

Facial Expressions and Verbal Response Strategies in Postcrisis Communication

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Abstract

This study explores how a spokesperson's facial expressions and verbal response strategies affect participants' evaluations of an organization's crisis communication responses. Using a between-subjects experiment with Taiwanese participants, the study investigates the effects of congruence and incongruence between an organization's emotional and verbal responses on participants' perceptions of the acceptability of its crisis response. The findings suggest that an organization's emotional response should be congruent with its verbal response strategy in order to enhance the audience's acceptance of its crisis response and in turn protect its reputation.

Keywords

emotional crisis communication, crisis response, facial expression, emotion, reputation, communication management

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As a prominent theory in postcrisis communication, situational crisis communication theory (SCCT) posits that during a crisis, a company must use appropriate crisis responses (e.g., denial, diminish, or rebuild) to prevent reputational damage (Coombs, 2007; Dutta & Pullig, 2011; Seeger, Sellnow, & Ulmer, 2003; Yum & Jeong, 2015) because failing to respond appropriately might endanger the company's most valuable asset: its corporate reputation (Coombs, 2007; Tucker & Melewar, 2005). More recent research (e.g., Van der Meer & Verhoeven, 2014) builds on SCCT to determine how organizations employ emotions when dealing with crises. Such research has demonstrated that an organization's emotional crisis responses can enhance positive public reactions, such as account acceptance (i.e., acceptance of the organization's crisis responses and its attribution of responsibility) and its corporate reputation. For example, a spokesperson speaking on behalf of an organization should express deep regret in front of the public and the media in order to increase the public's account acceptance.

The study we present here investigates how the congruence or incongruence of emotions and crisis response content affects account acceptance and reputation. Unlike most previous research, which focuses on verbal emotions (Claeys & Cauberghe, 2014a; Coombs, 1999; Coombs & Holladay, 2009; Lee & Chung, 2012), this study examines nonverbal emotions such as facial expressions. We developed hypotheses around the premise that facial expressions congruent with verbal responses would yield higher account acceptance and an enhanced company reputation whereas facial expressions that are incongruent with verbal responses would yield lower account acceptance and a tarnished company reputation. To test our hypotheses, we designed a between-subjects experiment with Taiwanese participants in order to compare the effects of congruent emotional and verbal responses, neutral emotional responses, and incongruent emotional and verbal responses.

First, we describe the conceptual framework for our study and how we developed our hypotheses. Then, we explain our methods for the study, present its results, and discuss the results.

Conceptual Framework and Hypothesis Development

Coombs's (2007) SCCT has been extensively used by researchers when examining crisis communication. The premise of SCCT is to allow stakeholders to determine the crisis type and attribute different levels of responsibility depending on the selected type (Coombs, 2006). Then, the organization can exhibit crisis responses that match the crisis type.

Crisis types are generally categorized based on attributed responsibility. Coombs and Holladay (2002) identified three crisis types: victim, accidental, and preventable. In victim crises, such as natural disasters, or incidents of workplace violence, product tampering, or malevolence, the organization is the victim of the crisis; therefore, it has no responsibility. In accidental crises, such as technical breakdowns, product recalls, or stakeholder claims of mistakes in an organization's business operations, the organizational actions that resulted in the crisis are unintentional. And in preventable crises, such as violating laws or regulations or deceiving stakeholders, the organization put people at risk by knowingly taking inappropriate actions (Coombs, 2006).

Crisis response strategies include denial, diminish, and rebuild (Coombs, 2007), each of which demonstrates the extent to which the organization intends to take responsibility (Pace, Fediuk, & Botero, 2010). The denial response strategy is used to show that an organization assumes no responsibility for a crisis; for example, when a claim that syringes were found in Diet Pepsi cans in the United States, Pepsi-Cola denied the claim by releasing a video that explained how its production process makes it impossible to insert any foreign objects (Fink, 2013).

The diminish response strategy is used to prove that an organization has minimal responsibility for the crisis and that the crisis is a result of uncontrollable circumstances. For example, after the Exxon Valdez oil spill in Alaska, Exxon attempted to downplay the extent of the damage by telling National Public Radio that it had counted just 300 dead birds and 70 dead otters around the spot although the press claimed that there were tens of thousands of seabirds, hundreds of otters, and dozens of bald eagles (Benoit, 1997).

And the rebuild response strategy is used to indicate that an organization takes maximal responsibility for a crisis and that it is willing to cover the damages caused by the crisis. For instance, in 1993, when AT&T experienced a breakdown in its long-distance service, CEO Robert Eugene Allen stated that the company was taking corrective and preventive actions, including a thorough examination of all company facilities and practices. Promising to make its service more reliable, he publicly apologized to all who were affected, directly or indirectly (Benoit, 1997).

SCCT theorists argue that an organization's intent to take responsibility should match its level of attributed responsibility to ensure positive public reactions. Therefore, organizations need to choose the appropriate crisis response strategy based on the crisis type. Thus, in a victim crisis, the organization should choose the denial response by assuming no

responsibility; in an accidental crisis, it should choose the diminish response by taking minimal responsibility; and in a preventable crisis, it should choose the rebuild response by taking maximal responsibility.

The Role of Verbal and Nonverbal Emotional Expressions in Emotional Crisis Communication

During crises, the people who represent organizations intentionally or unintentionally communicate their emotions through their verbal and nonverbal expressions as they deliver crisis responses to the public (Van der Meer & Verhoeven, 2014). Because the public interprets these emotions as being associated with the entire organization (Christensen & Cornelissen, 2011), such verbal and nonverbal expressions are considered an integral part of crisis communication. Therefore, the emotions communicated by company spokespeople are critical because they can positively or adversely affect public opinion (Van der Meer & Verhoeven, 2014).

Studies on the effects of emotions communicated by company spokespeople on public perceptions (Claeys & Cauberghe, 2014b; Stafford & Day, 1995; Van der Meer & Verhoeven, 2014) show that emotionally charged content outperforms rationally expressed content (Claeys & Cauberghe, 2014b; Kim & Cameron, 2011) in terms of enhancing company reputation. Van der Meer and Verhoeven (2014) studied the effects of the emotional signals embedded in crisis responses on public anger and on the acceptance of the organizational messages and found that verbal expressions of emotions are a crucial addition to persuasive messages (Cotte & Ritchie, 2005; Kim & Cameron, 2011; Ridout & Searles, 2011). Fridlund (1991) found that recipients used the communicated emotions to judge an organization's intentions, feelings, and consequent actions toward a crisis. And Kim and Cameron (2011) found that emotionally framed news reports influence public reactions.

Most prior research focused on verbally expressed emotions, in which written words were used in experiments to represent the emotions displayed by organizational spokespeople. While this approach seems reasonable because the verbal expression of emotions widely occurs in real crisis communication practices, emotions are not only verbally expressed but are also often accompanied by nonverbal signs, such as facial expressions (Ekman, 1993), posture and gestures (Wallbott, 1998), and voice pitch and tone (Claeys & Cauberghe, 2014a).

Of these nonverbal signs of emotions, facial expressions have been recognized as the primary area for emotional displays whereas body posture

tends to indicate how people are coping with their emotions (Ekman & Friesen, 1975). According to Ekman and Friesen (1975), “no specific body movement patterns always signal anger or fear, but there are facial patterns specific to each emotion” (p. 7). Thus, we considered facial expressions, rather than other body-related nonverbal signs, as more relevant to this study on the relationship between nonverbal signs of emotion and crisis response messages.

Facial Expressions and Emotional Crisis Communication

Related but visually distinct expressions represent specific emotions (Ekman & Friesen, 1975). Ekman (1993) noted that there are far fewer emotions that are associated with universal facial expressions than there are emotions in general. He identified six distinctive universal expressions—anger, fear, disgust, surprise, sadness, and enjoyment—in which people identified a specific facial expression with the same emotion regardless of their cultural origins (Ekman & Cordaro, 2011; Matsumoto, Keltner, Shiota, O’Sullivan & Frank, 2008). Although this finding was recently referred to as the “universality hypothesis” (Gendron, Roberson, Van der Vyver, & Barrett, 2014, p. 252), some studies (Gendron et al., 2014; Jack, Garrod, Yu, Caldara, & Schyns, 2012) argued that the perceptions of facial expressions are culturally dependent. For example, Jack, Garrod, Yu, Caldara, and Schyns (2012) compared Westerners with Easterners and found that Easterners could not reliably distinguish universal facial expressions for some negative emotions such as fear and disgust. This debate between the presence of a universality hypothesis and cultural dependence is not yet settled. And because culturally dependent arguments might question the validity of using Eastern participants in studies on the facial expression of emotions, we needed to use pretests in this study to determine whether Eastern participants could correctly identify anger and sadness.

The complexity of facial expressions. Emotional facial expressions can be complicated. Ekman and Friesen (1975) found that when expressing emotions, the face was a “multisignal, multimessage system” (p. 11). They used the terms *multisignal* because the face provides static (e.g., skin color), slow (e.g., wrinkles), and rapid (e.g., eyebrow raising, muscle twitching) signals and *multimessage* because the face conveys various emotions, moods, attitudes, and other information related to geographical factors. Other facial expression elements, such as eye contact, have also been found to convey messages; for example, the lack of eye contact has been associated with

dishonesty (Stass & Willis, 1967), and direct eye contact has been associated with anger (Adams & Kleck, 2005). Despite these various facial signals, Ekman and Friesen (1975) focused on only rapid signals such as eyebrow raising or muscle twitching. In this study, we follow Ekman and Friesen's study by focusing on rapid signals.

Further, emotional facial expressions can be misinterpreted. For example, Ekman and Friesen (1975) examined the differences between the eyebrows, the eyelids, and the mouth, arguing that if only two of these expressed anger, the anger message was perceived as ambiguous. "Facial deceit" (p. 20), in which people control their facial expressions to falsify their real emotions, can also complicate the understanding of facial expressions. Ekman and Friesen noted a difference between real sadness and simulated sadness; this difference was seen in particular (facial) muscular movements that were "a part of the person's usual repertoire to infer leakage or deception clues reliably" (pp. 149–150). But even though people might falsify their real emotions, their "micro-facial expressions" (p. 145), which last for microseconds, provide clues about their real emotions.

Although emotional facial expressions can be misinterpreted because of deliberate and elaborate deceptions, many previous studies, such as Ekman and Friesen (1975), used photographs to test people's reactions to facial expressions. In line with these studies, we used photographs in this study as the stimuli in both the pilot test and final experiments in order to assess participants' interpretations of the emotional facial expressions.

Links between certain facial expressions and postcrisis communication. Although there are several identified emotions, anger and sadness are two of the most frequently studied emotions in crisis communication (Coombs, 2007). Crisis communicators use anger or sadness (e.g., sympathy) far more than other emotions (e.g., fear, disgust, surprise, and enjoyment) to evoke public emotional reactions or to change public attitudes. Because these two emotions occur most frequently in crisis communication, this study focuses on the two facial expressions of anger and sadness. Anger or sadness can be expressed by angry or sad facial expressions, and both can be interpreted according to the intent to bear responsibility.

Anger is provoked by "a demeaning offense against me and mine" (Lazarus, 1991, p. 122); that is, people and organizations express anger when they feel demeaned. When organizations strategically express anger during crisis communication, they give the impression that they feel demeaned by being asked to take responsibility and that they are trying

to deny responsibility. Therefore, we contend that an angry facial expression is congruent with denying responsibility for a crisis.

Sadness is often perceived to be related to an organization's tendency to correct past performances (Roseman, Wiest, & Swartz, 1994). Therefore, a sad (e.g., tearful) face indicates an organization's intent to assume responsibility for the crisis and is congruent with the diminish or rebuild crisis response strategy.

To assess the impact of emotional facial expressions on crisis communication, we need to compare emotional and unemotional facial expressions in order to determine the effects of these emotional faces on participants. In this study, a neutral face refers to an unemotional face; in crisis responses, a neutral face has the same effect as an unemotional verbal expression. Neutral faces have relaxed facial muscles, set jaws, and staring eyes with untensed eyelids (Ekman & Friesen, 1975, p. 142).

Congruence and Incongruence of Emotional and Verbal Responses

Emotional crisis responses are imbued with certain emotions. Because emotions are an integral part of a response, recipients tend to evaluate facial expressions as part of the response content in order to make sense of the speaker's meaning. Here, we assumed that the emotional and verbal response contents were congruent when the spokesperson delivered identical meanings to the recipients and that an emotional response was appropriate and engendered high account acceptance when the emotion conveyed by facial expression was congruent with the verbal response content.

The SCCT presumes that an organization's crisis response shows its intent to take responsibility. Because facial expressions are an integral part of the emotional crisis response, they should therefore correctly display the organization's intent to assume responsibility; that is, the facial expression is congruent with the verbal response content if the emotion shows the same intent to take responsibility as does the verbal response content whereas the facial expression is incongruent with the verbal response content if the emotion fails to show the same intent to take responsibility as does the verbal response.

When people receive an organization's emotional crisis response, they view it holistically to perceive whether there is any inconsistency between the emotion being expressed and the response content, with consistent responses being judged as more acceptable than inconsistent responses. For example, when individuals start a public speech by saying, "I am delighted to be here to speak to you, and I feel good about being here with you

tonight,” but they nonverbally communicate with an angry facial expression, their verbal content is incongruent with their facial expression. In this case, the audience is more likely to trust the facial expression over the words and to perceive the speaker as being insincere. Therefore, we propose the following hypothesis:

Hypothesis 1: Congruent facial expressions and verbal responses result in a higher level of account acceptance than do incongruent facial expressions and verbal responses.

As previously mentioned, facial expressions and verbal responses are congruent if they both convey the same level of intent to take responsibility. Congruent facial expressions and verbal responses should result in high account acceptance when an organization takes responsibility for the crisis; therefore, we propose the following hypothesis:

Hypothesis 2a: When organizations assume responsibility for a crisis, their use of congruent facial expressions and verbal responses results in a higher level of account acceptance than does their use of neutral (i.e., unemotional) facial expressions and verbal responses.

But when organizations take no responsibility, facial expressions are irrelevant because enhancing their responsibility-taking intentions is unnecessary; therefore, we propose the following hypothesis:

Hypothesis 2b: When organizations assume no responsibility for a crisis, their use of emotional facial expressions does not result in a higher level of account acceptance than does their use of neutral facial expression.

Incongruent emotional and verbal responses might be confusing to audiences because such responses convey a mismatch between the organization’s responsibility-taking intentions and the level of responsibility it is attributing. We would expect that incongruent emotional and verbal responses decrease the account acceptance of the messages; therefore, we propose the following hypothesis:

Hypothesis 3a: When organizations assume responsibility for a crisis, their use of incongruent emotional responses results in a lower level of account acceptance than does their use of neutral responses.

But when organizations assume no responsibility for a crisis, incongruent responses are irrelevant; hence, we propose the following hypothesis:

Hypothesis 3b: When organizations assume no responsibility for a crisis, their use of emotional responses does not result in a lower level of account acceptance than does their use of neutral responses.

Relationship Between Communicated Emotions, Account Acceptance, and Reputation

Account acceptance is defined as “how respondents feel about the crisis response offered by the organization” (Coombs & Holladay, 2008, p. 253) and how they perceive the appropriateness of its response strategy (Van der Meer & Verhoeven, 2014). Account acceptance indicates how appropriate the organization’s crisis response is perceived to be by the public (Coombs & Holladay, 2008; Van der Meer & Verhoeven, 2014). Research on crisis communication has demonstrated the relationship between response content and account acceptance, generally finding a positive relationship between account acceptance and reputation (Van der Meer & Verhoeven, 2014).

Reputation has been a primary focus in crisis communication research (Coombs & Holladay, 2002). Because reputation is its most valuable asset, a company is vulnerable to crises. How a company attributes responsibility for a crisis might cause the public to view the company negatively (Coombs & Holladay, 1996). Coombs and Holladay (2008) claimed that account acceptance determines reputation. This study explores the relationship between the emotion a company communicates and account acceptance. Van der Meer and Verhoeven (2014) found that the communicated emotion affects account acceptance and that account acceptance affects reputation, so account acceptance mediates communicated emotion and reputation. Although Van der Meer and Verhoeven (2014) used verbally communicated emotions to test the mediating role of account acceptance, we wanted to examine whether their finding is still viable for nonverbally expressed emotions; therefore, we propose our final hypothesis:

Hypothesis 4: Account acceptance mediates nonverbally communicated emotions and reputation.

Method

For our experiment, we used a 3 (response content) \times 3 (facial expressions) between-subjects design. We randomly assigned participants to nine

groups, giving each group a news article on a hospital's response to a crisis and a picture of the hospital spokesperson's face. After reading the material, participants answered questions about how acceptable they felt that the crisis response was and evaluated the hospital's reputation. To ensure that participants identified with the stimulus material and that their responses were based on the manipulations, we conducted a manipulation check in which participants answered two questions about the hospital's response strategy and the spokesperson's facial expression. Participants who failed this manipulation check were excluded from our statistical analysis.

Participants

Using a quota-sampling method, we recruited the participants via e-mail and telephone calls from a pool of our acquaintances and those acquaintances' social networks. In all, we contacted 982 respondents, with 820 completing the questionnaire and passing the manipulation check.

Of the 820 participants, 52% were female. In terms of age, 36% of the participants were between 20 and 29 years, 20% were between 30 and 39 years, 23% were between 40 and 49 years, 16% were between 50 and 59 years, and 4% were 60 years and older. With regard to education level, 74% of the participants had completed a bachelor's degree or higher, and 26% had completed a high school education or lower.

Materials

The stimulus materials we used were based on a series of nonfactual case scenarios in which a hospital's built-in power generator stopped working, causing a large-scale power outage. During the outage, the hospital staff converted the automatic life-support systems to manual mode, a standard procedure to protect patients connected to life-support systems. Despite these efforts, two patients died. The sudden cessation of the power generator was considered the only factor responsible for these deaths. The scenarios describe three possible reasons for the outage, each representing a crisis type matched to a crisis response strategy (i.e., denial, diminish, rebuild):

1. **Victim crisis:** The power generator was deliberately sabotaged. The hospital was also a victim, and it responded by denying responsibility.
2. **Accidental crisis:** The power generator malfunctioned for unknown reasons. The power cut was an accident. The hospital responded by diminishing its responsibility.

3. Preventable crisis: The power generator malfunctioned because of insufficient maintenance due to budget cuts. The power cut could have been avoided if the power generator maintenance had been well funded. The hospital responded by taking full responsibility, using the rebuild strategy.

Each scenario was printed with descriptions of the specific crisis type and the response strategy that the hospital used. Therefore, the three scenario versions were victim–denial, accidental–diminish, and preventable–rebuild. We manipulated the experiment by using three photographs of a male spokesperson, each expressing a different emotional state (see Figure 1). To ensure that participants could match the facial expressions with the specific emotions, we conducted a pilot study in which each photograph was shown to 25–27 college students, each of whom was asked two questions: “What facial expression is the person showing?” and “What emotion, according to his facial expression, do you think the person is expressing?” In the photo showing sadness, almost all pilot participants (92.6%) correctly recognized that the person in tears was expressing “sadness.” In the photo showing anger, most participants (96%) recognized the face as “wrathful” and the emotion as “anger” (88%). In the photo showing a neutral expression, all pilot participants recognized the person’s face as a “poker face,” and the majority (88.5%) recognized the “neutral” emotion. The pilot results indicated that these three photographs, each sized 3.15×2.16 inches, correctly displayed the distinctive facial expressions of sadness (i.e., tearful face), anger (wrathful face), and neutrality (i.e., emotionless face).

Procedure

The two dependent variables in this study were account acceptance and reputation. We measured account acceptance using 4 items from Coombs and Holladay’s (2008) account acceptance scale and reputation using 5 items from Coombs and Holladay’s (2002) reputation scale. Participants rated these items on a 5-point scale ranging from *strongly disagree* to *strongly agree*. Then we averaged the participant ratings for the items for each dependent variable to produce an overall score for that variable.

We used an independent sample, two-tailed *t* test to test our hypotheses, in which the dependent variables were the participant ratings for the reactions to account acceptance. For each crisis type, the hospital chose the proper response option for its spokesperson using a specific facial expression. We randomly assigned participants to nine conditions. In each

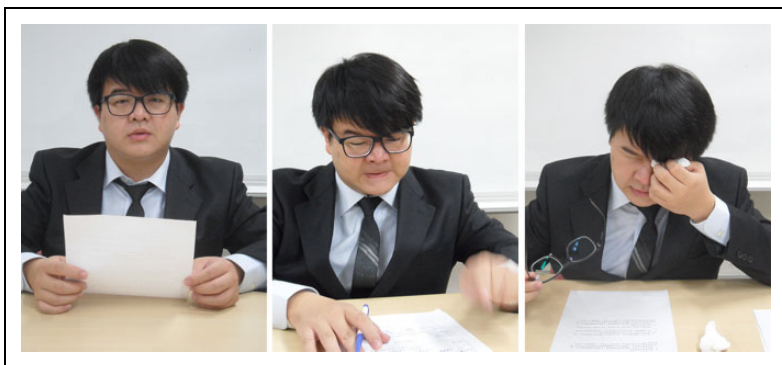


Figure 1. Stimulus photographs of a male spokesperson's neutral, anger, and sadness (from left to right) facial expressions that were displayed to assigned participant groups.

condition, the participants read a specific version of the material, which was accompanied by a photograph of the spokesperson's face. The participants then evaluated their perceptions on the 5-point rating scale.

Results

We analyzed the results of this study using two-tailed t tests. Our first hypothesis predicted that congruent facial expressions and verbal responses for each crisis type result in higher account acceptance than do incongruent facial expressions and verbal responses.

In the preventable crisis type, the two emotional facial expressions had significantly different effects on account acceptance ($t = -5.142, p = .000, df = 188$). For this type of crisis, sadness is congruent with the rebuild verbal response because both display the intent to take responsibility whereas anger is incongruent with the rebuild option. The results showed that the congruent emotional facial expression resulted in a higher level of account acceptance (mean = 3.17) than did the incongruent one (mean = 2.45). Thus, the results support Hypothesis 1 for a preventable crisis.

In the accidental crisis, the two emotional facial expressions also had significantly different effects on account acceptance ($t = -4.454, p = .000, df = 179$). Sadness is congruent with the diminish verbal response, and anger is incongruent. The results showed that the congruent emotional facial expression resulted in a higher level of account acceptance (mean

= 3.39) than did the incongruent one (mean = 2.78); therefore, the results support Hypothesis 1 for an accidental crisis.

In the victim crisis, the two emotional facial expressions again had significantly different effects on account acceptance ($t = -3.132, p = .002, df = 180$). Anger is congruent with the denial verbal response, which indicates that the organization does not intend to take responsibility whereas sadness is incongruent with the denial option. But the congruent emotional facial expression resulted in a lower level of account acceptance (mean = 2.97) than did the incongruent one (mean = 3.42). The results, then, were not as we predicted and fail to support Hypothesis 1 for a victim crisis.

The results indicated that the superior effects of congruent facial expressions depend on crisis type. That is, congruent facial expressions had better effects in the crisis types in which the organization took responsibility than in the crisis type in which the organization assumed no responsibility.

We analyzed Hypotheses 2 and 3 using a t test to compare the differences between the congruent emotional facial expressions and the neutral facial expression. Hypothesis 2a predicted that when organizations assume responsibility for a crisis, their use of congruent facial expressions and verbal responses results in higher account acceptance than does their use of neutral (i.e., unemotional) facial expressions and verbal responses. For the preventable crisis, the use of the congruent sadness facial expression and the rebuild verbal response (mean = 3.17) resulted in a higher level of account acceptance than did the use of the neutral facial expression and the rebuild verbal response (mean = 2.77, $t = 2.791, p = .006, df = 187$). For the accidental crisis, the use of the congruent sadness facial expression and the diminish verbal response (mean = 3.39) resulted in a higher level of account acceptance than did the use of the neutral facial expression and the diminish verbal response (mean = 3.04, $t = 2.516, p = .013, df = 167$); therefore, the results support Hypothesis 2a.

Hypothesis 2b predicted that when organizations assume no responsibility for a crisis, their use of emotional facial expressions does not result in a higher level of account acceptance than does their use of neutral facial expressions. The results of the t test indicated that the use of the congruent anger facial expression and the denial verbal response (mean = 2.97) was not significantly different from the use of the neutral facial expression and the denial verbal response (mean = 3.26, $t = 1.557, p = .121, df = 180$) in account acceptance; therefore, the results support Hypothesis 2b.

Hypothesis 3a predicted that when organizations assume responsibility for a crisis, their use of incongruent emotional responses results in a lower level of account acceptance than does their use of neutral responses. In the preventable

crisis, the use of the incongruent anger facial expression and the rebuild verbal response (mean = 2.45) resulted in a lower level of account acceptance than did the use of the neutral facial expression and the rebuild verbal response (mean = 2.77, $t = -2.111$, $p = .036$, $df = 177$). The results showed that the difference was significant. For the accidental crisis, however, the use of the incongruent anger facial expression and the diminish verbal response (mean = 2.78) did not result in a lower level of account acceptance than did the use of the neutral facial expression and the diminish verbal response (mean = 3.04, $t = -1.912$, $p = .057$, $df = 184$), because the results showed that the difference was marginally significant. Therefore, the results support Hypothesis 3a for the preventable crisis and only partially support it for the accidental crisis.

Hypothesis 3b predicted that when organizations assume no responsibility for a crisis, their use of incongruent emotional responses does not result in a lower level of account acceptance than does their use of neutral responses. For the victim crisis, the results showed no significant difference in the level of account acceptance when the incongruent sadness facial expression and the denial verbal response (mean = 3.42) were used from when the neutral facial expression (mean = 3.26) and the denial verbal response were used ($t = 1.193$, $p = .235$, $df = 180$); therefore, the results support Hypothesis 3b. The results are shown in Table 1.

Hypothesis 4 predicted that account acceptance would mediate nonverbally communicated emotion and organizational reputation. To test this hypothesis, we analyzed the data in accordance with the procedure that Baron and Kenny (1986) outlined (p. 1179) to test for mediation. The following three conditions must be met to establish mediation:

Equation 1: the independent variable (communicated emotion) must affect the mediator (account acceptance);

Equation 2: the independent (communicated emotion) variable must affect the dependent variable (reputation); and

Equation 3: the independent variable (communicated emotion) and the mediator (account acceptance) must affect the dependent variable (reputation).

We tested this relationship by regressing account acceptance on nonverbally communicated emotion using Equation 1 (emotion: $\beta = .122$, $p = .000 < .001$, $R^2 = .014$) and by regressing reputation on communicated emotion using Equation 2 (emotion: $\beta = .121$, $p = .001 < .01$, $R^2 = .013$). Finally, we regressed reputation on communicated emotion and account acceptance using Equation 3 (emotion: $\beta = .023$, $p = .274 > .05$;

Table 1. Participant Ratings of Account Acceptance to Organization’s Emotional Crisis Responses Across Three Crisis Types (Two-Tailed t Test).

Crisis Types	Verbal Response	Facial Expressions	Account Acceptance	p Value
Preventable (n = 279)	Rebuild	Sadness (congruence)	3.17	.000***
		Anger (incongruence)	2.45	
		Sadness	3.17	.006**
		Neutral	2.77	
		Anger	2.45	.036
Accidental (n = 268)	Diminish	Sadness (congruence)	3.39	.000***
		Anger (incongruence)	2.78	
		Sadness	3.39	.013*
		Neutral	3.04	
		Anger	2.78	.057
Victim (n = 273)	Denial	Sadness (incongruence)	3.42	.002**
		Anger (congruence)	2.97	
		Sadness	3.42	.235
		Neutral	3.26	
		Anger	2.97	.121
		Neutral	3.26	

*p < .05. **p < .01. ***p < .001.

account acceptance: $\beta = .801, p = .000 < .001, R^2 = .646$). The results indicated that nonverbally communicated emotion serves as a significant predictor of account acceptance and that account acceptance fully mediated the effect of nonverbally communicated emotion on reputation; therefore, the results support Hypothesis 4. The hypotheses and test results are summarized in Table 2.

Discussion

This study investigated the effects of an organization’s emotional crisis responses on account acceptance and reputation. In particular, it focused on the impact of congruence and incongruence between emotional and verbal responses on account acceptance.

We posited that the congruence and incongruence of emotional and verbal responses depended on whether the spokesperson’s facial expression (emotional response) conveyed the same intent to take responsibility as did the organization’s verbal response. After determining which facial expression

Table 2. The Hypotheses and Tests Results.

Hypothesis	Prediction	Test Results
Hypothesis 1	Congruent facial expressions and verbal responses result in a higher level of account acceptance than do incongruent facial expressions and verbal responses.	Partially supported (unsupported in victim crisis)
Hypothesis 2a	When organizations assume responsibility for a crisis, their use of congruent facial expressions and verbal responses results in a higher level of account acceptance than does their use of neutral (i.e., unemotional) facial expressions and verbal responses.	Supported
Hypothesis 2b	When organizations assume no responsibility for a crisis, their use of emotional facial expressions does not result in a higher level of account acceptance than does their use of a neutral facial expression.	Supported
Hypothesis 3a	When organizations assume responsibility for a crisis, their use of incongruent emotional responses results in a lower level of account acceptance than does their use of neutral responses.	Partially supported (supported for the preventable crisis but only partially supported for the accidental crisis)
Hypothesis 3b	When organizations assume no responsibility for a crisis, their use of emotional responses does not result in a lower level of account acceptance than does their use of neutral responses.	Supported
Hypothesis 4	Account acceptance mediates nonverbally communicated emotions and reputation.	Supported

was congruent with which verbal response, we tested the effects of the congruent and incongruent emotional responses for different crisis types.

First, we found that congruence was necessary only in crises in which the organization assumed responsibility. Congruent emotional and verbal responses were more appropriate than incongruent ones only in preventable

and accidental crises in which the organization assumed responsibility. When the organization did not assume responsibility (victim crisis), congruence was not necessary. These results were reasonable because the criterion that determined congruent and incongruent emotional responses was the organization's intent to take responsibility. In a responsibility-free crisis (victim crisis), the organization's intent to assume responsibility was irrelevant; therefore, the congruence between its emotional and verbal responses was also irrelevant.

Second, we found that congruent emotional and verbal responses enhanced account acceptance. In contrast, incongruent emotional and verbal responses reduced account acceptance for preventable crises but not for accidental crises.

Third, in situations in which the organization needed to take greater responsibility, congruence had more positive effects and incongruence had more negative effects. The results indicated that the strength of the congruence and incongruence effect was positively related to the level of responsibility for the crisis that the organization assumed.

And fourth, we found that congruence or incongruence was irrelevant in a situation in which the organization had no responsibility (victim crisis).

These study findings suggest that congruence and incongruence effects can vary depending on attributed responsibility. Therefore, we conclude that spokespersons and organizations should be prudent when communicating facial expressions in crises in which their attributed responsibility is high (preventable crisis).

Further, we found that spokespersons cannot gain or lose advantages by communicating facial expressions in victim crises, in which the organization assumes little or no responsibility. The finding, while counterintuitive to the widely accepted belief that a victim's emotions tend to arouse public emotions and enhance persuasiveness, is relevant because it implies that emotional and verbal responses are related to crisis responsibility.

Finally, we found that an organization's communicated emotion affected its reputation through account acceptance. This finding was consistent with previous studies that tested verbally communicated emotions (Coombs & Holladay, 2008; Van der Meer & Verhoeven, 2014). But this study demonstrates that the link between an organization's emotional response, account acceptance, and reputation is also valid for nonverbally communicated emotions.

Limitations and Conclusions

This study has some limitations. First, it examined only three types of facial expressions: angry, sad, and neutral. Further research might include other

facial expressions such as disgust, enjoyment, and fear (Ekman, 1993). Second, the study used photographs to show the facial expressions. Because of the complexity of facial expressions, future research might consider using videos to display the facial expressions.

Despite these limitations, this study has extended the research involving the SCCT by matching facial expressions with crisis types and verbal responses, thereby increasing our understanding of the relationship between facial expressions and crisis responses. Specifically, the study contributes to the field of organizational crisis communication in several ways.

First, it uses facial expressions instead of written words to examine communicated emotions in an organization's crisis responses, demonstrating that disparate facial expressions have different effects on account acceptance of the crisis response. Second, this study extends the research on emotional responses in crisis communication by finding that congruence in emotional and verbal responses is essential to effective crisis responses. This finding leads to the notion of a composite crisis response that conveys nonverbal emotions that are appropriate for the verbal response.

Finally, SCCT posits that crisis responses should be based on crisis responsibility; however, previous studies have only discussed verbal responses. This study enriches this theory by investigating nonverbal responses—facial expressions—based on crisis responsibility, demonstrating that both the verbal and the nonverbal messages of an organization should be congruent with its level of crisis responsibility in order to achieve greater public acceptance and enhance its reputation.

This study, then, provides practical implications for the implementation of crisis communication by demonstrating that spokespersons who display appropriate emotions when responding to a crisis enhance the effectiveness of their communication. Further, the appropriateness of this emotional response is based on crisis type. But even when anger is an appropriate response, it is never an optimal one. Therefore, the use of anger should be carefully considered to avoid other unpredictable assumptions.

This study also shows that when organizations assume responsibility, their spokespersons should use congruent emotional and verbal responses to enhance public account acceptance. But when organizations are crisis victims, their spokespersons's use of emotional responses does not increase public account acceptance.

In other words, spokespersons's facial expressions should be congruent with their verbal response strategy in order to increase the audience's

acceptance of the response and in turn protect their organization's reputation. Therefore, when planning their postcrisis communication, crisis managers should consider account acceptance as their primary goal in order to protect their organization's reputation.

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References

- Adams, R. B. Jr., & Kleck, R. E. (2005). Effects of direct and averted gaze on the perception of facially communicated emotion. *Emotion, 5*, 3–11.
- Baron, R., & Kenny, D. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review, 23*, 177–186.
- Christensen, L. T., & Cornelissen, J. (2011). Bridging corporate and organizational communication: Review, development and a look to the future. *Management Communication Quarterly, 25*, 383–414.
- Claeys, A. S., & Cauberghe, V. (2014a). Keeping control: The importance of non-verbal expressions of power by organizational spokespersons in times of crisis. *Journal of Communication, 64*, 1160–1180.
- Claeys, A. S., & Cauberghe, V. (2014b). What makes crisis response strategies work? The impact of crisis involvement and message framing. *Journal of Business Research, 67*, 182–189.
- Coombs, W. T. (1999). Information and compassion in crisis responses: A test of their effects. *Journal of Public Relations Research, 11*, 125–142.
- Coombs, W. T. (2006). The protective powers of crisis response strategies. *Journal of Promotion Management, 12*, 241–260.
- Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review, 10*, 163–176.

- 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.
- 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*, 165–186.
- 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*, 252–257.
- Coombs, W. T., & Holladay, S. J. (2009). Further explorations of postcrisis communication: Effects of media and response strategies on perceptions and intentions. *Public Relations Review, 35*, 1–6.
- Cotte, J., & Ritchie, R. (2005). Advertisers' theories of stakeholders: Why use negative emotions to sell? *Advances in Consumer Research, 32*, 24–31.
- Dutta, S., & Pullig, C. (2011). Effectiveness of corporate responses to brand crises: The role of crisis type and response strategies. *Journal of Business Research, 64*, 1281–1287.
- Ekman, P. (1993). Facial expression and emotion. *American Psychologist, 48*, 384–392.
- Ekman, P., & Cordaro, D. (2011). What is meant by calling emotions basic? *Emotion Review, 3*, 364–370.
- Ekman, P., & Friesen, W. (1975). *Unmasking the face: A guide to recognizing emotions from facial expressions*. Englewood Cliffs, NJ: Prentice Hall.
- Fink, S. (2013). *Crisis communications: The definitive guide to managing the message*. New York, NY: McGraw-Hill Professional.
- Fridlund, A. J. (1991). Sociality of solitary smiling: Potentiation by an implicit audience. *Journal of Personality and Social Psychology, 60*, 229–240.
- Gendron, M., Roberson, D., Van der Vyver, J. M., & Barrett, L. F. (2014). Perceptions of emotion from facial expressions are not culturally universal: Evidence from a remote culture. *Emotion, 14*, 251–262.
- Jack, R. E., Garrod, O. G., Yu, H., Caldara, R., & Schyns, P. G. (2012). Facial expressions of emotion are not culturally universal. *Proceedings of the National Academy of Sciences, 109*, 7241–7244.
- Kim, H. J., & Cameron, G. T. (2011). Emotions matter in crisis: The role of anger and sadness in the publics' response to crisis news framing and corporate crisis response. *Communication Research, 38*, 826–855.
- Lazarus, R. S. (1991). *Emotions and adaptation*. New York, NY: Oxford University Press.
- Lee, S., & Chung, S. (2012). Corporate apology and crisis communication: The effect of responsibility admittance and sympathetic expression on public's anger relief. *Public Relations Review, 38*, 932–934.

- Matsumoto, D., Keltner, D., Shiota, M. N., O'Sullivan, M., & Frank, M. (2008). Facial expressions of emotion. *Handbook of Emotions*, 3, 211–234.
- Pace, K. M., Fediuk, T. A., & Botero, I. C. (2010). The acceptance of responsibility and expressions of regret in organizational apologies after a transgression. *Corporate Communications: An International Journal*, 15, 410–427.
- Ridout, T. N., & Searles, K. (2011). It's my campaign I'll cry if I want to: How and when campaigns use emotional appeals. *Political Psychology*, 32, 439–458.
- Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology*, 67, 206–221.
- Seeger, M. W., Sellnow, T. L., & Ulmer, R. R. (2003). *Communication and organizational crisis*. Westport, CT: Quorum Press.
- Stafford, M. R., & Day, E. (1995). Retail services advertising: The effects of appeal, medium, and service. *Journal of Advertising*, 24, 57–71.
- Stass, J. W., & Willis, F. N. (1967). Eye contact, pupil dilation, and personal preference. *Psychonomic Science*, 7, 375–376.
- Tucker, L., & Melewar, T. (2005). Corporate reputation and crisis management: The threat and manageability of anti-corporatism. *Corporate Reputation Review*, 7, 377–387.
- Van der Meer, T. G. L. A., & Verhoeven, J. W. M. (2014). Emotional crisis communication. *Public Relations Review*, 40, 526–536.
- Wallbott, H. G. (1998). Bodily expression of emotion. *European Journal of Social Psychology*, 28, 879–896.
- Yum, J. Y., & Jeong, S. H. (2015). Examining the public's responses to crisis communication from the perspective of three models of attribution. *Journal of Business and Technical Communication*, 29, 159–183.

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