

# HOW PERSONALITY TRAITS AFFECT CRISIS PERCEPTIONS: AN EXPERIMENTAL TEST OF THE USE OF CRISIS RESPONSE STRATEGIES AND THE MODERATING EFFECTS OF LOCUS OF CONTROL

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## ABSTRACT

This study provides empirical evidence for the Situational Crisis Communication Theory, which provides guidelines for matching crisis response strategies (CRS) to crisis types. The impact of crisis type and CRS on corporate reputation was measured among 316 consumers in a 3 (crisis type: victim, accidental, preventable) x 3 (CRS: deny, diminish, rebuild) between subjects factorial design. Preventable crises had the most negative effects on reputation. The rebuild CRS restored the reputation best. The interaction between crisis type and CRS on reputation was not significant. The respondents' locus of control had a moderating impact on the relationship between CRS and reputation.

## INTRODUCTION

Academic interest in the field of crisis communication significantly increased (Ulmer et al., 2007). Recently, the Situational Crisis Communication Theory (SCCT) (Coombs, 2007) was developed to offer guidelines for crisis communication. The SCCT empirically studies which response strategies organizations should apply for which crisis type in order to restore the organization's reputation in the best possible way. The main goal of this study is to experimentally test the matches between crisis types and crisis response strategies. In addition, the moderating influence of the locus of control, as a personality trait, is studied. Little research has been conducted on personality traits that may affect the respondents' reactions to a crisis or to the crisis response strategy used to manage the crisis (Coombs, 2007).

## SITUATIONAL CRISIS COMMUNICATION THEORY

The SCCT has developed a list of 13 crisis types, based upon attributions of crisis responsibility, that can be divided within three crisis clusters (Coombs, 2007; Coombs and Holladay, 2002). *The victim cluster* can be defined by crises with weak attributions of organizational responsibility (e.g., product tampering). *The accidental cluster* involves crises with a certain, but low level of responsibility attribution to the organization (e.g., technical-error product harm). *The preventable cluster* incorporates crises for which the organization is perceived to be responsible (e.g., organizational misdeed with injuries) (cf. Table 1). According to the SCCT, the more responsibility that is accredited to the organization with respect to the crisis, the more negative the impact on the organizational reputation will be (Coombs, 1998):

*H1: The victim crisis leads to the least negative effect on organizational reputation compared to the accidental and preventable crisis. The accidental crisis leads to a moderate negative effect on organizational reputation compared to the victim and preventable crisis. The*

*preventable crisis leads to the most negative impact on organizational reputation compared to the victim and accidental crisis.*

<<Insert table 1 about here>>

These crisis types, differing in organizational responsibility, can be matched to three clusters of crisis response strategies, based on the responsibility taken in each of them (cf. Table 1). (Coombs, 2007). *Deny strategies* reject all responsibility for the crisis. *Diminish strategies* minimize organizational responsibility or crisis damage. *Rebuild crisis strategies* admit full responsibility. Research has shown that apology, a rebuild crisis response strategy, leads to a more effective reputation repair compared to deny and diminish strategies (Coombs and Holladay, 2008). Therefore, we expect:

*H2: The reputation of an organization using rebuild crisis response strategies will be more positive than the reputation of an organization using either deny or diminish crisis response strategies.*

Coombs and Holladay (1996) found in their experimental study that when crisis communication responses match the crisis type in terms of responsibility attribution, this leads to a more positive reputation than either no response or a mismatched response. They examined the match between a crisis type and one single crisis response strategy. However, Benoit (1997) suggests that the use of a combination of multiple strategies can increase the effectiveness of the image restoration. Based on guidelines from the SCCT we expect that deny strategies match with victim crises, diminish strategies match with accidental crises and rebuild strategies match with preventable crises (Coombs, 2007). These assumptions lead to the following:

*H3: Matches between crisis type and crisis response strategy lead to a less negative organizational reputation than mismatches between crisis type and crisis response strategy.*

Although Coombs (1998) did not find proof that the severity of the crisis damage has a negative effect on reputation, the author claims that it seems likely that more severe crises have a more negative impact on organizational reputations than crises with trivial damage (Coombs, 1998; Coombs and Holladay, 2002). Coombs (1998) tested his assumption by operationalizing crisis severity as the amount of property damage and seriousness of injuries, instead of using perceived crisis severity. Therefore, a different operationalization is used in this study, which may discover the impact of crisis severity on reputational damage.

*H4: The perceived severity of a crisis has a negative impact on the organizational reputation.*

## **MODERATING INFLUENCE OF LOCUS OF CONTROL**

The moderating impact of personality traits has been rarely investigated within the domain of crisis communication. An individual's locus of control is of interest given that this personality trait builds on the attribution theory, on which an important part of the SCCT framework is based (Beretvas et al., 2008). Deny strategies make consumers believe that a crisis is caused by an attribute of the environment (external attribution) (Coombs, 2007). Rebuild strategies on the other hand argue that a crisis is caused by an attribute of the actor/company (internal attribution) (Collins, 1974). Diminish strategies are somewhere in between, at the same time taking some of the responsibility and rejecting part of it. Locus of control on the other hand,

relates to whether an individual has the perception to have power over what happens to him or her (internal locus of control), or attributes it to external factors (external locus of control) (Lefcourt, 1966). Rotter (1966) stated that a person's locus of control may correlate with the value the subject places on either internal or external control in others. This leads to the following hypotheses:

*H5a: When an organization uses deny strategies, its reputation will be perceived as less negative by respondents with an external locus of control than by respondents with an internal locus of control*

*H5b: When an organization uses diminish strategies, its reputation will be perceived as equal by respondents with an external locus of control and respondents with an internal locus of control*

*H5c: When an organization uses rebuild strategies, its reputation will be perceived as less negative by respondents with an internal locus of control than by respondents with an external locus of control*

## METHOD

### Design & Stimuli

A 3 (crisis type) x 3 (crisis response) between-subjects factorial experimental design was used to investigate the hypotheses. Crisis type and crisis response strategy were manipulated using different scenarios. Crisis type was manipulated by the selection of one crisis from each of the three clusters (victim cluster, accidental cluster, preventable cluster). To manipulate the response strategy, the combination of the two strategies within each cluster was used. Only one crisis response strategy was used from the *deny cluster*, since all three deny strategies tend to conflict with one another. Combining strategies will only enhance their individual impacts when the responses are compatible (Huang, 2006).

### Participants & Procedure

Data were collected from 316 respondents using an online questionnaire. The respondents were randomly divided across the 9 conditions and were instructed to read a scenario for a fictitious juice company. Participants were Dutch-speaking Belgian men and women with an average age of 35 (S.D. = 14.46; range 13 to 70 years). About 47% were male and 53% were female.

### Measures

*Organizational responsibility for a crisis* was measured using the four items 10-point Likert scale of Griffin et al. (1992) (e.g., "How responsible was the organization with respect to the crisis?") ( $\alpha = .81$ ).

*Organizational reputation* was measured by a combination of the Reputation quotient (RQ) scale of Fombrun et al. (2000) and McCroskey's (Cited in: Coombs and Holladay, 1996) scale of credibility ( $\alpha = .97$ ).

*Crisis damage* was held constant across scenarios by telling respondents that each crisis caused the death of two adults. To measure the possible effects of the perceived crisis severity, respondents were asked to answer one question on a 10-point scale, ranging from one (*not at all severe*) to 10 (*very severe*): "How severe do you consider the damage caused by this crisis?"

*Locus of control* was measured using the internal-external (I-E) locus of control scale of Rotter (1966). The I-E scale had a Cronbach  $\alpha$  of .73 and consisted of nine factors with eigenvalues higher than 1.0. The two factors with the highest eigenvalues were labelled *control over politics* and *misfortunes* and explained together 23 % of the total variance. The *control over politics* dimension considers the perceived control one can have over politics. The *misfortunes* dimension considers the perceived causes of peoples' misfortunes. Since the I-E scale has shown to oversimplify the multidimensionality of the locus of control construct, these two dimensions were also taken separately into analyses (Duffy et al., 1977).

### **Pre-tests**

Two pre-tests were conducted to test the manipulated variables, crisis response and crisis type. In the first pre-test, 12 respondents were instructed to read each of the three crisis response scenarios, and order them based on a list containing all five crisis response strategies. Some adaptations were made in the scenarios based on these results. The second pre-test assessed the manipulation of corporate responsibility for each crisis type. Twenty-one respondents participated in a within-subjects design. A seven-point Likert scale (Griffin et al., 1992) was used. In the victim crisis ( $M = 4.31$ , S.D. = 1.49) the company was perceived as less responsible than in the accidental crisis ( $M = 5.31$ , S.D. = .98,  $t(40) = 2.56$ ,  $p = .015$ ) and the preventable crisis ( $M = 5.79$ , S.D. = 1.01,  $t(40) = 3.75$ ,  $p = .001$ ). However, no significant differences occurred between the accidental ( $M = 5.31$ , S.D. = .98) and preventable crisis ( $M = 5.79$ , S.D. = 1.01,  $t(40) = 1.55$ ,  $p = .13$ ). All scenarios were slightly adapted.

## **RESULTS**

### **Manipulation Check**

A one-way ANOVA was performed to check for the manipulation of crisis type, measured by the amount of crisis responsibility (Griffin et al., 1992). The mean difference in crisis responsibility between the three crisis types was significant ( $F(2, 313) = 82.93$ ,  $p < .001$ ). The Scheffé follow-up procedure showed that the victim crisis ( $M = 4.78$ , S.D. = 2.11) differed significantly from the accidental crisis ( $M = 6.81$ , S.D. = 1.87) ( $p < .001$ ) and from the preventable crisis ( $M = 8.07$ , S.D. = 1.62) ( $p < .001$ ). Furthermore, the accidental crisis differed significantly from the preventable crisis ( $M_{\text{Accidental crisis}} = 6.81$ , S.D. = 1.87;  $M_{\text{Preventable crisis}} = 8.07$ , S.D. = 1.62) ( $p < .001$ ).

### **Impact of Crisis Type and Response Strategy on Reputation**

To address the main effects of crisis types (H1) and response strategies (H2) on organizational reputation and to test the interaction effect of crisis type and crisis response strategies as hypothesised in H3, a univariate two-way ANOVA (general linear model) was used. Two main effects occurred. Both crisis type ( $F(8, 307) = 94.72$ ,  $p < .001$ ), and crisis response strategy ( $F(8, 307) = 4.68$ ,  $p = .01$ ), had a significant main effect on organizational reputation (cf. Figure 1).

<<Insert figure 1 about here>>

The results of a separate one-way ANOVA ( $F(2, 313) = 95.33$ ,  $p < .001$ ) show that individuals perceive the organization's reputation as less favourable in case of a preventable crisis ( $M = 2.72$ , S.D. = 1.42), compared to both the victim ( $M = 5.95$ , S.D. = 1.97) ( $p < .001$ ) and accidental crisis ( $M = 5.48$ , S.D. = 2.04) ( $p < .001$ ). No significant difference in reputation occurred between the victim crisis ( $M = 5.95$ , S.D. = 1.97) and the accidental crisis ( $M = 5.48$ , S.D. = 2.04;  $p = .18$ ). These results partially support H1. The main effect of crisis

response strategy on organizational reputation was also confirmed ( $F(2, 313) = 4.52, p = .012$ ). The Scheffé procedure revealed that rebuild strategies ( $M = 5.26, S.D. = 2.36$ ) significantly lead to a more positive reputation than diminish strategies ( $M = 4.35, S.D. = 2.24$ ) ( $p = .018$ ). The difference between the rebuild strategies and deny strategies was only marginally significant ( $M_{\text{Rebuild strategies}} = 5.26, S.D. = 2.36; M_{\text{Deny strategies}} = 4.57, S.D. = 2.28, p = .087$ ). Therefore, H2 is partially supported. The interaction-effect of crisis type and crisis response strategies on reputation was not significant ( $F(8, 307) = 1.28, p = .28$ ). Therefore, H3 could not be supported. A significant negative correlation appeared between the severity of the crisis and organizational reputation ( $r(314) = -.12, p = .034$ ). These results support H4.

### **Moderating Influence of Locus of Control**

Hypotheses 5a, 5b and 5c were tested by means of a univariate two-way ANOVA (general linear model). A significant interaction-effect occurred between crisis response strategy and one of the factors found in the locus of control scale, labelled *misfortunes* ( $F(5, 310) = 3.82, p = .023$ ). The plot (Cf. figure 2) shows that when a company uses a deny response strategy, its reputation is less negative for individuals with an external locus of control ( $M = 5.30, S.D. = 2.15$ ) than for individuals with an internal locus of control ( $M = 3.90, S.D. = 2.20$ ) ( $t(105) = 3.33, p = .001$ ). Therefore, H5a is supported. When an organization uses diminish strategies however, its reputation is perceived as equally positive by both externals ( $M = 4.27, S.D. = 1.91$ ) and internals ( $M = 4.44, S.D. = 2.53$ ) ( $t(99) = .38, p = .70$ ), which supports H5b. H5c was not supported.

<< Insert figure 2 about here >>

## **DISCUSSION & CONCLUSIONS**

Two main effects occurred of crisis type and crisis response on organizational reputation. Corporate reputation was least favourable when organizations are confronted with a preventable crisis. There was also a main effect of crisis response strategy on organizational reputation. The reputation of organizations using rebuild crisis response strategies will be more positive than the reputation of an organization using diminish strategies. In the current study no interaction-effects between crisis type and response strategy were found on corporate reputation. This is in contradiction with the findings of Coombs and Holladay (1996). A possible explanation might be that Coombs and Holladay (1996) used a within-subjects design. Another may be the fact that two response strategies were combined into one response. Results also show that the more severe the crisis is perceived, the worse an organization's reputation will be. In addition, locus of control (more specifically the factor "*misfortunes*") as a personality trait had a moderating impact on the effect of response strategy on reputation. For the deny strategy the corporate reputation will be perceived as less negative by individuals with an external locus of control than by respondents with an internal locus of control. However, when a company uses a rebuild or diminish strategy to respond on a crisis, the locus of control did not have a significant impact on the organizational reputation.

## **LIMITATIONS & FURTHER RESEARCH**

The limitations of the current study provide some possibilities for further research. A first limitation is that reputation was measured after only one exposure to a fictitious company. Therefore, the reputation measure resembles more an attitude than a reputation developed over time. Further research is therefore needed with real brands from different productive sectors. Secondly, the internal-external (I-E) locus of control scale may oversimplify the

actual dimensionality of the construct (Duffy et al., 1977). Thirdly, the current study did not incorporate a condition in which the company did not react to the crisis. This would be interesting to measure in further research to detect the impact of a reaction of a company to a crisis versus the situation in which they do not react in any way. It would also be interesting to investigate if there might be different personality traits that influence the impact of crisis response strategies. Lastly, the current study compared the impact of matching response strategies and crisis types across the different clusters of each. In addition, it would be useful to examine the impact of each of the different strategies within each cluster.

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## TABLES & FIGURES

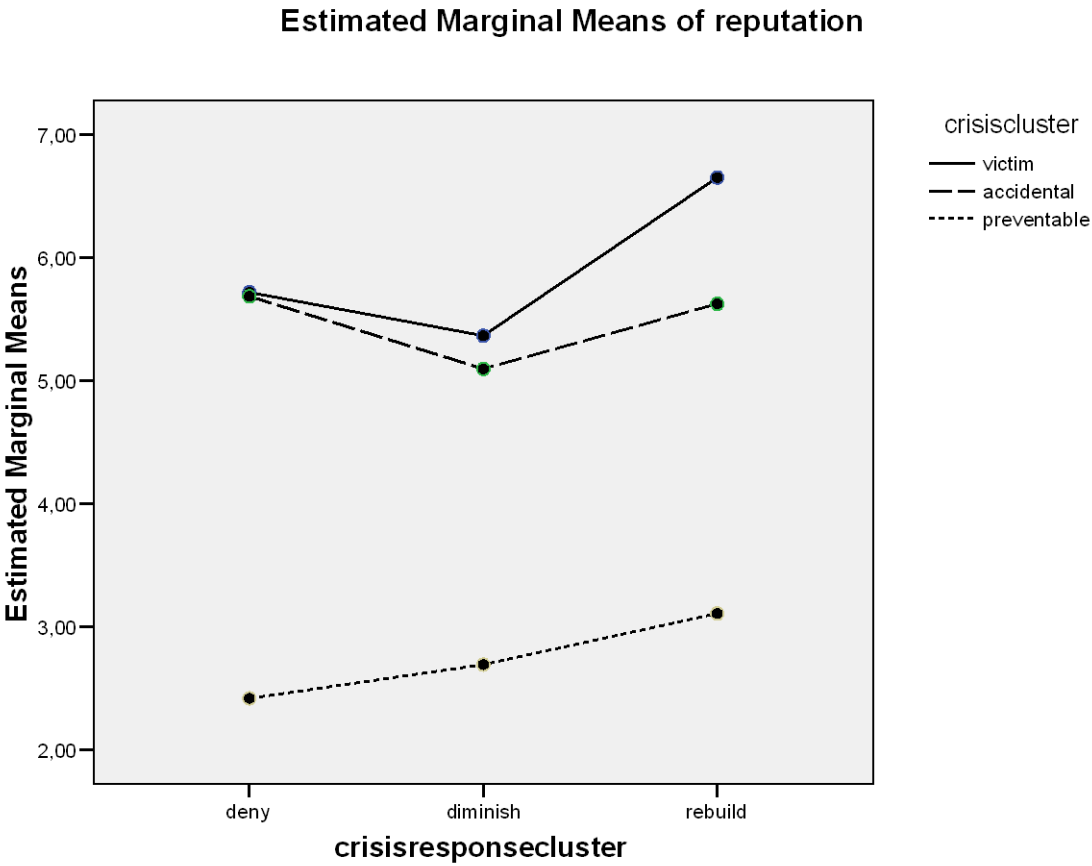
**Table 1: Match between crisis types and crisis response strategies**

<b>Crisis types</b>	<b>Crisis response strategies</b>
<p><b><i>Victim cluster</i></b></p> <ul style="list-style-type: none"> <li>▪ Natural disaster</li> <li>▪ Rumor</li> <li>▪ Workplace violence</li> <li>▪ Product tampering/Malevolence</li> </ul> <p><b><i>Accidental cluster</i></b></p> <ul style="list-style-type: none"> <li>▪ Challenges</li> <li>▪ Technical-error accidents</li> <li>▪ Technical-error product harm</li> </ul> <p><b><i>Preventable cluster</i></b></p> <ul style="list-style-type: none"> <li>▪ Human-error accidents</li> <li>▪ Human-error product harm</li> <li>▪ Organizational misdeed with no injuries</li> <li>▪ Organizational misdeed management misconduct</li> <li>▪ Organizational misdeed with injuries</li> </ul>	<p><b><i>Deny strategies</i></b></p> <ul style="list-style-type: none"> <li>▪ Attack the accuser</li> <li>▪ Denial</li> <li>▪ Scapegoat</li> </ul> <p><b><i>Diminish strategies</i></b></p> <ul style="list-style-type: none"> <li>▪ Excuse</li> <li>▪ Justification</li> </ul> <p><b><i>Rebuild strategies</i></b></p> <ul style="list-style-type: none"> <li>▪ Compensation</li> <li>▪ Apology</li> </ul>

Source: Adapted from: Coombs, 2007, p. 168 & 170



**Figure 1: Interaction between crisis response cluster and crisis cluster**



**Figure 2: Interaction between crisis response cluster and locus of control factor**

