the linkages among relationship quality outcome indicators. The analysis yielded results somewhat contradictory to the theoretical assumptions underlying crisis management perspectives for public relations theory and practice. However, some of the unexpected findings suggest valuable questions for future scholarship regarding crisis management theory and attribution of crisis responsibility theories.

By using four crisis response strategies—scapegoating, justification, apology, and reminding—this study tested the effect of crisis response strategies on attribution of an organization's crisis responsibility. This study found that none of the tested crisis response strategies were helpful in reducing public blame surrounding the featured organization's responsibility in the crisis. Although no effect was found, this study's results are consistent with earlier studies (Brown & White, 2011; Haigh & Dardis, 2008) that tested the effect of crisis response strategies on attribution of an organization's crisis responsibility. This insignificant finding from this study could be explained by considering issues of stimuli. First, the crisis response stimuli this study used might not be distinctive enough to be recognized as a particular response strategy. Like other studies (e.g., Brown & White, 2011; Coombs & Holladay, 2008), this study used a few sentences to evaluate crisis response strategies as stimuli. The respondents in this study might not recognize an organization's approach to dealing with the crisis. Second, the format in which the stimuli were displayed might not have been appropriate considering the characteristics of the respondents. As noted in An and Cheng (2010), majority studies evaluating crisis response strategies used a news story in printed format presented on an Internet-based site. Considering that the study participants were college students, the news article format might not be appropriate for testing crisis response strategies, because this young generation increasingly operates in a more visual culture (McDougall, 2007). Therefore, it might be time to adopt more appropriate stimuli formats, such as video clips, social media threads, and so on, to test crisis response strategies, especially when study participants are college students. Last, in the real world, publics tend to receive information about an organization in crisis from various sources, including newspapers, television, the Internet, by word of mouth. However, in the experimental design setting, there is only one source of information describing the crisis situation. It would therefore be more realistic to use multiple source types to provide information about crisis response strategies.

Contrary to the study's hypotheses, a positive association was found between the attribution of crisis responsibility and relationship perceptions toward the organization after members of a key public learned about the crisis, though the magnitude of the effect size was small. Simply stated, the more blame the public placed on the organization about the crisis situation, the more positive the relationship the members of the public perceived. This result is not only surprising, but also contradictory with the established logic. However, this surprising finding could be explained by the type of relationship tested here. This study tested the relationship between a university and its students. Unlike publics of other types of organizations such as corporations and nonprofit organizations, students tend to demonstrate greater loyalties and are less likely to choose other institution due to a crisis their university is facing. Although students may blame the university for a particular crisis situation such as financial difficulty in this case that could affect their classes and/or possibly delay graduation, they are more likely to maintain a positive relationship with the institution. The measurement issue of attribution could also contribute to this contradictory finding. Although this study adopted an attribution scale developed by McAuley et al. (1992) which has been used widely in previous studies (e.g., Coombs & Holladay, 1996, 2001, 2008, 2009), the scale seems to be problematic. Even after removing items irrelevant items to the scale, the reliability was .70, which is marginally acceptable (Nunnally, 1978). Similar low reliabilities have been reported in several studies (Coombs & Holladay, 2001). Moreover, factor analysis confirmed that the attribution measures were composed of four factors, and several items have unacceptable factor loadings. For example, two items for external control loaded at .45, and three items showed the opposite sign of the loading values. To better address the concept of attribution, future research should therefore consider developing a new scale.

This study tested the effects of crisis response strategies on relationship quality outcomes and did not discover any significant impact of the crisis response strategies on the relationship quality outcomes. This implies that regardless of which crisis strategies an organization employs, they do not have a positive impact on the relationship. As shown in Table 2, scores for the four relationship quality measures—satisfaction, trust, commitment, and control mutuality—were all lower after the public learned about the organizational crisis than before regardless of the crisis response strategy presented. Moreover, the post hoc analysis confirmed statistically significant differences between pre- and post-measures of the relationship quality outcomes. This finding indicates the presence of crisis itself tends to negatively affect the relationship quality and that the publics examined were not influenced by the use of crisis response strategies. These findings are consistent with those of a previous study (Brown & White, 2011), and this study can therefore conclude that organizational efforts to manage and cultivate positive relationships with publics are more important than using crisis response strategies. More important, as indicated by the post hoc analysis, members of publics who positively evaluated their relationship with the organization prior to learning about the crisis were more likely to continue to positively evaluate their relationship with the organization even after learning about the organization's crisis. Although an organization should make efforts to manage a crisis when it occurs, this finding suggests that an organization should dedicate greater resources to cultivating stronger relationships with its various publics.

Last, this study tested the sequential order among three relationship quality indicators—satisfaction, trust, and commitment—as suggested by several previous studies (Garbarino & Johnson, 1999; Ki & Hon, 2007a, 2007b; Kwon & Suh, 2004). Although the magnitude of the impact power on each relationship was smaller than the study by Ki and Hon (2007b), which can be explained by a factor of crisis presence, this study documented greater evidence that satisfaction plays an important role in developing trust, which influenced commitment even after members of a public learned about the crisis. This empirically tested sequential order could assist organizations that intend to improve relationships with their key publics even during or after a crisis. To foster public opinion of an organization's level of honesty, competence, and benevolence during a crisis, an organization should provide positive experiences and a sense of satisfaction (Park & Reber, 2011). When publics recognize that an organization is willing to satisfy their needs and provide reliable services even during crises, these publics are more likely to maintain or establish trust in the organization. Understanding the importance of satisfaction among members of publics in the establishment of trust, public relations professionals should design communication strategies and tactics that ensure publics' favorable opinions of the organization and the belief that the benefits of their relationship with the organization outweigh the costs (Ki & Hon, 2007b). Trust is a key factor in every type of relationship, including OPR, because publics are more likely to commit to such relationships down the line. In particular, trust, which is built on during times of crisis, could be used to establish public commitment to a relationship more quickly. Therefore, public relations professionals should develop crisis management programs that seek to establish public trust, which in turn encourage more long-term relationships (Dwyer, Schurr, & Oh, 1987; Morgan & Hunt, 1994).

Limitation and Future Research Agendas

There are several limitations that could inform future research agendas. First, as mentioned in the discussion, the attribution measure this study used does not seem to address the concept it was meant to measure. A primary reason of producing low reliabilities is its origin. The scale was originally developed to measure individual attribution not organizational attribution (McAuley et al., 1992). Therefore, future research should develop a more reliable and valid measure of organizational attribution. Second, as the print version of crisis response strategies were not as effective as anticipated to the student sample, future studies should consider employing other formats for the delivery of crisis response strategies, such as videos or social media.

Appendix

Crisis Response Manipulations

(Apology) "The reduction in classes is unfortunate, and on behalf of the university, I sincerely apologize to our dedicated students who will suffer because of this situation.

We will do whatever it takes to assure that the class cuts have a minimal impact on graduation," a university spokesperson stated in a news conference on Monday.

The university acknowledged their unsuccessful efforts to find an alternative to cutting classes during the press conference.

"The University takes full responsibility for the class cuts. We explored many other options to try to avoid punishing our students, but in the end the university had no choice. Once again, we apologize to our students for the unfortunate circumstances," stated a university spokesperson.

(Justification) "The university is within its right during these economic times to reduce classes as a viable cost-management strategy. We have explored every possible option, but do not see an alternative to the class cuts. The reduction in classes is a reality; however, the university does not believe that the class cuts will hinder most students from graduating on time," a university spokesperson stated in a news conference Monday.

During the news conference, university officials believed that the class cuts are the only viable option to keep from lifting the tuition cap or raising tuition even more, but continued to state that the class cuts are not a serious matter and despite the large number of classes that will be cut, students will not suffer.

"We can assure that only a handful of students will be greatly affected by the reduction in classes, most students that are scheduled to graduate in the fall will graduate on time. The university honestly has no better options available," stated a university spokesperson.

(Reminding) "The University has an undying commitment to its students. The university has long been committed to increasing the quality of education for its students and will continue to do so in this time of economic crisis," a university spokesperson stated in a news conference Monday.

During the news conference, reporters were constantly reminded of the university's attempts to lessen the impact of the crisis, including the President's fight to keep the tuition cap intact.

"Although the university has to cut classes for the upcoming semester, the President and his staff have fought to keep the tuition cap and will continue to fight to keep the increase in tuition minimal. The education of our students will remain our first priority and will not suffer because of class reductions," stated a university spokesperson.

(Scapegoating) "The reduction in state funding has given us no choice but to reduce classes for the upcoming semester. The state government has been very adamant about it refusal to free any funds that could keep our employees from being laid off and our student's education from being sacrificed," a university spokesperson stated in a news conference on Monday.

University officials have noted their willingness to cooperate with the state government, but in the end, the state has not attempted to provide additional funding for the university.

"The class cuts are inevitable, and the state government is to blame. We have given state officials every chance to work with us to fix this situation, but their unwillingness to cooperate has made it difficult for us to find another solution to this problem," stated a university spokesperson.

Declaration of Conflicting Interests

Funding

Note

1. Items retained were "The crisis is something that the university can manage successfully," "The crisis is something that the university can regulate successfully," and "The university has power over the situation."

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