

# Master Thesis:

## The potential role of using humor-framed crisis response on post-crisis corporate reputation and purchase intention

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## Abstract

Incorporating humor into the crisis management literature is a relatively new concept and only explored the possibility of using humor in situations when crises are rumored. The present study used this same concept but in times when the crisis is not rumored but confirmed.

**Purpose** - This study aims to examine the potential roles of using a humor-framed crisis response on post-crisis corporate reputation and purchase intention while including pre-crisis corporate reputation and pre-crisis communication styles as moderating conditions.

**Method** - A 2 (humor-framed vs. non-humor framed crisis responses) \* 2 (positive vs. negative pre-crisis corporate reputation) \* 2 (humorous vs. non-humorous pre-crisis communication style) experimental design was conducted using a combination of random sampling and snowball sampling methods. Specifically, responses were collected via various online platforms, including Facebook groups, WhatsApp groups, LinkedIn, and through the researcher's networks, given a duration of 4 weeks. In total, 392 answers were recorded, while 72.4% of which completed the questionnaire. After an initial inspection of the dataset, three respondents' answers with missing values were excluded. As such, 281 responses were subjected to further statistical analysis. With the 281 valid responses, 41.1% of them are male, and 57.4% are female. In total, 54 nationalities contributed to the experiment.

**Results** - The research hypotheses were tested by MANOVA test whereby statistical analyses indicated that although there was no major significant effect of humor-framing crisis response, pre-crisis corporate reputation moderates the impact of using a humor-framed crisis response on post-crisis corporate reputation and purchase intention.

**Conclusion** - this research contributed to this body of literature to a degree by extending the application of humor in times of crisis. From a managerial perspective, it is crucial for public relations professionals to clearly recognize and evaluate the crisis severity before formulating a humorous crisis response message. Furthermore, this study must be extended to incorporate varied humor types to fully understand humor style has the greatest chances to influence the most of target audience before formulating a humorous crisis response.

**Keywords:** Humor, crisis, product defect, crisis response, communication style, corporate reputation, purchase intention

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## 1. Introduction

Humor, in nature, is compelling and mysterious. After all, if one must explain the joke, it probably will not be funny anymore. Scholars from various disciplines have analyzed the subject. In advertising, It is argued that humor evokes positive responses to product liking (Strick et al., 2009). Moreover, if people have a favorable prior brand attitude, the impact of humor can be further enhanced (Chattopadhyay & Basu, 1990; Nabi et al., 2007). In the context of political science, studies suggested that if political communication issues are conducted in an entertainment context with jokes (e.g., in late-night talk shows), the public will be less motivated to counter-argue with the sources (Nabi et al., 2007). These studies indicate that, if properly framed, humor can be a compelling persuasive message.

As building relationships is one of the strategic goals of companies in the practical world, they have used humor to connect and project relatability with their customers and prospective consumers (Kim et al., 2016). With the right degree and on the suitable topics, humor helps to humanize the companies' brands and help with de-escalate crises. A variety of tips have been incorporated with using humor in a company's crisis situation. For instance, self-deprecating humor is most effective because it involves making jokes at the company's own expense, which is less likely to offend others; puns and clever phrases can artfully be applied to the humor-infused messages; humor should be obvious but does not include any off-color, sexist, racist or ethnic jokes (Strick et al., 2009).

In 2018, when a fictitious character from the NBC drama show "This Is Us" died because a faulty slow cooker caused a house fire, CrockPot also died a little. Many fans of the show derided CrockPot on social media, showed their anger at Crockpot, threw the product away, or canceled the orders due to safety concerns. In response to the crisis, CrockPot tweeted on the company's official account to empathize with the heartbroken fans by saying "we too are heartbroken by the latest development in Jack's storyline" together with the #crockpotisinnocent hashtag (Bruner, 2019). The company used a light sense of humor while maintained the positive image of the brand. In the same year, the popular fast-food restaurant chain KFC was forced to close over 600 stores in the U.K due to a shortage in chicken supplies. The closure quickly turned into a crisis where customers expressed their anger and dissatisfaction. Some even went far and called the authorities. KFC promptly responded with a full-page newspaper ad showing a chicken bucket picture with the letters "FCK." Of course, "FCK" was intentionally rearranged to make it more risqué and expressed their sorry for the chicken shortage. With this bit of crude humor with humility, KFC received public understanding over the situation (Amatulll, 2018). If there is a lesson to learn from the above-mentioned crisis responses, it is that humor can be powerful to laugh off the crises when companies have the correct understanding of their audiences and communicate properly.

As its popularity grows, more and more brands will likely use humor in a crisis. Nevertheless, the conditions and contexts of using humor and the consequent impact on brands and the individual's perception of the brands lack thorough study. Specifically, in crisis communication studies, the use of humor as a crisis message may seem questionable. It is understandable that when a crisis situation involves lost lives or injuries of people, humor is most likely to damage the company's ethos and indicates the company as lacking empathy and sincerity. Nevertheless, in the case of a paracrisis (defined as a threat, a warning sign, if

not adequately stressed and dealt with, will turn out to be a potential crisis) (Coombs et al., 2012) or a non-severe crisis situation, use of humor can express a confident attitude about the company's sense of responsibility and reduce the public's assessed attribution of responsibility towards the company, which leads to a more positive organization reputation, compared to non-humor messages (Xiao et al., 2018).

Although a few scholars have studied the effectiveness of humor-framed messages on crisis communication, these researchers have only explored the possibility of using humor in situations when crises are rumored. Chattopadhyay et al. (1990) argued that a humorous ad is more effective in changing consumer attitude and purchasing intention when consumers hold a favorable prior corporate evaluation. Beldad et al. (2017) also demonstrated that a positive pre-crisis corporate reputation increases post-crisis purchase intention. Therefore, it is logical to assume that pre-crisis corporate reputation is likely to moderate the effect of humorous crisis response on the public's evaluation of a company's post-crisis reputation and credibility. If a company has a negative pre-crisis reputation, the consumers will assign more initial crisis responsibility to the company, and in that, the company's reputation score will be further lowered.

On the contrary, a positive pre-crisis reputation may protect the firm from the destructive effects of a crisis because it has more reputational capital to spend compared to the one with a negative pre-crisis reputation. Further, Jung et al. (2016) argued that types of brand crises (product harm - product quality, manufacturing capability and expertise, and moral harm - commitment to company's social obligations) have influences on consumer's response to a brand crisis. In addition to that, pre-crisis corporate-consumer interactions can also provide insights on how to interact with the public during the crisis. Specifically, a certain level of congruence on pre-crisis communication formality facilitates higher positive attitudes among consumers (Jahng & Hong, 2017). Consequently, if a company often uses a humor-framed communication style before the crisis situation, humor-framed crisis response is less likely to damage brand reputation as consumers expect communication congruence from the part of the organization and will be less likely to see the humorous messages as an attempt of insincerity.

Delineating the conditions and contexts under which using humor as a crisis response could benefit or damage a company's reputation will not only instruct public relations practitioners and marketers on when and how (not) to use humor but also contribute to the existing crisis communication studies that aim to understand how, not just humor, but any positive emotions can be operationalized in crisis communication. Thus, this research aims to examine the potential roles of using a humor-framed crisis response on the individual's attitude on post-crisis corporate reputation and purchase behavioral intention. Aside from this, pre-crisis corporate reputation and pre-crisis communication styles are included as moderating conditions. Only non-severe product harm crises will be considered in this study. A 2 (humor-framed vs. non-humor framed crisis responses) \* 2 (positive vs. negative pre-crisis corporate reputation) \* 2 (humor involved vs. non-humor involved pre-crisis stakeholder communication style) mixed factorial experiment will be designed.

This paper aims to answer the following research questions:

*RQ1: In a product defect crisis situation, to what extent does the use of humor-framed crisis response influence post-crisis corporate reputation and purchase intention?*

*RQ2: In a product defect crisis situation, to what extent is the effect of humor-framed crisis response on post-crisis corporate reputation and purchase intention moderated by 1. pre-crisis corporate reputation; 2. the consistency of pre- and post-communication style towards the consumers?*

## 2. Theoretical Framework

### 2.1 Crisis in a Nutshell

In crisis management literature, a crisis is defined as an "unexpected event or series of events with high levels of uncertainty and threat, which are perceived to threaten an organization's routine practices and priority goals" (Seeger, Sellnow, & Ulmer, 2001, p.157). Crises may cause financial losses, property damages, physical injuries, or even loss of life in severe situations.

Two types of crises are identified, namely product-harm crisis and moral-harm crisis. A product-harm crisis relates to corporate abilities, namely product quality, manufacturing capability, and expertise (Brown & Dacin, 1997), and is seen as performance-based (Dutta & Pullig, 2011). Examples of such situations are product defects and unsafe/dangerous usage. Dawar (1998) stated that: "the increasing complexity of products, more demanding customers, and more stringent product safety legislation have led to a considerable increase in the occurrence of product-harm crises in recent years" (p.110). Therefore, companies need to take immediate actions regarding product-harm crises as they may damage the corporate image and impact the effectiveness of their marketing strategies in the long run (Van Heerde, Helsen, & Dekimpe, 2007).

On the other hand, a moral-harm crisis is associated with the corporate's commitment to its social responsibilities. Carroll (1991) specified social responsibilities into four categories: economic, legal, ethical, and philanthropic. An economic responsibility implies that the company should provide goods and services that are needed by society. A legal responsibility concerns that the company's activities should abide by laws. Ethical responsibility deals with what society expected morally. Philanthropic responsibility emphasizes improving the quality of employees' life, local community environment, and society at large. Examples of moral-harm crises are pollution, child labor exploitation, sexual harassment, racial discrimination against employees or customers, and disgrace towards minority groups such as gay/lesbian. Such types of crises would damage the public's perception of the company's ability to deliver symbolic values while using the company's products/services, as well as its reputation and legitimacy (Pullig, Netemeyer, & Biswas, 2006).

Although both types of crises can be deleterious for the company's reputation, consumers' responses differ. Skowronski and Carlston (1987) indicated that the perceived negativity towards the company is likely to be higher for a moral-harm crisis than for a product-harm crisis, as the company is regarded lack of integrity and benevolence. In crisis responses, sincerity is always expressed, showing regret and shame (Benoit, 1995). Since humor is a rather joyful reaction, in the context of a moral-harm crisis, using humor may negatively affect the customer's perception of the company's sincerity level and would be seen as a reckless action lacking sympathy or empathy for the victims (Vigsø, 2013).

Another aspect that can determine the effectiveness and appropriateness of a crisis response strategy is the severity of the crisis. The concept of severity of the crisis was first introduced in 1995 by Coomb when describing the Situational Crisis Communication Theory. In this publication, he proposed that crisis situations change perspectives as the severity of the crisis varies. Here, severity is defined as "the amount of damage generated by a crisis including

financial, human, and environmental damage" (Coombs & Holladay, 2002, p. 169). In general, when a crisis is severe, consumers are likely to put all the responsibilities and blames on the company, as the company is the one that is primarily involved. It will ultimately lead to a higher chance of the corporate reputation being negatively affected and their brand images worsening. Research suggests that when a crisis is considered a rumor, consumers perceived the crisis to be less severe and put fewer responsibilities and blames on the company (Xiao, Cauberghe, & Hudders, 2017). In this case, humor can be used to minimize the public's perception of the severity of the threat posed by the crisis.

## 2.2 Popularity of Humor in Crisis Communication

When it comes to crisis communication, "social media allows corporates to provide timely responses and interact with publics before and while crises happen" (Jahng & Hong, 2017; p.148). As many companies use social media channels for rapid information distribution with their targets, this study focuses on crisis communication on Twitter, which allows immediate and interactive communication with followers (Schultz, Utz & Göritz, 2011). Veil et al. (2011) studied crisis communication on the social media platform Twitter. They found that the open nature and participatory immediacy offer advantages to organizations during crises and protect the corporate's reputation. While the conversation is more dialogic, using social media as the communication channel can minimize corporate reputational damage from crises (Seltzer & Mitrook, 2007).

Interestingly, given that social media allows human expression and interaction, humor is often one of the main characteristics of online communication (Jahng & Hong, 2017). Researchers have found that there has been an increasing tendency to use satirical humor for online political commentaries since the 2016 U.S Presidential Elections (Davis, Love, & Killen, 2018). By introducing humor into communication, people's perception of delivered messages can change, such as in the case of advertising, where humor has been shown to enhance user acceptance and creates a positive emotional response towards products and services, which has a positive impact on the purchase decision (Strick et al., 2009).

While the use of emotions in online crisis communication has been studied extensively, researchers primarily focused on negative emotions such as shame, regrets, and sadness (Claeys, Cauberghe, & Leysen, 2013; van der Meer & Verhoeven, 2014). The use of humor as a crisis response message may seem questionable. It is understandable that when a crisis situation involves lost lives or injuries of people, humor is most likely to damage the company's ethos and indicates the company as lacking empathy and sincerity. Nevertheless, in the case of a paracrisis (Coombs et al., 2012) or non-severe crisis situation, the use of humor can express a confident attitude about the company's sense of responsibility and reduce the public's assessed attribution of responsibility towards the company, which leads to a more positive organizational reputation, compared to non-humor messages (Xiao et al., 2018). Moreover, Kim et al. (2016) studied the paracrisis of Chinese' biggest e-Commerce company Alibaba on social media. They found that using humorous self-mocking strategies at the early stage of a crisis yields positive online reactions than without a sense of humor. Given the advantages of using social media as a communication channel and the positivity of humor, we propose the first hypothesis:



*H1: In a product defect crisis situation, the effect of humor-framed crisis response on post-crisis corporate reputation and purchase intention will be more positive compared to non-humor-framed crisis response.*

### 2.3 Role of Pre-crisis Corporate Reputation

Corporate reputation is defined as "the evaluation of a firm by its stakeholders in terms of their effect, esteem, and knowledge" (Deephhouse, 2000; p.1093). Reputation has intangible value, both financially and emotionally towards the customers and the people within an organization (Dahlén, Granlund, & Grenros, 2009). Financially, it has an impact "on the attraction of new customers, the generation of investment interest, the recruitment of top employer talent" (Miriam, 2019; p.13). Emotionally, corporate reputation is seen as social goodwill that consumers ascribed to the company based on their previous encounters with the company and the employees' motivation to stay on the job and deliver job satisfaction (Dahlén, Granlund, & Grenros, 2009). Brands with a positive corporate reputation tend to receive a higher level of awareness in the market, as consumers perceive these brands as valuable and like to be associated with such brands (Kim, Hur, & Yeo, 2015).

"While a single crisis can wreck a company's reputation, the valence of a company's pre-crisis reputation can also determine the ramifications of a crisis for a company" (Beldad et al., 2017; p.152). If a company has a negative pre-crisis reputation, the consumers will assign more initial crisis responsibility to the company, and in that, the company's reputation score will be further lowered (Coombs, 2007). On the contrary, a company's positive pre-crisis reputation may work as a shield and protect the firm from the destructive effects of a crisis because it has more reputational capital to spend compared to the one with a negative pre-crisis reputation (Beldad et. a, 2017). Moreover, when a company with a positive pre-crisis reputation is struck with a crisis, it can create cognitive dissonance to the external stakeholders, as their existing beliefs on the company are challenged (Festinger, 1957). Nisbett and Wilson (1977) argued that it is a natural tendency for human beings to evaluate a specific property of a person/object in a way that is consistent with how they evaluate the person/object as a whole, namely the halo effect. Thus, to evade cognitive dissonance and discomforts, consumers will search for ways to reduce the intensity and strength of the negativity from the crisis. Several studies have confirmed the effect of positive pre-crisis reputation. Doney and Cannon (1997) demonstrated that a favorable corporate reputation develops the supplier firm and salesperson trust and increases the buyer's future interaction with the firm. Nisbett and Wilson (1977) found that a positive corporate reputation strengthens consumers' evaluation of the company's product performance. Claeys and Cauberghe (2015) confirmed that a company with a favourable pre-crisis reputation suffers less from the reputational damage from a crisis situation. People will attribute less crisis responsibility towards the company than the one with an unfavorable pre-crisis reputation. Turk et al. (2012) also reported that a good corporate reputation results in a positive post-crisis stakeholders' attitude and purchase intention. Thus, we hypothesize that:

*H2: In a product defect crisis situation, the effect of humor-framed crisis response on post-crisis corporate reputation and purchase intention will be more positive when pre-crisis corporate reputation is positive.*

## 2.4 Consistency in Pre- and Post-crisis Communication Style

Although there have not been studies that explicitly discussed the influence of corporate communication style before and during the crisis times on consumers' attitudinal and behavioral changes, the concept of consistency in communication style can relate to the Cognitive Dissonance Theory. According to Festinger (1957), cognitive dissonance is seen as a psychological state of discomfort. Such discomfort results from a discrepancy between what one expects and what occurs. Thus, a person who expects a company to interact in one specific way could experience discomfort if the company acts adversely. While people are more inclined to maintain a cognitive consistency among expectations (Sampson, 1963), an incongruence between pre-crisis corporate-consumer interactions and interactions during crises may negatively affect consumers' attitudes.

On the contrary, if a company often uses a humor-framed communication style before the crisis situation, for instance, in their advertisements or in their social media interactions with online users through tweets and replies, humor-framed crisis response is less likely to damage corporate reputation as consumers expect a certain level of communication consistency and therefore less likely to see the humorous messages as an attempt of insincerity. Moreover, Kim (2011) reported that being in a cognitive dissonant stage could drive the consumers to alter their behaviors, for instance lowering purchase/repurchase intention. Hereby, we propose the fourth hypothesis:

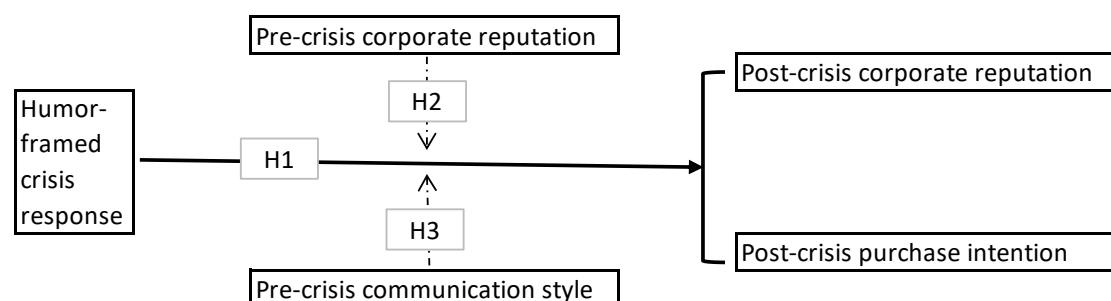
*H3: In a product defect crisis situation, the effect of humor-framed crisis response on post-crisis corporate reputation and purchase intention will be more positive when pre-crisis communication is humor-framed.*

## 2.5 Conceptual Model

Figure 1 depicts the conceptual model. The main effect of humor-framed crisis-response on post-crisis corporate reputation and post-crisis purchase intention was tested by H1. The moderating effects of pre-crisis corporate reputation and pre-crisis communication style were tested by H2 and H3, respectively.

**Figure 1**

*Conceptual Model*



### 3. Methodology

#### 3.1 Design

This study used a 2 (humor-framed vs. non-humor framed crisis responses) \* 2 (positive vs. negative pre-crisis corporate reputation) \* 2 (humor involved vs. non-humor involved pre-crisis stakeholder communication style) mixed factorial experimental design. The designed questionnaire was approved by Ethics Committee BMS for ethical review. A consent form was included on the front page of the questionnaire to give detailed information for the potential respondents regarding the purpose, procedure of the survey, and how the collected information will be processed.

In this experiment, a fictional brand was used to prevent the individual's subjective evaluations based on possible previous encounters with the brand. Following this, the researcher developed a pair of company stories; one indicated a positive pre-crisis reputation and the other a negative pre-crisis reputation. Under the positive pre-crisis reputation scenario, a screenshot of positive customer reviews provided by one of the biggest 3rd party review sites – Trustpilot, was shown to the participants. After viewing the customer reviews, the participants were asked to select to what extent they agree with the items that present the pre-crisis reputation (e.g., *MultiMedia is a company I have a good feeling*). In a negative pre-crisis reputation scenario, a screenshot of negative customer reviews was shown to the participants, and they were asked to rate the same items accordingly.

After rating the statements, the participants were directed to two different contexts where one displayed the brand's tweets from their official Twitter account in a humorous way (in the form of a combination of funny Gifs and product illustrations) and the other in a non-humorous way (in the form of product illustrations only). After seeing the tweets, the participants were asked to select to what extent they agree with the items that present the humor/non-humor stakeholder pre-crisis communication style (e.g., *I find the company communication funny*).

In the next phase, a product-defect crisis situation was created. The participants were asked to read the crisis situation carefully. Afterward, they were directed to one of the brand's official responses regarding the product defect on their Twitter account that followed. The crisis response message was shown either with humor (using a combination of funny Gifs and text) or no humor (using a combination of non-funny imagery and text). After seeing one of the two different crisis response messages, the participants were asked to select to what extent they agree with the items that present post-crisis corporate reputation (e.g., *In the future, I would likely believe what the company says about their products*) and post-crisis purchase intention (e.g., *I would likely buy the company's product*), which are the two dependent variables in this study.

## 3.2 Stimulus Materials

### **Pre-crisis corporate reputation manipulation**

Without a prior encounter with the brand, pre-crisis corporate reputation was manipulated based on the participants' first impressions of the company's business and products, given online customer reviews provided in the experiment. Based on these reviews, participants could tell whether other consumers have negative or positive experiences with the product or the service the company provided. They thus helped participants to evaluate whether the corporate reputation is positive or not.

### **Pre-crisis communication style manipulation**

How a company interacts with its online customers and communicates on its products can be presented in its social media posts, as they often align with the brand personality. Two different series of tweets from the brand's official twitter account were used to give the participants a better understanding of how the company's communication style looks like: one incorporated funny imagery in their product promotional tweets, and the other did not incorporate funny imagery. Participants were able to distinguish the two styles of communication into either humorous or non-humorous.

### **Humor-framed crisis response manipulation**

Furthermore, two crisis response messages were created after the product-defect crisis situation, where the humorous response used the meme as an addition to the apologetic statement. On the contrary, the non-humorous response message used a formal "we are sorry" image instead of the memes.

Following the design, a pre-test (N=25) was conducted with convenience sampling, where the researcher's colleagues and friends were asked to identify potential problems concerning the design and formulation of the stimulus materials. Specifically, pre-test participants were randomly shown one of the eight manipulations and were checked whether they could correctly interpret the manipulative variables based on the stimulus materials. Overall results of the pre-test indicated few problems, with minor changes in the formulation of the questions.

### 3.3 Measures

All scales used in the survey were pre-defined constructs that were reliable and valid, thus being adapted to fit this study's context. All measurement items were evaluated on 7-point Likert scales (1 = strongly disagree, 7 = strongly agree). 2 manipulative constructs (pre-crisis corporate reputation and pre-crisis communication style), and two dependent constructs (post-crisis corporate reputation and post-crisis purchase intention) were each measure with four items.

#### ***Pre-crisis Corporate Reputation***

The independent variable pre-crisis corporate reputation was measured with five items as suggested by Kim et al. (2015). Since it was manipulated through stimulus materials, the pre-crisis corporate reputation scale emphasized on the first impressions participants got from the company. An example statement is "*MultiMedia is a company I have a good feeling about.*"

#### ***Pre-crisis Communication Style***

Four items were used to measure the independent variable pre-crisis communication style construct: a. *I find the company communication funny*; b. *I find the company communication humorous*; c. *I find the company communication serious*; 4. *I find the company communication formal* on 7-point Likert scales (1 = strongly disagree, 7 = strongly agree).

To develop a direct measurement, recoding was done for the statements having negatively worded endpoint towards the right. Hence, a higher score always indicated a more humorous evaluation of the pre-crisis communication style.

#### ***Post-crisis Corporate Reputation***

The dependent variable post-crisis corporate reputation was measured with five items as suggested by Jahng and Hong (2017). The items are different from the pre-crisis corporate reputation as participants have developed their understanding of the company through online communications. Their evaluation of the corporate reputation would base more on their perceptions towards the company's product and service. An example statement is, "*This company cares about its customers and consumers.*"

#### ***Post-crisis Purchase Intention***

The dependent variable post-crisis purchase intention was measured with four items which expanded on Hong & Park's study (2012). Items used to measure the variable include "*I would likely buy the company's product.*"

### 3.4 Measurement Validity and Reliability

Validity measures whether the constructs are well-founded and correspond to and reveal the true nature of the concepts developed. It is tested primarily through factor analysis. Essentially, factor analysis is divided into two types, exploratory and confirmatory. Exploratory factor analysis (EFA) identifies factors based on data and maximization of variance explained. In contrast, confirmatory factor analysis (CFA) tests pre-determined theory constructs and thus verify if the tested pattern is consistent with such developed structure. Although the construct post-crisis corporate reputation was measured with items as suggested by Jahng and Hong (2017), and the construct - post-crisis purchase intention was derived from Hong & Park's study (2012), there was still ambiguity and unclarity existed for the formulated statements. In this case, exploratory factor analysis was conducted to test the validity of the dependent variable constructs.

**Table 1**

*Validity Test Output for Dependent Variable Constructs*

Construct	$\alpha$	Mean(SD)	Statements	Factor	
				1	2
purchase intention	.92	3.71(1.43)	I am willing to buy the company's product	.90	
			I intend to buy from the company	.89	
			I would likely buy the company's product	.88	
			I am inclined to buy from the company	.71	
post-crisis corporate reputation	.83	4.65(1.06)	The company is honest		.84
			I trust this company that they communicate the truth about the crisis		.77
			The company is sincere		.75
			This company cares about its customers and consumers		.65
Cronbach alpha:				.92	.83
Explained variance:				41.43%	31.28%
Eigenvalue:				5.45	1.1

The EFA result can be seen in Table 1. Factor 1 concerns the purchase intention construct where all purchase intention items are loaded. Factor 2 loads post-crisis corporate reputation items. As depicted from the table, the total explained variance of the identified constructs by EFA is 72.71%. Eigenvalues of over 1 for the two factors indicate that these are well-constructed factors. Therefore, it is reasonable to include these eight items for further analysis.

Cronbach's alpha is a commonly used measurement for testing the internal consistency of items within the same construct. It provides an overall reliability coefficient to see whether these items are closely related to be in the same group. A reliable construct is supposed to generate the same or similar outcomes under consistent conditions. A Cronbach's alpha value ranges from 0 to 1. A value of 0.70 or above is considered high in internal consistency. However, if Cronbach's alpha is lower than 0.70 but higher than 0.60, it is still considered acceptable or sufficient in social science studies (Taber, 2018).

Table 2 provides an overview of the reliability coefficients of the constructs. All four constructs are seen to have high internal consistency with Cronbach's alpha scores of above 0.80, meaning the items are good measurements for the respective constructs.

**Table 2***Reliability Test Output Constructs*

<b>Construct</b>	<b>Cronbach's Alpha</b>	<b>Mean(SD)</b>
Pre-crisis corporate reputation	0.98	3.81(1.92)
Pre-crisis communication style	0.97	4.17(1.85)
Post-crisis corporate reputation	0.83	4.65(1.06)
Post-crisis purchase intention	0.92	3.71(1.43)

### 3.5 Procedure

The questionnaire was created to carry out the study using Qualtrics<sup>XM</sup> platform. In total, eight conditions were designed, as shown in Table 3. Participants were randomly assigned to one of the eight conditions. They were instructed to read the information on the screen carefully and answer all the questions before moving to the next page. Browse back to earlier pages were not allowed once they were directed to the next page.

Participants viewed the texts and questions in a fixed order. First, the participants were asked to fill in demographic information such as gender, age, education, and nationalities. Afterward, the questionnaire started with a block of online review screenshots, followed by questions on pre-crisis corporate reputations. On the next page block, tweets messages were displayed, followed by questions about pre-crisis communication style. Next, the crisis situation was described, and a crisis response message was displayed on the next page. In the end, questions on post-crisis corporate reputation and post-crisis purchase intention were asked.

All responses were recorded and exported from Qualtrics<sup>XM</sup> as SPSS data format. In the analytical part, the collected data was processed and analyzed using IBM SPSS<sup>®</sup> statistical software platform.

**Table 3***Experimental Conditions*

<b>Condition number</b>	<b>Humor-framed crisis response</b>	<b>Pre-crisis corporate reputation</b>	<b>Pre-crisis communication style</b>
1	yes	Positive	Congruent (with humor)
2	yes	Positive	Incongruent (without humor)
3	yes	Negative	Congruent (with humor)
4	yes	Negative	Incongruent (without humor)
5	no	Positive	Incongruent (with humor)
6	no	Positive	Congruent (without humor)
7	no	Negative	Incongruent (with humor)
8	no	Negative	Congruent (without humor)



### 3.6 Participants

A combination of random sampling and snowball sampling distribution methods was used to spread the experiment and collect the data. Specifically, the link was distributed via various online platforms, including Facebook groups, WhatsApp groups, LinkedIn, and the researcher's networks. Responses were collected, given four weeks.

Out of 392 responses, 72.4% completed the questionnaire. After an initial inspection of the dataset, three respondents' answers with missing values were excluded. As such, 281 responses were subjected to further statistical analysis. With the 281 valid responses, 41.1% of them are male, and 57.4% are female. Over 90% of the participants are between 21 and 60 years old, while 8.5% are below 20 years old, and one participant is above 60 years old. Amongst all, 46.5% have completed Bachelor's programs, 36.2%, 3.9%, and 13.1% for Master's programs, Ph.D., and high school equivalent, respectively. The majority of the participants come from Taiwan (21.48%), the Netherlands (17.25%), China (9.15%), and Germany (8.10%). In total, 54 nationalities contributed to the experiment.

Table 4 provides an overview of the participants' demographic information for each group. In general, for each group, most respondents have obtained a bachelor's or master's degree. The average age falls between 26 and 31, which makes it comparable across groups. However, while groups 1, 2, 3, 4, 7, and 8 have relatively similar compositions of genders, groups 5 and 6 contain a significantly higher percentage of female respondents than male respondents. Besides, group 1 was assigned the most participants (N=42) while group 5 has the least (N=27). Consequently, the comparison between group 1 and group 5 on the effect of humor-framed crisis response versus non-humor framed crisis response may not be representative as the demographic characteristics varied to some extent.



**Table 4***Complete Respondents' Demographic Information*

Demographic Variables		Group 1				Group 2			
		N	%	Mean	SD	N	%	Mean	SD
Gender	Male	19	45.2			15	46.9		
	Female	23	54.8			16	50.0		
	Prefer not to say					1	3.1		
Education level	High School or equivalent	5	11.9			4	12.5		
	Bachelor's degree	18	42.9			15	46.9		
	Master's degree	17	40.5			12	37.5		
	Ph.D or higher	2	4.8			1	3.1		
Age				28	7.8			28	8.3
Total		42	100			32	100		
		Group 3				Group 4			
		N	%	Mean	SD	N	%	Mean	SD
Gender	Male	16	48.5			13	40.6		
	Female	17	51.5			19	59.4		
Education level	High School or equivalent	6	18.2			2	6.3		
	Bachelor's degree	13	39.4			17	53.1		
	Master's degree	11	33.3			10	31.3		
	Ph.D or higher	3	9.1			2	6.3		
Age				26	4.4	1	3.1	31	8.8
Total		33	100			32	100		
		Group 5				Group 6			
		N	%	Mean	SD	N	%	Mean	SD
Gender	Male	8	29.6			14	35.9		
	Female	19	70.4			25	64.1		
Education level	High School or equivalent	4	14.8			7	17.9		
	Bachelor's degree	13	48.1			15	38.5		
	Master's degree	10	37.0			16	41.0		
	Ph.D or higher					1	2.6		
Age				26	5.6			26	5.7
Total		27	100			39	100		
		Group 7				Group 8			
		N	%	Mean	SD	N	%	Mean	SD
Gender	Male	14	35.9			16	43.2		
	Female	23	59.0			21	56.8		
		2	5.1						
Education level	High School or equivalent	6	15.4			2	5.4		
	Bachelor's degree	20	51.3			20	54.1		
	Master's degree	13	33.3			13	35.1		
	Ph.D or higher					2	5.4		
Age				27	6.9			29	7.2
Total		39	100			37	100		

## 4. Results

This section will present the results of the statistical analysis that was performed.

### Manipulation Checks

Manipulation checks were conducted using independent samples T-tests to determine the success of the manipulations for pre-crisis corporate reputation and pre-crisis communication style. Participants exposed to a positive pre-crisis reputation condition should provide a greater score on pre-crisis corporate reputation than those exposed to a negative pre-crisis reputation condition. Similarly, participants exposed to the humorous pre-crisis tweets should score higher on humorous pre-crisis communication than those exposed to the non-humorous pre-crisis tweets.

To verify that participants perceived the stimuli as expected, mean scores of 5-item pre-crisis corporate reputation scale and 4-item humorous pre-crisis communication scale were calculated for the valid 281 respondents. Each means of the variables was compared to see whether the differences between groups are significant. A Levene's test significance value of 0.002 on manipulation for pre-crisis corporate reputation ( $M_{\text{positive precrisis reputation}} = 5.68$ ,  $SD = 0.39$  vs.  $M_{\text{negative precrisis reputation}} = 1.95$ ,  $SD = 0.51$ ) rejected the null hypothesis of equal variance between the two groups, thus indicates that participants correctly identified negative and positive pre-crisis reputation. For the manipulation of pre-crisis communication style ( $M_{\text{humorous communication}} = 5.95$ ,  $SD = 0.46$  vs.  $M_{\text{non-humorous communication}} = 2.37$ ,  $SD = 0.45$ ), a significance value of 0.93 failed to reject the null hypothesis, meaning the differences between the mean scores of humorous communication style and non-humorous communication style groups are insignificant.

### Hypotheses Testing

Multivariate Analysis of Variance (MANOVA) was constructed to assist with hypotheses testing. The model compares the dependent values across groups under each scenario and tests if the amount of variance in the dependent values can be explained by the independent variables. Moreover, Wilks' Lambda was added to see if the MANOVA test was statistically significant. The results of the MANOVA test are presented in Table 5.

**Table 5***Results of Multivariate Analysis of Variance*

	F value			
	Wilks' Lambda	df	Postcrisis corporate reputation	Postcrisis purchase intention
precrisis reputation	.750	1	39.44**	89.95**
precrisis communication style	.975	1	0.32	3.14*
crisis response	.985	1	2.98*	0.02
precrisis reputation * precrisis communication style	.995	1	1.02	0.00
precrisis reputation * crisis response	.982	1	4.87**	1.21
precrisis communication style * crisis response	.994	1	1.54	0.51

\* Significant at 0.1.  
 \*\* Significant at 0.05.

#### 4.1 Main Effect

The multivariate test result shows that post-crisis corporate reputation is significantly more positive using humor-framed crisis response than using non-humor-framed crisis response. At the same time, no significant effect was observed on purchase intention. Based on this result, hypothesis H1 is not supported.

#### 4.2 Interaction Effects

**Table 6***Effects of Pre-crisis Corporate Reputation on Dependent Variables*

Dependent Variable	F	df	Partial Eta Squared
Postcrisis corporate reputation	39.34**	1	.124
Postcrisis purchase intention	94.003**	1	.252

\*\* Significant at 0.05.

In addition to the MANOVA output, which already indicated that statistically significant result was found between crisis response type and pre-crisis corporate reputation level regarding post-crisis corporate reputation, the ANOVA test (Table 6) also presents an overview of the effects of pre-crisis corporate reputation on both dependent variables. Levene's test of equality of error variances was performed to confirm that the error variance of the dependent variables is equal across groups, and homogeneity of variances was confirmed.

Significant differences between positive and negative pre-crisis corporate reputations were found. Partial eta squared also indicated that 12.4% of the total variance in post-crisis corporate reputation and 25.2% of the total variance in post-crisis purchase intention are explained by the differences in pre-crisis corporate reputation. Therefore, hypothesis H2 is partially supported, in which the effect of humor-framed crisis response on the individual's post-crisis corporate reputation evaluation will be more positive when pre-crisis corporate reputation is positive. Figure 3 illustrates the interaction effect. It can be seen from the graph that if pre-crisis corporate reputation is positive, using a humor-framed crisis response is more effective and positively affect the post-crisis corporate reputation. However, if pre-crisis corporate reputation is negative, using a humor-framed crisis response could damage the post-crisis corporate reputation and is less effective than a non-humorous crisis response.

**Figure 3**

*Marginal Effect Pre-crisis Corporate Reputation on Post-crisis Reputation*

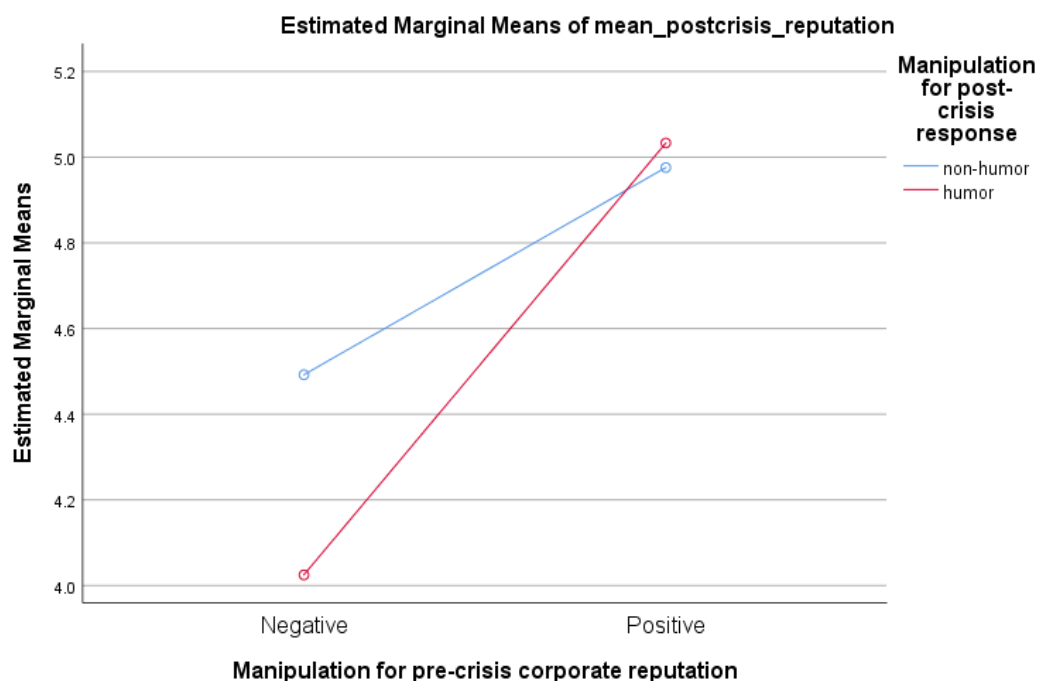
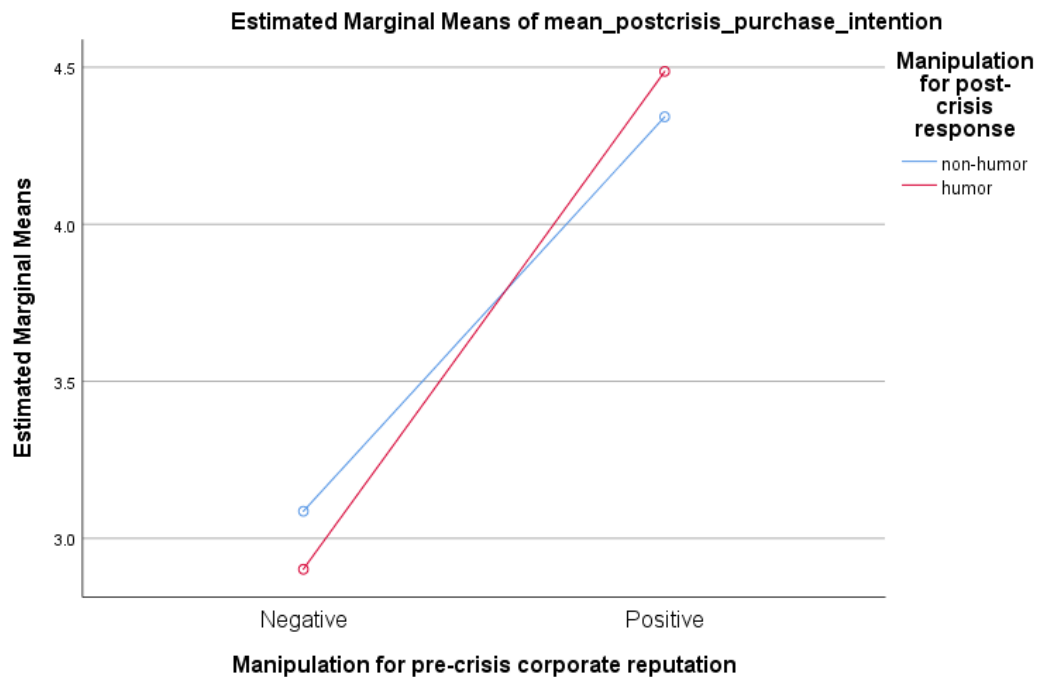


Figure 4 also indicates that when pre-crisis corporate reputation is more positive, using a humor-framed crisis response is more effective and positively affects the post-crisis purchase intention. However, if pre-crisis corporate reputation is negative, using a non-humor-framed crisis response is more effective than a humor-framed crisis response. However, the effect is not statistically significant from the MANOVA test.

**Figure 4**

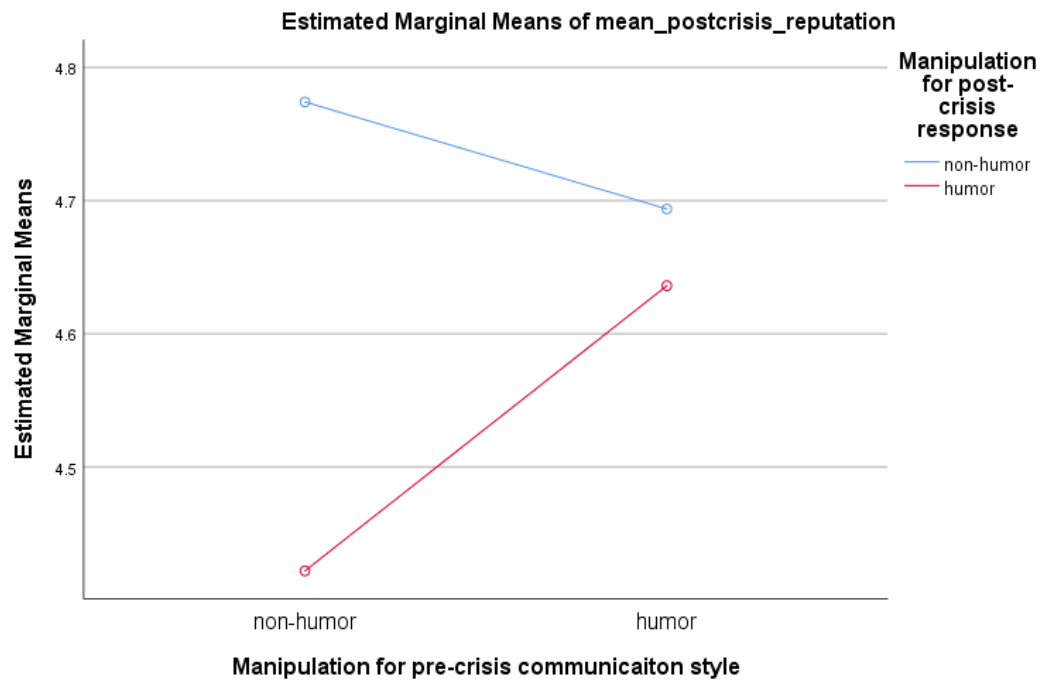
*Marginal Effect Pre-crisis Corporate Reputation on Post-crisis Purchase Intention*



H3 states that in a non-severe product defect crisis situation, the effect of humor-framed crisis response on the individual's post-crisis corporate reputation evaluation and purchase behavioral intention will be more positive when pre-crisis communication is humor-framed. Figure 5 depicts that when the pre-crisis communication is non-humorous, individuals will have a higher evaluation of the post-crisis corporate reputation with a non-humorous crisis response than with a humorous crisis response. When the pre-crisis communication is humorous, a humor-framed crisis response works better compare to the situation when the pre-crisis communication is non-humorous. However, it is still less effective than a non-humor-framed crisis response.

**Figure 5**

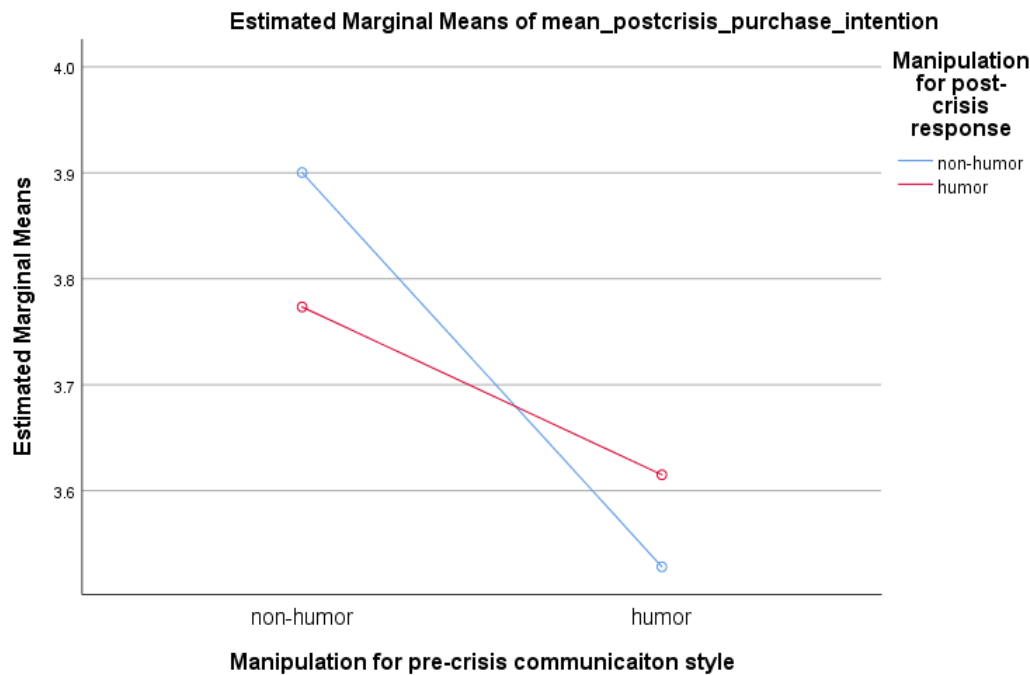
*Marginal Effect Pre-crisis Communication Style on Post-crisis Reputation*



On the contrary, Figure 6 below indicates that consistency in pre- and post-crisis communication style could positively affect an individual's post-crisis purchase intention. However, no statistically significant interaction effect is found to emphasize the consistency in pre- and post-crisis communication style in the MANOVA test. As a result, H3 is not supported.

**Figure 6**

*Marginal Effect Pre-crisis Communication Style on Post-crisis Purchase Intention*



## 5 Discussion

In this study, we experimentally assessed the potential roles of humor-framed crisis response on post-crisis corporate reputation and purchase intention, including pre-crisis corporate reputation and pre-crisis communication styles as moderating conditions. Compared to earlier studies where only rumor crisis situations were created, we created a realistic product defect crisis situation. Three hypotheses were formulated based on the literature and theoretical framework, while only partially confirmed by the statistical analysis.

### Main Findings

This study failed to figure out the main effect of humorous framing on the effectiveness of a crisis response message. However, in this study, as the crisis was non-severe and merely a product defect, it was expected that using humor can express a confident attitude about the company's sense of responsibility and reduce the public's assessed attribution of responsibility towards the company (Coombs et al., 2012), which should lead to a more positive corporate reputation, compared to non-humor messages. There are three possible reasons why the effect is statistically insignificant. Firstly, as mentioned in Section 3.7, with other stimulus materials equal, condition 1 (with humorous crisis response message) was assigned the most participants while condition 5 (with non-humorous crisis response message) has the least. The gender composition and age differences between groups varied to a large extent. Consequently, the comparison between group 1 and group 5 on the effect of humor-framed crisis response versus non-humor framed crisis response were not comparable and thus partially contributed to the insignificance in the main effect. Secondly, the manipulation of the humor-crisis response variable was not checked with particular questions

assigned to test whether the participants correctly identified the response as humorous or non-humorous. As a result, the examination of H1 may not provide a correct indication of the effect of humor-framed crisis response on the individual's post-crisis corporate reputation evaluation and purchase intention. Lastly, as we used self-deprecating humor-framed crisis response in the form of a funny meme, some participants could view it as an aggressive one as we laughed at our own without true sincerity. Some literature also pointed out that if not carefully implemented, humor is likely to damage the company's ethos and indicates the company as lacking empathy and sincerity (Xiao et al., 2018).

The study results showed that having a positive pre-crisis reputation has a statistically significant positive main effect on both output variables included in this study since it can stimulate an individual's intention to engage with the brand, which is consistent with prior research (Cauberghe, 2015). When a company has a negative pre-crisis reputation, the consumers will assign more initial crisis responsibility to the company, and in that, the company's reputation score will be further lowered. On the contrary, a positive pre-crisis reputation may protect the firm from the destructive effects of a crisis because it has more reputational capital to spend compared to the one with a negative pre-crisis reputation.

Furthermore, the moderating role of pre-crisis corporate reputation is partially supported, in which the effect of humor-framed crisis response on the individual's post-crisis corporate reputation evaluation will be more positive when pre-crisis corporate reputation is positive. However, such effect is not statistically significant on post-crisis purchase intention.

In the end, no statistically significant interaction effect is found to emphasize the consistency in pre- and post-crisis communication. Corporate communication style is an important source of imagery for brand personality, in that the communication itself reveals a set of human characteristics that can associate with the brand (Antonio, 2005). Thus, we expected that maintaining the self-image congruence before and after a crisis situation would positively contribute to corporate reputation and purchase intention. In our study, it is possible that the sample participants cannot properly distinguish the humorous and non-humorous pre-crisis communication style, as the manipulation of pre-crisis communication style failed to reject the null hypothesis, meaning the differences in post-crisis corporate reputation evaluation and purchase intention between humorous communication style and non-humorous communication style groups are insignificant.

### **Theoretical Implications**

Although there has been research conducted in the past on the effects of humor in the advertisement, it is still arguable that humor is difficult to depict as the sense of humor varies greatly between individuals (Kim et al., 2016). Incorporating humor into the crisis management literature is a relatively new concept, as only a few researchers have explored this field of study (e.g., Xiao, Cauberghe, & Hudders, 2017). Compared to those earlier studies where only rumor crisis situations were created, we created a more realistic product defect crisis situation and walked the participants through the entire customer journey. Although our study did not find the main effect of humorous framing on the effectiveness of a crisis response message, it contributed to the crisis management literature to a degree by extending the possibility of applying humor in times of confirmed crisis.



## **Practical Implications**

From a managerial perspective, it is crucial for relationship management and communication professionals to carefully integrate humor-framed crisis response messages. Firstly, as shown in the stimulus materials of the current study, the crisis was non-severe. Since humor is suggested to work better when the perceived crisis severity is low (Kim et al., 2016), it is therefore important to clearly recognize and evaluate the crisis severity before formulating a humorous crisis response message. Secondly, one should realize that a company's pre-crisis corporate reputation has a moderating effect on the implementation of humor. Suppose the company already has a negative reputation prior to the crisis. In that case, it is advised not to use humor in the crisis message as the consumers will assign more initial crisis responsibility to the company. Lastly, it is important to research what types of humor style work best for the targeted audience, as different humor types (e.g., self-deprecating, aggressive humor, self-enhancing humor) can have different source liking and persuasion effects among varied audience groups.

## **Limitation and Directions for Future Research**

Although the model gives a relatively fair prediction of the sample respondents' perceptions of using humor in crisis communication, there are several limitations. Some are related to the nature of the sample participants, others to the methodological choices.

Firstly, due to the snowball sampling selection procedure, a large proportion of the sample participants came from the researcher's private network. The sampling distributions of the demographic variables are not strong indications of the population characteristics. Limited statistical results can be generalized towards the population. Besides, the age groups are diversified. Although 68.8% of the sample participants are aged between 21 to 30 years old, 31.2% fall beyond the group. Having a large variety of age groups could complex the results as people from varied age groups perceive things differently. In addition, the cultural background also plays a role. This experiment targeted people who reside in the Netherlands. Thus, it is expected that people's reactions to humor-framed crisis responses that were being used can vary across ethnics and results can only be generalized to a certain extend. Due to the limited sample responses collected in this study and unequal distribution of ethnic groups, this study failed to make comparable analyses across different cultural groups. Future research should take cultural background into considerations and control for the number of respondents per cultural group.

Moreover, since a fictional brand, as well as a created crisis situation were used for the experiment, limited brand engagement and emotions from individuals were anticipated. Participants may not provide truthful or serious answers to the questions as it does not have an impact on their life in reality. The statistical results thus limit the implications of using humor in a crisis situation. If fictional brands are used for future experiments, it would be beneficial to have more brand-individual interactions to develop a stronger connection between the individual and the brand.

Withal, this study collected cross-sectional data from a specific point of time, the results can only be used to explain and predict current intention, opinion, or perception of certain behaviors. Therefore, the prediction power of purchase intention on actual behavior cannot be verified and assessed at a later stage. The model would have limited contribution if there is a significant discrepancy between the intention and performing the behavior. Moving forward,

longitudinal data can be incorporated into studying the relationship between purchase intention and purchase behavior. Such addition would provide an opportunity to assess the predicted power of the intention model. Attention needs to be paid to the consistency of including the time series. The measured items and the target participants will need to be consistent over time for comparison.

## 6 Conclusion

This study investigates the potential roles of incorporating humor in a crisis response strategy. More specifically, it provides insight by relating it to the individual's evaluation of post-crisis corporate reputation and purchase behavioral intention. Although the present study did not find a major significant effect of humorous-framing crisis response, it is worth noticing that a pre-crisis corporate reputation moderates the effect of humor-framed crisis response messages. Additionally, humor is suggested to work better under non-severe crises. Therefore, it is important for marketing and communication professionals to clearly recognize and evaluate the crisis severity before formulating a humorous crisis response message. Furthermore, this study must be extended to incorporate varied humor types to fully understand humor style has the greatest chances to influence the most of target audience before formulating a humorous response.

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# Appendix 1. Humor in Crisis Communication Online Experiment

7/9/2021

Edit Survey | Qualtrics Experience Management

Tools ▾ Saved Jun 21, 2021 at 10:34 AM Draft



Preview

Publish

Humor in Crisis Communication - Test

iQ Score: Fair

Front page and demo qns

Info



Skip to

End of Survey if No stop right here Is Selected

Welcome!

Thank you so much for participating in the experiment! The experiment is part of my master thesis project at the University of Twente. The experiment tries to analyze how an organization communicates with its customers.

The experiment will take approximately 5 minutes. All data is collected anonymously through Qualtrics and will only be used for this research. All identifying information will be removed and will be replaced with a number.

Your participation is voluntary and you are free to stop at any point. If you want to know more about data storage, the research or you want to know about the results, you can send an email to [r.wang-3@student.utwente.nl](mailto:r.wang-3@student.utwente.nl).

Thanks for your time and insightful contribution. If you choose to proceed, you consent to take part in the experiment!

Bests,  
Ran Wang

☐ Yes I'm ready to start

☐ No stop right here

gender



Your gender

☐ Male

☐ Female

☐ Other

☐ Prefer not to say

[https://utwentebs.eu.qualtrics.com/surveys/SV\\_9Azi0Ja3JWYNdMi/edit?SurveyID=SV\\_9Azi0Ja3JWYNdMi](https://utwentebs.eu.qualtrics.com/surveys/SV_9Azi0Ja3JWYNdMi/edit?SurveyID=SV_9Azi0Ja3JWYNdMi)

1/13



age

\*

Your age

19

65

educational\_degree

\*

Highest education degree you have obtained

☐ Elementary School

☐ High School or equivalent

☐ Bachelor's degree

☐ Master's degree

☐ Ph.D or higher

☐ Others

nationality

\*

In which country were you born?

▲

Import from library

Add new question

[Add Block](#)

▼ Intro

Info


Now, assume that you are looking into buying an electronic device. You are browsing online and come across a company called MultiMedia. Here is an overview of their online store.




Website

**MultiMedia**
Product Range


Discount on Samsung TVs




Samsung 4K Ultra HD QLED TV 55Q65T  
799,-



Samsung 4K Ultra HD QLED TV 65Q65T  
1099,-



Samsung 4K Ultra HD QLED TV 75Q65T  
1499,-



Samsung 4K Ultra HD TV UE55TU8300  
749,-


Shop at your store!  
Book a timeslot online now

Is the delivery person already on his way?  
Track your order

My product is defective  
Register your repair online

**Customer service** *now open*  
How can we help you?  
Monday to Friday from 8 a.m. to 6 p.m.  
Saturday from 9 a.m. to 5 p.m.

**Always a solution at home**  
✓ Personal advice in 60 stores  
✓ Free delivery from 20,- +  
✓ Free returns within 30 days



**Harman kardon soundbar Citation MultiBeam 700 (Black)**  
Now extra advantageous in combination with other Citation speakers. Check the bundles on the product page!  
499,-

Info

Please read the story of the company carefully. After the story, you will be shown 2 posts from the company's official Twitter account to have a better understanding of how they communicate with their customers.



Add Block

S1N

Info

**MultiMedia** is a company specializing in selling digital products. They have 5 years of experience in selling consumer electronic products. Currently, they have nearly 200,000 items in stock ranging from household appliances to smart home devices.

**MultiMedia** customer reviews are also available in Trustpilot, one of the biggest 3rd party customer reviews sites. Below are some of the reviews:

**Good review**

A Rensink  
01-04-2021

✓ Yes, I recommend this shop

Overall score  
Reviewscore | 9.0

by far the cheapest of the well-known web stores, ordered today, at home tomorrow! We have just received the printer so we cannot yet form an opinion about their service, should something be wrong, but order and delivery went perfectly

0 Comments | [Reply to this review](#) | [I find useful](#) 0

---

GT Thiek  
01-04-2021

✓ Yes, I recommend this shop

Overall score  
Reviewscore | 10.0

Sales manager really helped me a lot with the purchase and installation of my new refrigerator. Anyone can slide boxes, but if you want a store where they think along with you and come up with handy and creative solutions and also go the extra mile for you, this is the place to be

0 Comments | [Reply to this review](#) | [I find useful](#) 0

---

Henk  
01-04-2021

✓ Yes, I recommend this shop

Overall score  
Reviewscore | 10.0

Super good service. Order went smoothly, delivery accurate and clear by messages and possibility to follow. Installation super due to extra deployment of technicians. Already used the oven today with success

0 Comments | [Reply to this review](#) | [I find useful](#) 0

[Import from library](#) [Add new question](#)

Add Block

▼ S1.1N

positive\_rep iQ ☆ x→

Now that you have some understanding of the company, please select how much do you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Agree	Strongly agree
MultiMedia is a company I have a good feeling about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MultiMedia is a company that I can trust	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MultiMedia is a company that I respect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MultiMedia has a good overall reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would likely believe what the company says about its products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Import from library](#) [Add new question](#)

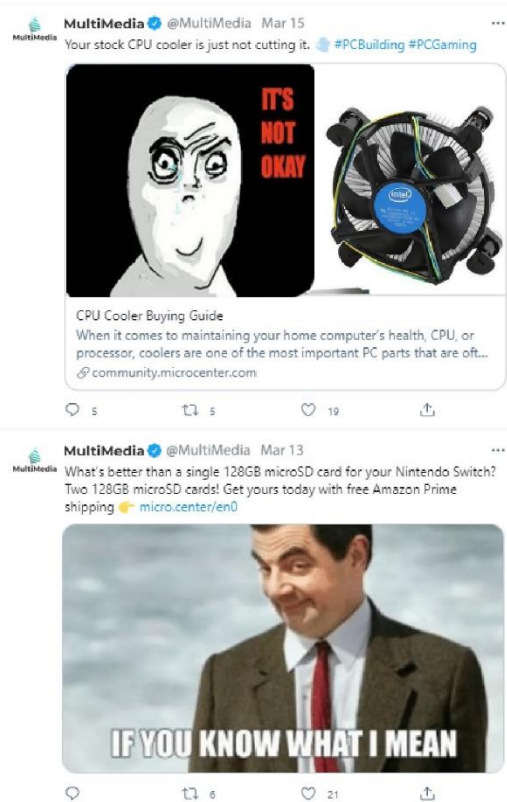
[Add Block](#)

S2N

Info

Now you are wondering how the company is doing on their social media. You kept searching and found these recent tweets from their official Twitter account:

humor tweets

[Import from library](#)[Add new question](#)[Add Block](#)

▼ S2.1N

humor\_com

iQ \*

After reading the tweets, please indicate how much you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Agree	Strongly agree
I find the company communication funny	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the company communication humorous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the company communication serious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the company communication formal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Import from library](#)[Add new question](#)[Add Block](#)

▼ S4N

Info

Now you are wondering how the company is doing on their social media. You kept searching and found these recent tweets from their official Twitter account:

formal tweets



Import from library

Add new question

Add Block

S4.1N

nonhumor\_com iQ \*

After seeing the tweets, please select how much do you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Agree	Strongly agree
I find the company communication funny	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the company communication humorous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the company communication serious	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find the company communication formal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Import from library](#)
[Add new question](#)

[Add Block](#)

▼ S3N

Info

**MultiMedia** is a company specializing in selling digital products. They have 5 years of experience in selling consumer electronic products. Currently, they have nearly 200,000 items in stock ranging from household appliances to smart home devices. **MultiMedia** customer reviews are also available in Trustpilot, one of the biggest 3rd party customer reviews sites. Below are some of the reviews:

**Bad review**

Peachie16v  
12-03-2021

Overall score  
Review score | 1.0

Bad customer service. bad website. (cash gets stuck if there is, for example, a PSS drop)

I had placed an order for the PSS, paid and all and suddenly 4 hours later you receive a sorry, sorry, sorry email. Not wearing anything at all.

0 Comments [Reply to this review](#)

I find useful 0

**Rob**  
01-04-2021

Overall score  
Review score | 1.0

On 19-02-2021 I reported to Customer Service about replacing a small part of my dishwasher. In the meantime, I have been in contact with 6 different Customer Service employees. All 6 tell me that it will be resolved as soon as possible, but so far (1-4-2021) I have not seen any part. What's wrong with "High Service". Why do I feel like I'm being held on a leash?

0 Comments [Reply to this review](#)

I find useful 0

**Cook**  
12-02-2021

Overall score  
Review score | 1.0

I have found this to be a very bad experience. PSS ordered in a bundle, neatly paid. Get confirmation and that it will be delivered on Saturday.

All sounds fine, but 2 hours later they can suddenly no longer deliver and you have to wait (no one knows how long) for the next shipment and then hope that you will be there when they possibly start delivering. But in the meantime keep the money in their account and only say sorry 3 times.

too bad you can't give 0. my experience was well below zero

0 Comments [Reply to this review](#)

I find useful 1

[Import from library](#) [Add new question](#)

Add Block

S3.1N

negative\_rep

iQ \* x→

Now that you have some understanding of the company, please select how much do you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Agree	Strongly agree
MultiMedia is a company I have a good feeling about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MultiMedia is a company that I can trust	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MultiMedia is a company that I respect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MultiMedia has a good overall reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would likely believe what the company says about its products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Import from library](#) [Add new question](#)

[Add Block](#)

## ▼ Crisis situation - non severe product harm crisis (product recall)

## Info

Right before you want to proceed, you discovered that MultiMedia is facing some issues in their business. This month, they have been receiving hundreds of calls from online customers saying that the products they received are damaged. Some angry customers started leaving negative reviews on the sites and swore that they would never buy from MultiMedia again. Others were disappointed in the company and were requesting a full refund through their customer service channels. The loss is at its high and started to damage MultiMedia's credibility. MultiMedia started the investigation immediately and found out where the issue came from: the products were stored and transported inappropriately from the warehouse. High pressure due to mispositioning has led thousands of e-products to have cracks on the surface. Afterward, MultiMedia decided to refund everyone who placed the order in March and posted an official response regarding the product defect on their Twitter account. Their crisis response is shown on the next page.

[Import from library](#)[Add new question](#)[Add Block](#)

## ▼ Humorous response

## humor crisis respons

[Import from library](#)[Add new question](#)[Add Block](#)



▼ Serious response

formal response



Import from library

Add new question

Add Block

▼ Post rep evaluation

post\_rep

iQ \*

After seeing MultiMedia's crisis response online, please select how much do you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Agree	Strongly agree
This company cares about its customers and consumers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company is dishonest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The company is sincere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not trust this company that they communicate the truth about the crisis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the future, I would likely to believe what the company says about their products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Import from library

[Import from library](#)[Add new question](#)[Add Block](#)

## ▼ Purchase Intention

purchase\_intention

iQ \*

Now, as one of MultiMedia's potential customers, please select how much do you agree with the following statements

	Strongly disagree	Disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Agree	Strongly agree
I would likely buy the company's product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to buy the company's product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to buy from the company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am less inclined to buy from the company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Import from library](#)[Add new question](#)[Add Block](#)

## End of Survey

We thank you for your time spent taking this survey.

Your response has been recorded.

## Appendix 2. Coding Scheme

**Survey coding scheme Humor in Crisis Communication**

Group label	Type	Question / Description	Scale
Demographic variables			
gender	Numeric	Your gender	{1, Male}...
age_4	Numeric	Your age	None
educational_degree	Numeric	Highest education degree you have obtained	{1, High School or equivalent}...
nationality	String	In which country were you born?	None
Manipulative variable - Positive pre-crisis reputation			
precrisis_reputation_1	Numeric	precrisis_reputation_1 MultiMedia is a company I have a good feeling about	{1, Strongly disagree}...
precrisis_reputation_2	Numeric	precrisis_reputation_2 MultiMedia is a company that I can trust	{1, Strongly disagree}...
precrisis_reputation_3	Numeric	precrisis_reputation_3 MultiMedia is a company that I respect	{1, Strongly disagree}...
precrisis_reputation_4	Numeric	precrisis_reputation_4 MultiMedia has a good overall reputation	{1, Strongly disagree}...
precrisis_reputation_5	Numeric	precrisis_reputation_5 I would likely believe what the company says about its products	{1, Strongly disagree}...
PRECRISIS_REPUTATION_MANIPULATION	Numeric	Manipulation for pre-crisis corporate reputation	{0, Negative}...
Manipulative variable - Humorous pre-crisis communication			
humorous_communication_1	Numeric	humorous_communication_1 I find the company communication funny	{1, Strongly disagree}...
humorous_communication_2	Numeric	humorous_communication_2 I find the company communication humorous	{1, Strongly disagree}...
humorous_communication_3	Numeric	humorous_communication_3 I don't find the company communication serious	{1, Strongly disagree}...
humorous_communication_4	Numeric	humorous_communication_4 I don't find the company communication formal	{1, Strongly disagree}...
HUMOR_COMMUNICATION_MANIPULATION	Numeric	Manipulation for pre-crisis communication style	{0, non-humor}...
Dependent variable - Post-crisis reputation			
post_rep_1	Numeric	post_rep_1 This company cares about its customers and consumers	{1, Strongly disagree}...
post_rep_2reco	Numeric	post_rep_2reco The company is honest	None
post_rep_3	Numeric	post_rep_3 The company is sincere	{1, Strongly disagree}...
post_rep_4reco	Numeric	post_rep_4reco I trust this company that they communicate the truth about the crisis	None
post_rep_5	Numeric	post_rep_5 In the future, I would likely to believe what the company says about their products	{1, Strongly disagree}...
Dependent variable - Post-crisis purchase intention			
purchase_intention_1	Numeric	purchase_intention_1 I would likely buy the company's product	{1, Strongly disagree}...
purchase_intention_2	Numeric	purchase_intention_2 I am willing to buy the company's product	{1, Strongly disagree}...
purchase_intention_3	Numeric	purchase_intention_3 I intend to buy from the company	{1, Strongly disagree}...
purchase_intention_4reco	Numeric	purchase_intention_4reco I am inclined to buy from the company	{1, Strongly disagree}...
HUMOR_CRISIS_RESPONSE_MANIPULATION	Numeric	Manipulation for post-crisis response	{0, non-humor}...