FROM SAVING FACE TO SAVING LIVES:
PRIORITIZING THE PUBLIC IN PUBLIC RELATIONS

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LIST OF ABBREVIATIONS AND SYMBOLS

α	Cronbach's index of internal consistency
β	Standardized multiple regression coefficient
df	Degree of freedom
η^2	Eta squared: measure of effect size
F	Fisher's F ratio: A ration of two variances
n	Sample size
p	Probability value
R^2	Coefficient of determination: measure of strength of relationship
M	Arithmetic mean
SD	Standard deviation
SE	Standard error
t	Computed value of t test
χ^2	Chi-square, the classic goodness-of-fit index
HSD	Tukey's Honestly Significant Difference
%	Percentage
ANOVA	Analysis of variance
BCO	Base + Corrective Action + Organizational Learning
SCCT	Situational Crisis Communication Theory
IRT	Image Repair Theory
DOR	Discourse of Renewal

FROM SAVING FACE TO SAVING LIVES:
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ABSTRACT

Traditional crisis communication literature emphasizes how organizations can use communication to preserve their image after a negative event. From image restoration theory to the situational crisis communication theory, these frameworks aim to shift the blame attributed to an organization to reduce negative impacts on reputation. The purpose of this study is to reevaluate the focus on reputation management and probe a crisis communication framework that addresses a crisis as an opportunity to address vulnerabilities. A between-subjects experimental design study compared the effects of the BCO framework (i.e., Base Response, Corrective Action, Organizational Learning) and reputation management strategies on anger, moral outrage, organizational reputation, social amplification, and the mediating effect of organizational learning. The results yielded from comparisons reveal how the BCO response may generate less anger and moral outrage, may result in higher perceptions of organizational reputation, and lower rates of negative social amplification than reputation responses. In some circumstances, organizational learning was found to mediate the effects of the strategies on reputation. This empirical investigation offers a promising direction for an ethical approach to crisis communication that prioritizes protecting the public.

Chapter 1: Introduction

In the past, a crisis might have been called an act of God or bad luck, but today we can see precisely what contributed to an adverse event. Since a crisis evolves from a manifested risk, it is necessary for public relations literature to shift the focus from saving face and shifting attributions of crisis responsibility to instead prioritize stakeholder wellbeing (Liu-lastres et al., 2018). Traditional crisis communication scholarship approaches a crisis as a threat to organizational assets, such as reputation, and prescribes management strategies such as scapegoating and denial that distance an organization from a crisis that originates externally (Coombs, 2019). Although these strategies can be effective for preserving, repairing, or restoring reputation, applications have lost sight of an organization's ethical obligation to address how they contributed to the crisis and claim responsibility for their failure to prevent or lessen the effects of the crisis.

Crises can take many forms and degrees of severity. They can be external, unstable, and uncontrollable like natural disasters, or they can be internal, stable, and controllable like organizational misdeeds (Coombs, 2006). Current crisis communication guides how organizations respond to these events based on where stakeholders attribute crisis responsibility. When an organization is highly attributed with crisis responsibility, they are advised to respond with rebuilding strategies like providing an apology since the crisis falls into a preventable category. On the other end of the spectrum, when a crisis falls into a victim cluster, there are minimal attributions of crisis responsibility. The organization is guided with responses such as denying associations or blaming the cause on someone or something else. The goal of these strategies is to shift crisis responsibility

to influence perceptions of the crisis to be less severe and influences positive perceptions of the organization (Coombs, 1995; Coombs & Holladay, 2002; 2010).

Instead of shifting crisis responsibility, this research endeavor applies crisis responsibility as an opportunity for organizations to learn from vulnerabilities, weaknesses, or underestimated threats. The present study raises questions surrounding ethical obligations and proposes a framework that suggests first providing a base crisis response (i.e., instructing and adjusting information), addresses crisis responsibility by taking corrective action (i.e., addressing the specific product or process that contributed to the crisis), and invests in organizational learning (i.e., states a commitment to ongoing improvement). With previous frameworks that base responses on perceived levels of crisis responsibility, organizations can face adversity if they utilize an inappropriate response (e.g., scapegoating when they should be apologizing). These consequences can threaten organizational reputation, negative behavioral intentions towards the organization, and cause financial loss (Fombrun, 1996; Klein, 1999; Nakra, 2000). To investigate and apply ethical crisis responses, the Situational Crisis Communication Theory (SCCT), Image Restoration Theory (IRT), and Discourse of Renewal (DOR) Theory serve as theoretical frameworks with applicable strategies in this study that reevaluates the current tools provided to practitioners that make organizational crisis responses ineffective, disregarded, and damaging (Coombs, 2015; Benoit, 1995; Ulmer et al., 2019).

Goals of the Study

Reassessing the role of public relations, this study uniquely positions a novel approach to crisis communication with ethical strategies from the SCCT's base crisis

response strategies (Coombs, 2015), image restoration strategies from IRT (Benoit, 1995), and organizational learning, which is rooted in the DOR theory (Ulmer et al., 2019). The purpose of this investigative study is to probe if the ethical response framework strategies are effective in responding to crises. The three BCO (i.e., Base response, Corrective action, Organizational learning) response strategies will be compared with the traditional reputation response. The experimental design study will probe the responses across two types of crises, one from the victim crisis cluster and one from the preventable crisis cluster. Findings from the assessment of the proposed BCO framework will provide scholars and practitioners an understanding of how stakeholders may respond to ethical responses that approach a crisis as an opportunity to correct and learn from the event.

Findings from this study will steer implications that accompany these responses, as the strategies are more than mere statements but rather include actionable measures that may require more time and resources than responses from traditional reputation management. Ultimately, the four experimental conditions will assess if stakeholders are satisfied with the responses to two crises and justify this investment into resources. To understand how the strategies can potentially mitigate the negative effects of a crisis, the strategies' effects will be tested on anger, moral outrage, organizational reputation, and social amplification. The following literature review provides conceptualizations of these variables and the BCO ethical response framework.

Overview of Chapters

The following chapters provide details of this dissertation. Chapter 2 presents a review of literature and poses research questions that further the ongoing crisis

communication conversation. Chapter 3 explains methodological decisions surrounding the study to answer the research questions. Chapter 4 provides answers to the research questions. Chapter 5 explains the meaning of the results addresses practical and theoretical implications. The Appendices include the materials used in the study.

Chapter 2: Literature Review

This chapter is dedicated to applying theoretical frameworks that inform the strategies, such as SCCT, IRT, and DOR theory, to position the study. After introducing concepts and justifications that illustrate the need for this research, research questions will provide directions that guide study design in Chapter 3.

Crisis Management

A crisis is traditionally known as a sudden, unpredictable event that threatens important stakeholder expectancies (Coombs, 2015). Seeger et al. (2002) define a crisis as "a targeted event that creates high uncertainty and perceived threat" (p. 2). The inherent uncertainty surrounding the situation, such as the cause, the extent of the damage, and the duration, creates a need for communication to the public to adequately address those affected and reduce uncertainty, which is a stressful and uncomfortable state (Liu, Bartz, & Duke, 2016; Reynolds & Seeger, 2005). Crises can be induced intentionally or unintentionally and result from a vulnerability or weakness that went misunderstood, misinterpreted, underestimated, neglected, or ignored by an organization (Coombs, 2015; Williams et al., 2017).

Efforts in crisis management have produced research that assesses and manages perceptions of crises and communication that aims to reduce impacts on organizational assets. Fearn-Banks (2001) defines crisis management as "strategic planning to prevent and respond during a crisis or negative occurrence, a process that removes some of the risk and uncertainty and allows the organization to be in greater control of its destiny" (p. 480).

Crisis management can be broken down at different stages of the crisis lifecycle (Coombs, 2007). If management is able to detect a threat, as virtually all crises leave traces of early warning signals, then the risk can be intercepted before it becomes a crisis. In the post-crisis phase, crisis communication has developed strategies for mitigating negative impacts on organizational reputation. Practitioners are also tasked with managing relationships between an organization and key stakeholders (Fombrun & Van Riel, 1997). A stakeholder is any individual or group that is affected by an organization or has the ability to affect an organization and can include publics like customers, employees, or shareholders (Coombs, 2004; Sellnow & Ulmer, 1995). Poor crisis management can result in stakeholders retracting support for an organization and threaten its survival if stakeholder needs are not met. Since a crisis is a manifested risk, this endeavor builds on crisis management literature while promoting a shift in public relations that prioritizes stakeholder wellbeing rather than traditional efforts that focus on maintaining reputation (Liu-lastres et al., 2018). SCCT notes that successful management recognizes how stakeholders attribute an organization with crisis responsibility to understand if the organization at fault (Coombs, 2006a).

Attribution of Crisis Responsibility

Attribution, which is a causal explanation for an event, plays a focal role in crisis communication (Weiner, 1985). When an event occurs, Weiner's (1985) attribution theory describes how individuals evaluate the cause along three independent dimensions: 1. Locus of causality (if it generated internally or externally); 2. Controllability (the degree of volitional control over an outcome or how much to hold another accountable), and; 3. Stability (the degree the cause fluctuates or remains constant). Attribution theory

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asserts that individuals will want to search for answers if a disturbance is important, unexpected, and negative. This theory is rooted in dominant crisis communication frameworks like SCCT to help position attributions of crisis responsibility. SCCT utilizes this in the organizational context by including that if the locus is external (rather than internal), unstable (rather than stable), and uncontrollable (rather than controllable), the organization has little attribution of crisis responsibility (Coombs, 2007a). When the crisis is stable (repeated), controllable (control over the outcome), and the locus is internal (with high intentionality), publics may be more likely to attribute organizational responsibility as they perceive that the organization could have established preventative measures. Attribution of crisis responsibility is critical to assess because it reflects the increasing amount of reputational threat an organization faces, among other negative outcomes.

SCCT is a prescriptive theory that matches the crisis type, based on a predictable amount of attributed crisis responsibility to organizational responses (Coomb, 2007). Three crisis clusters reflect varying degrees of crisis responsibility: victim, accidental, and preventable. As SCCT advises for victim crises, such as natural disasters, product tampering/malevolence, or workplace violence, there are minimal attributions of crisis responsibility to an organization, and the event should minimally impact organizational reputation (Coombs, 2010; 2006). The victim cluster is matched with deny response options that include attacking the accuser, denial, or scapegoating. When there are low attributions of crisis responsibility, crises fall into the accidental cluster, including challenges or technological error accidents where a failure causes an accident or potential harm. Crisis responses that match this cluster include diminishing strategies, such as an

excuse or justification (Coombs, 2006; 2010). The final, and most reputationally damaging cluster, is the preventable cluster, where there are strong attributions of crisis responsibility. When an organization experiences these crises, such as organizational misdeeds, human error that causes an accident or product harm, they are advised to use rebuilding strategies, such as an apology ingratiation (Coombs, 2006; 2010). Table 1 presents the crisis types and attributions of crisis responsibility.

Table 1

Crisis Types, Attributions of Crisis Responsibility, and Matched Responses

Crisis responsibility	Examples of crisis types	Matched response Posture
	Victim Crisis Cluster	
Minimal Attributions of Crisis Responsibility	Natural Disasters: Acts of nature such as tornadoes or earthquakes Product Tampering/Malevolence: External agent causes damage to the organization	Denial Posture - Attacking the accuser - Denial - Scapegoating
	Accidental Crisis Cluster	
Low Attributions of Crisis Responsibility	Technical Error Accidents: Equipment of technology failure that causes an industrial accident Technical Error Product Harm: Equipment of technology failure that causes a product to be defective	Diminishment Posture: - Excusing - Justification
	Preventable Crisis Cluster	
High Attributions of Crisis Responsibility	Human-error product harm: Product is defective or potentially harmful because of human error Organizational Misdeed: Management actions that put stakeholders at risk and/or violate the law	Rebuilding Posture: - Compensating - Apologizing

Note. Adapted from Coombs (2019) and Coombs and Holladay (2010).

Issues with Attribution and Reputation Responses

The reputation responses provide a generalizable guideline for practitioners to adopt. However, approaching crisis responsibility into these three classifications (i.e., victim, accidental, preventable) can generate issues when responsibility is incorrectly attributed. Applications that test matched and mismatched responses with crisis types have found that matched responses do not always protect publics physical or psychological, or produce more positive perceptions of organizational reputation, crisis responsibility, or potential supportive behavior, than unmatched responses (Claeys et al., 2010; Grappi & Romani, 2015; Kim & Sung, 2014; Verhoeven et al., 2012; Wright, 2009). When an organization misidentifies a crisis, such as responding to a preventable crisis with a victim cluster strategy, stakeholders are unsatisfied and can partake in disruptive behaviors, such as boycotting, negative word-of-mouth, and protesting (Coombs & Holladay, 2010). The current guidance from SCCT, a dominant crisis communication framework, advises practitioners to approach crisis responsibility as a categorical variable. Yet evidence shows that crises do not cleanly fall into these distinct clusters.

To address empirical consistencies, Ma and Zhan (2016) conducted a meta-analysis to examine the relationships among attributed responsibility, SCCT-identified response strategies, and organizational reputation. Authors found that, on average, matched responses are effective at protecting reputation; however, findings from the responsibility and reputation association indicate that damage caused by attribution requires "more than just explaining who should be responsible for what happens" (p. 12). Additionally, when responsibility is addressed in a strategy, an organization's credibility

may moderately increase and slightly increase favorable perceptions. Kim and Sung (2014) recognize that this may not have more of an effect because publics' general evaluation of an organization is more holistic, complex, and long-term. Kim and Liu (2012) show how for-profit organizations predominately focus more on reputation management crisis responses and neglect providing the ethical base crisis responses, which may damage long-term reputations. Similar to concerns raised by Penrose (2000), the present study continues to question if the success of short-term reputational responses comes at a cost, given the missed opportunity to build withstanding relationships with stakeholders.

When comparing reputation management strategies to the base crisis responses (i.e., providing instructing and adjusting information), Kim and Sung (2014) found that the base crisis responses were significantly more effective in producing positive perceptions, lowering blame, and offsetting damage than reputational strategies (i.e., denial and rebuilding strategies), regardless of crisis type. The results of these strategies can be found in Table 2. Serving as a reminder that the public expects and appreciates ethical responses, these findings imply an encouraging line of research in ethical implications of crisis communication (Kim, 2011).

Table 2

Results from the Base and Reputation Strategies

	Base *M (SD)*	Denial *M (SD)*	Rebuilding *M (SD)*	Base+ Denial *M (SD)*	Base+ Rebuilding *M (SD)*
Crisis responsibility	2.9 (1.4)	3.7 (1.5)	4.1 (1.4)	3.3 (1.6)	3.5 (1.8)
Company evaluation	4.3 (0.8)	4.0 (1.3)	3.8 (1.3)	4.2 (1.2)	4.0 (1.2)
Product evaluation	3.7 (1.2)	3.6 (1.4)	3.7 (1.3)	3.8 (1.2)	3.5 (1.3)
Supportive BI	3.6 (0.9)	4.0 (1.1)	3.5 (1.0)	3.7 (1.0)	3.8 (0.9)
Purchase Intension	3.4 (1.5)	3.1 (1.6)	3.4 (1.5)	3.8 (1.4)	3.2 (1.5)

Crisis Responses

Reputation Management Strategies

When a decision-maker for an organization attributes crisis responsibility, they are faced with the decision of how the organization will respond (Marcus & Goodman, 1991). These responses can take a variety of forms, including the extreme ends of an apology or denial. Allen and Caillouet (1994) investigate how ingratiation strategies, such as self-enhancing communication, can increase perceived legitimacy. Ingratiation strategies are typically used when there is a goal to "persuade the target of the organization's positive qualities, traits, motives, and/or intentions; and praise the target to gain approval" (as cited in Allen & Caillouet, 1994, p. 49). Authors call for the continued development of typological frameworks to assess the effectiveness of image-related response strategies (p. 56). This call was answered by Coombs and Holladay's (1996) exploratory study designed to test crisis typology with organizational response strategies.

The effects of crisis response strategies have been thoroughly investigated in crisis communication literature, driven by the belief that these strategic responses shape how stakeholders view an organization (Coombs & Holladay, 1996; Allen & Caillouet, 1994). Guided by the key premise of neoinstitutionalism, this advocates for organizations to conform to social rules within the external institutional environment. In return, conformity can enhance legitimacy and chances of survival. Neoinstitutionalists understand public relations as an institutionalized practice with governing mechanisms like rules and norms, and organizations are then guided by the logic of appropriateness and the logic of consequences (Boltanski & Thévenot, 2006; Fredriksson et al., 2013). The logic of appropriateness refers to decision-making as a reflection of social and moral

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standards as the surrounding environment expresses them, while the logic of consequences applies to a search for the most rational and technically efficient behavior (as cited in Fredriksson et al., 2013).

Studies moving forward under this postulate have investigated how strategies and best practices can produce outcomes that exceed outcomes produced by predecessors. Coombs and Holladay's (1996) approach to public relations shifts the focus from the violation (i.e., crisis) of social norms to repairing the violation by using communication to lessen the perceived severity of the crisis while enhancing perceptions of the organization. Authors apply attribution theory to match typology with crisis response strategies.

Traditionally, crisis communication scholars have consistently worked to develop frameworks with the unified goal to mitigate the potential threat to reputational damage or public image (e.g., Benoit, 1995; Coombs & Holladay, 1996; 2006). For instance, researchers have investigated how content strategies, the source associated with the message, the platform used for dissemination, message timing, and many other variables affect an organization's reputation after a crisis (Arpan & Pompper, 2003; Cameron, Sallot, & Curtin, 1997; Sora Kim, Avery, & Lariscy, 2009; Triantafillidou & Yannas, 2020). Reputational studies often neglect to recognize that before responding with a specific strategy tailored to the crisis type, the organization must first respond with communication that protects stakeholders both physically with instructing information and psychologically with adjusting information (Coombs, 2007). Although protecting the public is the implied priority in crisis communication literature, studies outside of testing the base crisis responses refrain from analyzing the effects of ethical messaging and

instead analyze response effects on reputation (e.g., Verhoeven et al., 2012). Marcus and

Goodman (1991) express that in the events where the public's health and safety are put

into question, managers should sacrifice profits to adopt an ethical position and act based

on a moral conviction (p. 300).

Ethical Response Strategies

As one of the goals of this study is to understand how responses that prioritize

stakeholder wellbeing affect post-crisis outcomes, a framework composed of three

strategies is proposed. The three strategies appropriate for addressing ethical

responsibilities during crises include the base crisis response, corrective action, and

organizational learning. The timed release of these three strategies depends on how

quickly the crisis unfolds. After the event, the base response should be quickly

disseminated to protect the public. With time investigating the situation, the organization

may identify a source that triggered the crisis and deploy corrective action to contain the

issue and prevent it from worsening. Beyond immediately addressing the issue, the

organization assesses its role in the crisis and pledge a commitment to solving a problem

or preventing a future crisis (i.e., demonstrate organizational learning). Thus, these three

layers build on the foundation of an ethical approach to public relations. The following

sections outline the conceptualization of the strategies and their utility. These strategies

can be used in conjunction or deployed depending on the situation outlined in Table 3.

Table 3

Conceptualization of BCO Response Framework

Strategy	Actions	Proposed appropriate situations
Base Response (B)	Provide instructing and adjusting information	Can be utilized as an immediate response after a crisis. Can be used as a solo strategy if there is uncertainty about the cause or if there are not resources available to investigate the cause.
Corrective Action (B+C)	Provide information that corrects the problem to prevent a similar event	Can be used after the base crisis response when the cause of the crisis is recognized. It involves addressing a specific product or processes that directly contributed to the current crisis. It can be used with consideration for legal consequences and if the correction is feasible to execute.
Organizational Learning (B+C+O)	Provide a stated commitment to a learning process (e.g., benchmarking, experimentation, environmental scanning)	Can be used after the base crisis response and after corrective action. It involves a systematic and expeditious commitment to an ongoing learning process to promote positive change.

Base Crisis Response (B). Immediately after any crisis occurs, organizations must compose a base crisis response, including instructing and adjusting information (Claeys & Coombs, 2020; Coombs, 2007). As crises result from a manifested risk and can have negative impacts on stakeholders, it is an organization's responsibility to help protect stakeholders wellbeing (Lie & Servaes, 2015; Liu-lastres et al., 2018). The first aspect of this two-part response includes providing information that instructs how to protect physical safety, such as seeking shelter, evacuating, or warnings to shelter-in-place (Coombs, 2015). The second, adjusting information, provides communication the assists with psychological coping since crises can create negative feelings, such as

anxiety. This can include expressions of sympathy, without implying guilt, as well as extending resources, such as hotlines and counseling, to those affected by the crisis. When the crisis is more severe, such as by creating life-threatening impacts, the base crisis response can become essential to protect stakeholder wellbeing.

As crises can cause stress to those affected, instructing and adjusting information provides communication to help alleviate these effects (Williams et al., 2017). Kim and Sung (2014) found that the base crisis responses were significantly more effective in producing positive perceptions, lowering blame, and offsetting damage than reputational strategies (i.e., denial and rebuilding strategies), regardless of crisis type (Table 2). Serving as a reminder that stakeholders expect and appreciate ethical responses, these findings imply an encouraging line of research in ethical implications of crisis communication (Kim, 2011). This response is appropriate after any crisis and can alone when the cause is unknown, still under investigation, or if there are not resources available to investigate the cause. Without a recognized cause, an organization cannot propose corrective action or organizational learning to address it (Coombs, 2006).

Corrective Action (C). Benoit (1995) developed the Image Restoration Theory (IRT) in an effort to provide organizations with strategies to recover from the damage left in the wake of a crisis. The IRT provides typology similar to SCCT and expands on Ware and Linkugel's (1973) work that provides practitioners guidance for navigating a crisis response. Of the image restoration strategies, corrective action addresses ways an organization can correct the problem to prevent a similar event from happening in the future (Benoit, 1995). Whether an organization is viewed as responsible for a crisis or

not, corrective action can be taken and create positive perceptions of an organization (Sellnow et al., 1998).

Corrective action, originally recognized as a subset of adjusting information, is distinct from the base crisis response strategies. It would be contradictory to pair corrective action, which is a necessary response to any crisis, with all reputation management responses, such as denial, silence, excuse, and minimization (Coombs, 2015). For instance, if corrective action was incorporated in the base crisis response, there would be potential for corrective action, or the commitment to prevent a similar event, to be paired with a reputation management strategy like an excuse, scapegoating, or minimization. This pairing would create an inconsistent message where the organization accepts responsibility while rejecting it in the same response. With respect to the properties of each strategy, corrective action is included as an ethical response distinct from the base crisis response strategies.

Specifically, SCCT's reputation responses also indicate that when a crisis is considered to be within the victim cluster, organizations are advised to utilize the deny responses like attacking an accuser, denial, or scapegoating (Coombs, 2006; 2010); however, external crises do not absolve organizational responsibilities to intervene (Sellnow et al., 1998). Voluntarily taking corrective action does not necessarily imply guilt and Sellnow et al. (1998) describe instances where this involvement contributes to positive perceptions of the organization. For instance, in 1982, an unknown individual entered Chicago drugstores and poisoned Tylenol bottles with cyanide. Instead of distancing from the crisis, Johnson & Johnson pioneered tamper-resistant packaging to prevent a similar event from occurring. Traditional crisis communication frameworks,

such as SCCT, advise contradictory responses that show an organization is under no obligation to invest in efforts that may reveal how an organization could have prevented the crisis. Corrective action addresses the specific product or process that directly contributed to the crisis, but this strategy may not apply to all situations. The base crisis response (B) must first be released, followed by corrective action (C) only if it is feasible for the organization to execute the corrective action, such as by considering resources, personnel, and legal consequences.

Organizational Learning (O). This ethical strategy, driven by the discourse of renewal (DOR) theory, approaches a crisis as an opportunity to learn and move forward (Ulmer et al., 2019). Moving away from reputation management strategies that emphasize restoring image, DOR advises organizational rhetoric that promotes ethical considerations and optimism for positive change. Literature from management sciences supplements research on how organizational learning can contribute to not only survival but a competitive advantage (Odor, 2017). The success of an organization surviving a crisis can depend on the ability to adapt to environmental changes to improve operations. Defined as a change in the organization's knowledge base that occurs due to past experience, the concept of organizational learning can provide public relations with a novel approach to crisis communication. Rather than focusing on short-term recovery after an event, organizational learning illustrates how a crisis provides the organization an opportunity to learn, with a sustainable process that strengthens operations (Fiol & Lyles, 1985). This process can include acquiring, retaining, and using competencies for changing thinking and behaviors at the individual and collective levels.

For organizations to cope with future challenges, learning involves initiating a systematic and expeditious process of identifying, acquiring, developing, mastering, retaining, managing, evaluating, and improving relevant individual and organizational competencies (Jones & Pfeiffer, 1976; Odor, 2017). An organizational statement about continuous maintenance must come with a real commitment to the learning process. As opposed to short-term reputational responses, organizational learning is a pledge to a process that identifies needs that learning can support, such as strategic planning, benchmarking, problem-solving, project management, experimentation, lessons from experience, knowledge transfer, scenario planning, environmental scanning, and building alliances. In the context of crisis communication, this learning is paradigmatic and operationalized by changes enacted by the organization (e.g., core beliefs, values, work procedures, effective communication systems) to prevent the crisis from happening again (Zhao et al., 2020). This is distinct from corrective action, which focuses on "correcting the current problem without actual paradigmatic changes" (p. 5). This process is also time-delineated since time will allow the organization to collect information and investigate a cause to prepare corrective action and progress on organizational learning. Again, after a crisis occurs, it is necessary to first employ the base crisis response for immediate relief, then, if feasible, corrective action, followed with organizational learning (BCO).

Response Effects

Anger and Moral Outrage

Crises are socially constructed and emerge when an organization violates stakeholder expectancies that create negative affect (Coombs, 2018; Estes, 1983). As

individuals process the event, it often generates negatives emotions (Weiner, 1995).

Coombs and Tachkova's (2019) analysis of scansis, which is the intersection of a crisis

and scandal, uses cognitive appraisal theories to understand how elements of crisis

produce predictable emotions, such as moral outrage and anger. Anger, for instance, may

be arrived through thoughts that were capable of producing emotion (Lazarus, 1991).

Crises can produce anger in stakeholders because they experience an undesirable

outcome that could have been controlled by some actor (Coombs & Tachkova, 2019).

Coombs and Holladay (2007) add that when attributions of crisis responsibility are high,

the event will produce more anger, and that anger can cause resistance or backlash that

translates the emotion into behaviors (Watson & Spence, 2007).

Perceptions of irresponsible behavior have been linked to moral outrage

(Lindenmeier et al., 2012), which is a moral emotion that is "linked to the interests or

welfare either of society as a whole or at least of persons other than the judge or agent"

(Haidt, 2003, p. 853). In CSR literature, moral outrage was found to occur when

participants perceived greed by the organization and unfair corporate behavior (Antonetti,

Paolo & Maklan, 2016). Similar to anger and moral outrage, moral anger has been shown

to motivate negative behaviors like boycotting (Cronin et al., 2012), punitive political

action (Pagano & Huo, 2007), and arouses other forms of retaliatory behavior (Skitka et

al., 2004). To understand these consequences after an organization violates expectancies,

the present study will determine how the response strategies trigger these emotions and

their effects on organizational outcomes. Coombs and Tachkova's (2019) application

found that when an organization responds to a scansis with corrective action and moral

recognition, the response generated the lowest levels of moral outrage. Authors explain

that the response can burgeon an investment that can benefit the organization by reducing

the likelihood of the event evolving into an organizational stigma, which is when a

critical mass of stakeholders believe the organization is problematic (Devers et al., 2009).

In response to Coombs and Tachkova's (2019) call for literature that integrates long-term

effects of crisis communication with consideration for ethical obligations, the following

research questions are proposed:

RQ1: How will the BCO framework responses to a victim crisis compare with the

matched reputational response on (a) anger and (b) moral outrage?

RQ2: How will the BCO framework responses to a preventable crisis compare with the

matched reputational response on (a) anger and (b) moral outrage?

Organizational Reputation

Since the early 1990s, crisis communication scholars have pivoted away from

business and management discourse to examine if and how communication can protect

organizational reputation (Claeys et al., 2010; Coombs & Holladay, 1996; Ma & Zhan,

2016b). Fombrun and van Riel (1997) state:

> A corporate reputation is a collective representation of a firm's past actions and
>
> results that describe its ability to deliver valued outcomes to multiple
>
> stakeholders. It gauges a firm's relative standing both internally with employees
>
> and externally with its stakeholders, in both its competitive and institutional
>
> environments. (p. 10)

It is recognized as an intangible asset to be monitored and protected (Davies et al., 2005),

as it can help attract employees and customers (Gardberg & Fombrun, 2006), increase

investor confidence (Fombrun & Van Riel, 1997), and increase chances of survival after

a crisis (Rao, 1994). Reputations are an investment derived from unique internal features, making them valuable to protect since they can be challenging to duplicate. Positive interactions with an organization can build favorable reputations, while the unpleasant can lead to unfavorable reputations (Fombrun, 1996). From maintaining, restoring, to repairing, scholars have studied different ways to protect reputation in the face of a crisis. Claeys and Coombs (2019) suggest practical implications to add that managers should "seek to add to the account through various actions, such as socially responsible actions or excellent customer service" (p. 12). Although Coombs and Tachkova's (2019) study with corrective action and moral recognition lowered anger and moral outrage, they did not find significant impacts on reputation. Without conclusive results and continuing previous efforts that value reputational impacts, the following research questions seek to find if and how the framework responses minimize reputational damage.

RQ3: How will the BCO framework responses to a victim crisis compare with the matched reputational response on organizational reputation?

RQ4: How will the BCO framework responses to a preventable crisis compare with the matched reputational response on organizational reputation?

Social Amplification

As crises involve uncertainty and can threaten public safety, organizations must use communication platforms that expeditiously distribute crisis responses, which can contain life-saving information. A Pew Research Center survey found that 69% of Americans use Facebook, with 74% visiting the site daily (Perrin & Anderson, 2019). While the adoption of social media has started to curtail, most existing users have remained faithful to Facebook, which can be used for gaining information, news, and

entertainment. Organizations have a responsibility to provide immediate information after a crisis, and social media allows organizations to release responses to stakeholders as soon as it becomes available, which cuts out the delay of communicating through third-party news organizations (Austin & Jin, 2017). For instance, Xu's (2020) meta-analysis outlined advantages, including higher interactivity with broader reach. As social media can allow practitioners to provide a prompt response, transmission speeds can also work against organizations as it may accelerate negative interactions.

Social media provides nonhierarchical channels for users and organizations to communicate, which can be essential to the distribution of critical information during a crisis (Eriksson & Olsson, 2016). Its various platforms, such as Twitter and Facebook, facilitate interactions, dialogue, and can build relationships quicker than traditional media (Seltzer & Mitrook, 2007). These platforms have created opportunities for crisis communicators to engage with stakeholders, but this does not come without challenges (Austin & Jin, 2017). Social media plays a central role in the social amplification and attenuation of a risk. The social amplification of risk framework (SARF) provides a way to understand how individuals have the ability to amplify, reduce, or modify risk perceptions (Kasperson et al., 1988). When a signal event triggers a risk, individuals, the media, and the public perceptions of the event may amplify or attenuate perceptions, resulting in an intensification process. This intensification may result in a secondary consequence of "ripples," which could extend (e.g., amplify) or constrain (e.g., attenuate) the scale of the impact (Lewis & Tyshenko, 2009; Luisi, 2020). The type of social media platform also dictates the extent of crisis impacts. For instance, the medium reflects the utility of communication, and can result in channel effects, which illustrates how

platforms can alter perceptions and reactions to crisis communication messages (e.g., Utz et al., 2013).

The social-mediated crisis communication model (SMCC) has also brought an opportunity for scholars to understand the facilitation of crisis communication on social media (Lui et al., 2011). The model recognizes that social media provides an opportunity for organizations to cultivate stakeholder relationships, inform their audiences, and monitor crises online. However, it can also foster negative interactions. For instance, rumors and misinformation may be amplified online, and the organization may lose control of the message. This crisis escalation on social media can be difficult for an organization to control since users have the ability to quickly disseminate narratives that may be incorrect or misleading (Lim, 2017).

Stakeholders and their use of social media also play a significant role in perpetuating a crisis (Gigliotti, 2019). In essence, social amplification involve interactions that increase the relevance of message for others, which further contributes to the spread and dissemination (Strekalova, 2017). When users interact with the message on social media, it may become visible to their social networks, increasing the reach (Pidgeon et al., 2003). As most audiences are on social media, Jin et al. (2014) adds, "Organizations no longer have a choice about whether to integrate social media into crisis management, the only choice is how to do so" (p. 76).

With an obligation to respond quickly on a social media platform, there is an opportunity to probe the effects of theoretically-based crisis responses in these contexts. When used appropriately, social media can be harnessed as a tool to navigate a crisis and restore the public's trust in an organization (Wang, 2016). On the other hand, when

ineffective, crisis communication on social media can tarnish an organization's reputation. Responding to Xu's (2020) call for experimental research that systematically assesses effect size or relationships of theoretical constructs involving crisis communication in the social media era, the following research questions will assess the potential for the BCO ethical responses to perpetuate on social media:

RQ5: How will the BCO framework responses to a victim crisis compare with the matched reputational response on negative social amplification?

RQ6: How will the BCO framework responses to a preventable crisis compare with the matched reputational response on negative social amplification?

The Mediating Role of Organizational Learning

To assess if a change in organizational learning mediates the effect of the BCO strategies on organizational reputation. Organizational learning is the perception that newly gained knowledge influences improvements, that an organization acquires and shares new and relevant knowledge, capacities, and skills (Edmonson, 1999; Kale et al., 2000). Organizational learning has been used as a mediator in past analyses that found, for example, sustainable leadership enhances learning and drives sustainable performance in organizations (Iqbal & Mumtaz, 2010). It has also been found to mediate the relationship of knowledge management processes with innovation (Abdi et al., 2018), operational performance (Jaber & Caglar, 2017), and sustainable competitive advantage (Liao et al., 2017). To assess the potential mediating role of organizational learning, the following research question is asked:

RQ7: Does organizational learning mediate the relationship between the conditions on organizational reputation?

Chapter 3: Method

This study uniquely positions the public relations literature with ethical strategies from the SCCT's base crisis response strategies (Coombs, 2015), image restoration strategies from IRT (Benoit, 1995), and organizational learning rooted in the DOR theory (Ulmer et al., 2019). The purpose of this investigative study is to probe if the framework strategies are effective in responding to two crises. The strategies will also be compared with the traditional reputation management strategies matched with each crisis. To examine the proposed research questions, an experimental design study was developed out of crisis communication literature. Case studies, such as Sellnow et al. (1998), have indicated that corrective action can rectify a predicament and should not be considered a hindrance but an opportunity. However, an experimental design study testing this approach has yet to be developed. The following section will describe the method for answering the research questions to understand the BCO ethical response framework's effectiveness.

Design

To examine the effects of the framework strategies, a between-subjects experiment was conducted, which is an approach gaining more traction in crisis communication (e.g., Arpan & Pompper, 2003; Coombs & Holladay, 1996; Sora Kim & Sung, 2014; Triantafillidou & Yannas, 2020). Since the objective is to compare conditions and establish causality, an experimental design is the most appropriate method for answering the research questions. As with any study, the methods must be dictated by the research questions. The present research questions would best be answered by measuring the effects of experimentally manipulated independent variables. By comparing the effects of the strategies in an artificially clean environment, the control

over the conditions minimizes the effects of other, unrelated variables (Creswell & Plano, 2011). The method of data collection also dictates data analysis. Data collected can be statistically analyzed and findings may reveal comparisons between message effects. Qualitative methods, such as interviews or focus groups, may illuminate other essential perspectives that are more rich in description. Although experimental research in the field is growing, crisis communication has been predominately analyzed using case study methods, which provides descriptive data but little measurable insight into stakeholder responses to crisis communication (Coombs & Holladay, 2008). Boynton and Dougall's (2006) content analysis of articles published from 1995 to 2004 in two prominent public relations journals (i.e., *Public Relations Review* and *Journal of Public Relations Research*) found that just 21 of the 400 articles reported outcomes of experimental design research. They note that this reluctance, or methodical avoidance, to apply the experimental method can explain the dearth of material that advances the field. Miller and Levine (1996) illustrate how experimental design is effective in identifying relationships between variables in persuasion research, and Stacks (2002) adds that this method can "allow the researcher the control necessary to precisely specify and manipulate the source or message characteristics he or she is interested in comparing" (p. 265). An experiment best answers the research questions that measure the effects of the independent variables (i.e., strategies) on the dependent variables (i.e., anger, moral outrage, reputation, social amplification), while controlling for existing attitudes towards the organization facing the crisis (Abdi, Edelman, Valentin, & Dowling, 2009).

The independent variables in the current study, guided by theory, were manipulated to include four conditions: (B) base crisis response, (BC) base crisis

response and corrective action, (BCO) base crisis response and corrective action with organizational learning, and the traditional reputation response. To determine the framework's effectiveness during different crises, two scenarios from different crisis types (i.e., victim and preventable) were developed. The victim crisis involved a college experiencing a "Zoombombing" incident and was developed to reflect an adverse event that originated external to the organization. The preventable crisis involved a college professor demonstrating discriminatory behavior, which reflects the intentional and internal nature of the preventable crisis type. The message strategies are the college's responses to the incident. Participants were randomly assigned one of four response messages, to a victim crisis or a preventable crisis. After receiving the response, they were asked of their perceptions of the college's response with questions that measured feelings of anger and moral outrage and perceptions of reputation, organizational learning, and social amplification

Experimental Conditions

The stimuli for each experimental condition was carefully created with operationalized definitions in mind, and the Flesch-Kincaid readability test was used to assess the comprehensibility of messages (Kincaid et al., 1975). The Flesch-Kincaid readability test takes into account sentence, word, and syllable counts to determine readability. The exact Flesch-Kincaid reading ease formula is as follows: 206.835 - 1.015 x (words/sentences) - 84.6 x (syllables/words). This equation generates a grade level that represents the American school grade needed to comprehend the material. The messages used in the experimental condition stimuli averaged a 12th-grade level, which means they should be understood by participants 18 years old or greater. Surveys are generally

advised to aim for content with an 8th-grade reading level, which is typically easily understood for 13 and 14-year-olds because the average American has a seventh- to eighth-grade reading ability (Kirsch, 1993). Those with low literacy may be at a disadvantage to the readability of the manipulations; however, it was important to maintain the features of messages released by an institute for higher education. The manipulations were also modeled after real posts from universities responding to similar crises, and emulating the language helps maintain external validity.

Crisis Scenarios

A fictitious higher education organization (i.e., Chicago College) was utilized in this experiment. A fictitious organization is acceptable to use in experimental studies to minimize subject bias (Siomkos, 1999). Fictitious organizations are often preferred to avoid familiarity and the possibility of pre-existing brand attitudes affecting responses (Till & Shimp, 1998). Fictitious organizations are commonly used in crisis communication studies to avoid possible confounding effects (e.g., Wan & Schell, 2007; Claeys & Cauberghe, 2014; Laufer & Jung, 2010).

Although the name of the organization was fictitious, the stimuli for the current experiment were based on real crisis scenarios in order to increase the levels of ecological validity (see Appendix A for all experimental materials). In both crises used in the current experiment, students experience a disturbance during a university class on Zoom. A review of 2019 news headlines found that education ranked as a top crisis-prone industry, and 13.3% of negative headlines were related to cyber crises, which has been a consistent upward trend from 12.8% in 2018 and 4.5% in 2017 ("ICM Annual Crisis Report," 2020).

Zoom is a videoconferencing platform that offers "1) access to increased educational resources, 2) flexibility for the learner, 3) valuable global interchange, and 4) equal opportunities for students and teachers regardless of location" (Earon, 2020). From students attending school to working employees, Zoom has played a significant role in connecting the world during the coronavirus pandemic when face-to-face meetings are not advised (Bond, 2020). The videoconferencing site reported higher profits from May to July than profits during the year of 2019. Although anyone can create an account and use the platform for their own purposes, it is often used to facilitate meetings, whether for work or school. The site has features such as breakout rooms, where classrooms can be divided into smaller groups within the meeting, screen-sharing capabilities, and sessions can be recorded to allow students to watch at a later time if desired (Earon, 2020). Institutes of higher education have used Zoom, among other video-conferencing platforms, as a digital tool to facilitate flexible, blended, and other forms of online learning. Receiving an education through online communication technologies is also referred to as e-learning and distance educated (Lee, 2010).

E-learning has enabled courses and interactions between learners and educators to continue during the pandemic, a time when face-to-face communication is unsafe. As an internet-enabled interface, videoconferencing platforms, such as Zoom, have become a convenient tool to overcome the challenges of classroom learning and instruction during a pandemic. Although this technology has enabled learning and connectedness, it has also provided a platform that facilitates racism, which manifests in aspects such student-instructor interactions. During the COVID-19 pandemic, issues of xenophobia emerged, specifically targeting those of Asian descent (Noel, 2020). The proliferation of COVID-

19 misinformed and xenophobic headlines within the United States, coupled with the misconception of the nature of the virus, promoted fear that contributed to prejudice, xenophobia, discrimination, and normalized racism (Das, 2020; Noel, 2020; Person et al., 2004). Communications that normalized racism perpetuated fears and amplified community tensions (Asmelash, 2020). As noted by Noel (2020), the stigma of an infectious disease can be worse than the disease itself. Instructors are encouraged to use e-learning to communicate information literacy and dissuade engagement with sensationalist propaganda (Noel, 2020). While some educators have used virtual platforms as tools for promoting justice, equity, diversity, and inclusion, others have perpetuated detrimental stereotypes and xenophobia through behaviors that discriminate against those of Asian descent. The preventable crisis in this experiment and further described in the next section, involves a college instructor exhibiting discriminatory behavior toward a group of Asian students during a course facilitated over Zoom. Noel (2020) notes the need for global equity-focused strategies for communication on online platforms, which are not only relied on in the education sector, but across all industries. Zoom has provided a platform for synchronous communication between any participants who are geographically distanced, such as employees, students, and family.

During the COVID-19 pandemic, millions of accounts were created to facilitate conversations while isolated (Yuan, 2020). A Zoom company statement from April 1, 2020 recognized how the site "ballooned overnight," from about 10 million daily meeting participants in 2019 to over 200 million in 2020, including over 90,000 schools across 20 countries (Yuan, 2020). As the platform became more popular, from facilitating work calls to hosting weddings, the app was scrutinized for its lack of security measures to

protect meetings from disruptions (Lorenz & Davey, 2020). Zoom's lack of security standards has enabled the emergence of online pranks and harmful disruption campaigns that threaten the confidentiality of meetings and privacy of users (Secara, 2020). In one study, researchers found over 500,000 Zoom accounts for sale on the dark web and hacker forums, many of which cost less than a penny to purchase (Hamilton, 2020). Members of a web security group developed a tool called "zWarDial" that automated the guessing of meeting IDs (which consist of nine to eleven numbers) (Krebs on Security, 2020). One day of scanning on zWarDial revealed information of nearly 2,400 Zoom meetings, including the date and time to join, the meeting organizer, the link to join the meeting, and other information. "Zoombombing," which involves someone entering a Zoom meeting uninvited and disrupting the call, is one example of a trend that has damaging effects on meeting participants (Secara, 2020). What started as a classroom prank quickly changed as Zoombombers have been notorious for broadcasting offensive material, such as racist and pornographic imagery, that is punishable with jail time (Setera, 2020).

The Victim Crisis.

A privacy concern known as "Zoombombing" has disrupted stakeholders expectations by exposing unsettling material to meeting attendees (Lorenz, 2020). Targeted virtual classrooms become a place where hackers with malicious intentions can cause chaos (Hamilton, 2020). For instance, a history class at UCLA was taken over by a hacker that projected racial slurs, hackers disrupted a storytelling class at Arizona State University with pornographic videos, and hackers made lewd comments to elementary students in a virtual geography class in Singapore. Not only is it found to be disruptive,

these hacks can include harassment, such as offensive and unsettling expletives. For instance, the Tech Times reports, "Several accounts connive to raid Zoom sessions with harassment campaigns and vexatious actions mainly through shocking images and videos." They also note that the attacks may be driven by Zoom-raid social media accounts that are trying to gain popularity through social media engagement.

For the victim crisis in this experiment, study participants are presented with information about a Zoombombing incident at Chicago College:

Chicago College received a complaint that an unknown individual, unaffiliated with the university, disrupted a biology course and hacked a Zoom session. During the event, the hacker took over screen-sharing capabilities to expose students to derogatory videos and hateful language. The uninvited participant kept their video off and microphone muted for most of the class before disrupting with audio containing racial slurs at a loud volume and began to screen-share a pornographic video. The incident was reported to the Office of the Provost and Title IX investigator.

Scholars have yet to study the perceptions of Zoombombing crises, which have emerged as a frequent threat to educational institutions worldwide. As most Zoombombings are instigated by hackers, universities are faced with incidents that are often perceived as external, uncontrollable, and unstable. Using SCCT crisis typology, these characteristics (i.e., external, uncontrollable, and unstable) are three aspects that classify the incident as a victim crisis (Coombs & Holladay, 2002). SCCT states that minimal attributions of crisis responsibility justify responses such as denying associations or scapegoating (e.g., blaming the cause on someone or something else) (Coombs &

Holladay, 2002). This matched reputation response (i.e., victim crisis with denial response) is one of the four conditions being tested, along with the BCO response strategies, on reputation. As Zoombombing often involves disturbances that contain harassment or explicit language for the purpose of social media engagement, it is appropriate to study the effects of the responses on anger, moral outrage, and social amplification.

The Preventable Crisis.

Challenges universities face over Zoom can also be caused by the educators at their own institution. Although these incidents are more often unintentional, this type of human error violates student expectancies by disrupting the learning environment (Coombs & Holladay, 2002). For instance, instructors may have inappropriate backgrounds, unintentionally share damaging information when mics are unmuted, or screen-share inappropriate content.

In April 2020, a University of Miami professor held a business analytics course over Zoom. While sharing his computer screen with students, one of the "bookmarks," which is a saved shortcut to access a webpage, that was visible on the professor's web browser included the cut-off site name "Busty college girl fu…" (Sparks, 2020). Students attending the course took photos and videos of the Zoom screen and shared them over social media, such as Snapchat and TikTok. The content spread quickly over social media, such as one TikTok video that reached over 800,000 views within hours. Responding to the crisis, the University of Miami fired the professor shortly after and issued the following general statement:

The University of Miami aggressively investigates all complaints of inappropriate

behavior or sexual harassment. After receiving a complaint through the

University's ethics hotline, the incident was investigated by the Office of the

Provost, Title IX investigator and Miami Herbert Business School.

In August 2020, a University of Missouri professor was relieved of teaching duties after

he commented about needing a face mask to a student from Wuhan, China, during a

course held over Zoom (Redden, 2020). A one-minute recording of the exchange was

shared over social media with comments labeling the professor as "racist and

xenophobic." The university responded similarly to the University of Miami, stating they

opened an investigation and referring the incident to their Office for Civil Rights and

Title IX.

The event that occurred at the University of Missouri was used for the basis of the

preventable crisis in this experiment. The manipulated preventable crisis emulates how

theory defines it, which is a human error that causes harm and attributes the organization

with high attributions of crisis responsibility (Coombs & Holladay, 2002). The

preventable crisis in the current study involved a fictitious college instructor intentionally

placing Asian students in their own small group during a Zoom breakout session with a

remark that digs at quarantining these students since the outbreak was first discovered in

China. Participants in this condition received the following statement:

Chicago College received a complaint regarding a university instructor's remarks

in a biology course over Zoom. During a course breakout session, the instructor

placed Asian students in the class in their own small group and made a remark

about quarantining the group, as the outbreak was first discovered in China. The incident was reported to the Office of the Provost and Title IX investigator. Both the victim and preventable crisis events created an opportunity for the organization (i.e., Chicago College) to respond to the events. To assess the effects of the BCO framework strategies, the organizational statements responding the events included the proposed framework responses (i.e., Base, Corrective Action, Organizational Learning) and reputation management strategies (i.e., victim and preventable reputation strategies).

Organizational Responses

The organizational responses utilized in this experiment include three manipulated statements from the BCO framework (i.e., Base, Corrective Action, Organizational Learning) and the reputation management strategies provided by SCCT. Each of these response strategies are described in the following subsection.

BCO Responses

Base Crisis Response.

The base crisis response, which includes instructing and adjusting information, is most critical during crises that cause life-threatening impacts (e.g., seek shelter, evacuate, etc.), but they still serve a strategic objective (i.e., public safety) during less physically threatening crises (Coombs, 2015). The base crisis response to the victim crisis in the current study includes the following statement from Chicago College:

> Chicago College is responding to the hacking event that occurred during a biology course being held over a Zoom session. Students enrolled in this class will be emailed with instructions about how to proceed in this course. Resources and appointments with the counseling center will also be available to those affected.

Similarly, the base crisis response to the preventable crisis maintains identical language, aside from the specifics of the event:

> Chicago College is responding to actions made over Zoom by a biology instructor. Students enrolled in this class will be emailed with instructions about how to proceed in this course. Resources and appointments with the counseling center will also be available to those affected.

Corrective Action.

Corrective action addresses the specific products or processes that contributed to the event and provides a solution to contain the situation and prevent it from continuing (Benoit, 1995). Before proving corrective action, the organization must provide the base response to address the immediate needs of the public. After the base response (B), participants randomly assigned to receive the corrective action statement (C) received the following response from Chicago College:

> In response to the hacking event, Chicago College has requested all instructors that facilitate courses over Zoom to create passwords for students to log into their course meetings securely. This will prompt a student identification process to prevent a similar event from happening in the future.

Participants in the preventable crisis condition will first receive the preventable base crisis response followed by the following statement from Chicago College:

> In response to the actions made by a university professor, Chicago College has investigated the event and relieved this professor from their duties at Chicago College to prevent this from continuing in the future. This course will now be instructed by Dr. Stephens, who is one of our renowned biologists.

Organizational Learning.

Participants in this condition will first receive the base crisis response, then correction action, and finally organizational learning. Organizational learning involves a systematic and expeditious commitment to ongoing learning that promotes positive change (Jones & Pfeiffer, 1976; Odor, 2017). Participants in the victim crisis condition will first receive the victim base crisis response and corrective action, followed by the following statement from Chicago College:

Chicago College has taken the hacking event as an opportunity to learn from system vulnerabilities. This process has involved learning from experience. We are committed to preventing these issues and have instilled new policies and annual training sessions for instructors to secure their Zoom sessions. We have also developed procedures for students with courses on Zoom to protect the security of sessions, such as by signing into sessions on secure browsers. Chicago College is committed to working on these issues through ongoing assessments to provide a welcoming environment conducive to learning.

Participants in the preventable crisis condition will first receive the preventable base crisis response and corrective action, followed by the following statement from Chicago College:

Regarding the incident earlier this month involving Chicago College faculty, we have taken the removed faculty's actions as an opportunity to learn from current hiring and reporting procedures. This process has involved learning from experience. We are committed to preventing these issues and have instilled new hiring procedures and annual training sessions for instructors to ensure students

receive the highest quality education we can provide. We have also developed

reporting procedures for students to raise any degree of concern about the content

or method of teaching in their courses. Chicago College is committed to working

on these issues through ongoing assessments to provide a welcoming environment

conducive to learning.

Matched Reputation Responses

The effects of the BCO responses will be compared with traditional reputation

responses. For the victim crisis, where attributions of crisis responsibility are minimal,

the reputation response that is advised by SCCT is a denial posture (Coombs & Holladay,

2002). The denial posture suggests strategies like scapegoating and denial. Participants

that were assigned to the victim reputation response received the following statement

from Chicago College: Chicago College does not claim responsibility for this incident.

The hacker, unaffiliated with the university, caused this event to occur.

In response to the preventable crisis, the reputation-based response that matches

this crisis type comes from the rebuilding posture, including an apology or compensation

(Coombs & Holladay, 2002). Responding to this crisis, the following statement was

provided to participants in this condition: Chicago College does not tolerate these

incidents. We apologize to all students affected by the decisions made by this instructor.

Sample

Participants were recruited through Amazon's Mechanical Turk (MTurk), a web-

based platform for recruiting virtual participation in public opinion research (Clifford et

al., 2015). The platform allows efficient recruitment of a randomized sample of subjects

at a lower cost than professional online panels (Berinsky et al., 2012). MTurk uses the

internet to connect people with participation in small tasks and is a form of crowdsourcing (Hitlin, 2016). Since MTurk provides access to a global respondent pool at a relatively low cost, it has become appealing to academics seeking a sample more diverse than a student sample. Hitlin's (2015) analysis of tasks posted on MTurk found that academics were responsible for one-third (36%) of tasks posted over a 5-day period, while businesses were responsible for another large portion (31%). MTurk allows academic researchers to make research projects available to MTurk workers (i.e., HITs) and select qualifications like the location of worker and the number of HITs a worker has previously completed (e.g., available only workers who have completed at least 100 HITs) (Sheehan, 2017). The current MTurk HIT was available to participants that were at least 18 years old and living in the United States. The workers who met the qualifications were provided a link to the Qualtrics survey. At the end of the survey, a unique code was generated for workers to copy and paste into MTurk to receive compensation. Payment was approved within three hours and was transferred into worker accounts, which are typically linked to their bank account. Hitlin (2016) notes that it is common for studies in social science disciplines to utilize crowdsourcing websites such as MTurk. Moving away from traditional samples, Goodman and Paolacci's (2017) analysis of studies published in the *Journal of Consumer Research* from June 2015-April 2016 found that over 40% of studies used crowdsourcing websites. Ultimately, MTurk efficiently connected this study with demographically diverse participants located in the United States.

Participants were compensated with a monetary value that reflected the federal minimum wage in the United States at the time of collection, which was $1.20 for this 10-15 minute survey. The average duration of the survey was 14:32. An a priori G*Power

analysis was conducted, using estimations of effect sizes (.25) from prior crisis

communication studies to determine the sample size (Xu, 2020). Accounting for the

potential for drop-outs, streamlining, and other circumstances, 450 participants were

recruited. The sample size per condition ranged from 55-60 participants, as shown below

in Table 4:

Table 4

Sample per condition

Condition	*n*
Preventable Crisis	
Base Response	55
Base, Corrective Action Response	58
Base, Corrective Action, Organizational Learning Response	55
Reputation Response	57
Victim Crisis	
Base Response	55
Base, Corrective Action Response	55
Base, Corrective Action, Organizational Learning Response	55
Reputation Response	60

Data cleaning and transformation.

Data cleaning, or scrubbing, refers to the process of improving the quality of data

by "detecting and modifying, replacing, or deleting incomplete, incorrect, improperly

formatted, duplicated, or irrelevant records" within a database (Allen, 2017, para. 1).

Krishnan et al. (2016) note that almost all computational cleaning requires an extent of

supervision and manual selection of the parameters. These procedures are often

unaddressed in the presentation of results, potentially contributing to the irreproducibility

of science. Krishnan et al. (2016) add a concern with the iterative process is confirmation

bias and statistical overfitting, or "cleaning until the output of a specific analysis is

achieved" (p. 3). Recognizing this concern, all cleaning and transformations of the dataset are discussed to communicate assumptions.

Assessing the dataset, it was observed that four participants indicated responses that were incomplete or involved straightlining, two in the Preventable – Base response and two in the Victim - Base, Corrective Action, Organizational Learning Response. Straightlining, is when the same response option is chosen from each item of a scale (Schonlau & Toepoel, 2015). With all responses from the two participants selecting the first option, including reverse-coded items, it an obvious indicator of suspicious data. Data from two additional participants was incomplete, where the participants partially completed the survey and then abandoned before fully answering all questions. This indicates a low drop-out rate (0.44%). Data tied to the two participants with true missing fields and the two participants with data that indicated straightlining were removed before analysis to avoid skewing the results. With respect to concerns of analyst biases and statistical over-fitting, data from the remaining 446 participants were included in the analysis.

With regard to data transformation, several scale items included reverse-coded items, or questions that include words and phrases opposite among the rest of the items. Incorporating reverse-worded items is often done to control for or identify acquiescence response bias (Herche & Engelland, 1996). Recasting positively stated items into negatively stated items, and vice-versa, is an approach to limit "yea-saying" or "nay-saying" tendencies (Churchill, 1979). Herche and Engelland (1996) question the acceptance of reversed items, noting a risk of reducing the unidimensionality of measures. Kanouse and Hanson (1971) add that polarized items do not always reflect the

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opposite ends of a dimension; thus, the measures with these items are not consistently unidimensional. The decision to accept the risk of unidimensionality with reverse-coding was made with the trade-off for results that limited acquiescence bias. One item in the anger measurement and three items in the organizational reputation measurement were reverse coded and can be found in the measurements section with the "®" to indicate specific items. The four items were transformed, or re-coded, to reflect the direction of the variable measured.

   Sample overview. Descriptive statistics of the 446 participants can be found in Table 5. Participants ranged in age, from 19 to 76 years old ($M = 37.72$, $SD = 10.74$). Over half of the participants identified as male ($n = 250$, 56.05%), while 193 (43.27%) identified as female, and 3 (.01%) preferred not to say. The majority of participants identified as White or Caucasian ($n = 324$, 72.65%), followed by Black or African American ($n = 63$, 14.13%), Asian ($n = 49$, 10.99%), American Indian or Alaska Native ($n = 5$, 1.12%), other ($n = 4$, 0.90%), and Native Hawaiian or Pacific Islander ($n = 1$, 0.22%). Approximately 8% of participants identified as Spanish, Hispanic, or Latino ($n = 36$), 32 participants identified as Mexican, Mexican American, or Chicano (7.17%), seven preferred not to answer (1.57%), and four identified as Cuban (0.90%). When responding to a question about religious beliefs, 177 respondents identified as Christian (39.69%), followed by Catholic ($n = 125$, 28.03%), no religious beliefs ($n = 108$, 24.22%), Hindu ($n = 11$, 2.47%), Jewish ($n = 7$, 1.57%), a different religion not listed ($n = 7$, 1.57%), Muslim ($n = 6$, 1.35%), and Buddhist ($n = 5$, 1.12%).

   In terms of political party, the majority of participants identified as a Democrat ($n = 244$, 54.71%). In this breakdown, 118 (26.46%) identified as a Democrat, 88 (19.73%)

identified as a strong Democrat, and 38 (8.52%) an Independent leaning Democrat. For

the Republicans (129, 28.92%), 71 (15.92%) identified as Republican, 32 (7.17%) a

Strong Republican, and 26 (5.83%) an Independent leaning Republican. Another portion

(n = 67, 15.02%) identified as Independent and 6 (1.35%) preferred not to say. In terms

of marital status, over half of the participants were married (263, 58.97%), followed by

never married (142, 31.84%), divorced (35, 7.85%), widowed (4, 0.90%), and separated

(2, 0.45%). For the highest level of education completed, about half of participants (224,

50.22%) have received a Bachelor's degree in college (4-year), followed by a Master's

degree (96, 21.52%), some college but no degree (49, 10.99%), an Associate's degree in

college (2-year) (39, 8.74%), a high school diploma or equivalent including GED (25,

5.61%), a doctoral degree (9, 2.02%), a professional degree (3, 0.67%), and less than a

high school degree (1, 0.22%).

Table 5

Participant demographics

	n (%)
Gender	
Female	193 (43.27%)
Male	250 (56.05%)
Prefer not to say	3 (0.01%)
Race	
White or Caucasian	324 (72.65%)
Black or African American	63 (14.13%)
Asian	49 (10.99%)
American Indian or Alaska Native	5 (1.12%)
Other	4 (0.90%)
Native Hawaiian or Pacific Islander	1 (0.22%)
Ethnicity	
Spanish/Hispanic/Latino	36 (8.07%)
Mexican/Mexican American/Chicano	32 (7.17%)
Preferred not to say	7 (1.57%)

Cuban	4 (0.90%)

Age	
Age	(*M* = 37.72, *SD* = 10.74) 19 to 76 years old

Marital Status	
Married	263 (58.97%)
Never Married	142 (31.84%)
Divorced	35 (7.85%)
Widowed	4 (0.90%)
Separated	2 (0.45%)

Highest Level of Education	
Less than high school degree	1 (0.22%)
High school diploma or GED	25 (5.61%)
Some college, no degree	49 (10.99%)
Associate degree or equivalent	39 (8.74%)
Bachelor's degree	224 (50.22%)
Master's degree	96 (21.52%)
Doctorate degree	9 (2.02%)
Professional degree	3 (0.67%)

Household Income	
Less than $29,999	55 (12.33%)
$30,000 - $59,999	172 (28.57%)
$60,000 - $99,999	151 (33.86%)
$100,000 or greater	68 (5.25%)

Note. Cells display counts of each category with percentages in parentheses in the overall column, except for cells referred to *age* with the mean, standard deviation, and the range.

Procedure

Participants accessed the Qualtrics survey through MTurk. From there, they were introduced to the study, provided information about the benefits, risks, anonymity, and reminded that participation in this study is voluntary. If they consented to participation after reading an IRB-approved script (Appendix B), they began the survey and were randomly assigned to one of four conditions per crisis type found in Appendix A. Random assignment was facilitated via the "randomizer" function was utilized on Qualtrics. When "Evenly Present Elements" function is selected, the elements are evenly

randomized and the number of times each condition is presented is tracked to ensure

every element is presented an equal number of times (Qualtrics, 2021). If deselected, no

attention the condition would have be paid to counts or whether the conditions are

presented equally or not. Participants were randomly assigned to receive either the base

crisis response (B), base + corrective action (BC), base + corrective action +

organizational learning (BCO), or reputation response for either the victim or preventable

crisis. The participants assigned in each condition did not significantly differ on gender,

$F(7, 438) = 0.27$, $p = 0.97$, age, $F(7, 438) = 1.06$, $p = 0.39$, political ideology, $F(7, 438) =$

0.47, $p = 0.86$, race, $F(7, 438) = 0.75$, $p = 0.63$, ethnicity, $F(7, 438) = 0.76$, $p = 0.63$,

marital status, $F(7, 438) = 0.90$, $p = 0.51$, income, $F(7, 438) = 0.75$, $p = 0.63$, education,

$F(7, 438) = 1.41$, $p = 0.20$. The lack of differences in participant demographics between

groups supports an indication of successful random assignment.

      After the messages, a proposed mediator, organizational learning, and dependent

variables of anger, moral outrage, organizational reputation, and social amplification

measured reactions to the responses. After that, demographic information was collected.

A debriefing statement was provided to ensure that participants understood that the crisis

was fictitious and the organization experiencing the crisis was fictitious. Lastly, a

uniquely randomized MTurk code was generated and given for participants to receive

payment. All 450 participants were compensated, even the four participants whose

responses were excluded from analyses. The experimental design flow with the condition

breakdown can be found in Figure 1.

Figure 1

Experimental flow with participant sample sizes per condition

Note. This figure demonstrates the elements of this experiment. The message manipulations in the BCO framework can be found in Appendix A. The IRB script included in the intro can be found in Appendix B. Measures and demographic questions can be found in Appendix C.

Measurements

The following measures were adapted from previous research in crisis communication. The symbol ® indicates reverse-coded items. A list of the measurement scales can be found in Appendix C.

Anger and Moral Outrage

Anger toward the organization was measured using Coombs and Holladay's (2007) measure. This three-item measure includes the following items: "I feel annoyed towards Chicago College for what happened."; "Because of the incident, I feel angry at

Chicago College."; "® I do NOT feel anger towards Chicago College" ($M = 3.46$, $SD = 1.79$, $\alpha = 0.81$).

Moral outrage was measured using a three-item scale used in prior crisis communication studies (e.g., Coombs &Tachkova, 2019), which has been adapted from Antonetti and Maklan's (2016) research. The questions ask participants to indicate the degree they feel each of these emotional reactions as a result of reading the organization's response (1 = not at all; 7 = extremely): Angered; Outraged; Mad ($M = 3.66$, $SD = 2.08$, $\alpha = 0.96$).

Organizational Reputation

Reputation was assessed using a five-item organizational reputation scale (Coombs & Holladay, 2002). Items include: "The organization is concerned with the well-being of its publics"; ® "The organization is basically DISHONEST."; "® I do NOT trust the organization to tell the truth about this incident."; "Under most circumstances, I would be likely to believe what the organization says."; "® The organization is NOT concerned with the well-being of its publics" ($M = 5.26$, $SD = 1.25$, $\alpha = 0.92$).

Negative Social Amplification

Measuring social amplification, participants were asked how likely they are to negatively engage with the response message (Barger, Peltier, & Schultz, 2016). On a 7-point Likert scale ranging from (1) very unlikely to (7) very likely, one item asked: "How likely is it that you would negatively react to the message on Facebook?"

Organizational Learning

Organizational learning was measured with two items scale initially developed by Kale, Singh, and Perlmutter (2000) and two items from Edmonson's (1999) study on learning behavior. This measure has been applied in communication studies and has been found to be unidimensional with adequate reliability and validity (García-Morales et al., 2012; García-Morales et al., 2006; 2008). On a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree), organizational learning was measured with the following statements: "At Chicago College, newly gained knowledge influences improvements."; "Chicago College is a learning organization."; "Chicago College acquires and shares new and relevant knowledge."; "Chicago College acquires critical capacities and skills" ($M =$ 5.46, $SD = 1.14$, $\alpha = 0.83$).

Pretest

A pretest was used to assess the effectiveness of the experimental manipulations and to understand if participants experienced any challenges with the statements or survey design (Converse & Presser, 1986). It provided an opportunity for participants to raise concerns about ambiguity, interpretation, or make any other issues aware. Acknowledging problems during pretests can help improve the validity, reliability, and efficiency of the main experiment while also potentially saving researchers time and money when discovering survey instrument flaws (Ruel, Wagner, & Gillespie, 2016).

Forty participants were recruited for the pretest. The sample was collected separately from participants in the main experiment to prevent contamination (Ruel, Wagner, & Gillespie, 2016). Participants were first asked to state their perception of four fictitious institution names and logos. Since fictitious organizations may still be

mistakenly recognized or associated with real organizations, which is a potential

confound, the pretest was able to determine which organization was perceived most

neutral. Participants were asked about their general perceptions of the universities (1 =

very unfavorable, 7 = very favorable). If participants did not recognize the college or did

not have an opinion, they were directed to select "Neutral" (4). Of the four colleges and

universities, Chicago College was rated the most neutral. (Ohio College (M = 3.17, SD =

1.11); West Metro University (M = 3.62, SD = 0.74); Texas Central University (M = 3.25,

SD = 1.08); Chicago College (M = 4, SD = 0)). All participants in the sample (N = 40)

rated Chicago College neutral, did not recognize it, or did not have an opinion of the

college.

Participants were randomly assigned a message about a college experiencing the

victim crisis or a preventable crisis, which were the crisis type manipulations utilized in

the main experiment. After receiving the statements, they were asked about their

perceptions of crisis responsibility, and then one of four message strategy conditions.

After that, they were given manipulation checks on the content strategies. Since this

pretest utilized a within-subjects design, participants repeated this process on the other

crisis type, which was either preventable or victim depending on the first crisis they

received.

Manipulation Checks

To assess the effectiveness of the manipulations, five manipulation checks were

created to correspond with each dimension of the manipulations. Items were created to

assess perceptions of instructing and adjusting information, corrective action,

organizational learning, an apology, and scapegoating on a scale from (1) strongly

disagree to (7) strongly agree. A series of one-way analyses of variance (ANOVAs) were conducted.

To assess perceptions of the base response, participants were asked to rate the extent they agree or disagree with the statement: "After reading the message, the students know what they can do to protect themselves." An ANOVA was performed and found significant differences between conditions ($F(3, 36) = 69.38$, $p < 0.001$), with the base response accurately perceived ($M = 6.60$, $SD = 0.52$).

To assess corrective action, the following statement provided: "I know what Chicago College is doing about this specific situation to prevent the event from happening again." An ANOVA was performed and found significant differences between conditions ($F(3, 36) = 98.65$, $p < 0.001$), with corrective action accurately perceived ($M = 6.50$, $SD = 0.53$).

For organizational learning, the statement said, "I feel like Chicago College is committed to ongoing learning to promote positive change." An ANOVA was performed and found significant differences between conditions ($F(3, 36) = 97.55$, $p < 0.001$), with organizational learning accurately perceived ($M = 6.51$, $SD = 0.52$).

The preventable reputation response, which was an apology, stated, "I feel like Chicago College apologized for the incident," and the victim reputation response, which was scapegoating, asked, "I feel like Chicago College blamed the incident on something else." An ANOVA was performed to assess the apology, and the differences were not found significant between conditions ($F(3, 36) = 1.49$, $p = 0.23$), although the matched apology response was perceived highest for this manipulation check ($M = 2.3$, $SD = 1.03$). The apology stimulus was adjusted in the main experiment to reiterate an apology.

For the victim reputation response, which was a scapegoating strategy, an ANOVA found statistically significant differences between conditions ($F(3, 36) = 100.5$, $p < 0.001$), with participants perceiving the scapegoating strategy perceived the highest in blaming something else for the incident ($M = 6.33$, $SD = 0.48$).

With results from the pretest indicating significantly different perceptions between manipulations, the researcher proceeded with the full experiment. The stimuli in the main experiment were altered to utilize the fictitious organization perceived most neutral (i.e., Chicago College).

Chapter 4: Results

Statistical Analyses

All analyses were conducted using R, a programming language, in R Studio, a free software environment where statistical computing and graphics techniques are implemented (R Core Team, 2020). In addition to base R, the following packages were used in the analyses: "dplyr" (Wickham et al., 2021); "psych" (Revelle, 2020); "car" (Fox & Weisberg, 2019); "pastecs" (Grosjean & Ibanez, 2018); and "mediation" (Tingley et at., 2014). To test the assumption of the equality of variance, Levene's test for homogeneity of variance across groups was conducted. All analyses met the assumption ($p > 0.05$) and results of Levene's test are reported for each analysis (Fox, 2016; Fox & Weisberg, 2019).

To answer the research questions, a series of ANOVAs were performed to assess the message effects on anger, moral outrage, organizational reputation, and social amplification (RQ1:6). An ANOVA, or one-way analysis of variance, is a statistical technique used to compare the differences between means across several treatment groups (Kutner et al., 2005). The ANOVAs determined if there were significant differences between conditions, but not where the differences occur. Traditionally, a Tukey HSD test, a post hoc test, is used to determine where differences occur in comparisons. However, since there are unequal sample sizes, ranging from 53 to 60 per condition, the Tukey-Kramer test, which is a modification of the Tukey HSD (honestly significant difference) test, was used (Salkind, 2007). The code for the "TukeyHSD" function shows that it uses the Tukey-Kramer method, which is the approximate HSD, and is preferred over the Bonferroni significant difference because it produces smaller

confidence intervals and is considered conservative when there are unequal sample sizes (Gupta, 2015; Oehlert, 2010).

To assess if organizational learning mediates the relationship between the conditions on organizational reputation (RQ7), a mediation analysis was conducted to detect interactions. Overall, the analyses conducted serve as an exploratory process of probing the effects of the BCO framework (Campbell & Stanley, 1963).

Answering the Research Questions

RQ1: How will the BCO framework responses to a victim crisis compare with the matched reputation response on (a) anger and (b) moral outrage?

An ANOVA was conducted to assess the differences between the BCO and the reputation response to a victim crisis on anger. See Table 6 for results. There were not statistically significant differences between conditions on anger ($F(3, 219) = 1.88$, $p = 0.14$, $\eta^2 = 0.02$), with the Base response perceived highest in anger ($M = 3.59$, $SD = 1.79$, $n = 55$), then the reputation response ($M = 3.01$, $SD = 1.77$, $n = 60$), followed by the BC response ($M = 2.95$, $SD = 1.59$, $n = 55$), and the BCO response ($M = 2.89$, $SD = 1.87$, $n = 53$). Testing the homogeneity of variance, the Levene's test was not significant, indicating reasonable normality and the assumption was not violated ($F(3, 219) = 0.61$, $p = 0.61$).

Another ANOVA was conducted to assess the differences between the BCO and the reputation response to a victim crisis on moral outrage. See Table 5 for results. There were not statistically significant differences between the strategies to a victim crisis on moral outrage ($F(3, 219) = 0.74$, $p = 0.52$, $\eta^2 = 0.02$), with the Base response receiving the greatest perceptions of moral outrage ($M = 3.60$, $SD = 1.91$, $n = 55$), then the

reputation response ($M = 3.56$, $SD = 2.12$, $n = 60$), followed by the BC response ($M = 3.25$, $SD = 2.05$, $n = 55$), and the BCO response ($M = 3.11$, $SD = 2.11$, $n = 53$). Testing the homogeneity of variance, the Levene's test was not significant, indicating reasonable normality and the assumption was not violated ($F(3, 219) = 0.73$, $p = 0.53$).

In addition to an ANOVA, the HSD test compared the BCO responses with the matched reputation response. Although differences were present, with BCO being most effective, the HSD's conservative threshold revealed no significant differences on anger or moral outrage between the BCO responses compared with the reputation responses to the victim crisis (Table 7 and Table 8).

Table 6

ANOVA Comparisons of the Strategies to a Victim Crisis on Anger and Moral Outrage

Condition	n	Anger M (SD)	Moral Outrage M (SD)
Base	55	3.59 (1.79)	3.60 (1.91)
Base + Corrective Action	55	2.95 (1.59)	3.25 (2.05)
Base + Corrective Action + Organizational Learning	53	2.89 (1.87)	3.11 (2.11)
Reputation Response	60	3.01(1.77)	3.56 (2.12)

Note. The ANOVAs in the table were not statistically significantly different. (Anger: $p = 0.14$; Moral Outrage: $p = 0.61$).

Table 7

Multiple Comparisons on Anger during a Victim Crisis.

BCO compared to Reputation response	Difference between means (95% CI)
Base and Reputation Response	-0.58 (-1.43 to 0.27)
Base + Corrective and Reputation Response	0.07 (-0.78 to 0.92)
Base + Corrective + Org Learning and Reputation	0.12 (-0.78 to 0.92)

Note. * indicates significance at $p=.05$.

Table 8

Multiple Comparisons on Moral Outrage during a Victim Crisis

BCO Conditions compared to Matched Condition	Difference between means (95% CI)
Base and Reputation Response	-0.04 (-1.03 to 0.94)
Base + Corrective and Reputation Response	0.30 (-0.69 to 1.29)
Base + Corrective + Org Learning and Reputation	0.45 (-0.55 to 1.45)

Note. * indicates significance at *p*=.05.

RQ2: How will the BCO framework responses to a preventable crisis compare with the matched reputation response on (a) anger and (b) moral outrage?

Comparing the strategies responding to a preventable crisis on anger, an ANOVA was conducted and found statistically significant differences between conditions (F(3, 219) = 9.55, $p < 0.001$, $\eta^2 = 0.08$). See Table 9 for results. Participants felt the most anger towards the organization after receiving the Base response ($M = 4.46$, $SD = 1.64$, $n = 53$), followed by the Reputation response ($M = 4.37$, $SD = 1.73$, $n = 57$), then the Base + Corrective Action ($M = 3.39$, $SD = 1.68$, $n = 58$), and, lastly, the full BCO response ($M = 3.11$, $SD = 1.51$, $n = 55$). Testing the assumption for homogeneity of variance, the Levene's test was not significant, indicating reasonable normality and the assumption was not violated (F(3, 219) = 0.64, $p = 0.59$).

The Tukey-Kramer test compared the BCO responses with the reputation response to the preventable crisis on anger and found several significant differences. As shown in Table 10, the BC and reputation comparison ($p = 0.008$) and the BCO and reputation comparison ($p < 0.001$) showed the reputation condition generating significantly more anger towards the organization. The Base and reputation conditions were not significantly different ($p = 0.99$).

Similarly, comparisons for the responses to the preventable crisis on moral outrage were statistically significant ($F(3, 219) = 6.28$, $p < 0.001$, $\eta^2 = 0.08$). The Base response received the highest perceptions of moral outrage ($M = 4.57$, $SD = 2.04$, $n = 53$), followed by the reputation response ($M = 4.47$, $SD = 2.02$, $n = 57$), then the Base + Corrective Action response ($M = 3.56$, $SD = 2.06$, $n = 58$), and the full BCO response ($M = 3.18$, $SD = 1.95$, $n = 55$). Testing the assumption for homogeneity of variance, the Levene's test was not significant, indicating reasonable normality and the assumption was not violated ($F(3, 219) = 0.52$, $p = 0.67$). The HSD test compared the BCO responses with the reputation response to the preventable crisis on moral outrage and found one significant difference. For the preventable crisis (Table 11, the BCO and reputation comparison ($p = 0.004$) showed the reputation condition generated more moral outrage towards the organization. The BC response approached significance in reducing moral outrage ($p = 0.07$) and the Base response was not significantly different from the reputation response using traditional thresholds ($p = 0.99$).

Table 9

ANOVA Comparisons of the Strategies to a Preventable Crisis on Anger and Moral Outrage

Condition	n	Anger M (SD)	Moral Outrage M (SD)
Base	53	4.46 (1.64)	4.57 (2.04)
Base + Corrective Action	58	3.39 (1.68)	3.56 (2.06)
Base + Corrective Action + Organizational Learning	55	3.11 (1.51)	3.18 (1.95)
Reputation Response	57	4.37 (1.73)	4.47 (2.02)

Note. The ANOVAs in the table were statistically significantly different. (Anger: $p < 0.001$; Moral Outrage: $p < 0.001$).

Table 10

Multiple Comparisons on Anger during a Preventable Crisis

BCO compared to Reputation response	Difference between means (95% CI)
Base and Reputation Response	-0.09 (-0.90 to 0.72)
Base + Corrective and Reputation Response	0.98 (0.12 to 1.78)*
Base + Corrective + Org Learning and Reputation	1.26 (0.45 to 2.06)*

Note. * indicates significance at $p < 0.01$.

Table 11

Multiple Comparisons on Moral Outrage during a Preventable Crisis

BCO compared to Reputation response	Difference between means (95% CI)
Base and Reputation Response	-0.09 (-1.09 to 0.91)
Base + Corrective and Reputation Response	0.91 (-0.06 to 1.89)
Base + Corrective + Org Learning and Reputation	1.29 (0.30 to 2.28)*

Note. * indicates significance at $p = 0.004$.

RQ3: How will the BCO framework responses to a victim crisis compare with the matched reputation response on organizational reputation?

For the victim crisis, an ANOVA was conducted to compare the differences between the BCO framework and the matched reputation responses. The differences approached traditional thresholds of statistical significant ($F(3, 219) = 2.30$, $p = 0.07$, $\eta^2 = 0.03$), with participants that received the BCO strategy perceived the greatest organizational reputation ($M = 5.52$, $SD = 1.22$, $n = 53$), followed by the BC strategy ($M = 5.50$, $SD = 1.18$, $n = 55$), then the Reputation response ($M = 5.07$, $SD = 1.37$, $n = 60$), and the Base response ($M = 5.06$, $SD = 1.24$, $n = 55$). Testing the assumption for homogeneity of variance, the Levene's test was not significant, indicating reasonable normality and the assumption was not violated ($F(3, 219) = 0.92$, $p = 0.43$). Results from the ANOVA test can be found in Table 12. Although differences were present, the HSD

revealed no statistically significant comparisons between the BCO and victim reputation responses (Table 13).

Table 12

ANOVA Comparisons of the Strategies to the Victim Crisis on Organizational Reputation

Condition	Organizational Reputation	
	n	M (*SD*)
Base	55	5.06 (1.24)
Base + Corrective Action	53	5.50 (1.18)
Base + Corrective Action + Organizational Learning	55	5.52 (1.22)
Reputation Response	60	5.07 (1.37)

Note. The ANOVA on Organizational Reputation approached a conventional threshold of statistical significance ($p = 0.07$).

Table 13

Multiple Comparisons on Organizational Reputation during a Victim Crisis

BCO compared to Reputation response	Difference between means (95% CI)
Base and Reputation response	0.01 (-0.60 to 0.62)
Base + Corrective and Reputation response	-0.43 (-1.04 to 0.18)
Base + Corrective + Org Learning and Reputation	-0.45 (-1.06 to 0.17)

Note. * indicates significance at $p = 0.05$.

RQ4: How will the BCO framework responses to a preventable crisis compare with the matched reputation response on organizational reputation?

For the preventable crisis, an ANOVA was conducted to compare the differences between the BCO framework and the reputation strategies. The differences were statistically significant ($F(3, 219) = 6.25$, $p < 0.001$, $\eta^2 = 0.08$), with participants that received the BC strategy to the preventable crisis perceiving the greatest organizational

reputation ($M = 5.59$, $SD = 1.04$, $n = 58$), followed by the BC strategy ($M = 5.48$, $SD = 1.03$, $n = 55$), then the reputation response ($M = 5.13$, $SD = 1.35$, $n = 57$), and the B response ($M = 4.69$, $SD = 1.33$, $n = 53$). Testing the assumption for homogeneity of variance, the Levene's test was not significant, indicating reasonable normality and the assumption was not violated ($F(3, 219) = 1.98$, $p = 0.12$). Results from the ANOVA can be found in Table 14. Although differences were present, the HSD's conservative threshold revealed no statistically significant comparisons between the BCO and preventable reputation responses (Table 15).

Table 14

ANOVA Comparisons of the Strategies to the Preventable Crisis on Organizational Reputation

	Organizational Reputation	
Condition	*n*	M (*SD*)
Base	53	4.69 (1.33)
Base + Corrective Action	58	5.59 (1.04)
Base + Corrective Action + Organizational Learning	55	5.48 (1.03)
Reputation response	57	5.13 (1.35)

Note. The ANOVA on Organizational Reputation was statistically significantly different ($p < 0.001$).

Table 15

Multiple Comparisons on Organizational Reputation during a Preventable Crisis

BCO Conditions compared to Matched Condition	Difference between means (95% CI)
Base and Reputation response	0.44 (-0.15 to 1.03)
Base + Corrective and Reputation response	-0.46 (-1.04 to 0.12)
Base + Corrective + Org Learning and Reputation	-0.35 (-0.93 to 0.23)

Note. * indicates significance at $p = 0.05$.

RQ5: How will the BCO framework responses to a victim crisis compare with the matched reputation response on negative social amplification?

To assess if there were significant differences in intentions to negatively interact with the post on social media, an ANOVA was conducted comparing the differences between the responses to a victim crisis. The differences were not statistically significance ($F(3, 219) = 0.90$, $p = 0.44$, $\eta^2 = 0.01$), with participants that received the Reputation strategy indicating the most intention to amplify the message negatively on social media ($M = 3.45$, $SD = 2.02$, $n = 60$), followed by the Base strategy ($M = 3.29$, $SD = 1.75$, $n = 55$), then the BC Response ($M = 3.09$, $SD = 1.88$, $n = 55$), and the BCO response ($M = 2.91$, $SD = 1.80$, $n = 53$). Testing the assumption for homogeneity of variance, the Levene's test was not significant, indicating reasonable normality and the assumption was not violated ($F(3, 219) = 0.76$, $p = 0.52$). Results from the ANOVA can be found in Table 16. Although differences were present, the HSD revealed no statistically significant comparisons between the BCO and victim reputation responses (Table 17).

Table 16

ANOVA Comparisons of the Strategies to the Victim Crisis on Negative Social Amplification

| | Social Amplification | |
Condition	n	M (*SD*)
Base	55	3.29 (1.75)
Base + Corrective Action	55	3.09 (1.88)
Base + Corrective Action + Organizational Learning	53	2.91 (1.80)
Reputation response	60	3.45 (2.02)

Note. An ANOVA on Negative Social Amplification was not statistically significant ($p = 0.44$).

Table 17

Multiple Comparisons on Negative Social Amplification during a Victim Crisis

BCO compared to Reputation response	Difference between means (95% CI)
Base and Reputation response	0.16 (-0.74 to 1.06)
Base + Corrective and Reputation response	0.36 (-0.54 to 1.26)
Base + Corrective + Org Learning and Reputation	0.54 (-0.37 to 1.46)

Note. * indicates significance at $p = 0.05$.

RQ6: How will the BCO framework responses to a preventable crisis compare with the matched reputation response on negative social amplification?

For the preventable crisis, an ANOVA was conducted to compare the differences between the BCO framework and the reputation strategies. The differences were statistically significant ($F(3, 219) = 5.99$, $p < 0.001$, $\eta^2 = 0.08$), with participants that received the Base strategy to the preventable crisis indicating the most intention to amplify the message negatively on social media ($M = 4.55$, $SD = 1.94$, $n = 53$), followed by the reputation strategy ($M = 3.77$, $SD = 1.95$, $n = 57$), then the BC response ($M = 3.34$, $SD = 2.20$, $n = 58$), and the BCO response ($M = 3.05$, $SD = 1.67$, $n = 55$). Testing the assumption for homogeneity of variance, the Levene's test was not significant, indicating reasonable normality and the assumption was not violated ($F(3, 219) = 1.40$, $p = 0.25$). Results from the ANOVA can be found in Table 18. Although differences were present, the HSD revealed no statistically significant comparisons between the BCO and preventable reputation responses (Table 19).

Table 18

ANOVA Comparisons of the Strategies to the Preventable Crisis on Negative Social Amplification

Condition	Social amplification	
	n	M (*SD*)
Base	53	4.55 (1.94)
Base + Corrective Action	58	3.34 (2.20)
Base + Corrective Action + Organizational Learning	55	3.05 (1.67)
Reputation response	57	3.77 (1.95)

Note. An ANOVA on Negative Social Amplification was statistically significantly different (*p* < 0.001).

Table 19

Multiple Comparisons on Negative Social Amplification during a Preventable Crisis

BCO compared to Reputation response	Difference between means (95% CI)
Base and Reputation response	-0.78 (-1.74 to 0.19)
Base + Corrective and Reputation response	0.43 (-0.52 to 1.37)
Base + Corrective + Org Learning and Reputation	0.72 (-0.24 to 1.67)

Note. * indicates significance at *p* = 0.05.

RQ7: Does organizational learning mediate the relationship between the conditions on organizational reputation?

A regression model was fit for the path between each of the conditions on organizational learning. For the victim crisis, the BCO condition was found to significantly influence the mediator (i.e., organizational learning). The reputation condition yielded a negative coefficient for the mediator, but only approached conventional levels of statistical significance. A second model was fit to assess the effect of the mediator (i.e., on organizational learning) on reputation, the dependent variable, and the effect of the BCO condition on the outcome when controlling for the mediator.

Organizational learning was found to be significantly associated with reputation. The effect of the BCO condition on the outcome when controlling for the mediator was not significant, meaning there was no residual effect. To assess of the BCO condition had an indirect effect on reputation through its effect on organizational learning, a causal mediation analysis was conducted using Tingley et al.'s (2014) mediation package in R Studio.

The simulations ran at 10,000 bootstraps. The average causal mediation effect (ACME) was estimated at 0.30, meaning that with the average effect observed, of the 10,000 bootstrap resamples, the effect of the BCO condition on reputation through organizational learning is estimated at 0.30, which is a small effect. As these mediation analyses do not rely on p-values, the lower and upper confidence intervals were assessed. With the lower boundary (0.03) and the upper boundary (0.54) entirely above zero, this is loosely interpreted to mean there is 95% confidence that the true value of the indirect effect is not zero, rejecting the null. The effect ranged fairly small (0.09 - 0.30) and the estimate is not very precise. Ultimately, an indirect effect of the BCO condition on reputation through organizational learning was found, but a direct effect was not significant. A sensitivity analysis was conducted to address unobserved variable bias, or if the mediator and dependent variable have unexplained variance that is highly correlated, which would suggest an element unaccounted for that unites the variables. A sensitivity analysis was conducted using Imai et al.'s (2010b) procedure and guidelines, which holds that errors corrected at 0.20 or greater are acceptable, although the actual correlation of errors is unknowable. A rho (ρ) lower than 0.20 may invalidate the mediation, as there may be too great of a risk for an unobserved variable that invalidates

the path from moderator to reputation. Results from the sensitivity analysis found the

indirect effect on reputation was robust ($\rho = 0.68$), which is above the guideline for a

robust mediation. This procedure was repeated for each condition and results can be

found in Table 20. The BCO condition was the only condition to meet the thresholds for

95% confidence.

Table 20

Indirect Effects of Message Strategies on Reputation through Organizational Learning During a Victim Crisis

	Average Causal Mediation Effect (ACME)			
	Coef.	LLCI	ULCI	ρ
B -> Learning -> Reputation	-0.09	-0.37	0.16	0.68
BC -> Learning -> Reputation	0.11	-0.15	0.35	0.68
BCO -> Learning -> Reputation	0.30*	0.03	0.54	0.68
Rep -> Learning -> Reputation	-0.22	-0.48	0.02	0.68

Note: Coef. = Product of coefficients, LLCU = lower limit confidence interval, ULCI = upper limit confidence interval, ρ = sensitivity statistic. Average causal mediation effects estimated using Imai et al.'s (2010a) algorithms. ρ is generated using Imai et al.'s (2010b) procedure for sensitivity analysis. An asterisk (*) indicates significance, or when the LLCU and ULCI are both positive or are both negative.

This was repeated for the responses to the preventable crisis. Organizational

learning was significantly associated with organizational reputation ($p < 0.001$), meaning

participants had greater perceptions of organizational reputation if they perceived

organizational learning (0.78 on a 7-point Likert scale). The average causal mediation

effect (ACME) was estimated at 0.30, meaning that with the average effect observed, of

the 10,000 bootstrap resamples, the effect of the BCO condition on reputation through

organizational learning is estimated at 0.30, which is a small effect. As these mediation

analyses do not rely on p-values, the lower and upper confidence intervals were assessed.

With the lower boundary (0.03) and the upper boundary (0.46) entirely above zero, this is

loosely interpreted to mean there is 95% confidence that the true value of the indirect

effect is not zero, rejecting the null. The average direct effect was not significant (LLCI: -0.27, ULCI: 0.17), indicating there was not a residual effect of BCO on reputation after accounting for organizational learning. The total effect was also not significant (LLCI: -0.12, ULCI: 0.51), indicating the effect does not show up as an independent direct effect. Sensitivity analyses were conducted and found the indirect effect on reputation was robust ($\rho = 0.69$), which is above the guideline for a robust mediation. The BCO and Reputation conditions were the only conditions to meet the thresholds for 95% confidence. The results can be found in Table 21.

Table 21

Indirect Effects of Message Strategies on Reputation through Organizational Learning During a Preventable Crisis

	Average Causal Mediation Effect (ACME)			
	Coef.	LLCI	ULCI	ρ
B -> Learning -> Reputation	-0.07	-0.31	0.19	0.69
BC -> Learning -> Reputation	0.07	-0.15	0.27	0.69
BCO -> Learning -> Reputation	0.26*	0.03	0.41	0.69
Rep -> Learning -> Reputation	-0.30*	-0.61	-0.04	0.69

Note: Coef. = Product of coefficients, LLCU = lower limit confidence interval, ULCI = upper limit confidence interval, ρ = sensitivity statistic. Average causal mediation effects estimated using Imai et al.'s (2010a) algorithms. ρ is generated using Imai et al.'s (2010b) procedure for sensitivity analysis. An asterisk (*) indicates significance, or when the LLCU and ULCI are both positive or are both negative.

Chapter 5: Discussion

Traditional crisis communication literature approaches a crisis as a reputational threat and have focused PR efforts on shifting attributions of crisis responsibility. This study reevaluates the role of public relations and proposes a framework that approaches a crisis as an opportunity. Each strategy provided by the BCO framework contributes an ethical strategy that serves to protect stakeholders. The base response from SCCT provides protective instruction for stakeholders to physically and psychologically cope with the crisis, such as instructions on how to evacuate. Corrective action from IRT provides an action for immediate relief and preventing the effects of the crisis from worsening, such as hiring an employee causing a crisis. Organizational learning from DOR provides a public statement about the organization's long-term commitment to address the issue. This experiment found that in some cases, the BCO framework was comparatively more effective in satisfying stakeholders (e.g., reducing anger towards the organization). The BCO strategies provide actionable ways an organization can publicly address how a crisis serves as an opportunity to improve. By acknowledging vulnerabilities, the organization is better able to identify ways after the event (i.e., corrective action) and in ongoing evaluations (i.e., organizational learning) to prevent future crises. These findings illustrate a downfall of efforts that emphasize absolving guilt and repairing image. This shift from saving face to making potentially life-saving informed decisions prioritizes ethical considerations in public relations.

The overarching goal of this dissertation was to probe the BCO framework and assess how it compares to the reputation responses. When the differences were significant, the results illustrate how BCO responses can be more effective at meeting

stakeholder needs, even despite the implicit acknowledgment of crisis responsibility. This chapter will explicate the possible meaning of BCO results, provide practical and theoretical implications, acknowledge limitations, and address opportunities for future research.

Managing Negative Emotions

Generally, the full BCO response was most effective at mitigating anger and moral outrage, followed by the BC response. Although the differences between responses to the victim crisis lacked statistical significance, the pattern of differences and results showed consistency. The BCO response was most effective at reducing anger and moral outrage compared to the reputation response. The BCO response included the base response, corrective action, and organizational learning. Organizational learning is a systematic and expeditious commitment to an ongoing learning process to promote positive change. This can be addressed through a stated commitment to a learning process (e.g., benchmarking, experimentation, environmental scanning). If the BCO response is not feasible due to time and resource constraints, the BC response was also more effective at mitigating anger and moral outrage than the matched reputation response. This indicates that in circumstances in which an organization identifies ways it has contributed to the event, corrective action with the base response (BC) can generate less anger and moral outrage compared to the reputation response.

The effect of the base response (B) was less effective at mitigating anger and moral outrage compared to the reputation response, which was an apology for the preventable crisis while also scapegoating, or blaming something else for causing the victim crisis. This finding may indicate that the base response may not meet stakeholder

needs when standing alone and that dissatisfaction can result in consequences. Crises are violations of stakeholder expectancies and generate negative emotions (Coombs, 2018; Weiner, 1995). Anger, in this study, is an outcome of thoughts capable of producing emotion (Lazarus, 1991). These thoughts may be about an undesirable outcome that could have been controlled, such as the perceptions of an organization failing to prevent a crisis and the actions that led to a risk manifesting (Coombs & Tachkova, 2019). The preventable crisis should have, theoretically, produced high attributions of crisis responsibility, which generates anger (Coombs & Holladay, 2007). Studies have also found how anger can translate into behaviors by creating resistance or backlash (Watson & Spence, 2007).

Feelings of moral outrage were generated the least in participants that received the BCO and BC response. They were generated the most in the Base and Reputational responses. This moral outrage can be the result of stakeholders perceiving the organization as greedy or partaking in unfair or irresponsible behavior (Lindenmeier et al., 2012; Antonetti et al., 2016). The consequences of these types of reactions can be damaging to organizations, such as stakeholders retaliating and boycotting (Cronin et al., 2012; Skitka et al., 2004). These results are consistent with Coombs and Tachkova's (2019) study that found that lower levels of moral outrage were generated when an organization provided corrective action and moral recognition when responding to a crisis that involved a scandal.

Reputational Impacts

Comparing the effects of the BCO strategies with the reputation strategies on organizational reputation provides valuable insight. As the aim of the reputation

strategies are to preserve organizational reputation, these findings will address how effective the BCO strategies compare. For the victim crisis, the differences approached significance — with the BCO strategy was most effective and the Base strategy was the least. The reputation response fell above the Base and below Corrective Action. Similarly for the preventable crisis, which had significant differences between conditions, the BC response was most effective, followed by the BCO, then the Reputation response, and lastly, the Base. Although there were significant differences, those differences did not lie between the BCO and reputational comparisons, meaning that the effects were undifferentiated in this analysis.

Organizational reputation has served as the focal concept in many crisis communication studies (Claeys et al., 2010; Coombs & Holladay, 1996; Ma & Zhan, 2016b). It is regarded as an intangible investment to protect (Davies et al., 2005) and can result in favorable outcomes like attracting employees and customers (Gardberg & Fombrun, 2006) and increase chances of survival after a crisis (Rao, 1994). Coombs and Tachkova's (2019) study that found lower anger and moral outrage through the corrective action strategy did not find significant impacts on reputation. This study also did not find conclusive results that indicate differences on reputational impacts, which may be interesting to reputation management practitioners and scholars that rely on reputation strategies. This may be of interest because it encourages those in the practice to reevaluate their tools for managing crises and reprioritize the goals of their crisis communication. Relying on perceived attributions of crisis responsibility to guide prescriptive reputation management strategies has notable weaknesses. The results illustrate that strategies that aim to shift responsibility are not always effective at

satisfying stakeholders. Crises can be complex, evolving from different origins and the responsibility may be shared or shift over time. If a building with weak structural integrity collapses in a hurricane, do you blame the natural disaster or the lack of building code regulations? More broadly, this approach to blame can be applied in many contexts. When there is drug trafficking, for instance, do you blame the farmers that produce the drugs, the cartels that smuggle it, or the users for keeping it in demand? While there may be several aspects to any complex issue, this dissertation addresses how organizations can use public relations efforts to consider their role in an event. Rather than point a finger or shift the blame, organizations must take the opportunity to assess how they have contributed to an adverse event, and the BCO framework provides one way to ethically respond.

Negative Online Interactions

Traditional public relations practices advise responding to a crisis within the first two hours to quickly manage the situation, also called The Golden Hours which is referring to providing immediate life-saving medical treatment (Roshan et al., 2013). Social media has hastened the speed and propensity of circulation, and these findings illustrate the extent of this process. This critical 24-hour time period has compressed, requiring organizations to have prepared messaging and available resources to quickly respond and prevent crisis escalation on social media, also referred to as "online firestorms" (Lim, 2017).

The BCO responses to the preventable and victim crisis resulted in the least intention to negatively interact with the message on social media, although the differences between victim responses approached statistical significance. The Base

response to the victim crisis and the reputation response to the preventable received the highest intentions to interact negatively. Although there were overall significant differences, the comparisons between the BCO and reputational comparisons were not differentiated in this analysis.

The Mediating Role of Organizational Learning

Organizational learning can take the form of changes that address a blatant or underlying issue, such as developing new regulations and initiatives. While corrective action enacts an immediate decision to remedy a crisis, organizational learning illustrates a long-term investment in the issue (Zhao et al., 2020).

Surviving a crisis can depend on an organization's ability to adapt with changes and refine sustainable practices that strengthen operations (Fiol & Lyles, 1985; Odor, 2017). This investment in acquiring, retaining, and using competencies for change can also translate into a competitive advantage. In this experimental study, organizational learning stated a commitment to learning system vulnerabilities from experience. Between the two crises, the organization stated their implementation of new policies, reporting procedures, annual training sessions, development of security protocols, and ongoing assessments. Other long-term pledges may include strategic planning, benchmarking, experimentation, knowledge transfer, scenario planning, environmental scanning, and building alliances (Reilly, 1998). To actually prevent the crisis from reoccurring, these statements must come with actual changes, such as evaluations of core beliefs and work procedures (Zhao et al., 2020). It is also important to note how this process is time-delineated. While corrective action immediately responds to prevent further damage without pragmatic change, organizational learning is a process that takes

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time. The underlying issue, which may be hard to identify, may take time to investigate and, depending on available resources, the necessary change may not be feasible. These results, however, illustrate why this investment into the BCO response is not only an ethical approach, but can return in benefits like mitigating anger and maintaining reputation.

Theoretical Implications

The BCO approach embraces a comprehensive approach to crisis management that bridges post-crisis efforts, such as ongoing assessments and benchmarking recovery, into the pre-crisis phase, which assesses and monitors threats. These efforts all serve to prevent or lessen the effects of damage of a crisis that is felt by stakeholders (Coombs, 2007c). While scholars find that reputational damage can threaten the survival of an organization (e.g., Bernhardsdóttir, 2015; Coombs, 2014), this study finds that a commitment to organizational learning, such as by identifying vulnerabilities and adapting, not only contributes to survival but adds a competitive advantage (Odor, 2017).

While SCCT's Base response was least effective on most variables, the components of this response are often critical to provide to the public (Coombs, 2007). Instructing and adjusting information is provided to protect the public both physically and psychologically. These responses serve the victims of the crisis by providing direction through instructions and ways to cope with the incident. Alone, the Base response was ineffective at meeting stakeholder needs, but paired with corrective action and organizational learning (BC and BCO), the response was perceived more favorably. The response is comprised of concepts from three theories: SCCT's base crisis response strategies (Coombs, 2015), image restoration strategies from IRT (Benoit, 1995), and

organizational learning, which is rooted in the DOR theory (Ulmer et al., 2019). Each of

these components contribute an ethical strategy that serves the best interest of the public.

By shifting efforts on how to identify and prevent future crises, it demonstrates priority is

invested in protecting stakeholders, rather than repairing reputation. This line of inquiry

promotes approaching a crisis as an opportunity, which is consistent with other studies

that acknowledge the downfall of an emphasis on absolving guilt and repairing image,

such as Ulmer and Sellnow's (2001) categories of renewal.

Practical Implications

To actually prevent the crisis from reoccurring, these statements must come with

actual change, such as evaluations of core beliefs and work procedures (Zhao et al.,

2020). This is distinct from corrective action, which focuses on "correcting the current

problem without actual paradigmatic changes" (p. 5). By publicly communicating

initiatives that illustrate a commitment to ongoing improvement, stakeholder perceptions

of organizational learning led to increased perceptions of positive reputation. However, it

is important that these statements contain feasible actions, or the statements could serve

as an empty promise. Ultimately, the purpose of this study is to probe a proposed

framework that provides practitioners with strategies that serve their stakeholders.

Findings also indicate that this altruism in dedicating efforts to organizational learning

can also return benefits to reputation. Further assessment of the BCO approach will

provide practitioners with evidence-based guidance for responding to crises while

prioritizing the wellbeing of the public. It is also essential to consider how a crisis

response can unfold on social media.

Social media has become a tool for organizations to communicate directly and immediately with stakeholders. Practitioners are advised to utilize social media to communicate organizational messages that provide information about crises and respond to the public. Social media eliminates the delay of communicating through traditional or third-party outcomes and enables information to become accessible to a global audience (Austin & Jin, 2017). This study illustrates how there can also be drawbacks to crisis messaging on Facebook. Although the comparisons were not significant, there was an intention to interact negatively with the responses, with the stronger intentions when participants received the reputation and base responses and the least intention with the BCO response. This provides practitioners direction that the BCO response may be more effective at controlling negative word-of-mouth behavioral intentions online, although future research should clarify its effectiveness in this capacity. Overall, these insights indicate that crisis responses should be monitored online since they can foster negative interactions. When a crisis is amplified online, the organization may lose control of the message, and this escalation can lead to "online firestorms" that can be difficult to correct or control (Lim, 2017).

Additional implications may reveal the necessity of risk preparedness efforts, such as assigning resources to environmental scanning and updating protocols that become relevant. Internal stakeholders may hold discussions, forums, or mock crises, to spur ideas for solutions and potentially eliminate the threat or lessen the full impact of a crisis. Continual assessment of risks and monitoring may help in threat detection. Practitioners are also encouraged to evaluate what they perceive to be an acceptable threshold of risk. Lowering the threshold for risk tolerance and prioritizing threats is one

actionable direction for practitioners. Inadequate perceptions of risk, such as

underestimated or ignored threats, could be identified through inquiry commissions and

internal investigations. Although these pre- and post-crisis efforts of identifying risk

perceptions and preparing crisis management, are ideal, they often require resources, such

as experts and monitoring software. The proposed approach of identifying, correcting,

and committing to issues may not be a feasible approach for all organizations. For

instance, following through with corrective action and organizational learning could

require product development or upgrades in security systems that may benefit the

organization, but may not be financially possible. Before providing a BCO statement, it is

important for conversations occur about the feasibility of the stated commitments. In

additional to financial investments, there should be considerations regarding the

willingness of employees to adopt the proposed change and considerations for legal

implications. Some scholars find that statements that address an organizational weakness

or failure to prevent a crisis may imply an admission of guilt (Cohen, 1999). Rather than

refrain from providing the base, corrective action, and organizational learning statements

out of fear of liability, consulting with legal advisors or counsel may help guide language

choices that enable this morally right and socially beneficial approach to public relations.

Limitations

The readability of the manipulations, which was determined by the Flesch-

Kincaid readability test that considers sentence, word, and syllable counts, scored the

content to be easily understood by the average twelfth-grader (Kincaid et al., 1975). This

poses a challenge to a portion of participants because the average American has about an

eighth-grade reading level **(**Kirsch, 1993). Since the manipulations did not meet this

benchmark, it can be assumed that the content may have been challenging to comprehend for those that fall at the average or below the average reading ability. Specific populations this may have affected are those living in poverty, racial and ethnic minorities, persons older than 65 years, persons living with a disability, and other populations that may be overrepresented among those having marginal or limited reading skills (Calderón et al., 2006). If the material was not comprehended, this may pose a threat to the validity of the survey responses. This limitation was accepted in exchange for the ecological validity, a subtype of external validity, maintained by emulating real examples of university communications. It was important to creating realistic stimuli to ensure that the results of the study would be generalized to real-life settings. Imitating the formality in linguistic decisions helped participants perceive this as a real message, although this perception was a judgment call and was not statistically measured.

Future Research

The organization that was the subject of the crisis in this experiment was fictitious. This allowed for experimental control, but future applications with a real organization will provide additional insights into how familiarity with organizational histories and pre-existing brand attitudes affect perceptions. The organization was also a university within the higher education sector. The education industry is among the most crisis-prone industries, so this representation helps add generalizability to practitioners facing undue stress. The specific crisis scenarios that occurred over Zoom, a video-conferencing platform, are also transferrable to other industries. When traditionally face-to-face meetings shift online, employers may use a variety of video-conferencing platforms to facilitate their meetings, such as Google Meet and Microsoft Teams, which

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are all susceptible to intentional and unintentional crises. More importantly, future research should assess the effectiveness of this framework when applied to other crisis types and scenarios. The present study utilized crises in the preventable and victim crisis clusters. Future applications may utilize crises from different categorical clusters and organizations from other crisis-prone industries, such as food, retail, technology, transportation, pharmaceuticals, and banking and financial services ("ICM Annual Crisis Report," 2020). Replication and cross-validation under other conditions will better establish theoretical interpretation of the BCO framework. These results provide direction in hypothesis development for future probing of this framework.

A fictitious university was used as the organization experiencing the crisis in this study. Although it allowed for experimental control, the real relationships that stakeholders have with organizations are more complex. A pretest was used to select a university that participants perceived neutrally or did not have an opinion of. In reality, other factors play into the reactions to crisis messaging, such as an intensifier of the organization having a history of similar crises. This baggage can be an unfavorable or a favorable pre-crisis reputation. When positive, the organization may build goodwill that can produce a halo effect, or a favorable pre-crisis reputation that acts as a shield during a crisis (Coombs, & Holladay, 2006). Although the fictitious university provided an artificially clean environment, this was necessary for the purpose of the study. Future research can assess how participants perceive the responses from a real organization and consider the factors that come with it, such as their history of crises and stakeholder relationships.

This dissertation provides insight into how organizational learning, or investment in an issue to improve and prevent future challenges, can generate more positive stakeholder responses (e.g., less anger) and are also favorable for the organization (e.g., higher perceived organizational reputation). This experiment utilized experiential learning, or drawing from an organization's own experience; however, organizational learning can occur experientially or vicariously (Ancona & Bresman, 2007; Levitt & March, 1988; Madsen & Desai, 2010; Miner et al., 2008). Experiential learning relies on a direct experience, which a when an event triggers a "problemistic" search for a solution (Bresman, 2013; Cyert & March, 1963). In other words, the organization is a sitting duck until a crisis initiates a reaction guided by first-hand experience. Future research can investigate how organizations embed changes learned from experiences of others, such as a competitor within the same industry finding, copying, and adapting system improvements (Baum et al., 2000; Bresman, 2013; Haunschild & Miner, 1997). Madsen and Desai (2010) note that knowledge learned vicariously may depreciate more easily than knowledge learned experientially, so the direct impact of the crisis may create more lasting effects in institutional memory. Future research may compare the effects of publicly addressing experiential learning and vicariously learning after a crisis occurs in a similar organization. Although the crisis is not directly experienced, stakeholders may perceive it as an obligation for an organization to adapt with changes, or "catch up to speed" when a neighboring organization is experiencing a crisis. Organizations can identify, translate, and adopt a change based on what can be learned by those in the same industry, or with similar organizational structures, leadership, marketing strategies, and other similarities. For instance, in the 1980's, Domino's Pizza experienced a crisis after

an uncomfortable amount of delivery drivers were killed on the road trying to fulfill the company's "30 minutes or less" marketing strategy (Hearit, 1995). They faced backlash that their marketing strategy was deadly and costing the lives of the young, working class employees. In response, Domino's initiated the "Safety First" campaign and secured information about the initiative on top of each pizza box that went out the door, targeting and satisfying their key external stakeholders (i.e., customers). This strategy may be transferrable to others in the industry or with similar marketing strategies, such as Jimmy John's "Freaky Fast" delivery. Organizational learning should not require a crisis to stimulate, however it does make unrecognized weaknesses obvious. They can facilitate interorganizational learning that absorbs knowledge gained from a crisis. Whether it is learned vicariously or experientially, this learning can serve an organization a competitive advantage (Bresman, 2013).

Conclusion

In Chinese, two characters represent the word 'crisis': Danger and opportunity. As crises are known to threaten organizational assets, this threat comes with opportunity. As the nature of a crisis is a manifested risk, public relations practices are encouraged to reflect this by addressing how an organization failed to reduce or lessen the effects of an adverse event. This empirical investigation promotes an ethical approach that prioritizes public safety, such as through corrective action and organizational learning. The BCO framework proposes how this open communication and informed decision-making may be facilitated through crisis communication.

References

Abdi, H., Edelman, B., Valentin, D., & Dowling, W. (2009). *Experimental design and analysis for psychology*. New York: Oxford University Press.

Allen, M. (2017). *The sage encyclopedia of communication research methods* (Vols. 1-4). Thousand Oaks, CA: SAGE Publications, Inc. https://doi.org/10.4135/9781483381411

Allen, M. W., & Caillouet, R. H. (1994). Legitimation endeavors: Impression management strategies used by an organization in crisis. *Communication Monographs*, *61*(1), 44–62. https://doi.org/10.1080/03637759409376322

Antonetti, P., & Maklan, S. (2016). An extended model of moral outrage at corporate social irresponsibility. *Journal of Business Ethics*, *135*(3), 429–444. https://doi.org/10.1007/s10551-014-2487-y

Antonetti, Paolo, & Maklan, S. (2016). An extended model of moral outrage at corporate social irresponsibility. *Journal of Business Ethics*, *135*(3), 429–444. https://doi.org/10.1007/s10551-014-2487-y

Arpan, L. M., & Pompper, D. (2003). Stormy weather: Testing "stealing thunder" as a crisis communication strategy to improve communication flow between organizations and journalists. *Public Relations Review*, *29*(3), 291–308. https://doi.org/10.1016/S0363-8111(03)00043-2

Austin, L., & Jin, Y. (2017). *Social media and crisis communication*. Retrieved from https://doi.org/10.4324/9781315749068

Barger, V., Peltier, J. W., & Schultz, D. E. (2016). Social media and consumer engagement: a review and research agenda. *Journal of Research in Interactive Marketing*, *10*(4), 268–287. https://doi.org/10.1108/JRIM-06-2016-0065

Benoit, W. L. (1995). *Accounts, excuses, and apologies*. Albany: State University of New York Press.

Berinsky, A., Huber, G., & Lenz, G. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis*, *20*(3), 351–368. https://doi.org/10.1093/pan/mpr057

Boltanski, L., & Thévenot, L. (2006). On justification: Economies of worth. In *Polity*. Cambridge: University Press.

Bond, S. (2020). The Coronavirus crisis: Zoom turns record profit thanks to coronavirus shutdowns. Retrieved from NPR website: https://www.npr.org/sections/coronavirus-live-updates/2020/08/31/908089517/zoom-turns-record-profit-thanks-to-coronavirus-shutdowns

Boynton, L., & Dougall, E. (2006). The methodical avoidance of experiments in public relations research. *PRism Online PR Journal*, *4*(1), 1–14. Retrieved from http://praxis.massey.ac.nz/prism_on-line_journ.html

Calderón, J. L., Morales, L. S., Liu, H., & Hays, R. D. (2006). Variation in the readability of items within surveys. *American journal of medical quality: The official journal of*

the *American College of Medical Quality*, *21*(1), 49–56.
https://doi.org/10.1177/1062860605283572

Cameron, G. T., Sallot, L. M., & Curtin, P. A. (1997). Public relations and the production of news: A critical review and theoretical framework. *Annals of the International Communication Association*, *20*(1), 111–155.
https://doi.org/10.1080/23808985.1997.11678940

Chen, Z. F., & Tao, W. (2020). The association spillover mechanism of CSR crises: Evidence from the Uber case. *Journal of Public Relations Research*.
https://doi.org/10.1080/1062726X.2020.1861949

Churchill, G. A. Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, *16*, 64-73.
https://doi.org/10.1177/002224377901600110

Claeys, A.-S., & Coombs, W. T. (2019). Organizational crisis communication: suboptimal crisis response selection decisions and behavioral economics. *Communication Theory*. https://doi.org/10.1093/ct/qtz002

Claeys, A.-S., & Coombs, W. T. (2020). Organizational crisis communication: Suboptimal crisis response selection decisions and behavioral economics. *Communication Theory*, *30*(3), 290–309. https://doi.org/10.1093/ct/qtz002

Claeys, A.-S., & Cauberghe, V. (2014). Keeping control: The importance of nonverbal expressions of power by organizational spokespersons in times of crisis. *Journal of Communication, 64*(6), 1160–1180. https://doi.org/10.1111/jcom.12122

Claeys, A. S., Cauberghe, V., & Vyncke, P. (2010). Restoring reputations in times of crisis: An experimental study of the Situational Crisis Communication Theory and the moderating effects of locus of control. *Public Relations Review*, *36*(3), 256–262.
https://doi.org/10.1016/j.pubrev.2010.05.004

Clifford, S., Jewell, R. M., & Waggoner, P. D. (2015). Are samples drawn from Mechanical Turk valid for research on political ideology? *Research & Politics VO - 2*. https://doi.org/10.1177/2053168015622072

Cohen, J. R. (1999). Advising clients to apologize. *Southern California Law Review, 72*, 1009–1131.

Converse, J., & Presser, S. (1986). *Survey questions: Handcrafting the standardized questionnaire.* Newbury Park, CA: Sage. https://doi.org/10.4135/9781412986045

Coombs, W. Timothy. (2015). The value of communication during a crisis: Insights from strategic communication research. *Business Horizons*, *58*(2), 141–148.
https://doi.org/10.1016/j.bushor.2014.10.003

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*(4), 441–416.
https://doi.org/10.1177/0893318995008004003

Coombs, W.T. (2004). A theoretical frame for post-crisis communication: Situational crisis communication theory. In M. J. Martinko (Ed.), *Attribution theory in the*

organizational sciences: Theoretical and empirical contributions (pp. 275–296). Greenwich, CT: Information Age Publishing.

Coombs, W.T. (2006a). Crisis management: A communicative approach. In C. H. Botan & V. Hazleton (Eds.), *Public Relations Theory II*. Mahwah, NJ: Lawrence Erlbaum.

Coombs, W.T. (2006b). The protective powers of crisis response strategies: Managing reputational assets during a crisis. *Journal of Promotion Management*, *12*(3–4), 241–260. https://doi.org/10.1300/J057v12n03_13

Coombs, W.T. (2007a). Attribution theory as a guide for post-crisis communication research. *Public Relations Review*, *33*(2), 135–139. Retrieved from https://doi.org/10.1016/j.pubrev.2006.11.016

Coombs, W.T. (2007b). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, *10*(3), 163–176. https://doi.org/10.1057/palgrave.crr.1550049

Coombs, W.T. (2010). Conceptualizing crisis communication. In Robert L. Heath & H. D. O'Hair (Eds.), *Handbook of Risk and Crisis Communicationr* (pp. 99–118). https://doi.org/10.4324/9780203891629-11

Coombs, W.T. (2015). The value of communication during a crisis: Insights from strategic communication research. *Business Horizons*, *58*(2), 141–148. https://doi.org/10.1016/j.bushor.2014.10.003

Coombs, W.T. (2018). *Ongoing crisis communication: Planning, managing and responding* (4th ed.). Thousand Oaks, CA: Sage.

Coombs, W.T. (2019). *Ongoing crisis communication: Planning, managing, and responding* (5th ed.). SAGE Publications, Inc.

Coombs, W.T., & Holladay, S. J. (1996). Communication and attributions in a crisis: An experimental study in crisis communication. *Journal of Public Relations Research*, *8*, 279–295. https://doi.org/10.1207/s1532754xjprr0804_04

Coombs, W.T., & Holladay, S. J. (2002). Helping crisis managers protect reputational assets: Initial tests of the situational crisis communication theory. *Management Communication Quarterly*, *16*(2), 165–186. https://doi.org/10.1177/089331802237233

Coombs, W.T., & Holladay, S. J. (2006). Unpacking the halo effect: Reputation and crisis management. *Journal of Communication Management, 10*(2), 123–137. https://doi.org/10.1108/13632540610664698

Coombs, W.T., & Holladay, S. J. (2007). The negative communication dynamic: Exploring the impact of stakeholder affect on behavioral intentions. *Journal of Communication Management*, *11*(4), 300–312. https://doi.org/10.1108/13632540710843913

Coombs, W.T., & Holladay, S.J. (2008). Comparing apology to equivalent crisis response strategies: Clarifying apology's role and value in crisis communication. *Public Relations Review, 34*(3), 252–257. https://doi.org/10.1016/j.pubrev.2008.04.001

Coombs, W.T., & Holladay, S. J. (2010). *The Handbook of Crisis Communication.* https://doi.org/10.1002/9781444314885.

Coombs, W.T., & Tachkova, E. R. (2019). Scansis as a unique crisis type: theoretical and practical implications. *Journal of Communication Management*, *23*(1), 72–88. https://doi.org/10.1108/JCOM-08-2018-0078

Cronin, T., Reysen, S., & Branscombe, N. R. (2012). Wal-Mart's conscientious objectors: Perceived illegitimacy, moral anger, and retaliatory consumer behavior. *Basic and Applied Social Psychology, 34*(4), 322–335. https://doi.org/10.1080/01973533.2012.693347

Davies, G., Chun, R., da Silva, R. V., & Roper, S. (2005). Corporate reputation and competitiveness. In *Corporate Reputation and Competitiveness* (Taylor and, pp. 1–272). https://doi.org/10.4324/9780203218112

Devers, C. E., Dewett, T., Mishina, Y., & Belsito, C. A. (2009). A general theory of organizational stigma. *Organization Science*, *20*(1), 154–171. https://doi.org/10.1287/orsc.1080.0367

Earon, A. S. (2020). The value of video communications in education. Retrieved from Zoom website: https://zoom.us/docs/doc/The Value of Video Communications in Education.pdf

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 4*4, 350–383. https://doi.org/10.2307/2666999

Estes, C. L. (1983). Social security: The social construction of a crisis. *Milbank Memorial Fund Quarterly: Health and Society, 61*(3), 445–461. https://doi.org/10.2307/3349867

Fearn-Banks, K. (2001). Crisis communication: A review of some best practices. In R. L. Heath (Ed.), *Handbook of public relations* (pp. 479–486). https://doi.org/10.4135/9781452220727.n40

Fiol, C. M., & Lyles, M. A. (1985). Organizational learning. *The Academy of Management Review*, *10*(4), 803–813. https://doi.org/10.2307/258048

Fombrun, C. J. (1996). *Reputation: Realizing value from the corporate image*. Boston, MA: Harvard Business School Press.

Fombrun, C. J., & van Riel, C. B. M. (1997). The reputational landscape. *Corporate Reputation Review*, *1*(2), 5–13. https://doi.org/10.1057/palgrave.crr.1540024

Fox, J. (2016) *Applied Regression Analysis and Generalized Linear Models*, Third Edition. Sage.

Fox, J., & Weisberg, S. (2019). *An {R} Companion to Applied Regression*, Third Edition. Thousand Oaks CA: Sage. https://socialsciences.mcmaster.ca/jfox/Books/Companion/

Fredriksson, M., Pallas, J., & Wehmeier, S. (2013). Public relations and neo-institutional theory. *Public Relations Inquiry*, *2*(2), 183–203. https://doi.org/10.1177/2046147x13485956

García-Morales, V. J., Lloréns-Montes, F. J., & Verdú-Jover, A. J. (2006). Antecedents and consequences of organizational innovation and organizational learning in entrepreneurship. *Industrial Management & Data Systems, 106*(1–2), 21–42. https://doi.org/10.1108/02635570610642940

García-Morales, V. J., Lloréns-Montes, F. J., & Verdú-Jover, A. J. (2008). The effects of transformational leadership on organizational performance through knowledge and innovation. *British Journal of Management, 19*(4), 299–319. https://doi.org/10.1111/j.1467-8551.2007.00547.x

García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research, 65*(7), 1040–1050. https://doi.org/10.1016/j.jbusres.2011.03.005

Gardberg, N. A., & Fombrun, C. J. (2006). Corporate citizenship: Creating intangible assets across institutional environments. *Academy of Management Review*, *31*(2), 329–346. https://doi.org/10.5465/amr.2006.20208684

Gigliotti, R. A. (2019). *Crisis leadership in higher education: Theory and practice*. Rutgers University Press. https://doi.org/10.2307/j.ctvscxrr0

Goodman, J., & Paolacci, G. (2017). Crowdsumers take over. Retrieved from https://cpb-us-w2.wpmucdn.com/u.osu.edu/dist/0/37067/files/2016/12/JCR-MTurk-Tutorial-1dnc063.pdf

Grappi, S., & Romani, S. (2015). Company post-crisis communication strategies and the psychological mechanism underlying consumer reactions. *Journal of Public Relations Research*, *27*(1), 22–45. https://doi.org/10.1080/1062726X.2014.924839

Grosjean, P., & Ibanez, F (2018). pastecs: Package for analysis of space-time ecological series. R package version 1.3.21. https://CRAN.R-project.org/package=pastecs

Gupta, S. (2015). R-source on GitHub. https://github.com/SurajGupta/r-source/blob/master/src/library/stats/R/TukeyHSD.R

Haidt, J. (2003). The moral emotions. In J. David, K. Scherer, & H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 852–870). Retrieved from https://www.overcominghateportal.org/uploads/5/4/1/5/5415260/the_moral_emotions.pdf

Hamilton, E. (2020). Zoom hacking is on the rise: Here's what you need to do to be secure. Retrieved from Tech Times website: https://www.techtimes.com/articles/249572/20200512/zoom-hacking-is-on-the-rise-heres-what-you-need-to-do-to-be-secure.htm

Herche, J., & Engelland, B. (1996). Reversed-polarity items and scale unidimensionality. *Journal of the Academy of Marketing Science, 24*(366). https://doi.org/10.1177/0092070396244007

Hearit, K. M. (1995). "Mistakes were made": Organizations, apologia, and crises of social legitimacy. *Communication Studies, 46*(1-2), 1–17. https://doi.org/10.1080/10510979509368435

Hitlin, P. (2016). Research in the crowdsourcing age, a case study. Retrieved from https://www.pewresearch.org/internet/2016/07/11/research-in-the-crowdsourcing-age-a-case-study/

ICM Annual Crisis Report. (2020). Retrieved from Institute for Crisis Management website: https://crisisconsultant.com/icm-annual-crisis-report/

Jin, Y., Liu, B. F., & Austin, L. L. (2014). Examining the role of social media in effective crisis management: The effects of crisis origin, information form, and source on publics' crisis responses. *Communication Research*, *41*(1), 74–94. https://doi.org/10.1177/0093650211423918

Jones, J. E., & Pfeiffer, W. J. (1976). Annual handbook for group facilitators. In J. E. Jones & W. J. Pfeiffer (Eds.), *Group & Organization Studies,* (1), 3–5. https://doi.org/10.1177/105960117600100101

Kale, P., Singh, H., & Perlmutter, H. (2000). Learning and protection of proprietary assets in strategic alliances: building relational capital. *Strategic Management Journal, 21*, 217–317. https://doi.org/10.1002/(SICI)1097-0266(200003)21:3<217::AID-SMJ95>3.0.CO;2-Y

Kanouse, D. E., & Hanson, L. R. Jr. (1971). Negativity in evaluations. In Attribution: *Perceiving the Causes of Behavior*. Eds. Edward E. Jones, David E. Kanouse, Harold H. Kelley, Richard E. Nisbett, Stuart Valins, and Bernard Weiner. Morristown, NJ: General Learning, 47-62.

Kasperson R, Renn O, Slovic P, Brown H, Emel J, Gobie J, Kasperson J, Ratick S. (1988). The social amplification of risk: A conceptual framework. *Risk Analysis, 8*(2),177–187. https://doi.org/10.1111/j.1539-6924.1988.tb01168.x

Kim, S., & Sung, K. H. (2014). Revisiting the effectiveness of base crisis response strategies in comparison of reputation management crisis responses. *Journal of Public Relations Research*, *26*(1), 62–78. https://doi.org/10.1080/1062726X.2013.795867

Kim, S. (2011). Transferring effects of CSR strategy on consumer responses: The synergistic model of corporate communication strategy. *Journal of Public Relations Research*, *23*, 1–24. https://doi.org/10.1080/1062726X.2011.555647

Kim, S., & Liu, B. F. (2012). Are all crises opportunities? A comparison of how corporate and government organizations responded to the 2009 flu pandemic. *Journal of Public Relations Research*, *24*(1), 69–85. https://doi.org/10.1080/1062726X.2012.626136

Kim, S., Avery, E. J., & Lariscy, R. W. (2009). Are crisis communicators practicing what we preach?: An evaluation of crisis response strategy analyzed in public relations research from 1991 to 2009. *Public Relations Review*, *35*(4), 446–448. https://doi.org/10.1016/j.pubrev.2009.08.002

Kim, S., & Sung, K. H. (2014). Revisiting the effectiveness of base crisis response strategies in comparison of reputation management crisis responses. *Journal of Public Relations Research*, *26*(1), 62–78. https://doi.org/10.1080/1062726X.2013.795867

Kincaid, J., Fishburne, R., Rogers, R., & Chissom, B. (1975). Derivation of new readability formulas (automated readability index, fog count and flesch reading ease formula) for navy enlisted personnel. In *Naval Technical Training*. Retrieved from Institute for Simulation and Training website: https://stars.library.ucf.edu/istlibrary/56

Kirsch, I. S. (1993). Adult literacy in America: A first look at the results of the National Adult Literacy Survey. *US Government Printing Office, Superintendent of Documents, Washington, DC 20402* (Stock No. 065-000-00588-3).

Klein, H. K. (1999). Knowledge and methods in IS research: From beginnings to the future. In O. Ngwenyama, L. Introna, M. Myers, & J. DeGross (Eds.), *New Information Technologies in Organizational Processes, Field Studies and Theoretical Reflections on the Future of Work*. https://doi.org/10.1007/978-0-387-35566-5_3

Krishnan, S., Haas, D., Franklin, M. J., & Wu, E. (2016). *Towards reliable interactive data cleaning. Proceedings of the Workshop on Human-In-the-Loop Data Analytics - HILDA '16.* https://doi.org/10.1145/2939502.2939511

Kutner, M. H., Nachtsheim, C. J., Neter, J., & Li, W. (2005). *Applied linear statistical models* (Vol. 5). Boston: McGraw-Hill Irwin.

Laufer, D., & Jung, J. M. (2010). Incorporating regulatory focus theory in product recall communications to increase compliance with a product recall. *Public Relations Review, 36*(2), 147–151. https://doi.org/10.1016/j.pubrev.2010.03.004

Lazarus, R. S. (1991). Cognition and motivation in emotion. *American Psychologist*, *46*(4), 352–367. https://doi.org/10.1037/0003-066X.46.4.352

Lewis, R. E., & Tyshenko, M. G. (2009). The impact of social amplification and attenuation of risk and the public reaction to mad cow disease in canada. *Risk Analysis, 29*(5), 714–728. https://doi.org/10.1111/j.1539-6924.2008.01188.x

Lie, R., & Servaes, J. (2015). Disciplines in the field of communication for development and social change. *Communication Theory*, *25*(2), 244–258. https://doi.org/10.1111/comt.12065

Lim, J. S. (2017). How a paracrisis situation is instigated by an online firestorm and visual mockery: Testing a paracrisis development model. *Computers in Human Behavior, 67*, 252-263.

Lindenmeier, J., Schleer, C., & Pricl, D. (2012). Consumer outrage: Emotional reactions to unethical corporate behavior. *Journal of Business Research*, *65*(9), 1364–1373. https://doi.org/10.1016/j.jbusres.2011.09.022

Liu-Lastres, B., Schroeder, A., & Pennington-Gray, L. (2018). Cruise line customers' responses to risk and crisis communication messages: An application of the risk perception attitude framework. *Journal of Travel Research*, *58*(5), 849–865. https://doi.org/10.1177/0047287518778148

Liu, B. F., Austin, L., & Jin, Y. (2011). How publics respond to crisis communication strategies: The interplay of information form and source. *Public Relations Review,*

37(4), 345–353. https://doi.org/10.1016/j.pubrev.2011.08.004

Liu, B. L., Bartz, L., & Duke, N. (2016). Communicating crisis uncertainty: A review of the knowledge gaps. *Public Relations Review*, 1–9. https://doi.org/10.1016/j.pubrev.2016.03.003

Lorenz, T. (2020). 'Zoombombing': When Video Conferences Go Wrong. Retrieved from The New York Times website: https://www.nytimes.com/2020/03/20/style/zoombombing-zoom-trolling.html

Luisi, M. L. R. (2021). From bad to worse II: Risk amplification of the HPV vaccine on Facebook. *Vaccine, 39*(2), 303-308, https://doi.org/10.1016/j.vaccine.2020.11.065.

Ma, L., & Zhan, M. (2016a). Effects of attributed responsibility and response strategies on organizational reputation: A meta-analysis of situational crisis communication theory research. *Journal of Public Relations Research*, *28*(2), 102–119. https://doi.org/10.1080/1062726X.2016.1166367

Ma, L., & Zhan, M. (Monica). (2016b). Effects of attributed responsibility and response strategies on organizational reputation: A meta-analysis of situational crisis communication theory research. *Journal of Public Relations Research*, *28*(2), 102–119. https://doi.org/10.1080/1062726X.2016.1166367

Marcus, A., & Goodman, R. S. (1991). Victims and shareholders: The dilemmas of presenting corporate policy during a crisis. *The Academy of Management Journal*, *34*(2), 281–305. https://doi.org/10.5465/256443

Miller, M. D., & Levine, T. (1996). Persuasion. In M. B. Salwen & D. W. Stacks (Eds.), *An integrated approach to communication theory and research* (pp. 261–276). Mahwah, NJ: Erlbaum. https://doi.org/10.4324/9780203710753-23

Nakra, P. (2000). Corporate reputation management: "CRM" with a strategic twist? *Public Relations Quarterly*, *45*(2), 35–42.

Odor, H. O. (2017). A literature review on organizational learning and learning organizations. *International Journal of Economics & Management Sciences*, *7*(1). https://doi.org/10.4172/2162-6359.1000494

Oehlert, G. W. (2010). A first course in design and analysis of experiments. *University of Minnesota Digital Conservancy*, https://hdl.handle.net/11299/168002

Pagano, S., & Huo, Y. (2007). The role of moral emotions in predicting support for political actions in post-war Iraq. *Political Psychology*, *28*(2), 227–255. https://doi.org/10.1111/j.1467-9221.2007.00563.x

Penrose, J. (2000). The role of perception in crisis planning. *Public Relations Review, 26.* https://doi/10.1016/S0363-8111(00)00038-2

Perrin, A., & Anderson, M. (2019). Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018. Retrieved from Pew Research Center website: https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/

Pidgeon, N., Kasperson, R. E., & Slovic, P. (2003). *The social amplification of risk.*

Cambridge: Cambridge University Press.
https://doi.org/10.1017/CBO9780511550461

Qualtrics. (2021). Randomizer. *Qualtrics.* https://www.qualtrics.com/support/survey-platform/survey-module/survey-flow/standard-elements/randomizer/

R Core Team (2020). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/

Rao, H. (1994). The social construction of reputation: certification contests, legitimation, and the survival of organizations in the American automobile industry: Special Issue. *Strategic Management Journal*, *15*, 29–44. Retrieved from https://www.jstor.org/stable/2486809

Revelle, W. (2020). psych: Procedures for Personality and Psychological Research, Northwestern University, Evanston, Illinois, USA, https://CRAN.R-project.org/package=psych Version = 2.0.12,.

Redden, E. (2020). Offensive but Forgivable Joke or Fireable Offense? Retrieved from Inside Higher Ed website: https://www.insidehighered.com/news/2020/08/26/missouri-professor-reassigned-teaching-after-comments-student-wuhan

Reynolds, B., & Seeger, M. W. (2005). Crisis and emergency risk communication as an integrative model. *Journal of Health Communication*, *10*(1), 43–455. https://doi.org/10.1080/10810730590904571

RStudio Team. (2020). RStudio: Integrated development for R. RStudio, PBC, Boston, MA. http://www.rstudio.com/.

Ruel, E., Wagner III, W. & Gillespie, B. (2016). Pretesting and pilot testing. In *The practice of survey research* (pp. 101-119). SAGE Publications, Inc. https://www.doi.org/10.4135/9781483391700

Salkind, N. J. (2007). *Encyclopedia of measurement and statistics* (Vols. 1-0). Thousand Oaks, CA: Sage Publications, Inc. https://doi.org/10.4135/9781412952644

Schonlau, M., & Toepoel, V. (2015). Straightlining in Web survey panels over time. *Survey Research Methods, 9*(2). https://doi.org/10.18148/srm/2015.v9i2.6128

Seeger, M. W., Vennette, S., Ulmer, R. R., & Sellnow, T. L. (2002). Media use, information seeking and reported needs in post crisis contexts. In B. S. Greenberg (Ed.), *Communication and terrorism* (pp. 53–63). Cresskill, NJ: Hampton Press.

Sellnow, T. L., & Ulmer, R. R. (1995). Ambiguous argument as advocacy in organizational crisis communication. *Argumentation and Advocacy*, *31*(3), 138–150. https://doi.org/10.1080/00028533.1995.11951607

Sellnow, T. L., Ulmer, R. R., & Snider, M. (1998). The compatibility of corrective action in organizational crisis communication. *International Journal of Phytoremediation*, *46*(1), 60–74. https://doi.org/10.1080/01463379809370084

Seltzer, T., & Mitrook, M. A. (2007). The dialogic potential of weblogs in relationship building. *Public Relations Review, 33*(2), 227–229.

https://doi.org/10.1016/j.pubrev.2007.02.011

Sheehan, K. B. (2017). *Crowdsourcing research: Data collection with Amazon's Mechanical Turk. Communication Monographs, 85(1), 140–156.* https://doi.org/10.1080/03637751.2017.1342043

Siomkos, G. J. (1999). On achieving exoneration after a product safety industrial crisis. *Journal of Business & Industrial Marketing, 14*(1), 17–29. https://doi.org/10.1108/08858629910254076

Skitka, L., Bauman, C., & Mullen, E. (2004). Political tolerance and coming to psychological closure following the September 11 2001 terrorist attacks: An integrative approach. *Personality and Social Psychology Bulletin*, *30*(6), 743–756. https://doi.org/10.1177/0146167204263968

Sparks, H. (2020). Professor fired after TikTok of porn bookmark goes viral. Retrieved from New York Post website: https://nypost.com/2020/04/29/professor-fired-after-tiktok-of-porno-bookmark-goes-viral/

Stacks, D. W. (2002). *Primer of public relations research*. New York: The Guilford Press.

Strekalova, Y. A. (2017). Health risk information engagement and amplification on social media: News about an emerging pandemic on Facebook. *Health Education and Behavior*, *44*(2), 332–339. https://doi.org/10.1177/1090198116660310

Till, B. D., & Shimp, T. A. (1998). Endorsers in Advertising: The Case of Negative Celebrity Information. *Journal of Advertising, 27*(1), 67–82. https://doi.org/10.1080/00913367.1998.10673543

Tingley, D., Yamamoto, T., Hirose, K., Keele, L., & Imai, K. (2014). Mediation: R package for causal mediation analysis. *Journal of Statistical Software, 59*(5), 1-38. http://www.jstatsoft.org/v59/i05/.

Triantafillidou, A., & Yannas, P. (2020). Social media crisis communication in racially charged crises: Exploring the effects of social media and image restoration strategies. In *Computers in Human Behavior,* (106). https://doi.org/10.1016/j.chb.2020.106269

Ulmer, R. R., Sellnow, T. L., & Seeger, M. W. (2019). *Effective crisis communication: Moving from crisis to opportunity* (4th ed.). Sage Publications.

Utz, S., Schultz, F., & Glocka, S. (2013). Crisis communication online: How medium, crisis type and emotions affected public reactions in the Fukushima Daiichi nuclear disaster. *Public Relations Review, 39*(1), 40–46. https://doi.org/10.1016/j.pubrev.2012.09.010

Verhoeven, J. W. M., Van Hoof, J. J., Ter Keurs, H., & Van Vuuren, M. (2012). Effects of apologies and crisis responsibility on corporate and spokesperson reputation. *Public Relations Review*, *38*(3), 501–504. https://doi.org/10.1016/j.pubrev.2012.02.002

Wan, H.-H., & Schell, R. (2007). Reassessing corporate image—an examination of how image bridges symbolic relationships with behavioral relationships. *Journal of*

Public Relations Research, 19(1), 25–45.
https://doi.org/10.1080/10627260709336594

Wang, Y. (2016). Brand crisis communication through social media. *Corporate Communications: An International Journal*. https://doi.org/10.1108/CCIJ-10-2014-0065

Ware, B. L., & Linkugel, W. A. (1973). They spoke in defense of themselves: On the generic criticism of apologia. *Quarterly Journal of Speech*, *59*(3), 273–283. https://doi.org/10.1080/00335637309383176

Watson, L., & Spence, M. T. (2007). Causes and consequences of emotions on consumer behaviour: A review and integrative cognitive appraisal theory. *European Journal of Marketing*, *41*(5/6), 487–511. https://doi.org/10.1108/03090560710737570

Weiner, B. (1995). *Judgments of responsibility: A foundation for a theory of social conduct*. New York: Guilford.

Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychology Review*, *92*(4), 548–573. https://doi.org/10.1037/0033-295X.92.4.548

Wickham, H., François, R., Henry, L., & Müller, K. (2021). dplyr: A Grammar of Data Manipulation. R package version 1.0.4. https://CRAN.R-project.org/package=dplyr

Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals, 11*(2), 733–769. https://doi.org/10.5465/annals.2015.0134

Wright, C. (2009). Responding to crises: A test of the situational crisis communication theory. Graduate Theses and Dissertations. University of South Florida. https://scholarcommons.usf.edu/etd/91

Xu, J. (2020). Does the medium matter? A meta-analysis on using social media vs. traditional media in crisis communication. *Public Relations Review*, *46*(4). https://doi.org/101947

Yuan, E. S. (2020). Company news: A message to our users. Retrieved from Zoom website: https://blog.zoom.us/a-message-to-our-users/

Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, *12,* 341–352. https://doi.org/10.1086/208520

Zhao, X., Zhan, M., & Liang, M. (2020). How publics react to situational and renewing organizational responses across crises: Examining SCCT and DOR in social-mediated crises. *Public Relations Review*, *46*. https://doi.org/10.1016/j.pubrev.2020.101944

Appendix A

Stimuli

The Crisis Situations:

The Victim Crisis.

Chicago College received a complaint that an unknown individual, unaffiliated with the university, disrupted a biology course and hacked a Zoom session. During the event, the hacker took over screen-sharing capabilities to expose students to derogatory videos and hateful language. The uninvited participant kept their video off and microphone muted for most of the class before disrupting with audio containing racial slurs at a loud volume and began to screen-share a pornographic video. The incident was reported to the Office of the Provost and Title IX investigator.

The Preventable Crisis.

Chicago College received a complaint regarding a university instructor's remarks in a biology course over Zoom. During a course breakout session, the instructor placed Asian students in the class in their own small group and made a remark about quarantining the group, as the outbreak was first discovered in China. The incident was reported to the Office of the Provost and Title IX investigator.

Organizational Responses:

Base Crisis Responses.

1. *Victim Base Crisis Response*

2. *Preventable Base Crisis Response*

Corrective Action Responses.

   3. Victim Corrective Action

Chicago College | University Communications

In response to the hacking event, Chicago College has requested all instructors that facilitate courses over Zoom to create passwords for students to log into their course meetings securely. This will prompt a student identification process to prevent a similar event from happening in the future.

👍 Like   💬 Comment

   4. Preventable Corrective Action

Chicago College | University Communications

In response to the actions made by a university professor, Chicago College has investigated the event and relieved this professor from their duties at Chicago College to prevent this from occurring in the future. This course will now be instructed by Dr. Stephens, who is one of our renowned biologists.

👍 Like   💬 Comment

Organizational Learning Responses.

   5. Victim Organizational Learning

Chicago College | University Communications

Chicago College has taken the hacking event as an opportunity to learn from system vulnerabilities. This process has involved learning from experience. We are committed to preventing these issues and have instilled new policies and annual training sessions for instructors to secure their Zoom sessions. We have also developed p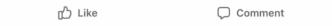rocedures for students with courses on Zoom to protect the security of sessions, such as by signing into sessions on secure browsers. Chicago College is committed to working on these issues through ongoing assessments to provide a welcoming environment conducive to learning.

👍 Like   💬 Comment

6. ***Preventable Organizational Learning***

Chicago College | University Communications

Regarding the incident earlier this month involving Chicago College faculty, we have taken the removed faculty's actions as an opportunity to learn from current hiring and reporting procedures. This process has involved learning from experience. We are committed to preventing these issues and have instilled new hiring procedures and annual training for instructors to ensure students receive the highest quality education we can provide. We have also developed reporting procedures for students to raise any degree of concern about the content or method of teaching in their courses. Chicago College is committed to working on these issues through ongoing assessments to provide a welcoming environment conducive to learning.

👍 Like   💬 Comment

Matched Reputation Responses.

7. ***Victim Matched Reputation Response***

Chicago College | University Communications

Chicago College does not claim responsibility for this hacking incident. The hacker, unaffiliated with the university, caused this event to occur.

👍 Like   💬 Comment

8. ***Preventable Matched Reputation Response***

Chicago College | University Communications

Chicago College does not tolerate incidents such as the actions made over Zoom by a Chicago College biology instructor. We apologize to everyone affected by the decisions made by this instructor.

👍 Like   💬 Comment

Appendix B

Consent Form

Informed Consent:
You are invited to participate in a research study about how information from organizations is shared. The goal of the study is to help researchers understand how organizations should respond when a crisis occurs. Specifically, you will be asked to read materials and then answer questions related to the materials. The crisis may contain content that you read in headlines, however they name contain sensitive scenarios. This study will take approximately **10-15 minutes** to complete. Once you have successfully completed the survey, you will be given a MTurk code.

Your participation in this study is voluntary. You may refuse to take part in the study or exit the study at any time without penalty. There is no reasonably foreseeable risk involved in participating in this study other than those encountered in day-to-day life. There are no concrete benefits to participating in this study other than the possible satisfaction of knowing you have helped advance the scientific knowledge of how crisis information should be shared.

Anonymity. The research team will not be provided with your name or any other identifiable information. Your responses will be automatically compiled in a spreadsheet and cannot be linked to you. The results of this study will be used for scholarly purposes only. Any reports or publications based on this research will use only aggregate data of participants in this study and will not identify you or any individual as being affiliated with this project.

If you have any questions, please feel free to contact the investigator, Erika Schneider, Doctoral Candidate, Missouri School of Journalism, at erikaschneider@mail.missouri.edu. If you have questions about your rights or complaints about this research (IRB Study #2047804), you may talk to the University of Missouri Institutional Review Board, 573.882.3181, irb@missouri.edu, University of Missouri, Columbia, MO 65201.

To consent to the use of your responses for research, please click the **"I ACCEPT"** button below. If you do not wish to allow your responses to be used in research, you can simply leave this page. **By clicking "I ACCEPT**," you are acknowledging: You have been given sufficient time to read this information and agree to participate in this research. You are free to withdraw your participation at any time without penalty. The purpose of this study has been explained sufficiently to you. You understand the potential risks and benefits of participating in this project. You understand your information will be held anonymous to the extent permitted by law. You are at least 18 years old.
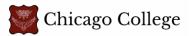
Appendix C

Measures

Pretest Measures

Fictitious organization names with logos

First, I'd like to ask about your general opinions of the following 4 universities.
(1 = very unfavorable, 7 = very favorable). If you haven't heard of them or do not have an opinion, please select "Neutral" (4):

 OHIO COLLEGE

 West Metro University

 Texas Central University

 Chicago College

Message Manipulation Checks

Indicate the extent you agree or disagree with the following statements (1 = Strongly disagree, 7 = Strongly agree):

After reading the message, the students know what they can do to protect themselves.

I know what Chicago College is doing about this specific situation to prevent the event from happening again.

I feel like Chicago College is committed to ongoing learning to promote positive change.

I feel like Chicago College apologized for the incident.

I feel like Chicago College blamed the incident on something else.

Main Experiment Measurement Scales

Anger and Moral Outrage

Anger
Indicate the degree to which you are feeling each of these emotional reactions as a result of reading the response (1 = not at all; 7 = extremely):
I feel annoyed towards Chicago College for what happened.
Because of the incident, I feel angry at Chicago College.
® I do NOT feel anger towards Chicago College.

Moral outrage
Indicate the degree to which you are feeling each of these emotional reactions as a result of reading the response (1 = not at all; 7 = extremely):
Angered
Outraged
Mad

Organizational Learning

Indicate the extent you agree or disagree with the following statements (1 = Strongly disagree, 7 = Strongly agree):
At Chicago College, newly gained knowledge influences improvements.
Chicago College is a learning organization.
Chicago College acquires and shares new and relevant knowledge.
Chicago College acquires critical capacities and skills.

Organizational Reputation

Please answer the following questions regarding Chicago College.
(1 = Strongly disagree, 7 = Strongly agree)
The organization is concerned with the well-being of its publics
® The organization is basically DISHONEST.
® I do NOT trust the organization to tell the truth about this incident.
Under most circumstances, I would be likely to believe what the organization says.
® The organization is NOT concerned with the well-being of its publics.

Social Amplification

Thinking back to the **message from Chicago College**, please answer the below questions.
(1=Very unlikely, 7=Very likely)
How likely is it that you would **negatively react to the message** on Facebook?

Demographics

Age
Gender
Education
University Attending
Income
Ethnicity/Race
Political Ideology
Religious Identity

VITA

Erika J. Schneider is a doctoral candidate at the Missouri School of Journalism. She specializes in strategic communication with an emphasis on crisis communication. Her research strives to optimize organizational responses that prioritize societal wellbeing. She often uses experimental design studies to investigate how organizations approach crisis responsibility and use communication to lessen the effects of a crisis. She looks forward to continuing this trajectory by investigating how organizations can navigate crises induced by emerging issues, such as health topics and (mis/dis)information. Her work is published in journals such as *Public Relations Review*. In the classroom, she shares her experiences from agency and in-house marketing positions, and also uses industry experiences to inform her research.

Erika's interest in strategic communication began during her undergraduate education at North Dakota State University (B.S. in Strategic Communication, '15) and continued during her master's a Marquette University (M.A. in Communication, '18). She continued her research trajectory in the journalism doctoral program at the University of Missouri, where she continues to investigate how communication can lessen the effects of crises. As an educator and young scholar, Erika brings real experiences from the public relations industry into academia. She became acquainted with challenges professionals face while serving in agency and in-house marketing roles. These challenges drove the research questions in this dissertation, and this endeavor was another step in Erika's trajectory to provide theoretical and practical guidance for seemingly indefensible crises. Permanent Email Address: erika.j.schneider@gmail.com