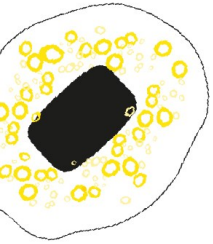


UNIVERSITY OF TWENTE.



# Joking the rumor away: The interplay of humor and brand personality in social media crisis communication

***Master Thesis***

L.M. Kerßens

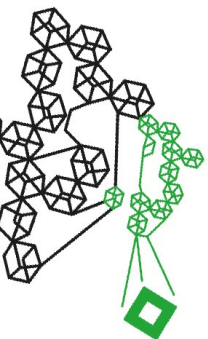
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## Abstract

**Purpose:** Humor is an essential part of human interaction, and therefore also plays a role in brand-customer interactions during online crises. Current findings suggest the success of humor in crisis communication to be highly context dependent. To build upon the existing body of research and disentangle the context-dependency in this specific field of corporate communication, this paper investigates a potential interplay between humor and brand archetypes in social media crisis communication, specifically for rumor crises.

**Method:** A 3×2 experiment was conducted to identify the impact of humor types (non-humorous vs. aggressive humor vs. affiliative humor) and brand archetype (jester vs. sage) on consumer perceptions and to investigate a potential interplay between these two variables.

**Results:** Results indicate that consumers' perceptions of an organizations' ability are generally judged by the type of organization, with sage archetypes achieving higher scores for ability. Furthermore, results show that the type of humor influenced participants reactions to the crisis response. Benevolence perceptions, however, depended on an interaction between brand archetype and humor. Jester archetypes achieved the least negative impact on benevolence with the use of affiliative humor, while sage brands did so by using non-humorous crisis responses.

**Conclusions:** Both humor and brand archetype play an important role in disentangling the high context-dependency of successful crisis communication strategies, although effects differ between benevolence and ability perceptions. Results of this study allow practitioners to better evaluate crisis response strategies for specific contexts by providing insights on the effects of and interplay between humor and brand archetypes. Further research is, however, needed to evaluate the findings for different brand archetypes and different types of crises.

**Keywords:** crisis communication, social media, humor, brand archetypes, trust

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## 1. Introduction

Humor has always been an essential part of human interaction. Not just in interpersonal communication has it taken a vital role, but organizations also increasingly make use of humor when communicating with their audience online (Béal & Grégoire, 2022; Davis et al., 2018; Han et al., 2018; Kling, 2020; Labuzinski, 2019; Mayer, 2022; Xiao et al., 2018a). Especially in the field of marketing communication, humor has become a widespread and acknowledged phenomenon, as it potentially increases the virality and effectiveness of influencer marketing (Barta et al., 2023; Borah et al., 2020). However, in other fields of organizational communication which are more traditional and serious in their tone, such as crisis communication, humor has not yet become the norm.

Recently, practice has shown that organizations adopt more humorous forms of crisis communication (Kling, 2020; Labuzinski, 2019; Xiao et al., 2018a; Yu et al., 2022). The success of organizations' attempts at humorous crisis responses, however, is highly context dependent. While, for example, Ellen DeGeneres received substantial negative feedback on her attempt on a humorous on-air apology (Kling, 2020; Yu et al., 2022), other organizations have been more successful in their communication. One of the most famous cases of successful use of humor in crisis communication is KFC's response to a shortage of chicken in the UK in 2018 which led to a generally positive customer response online. In a statement on their website, KFC had rearranged the brand's letters to "FCK" and explained the chicken shortage as follows: "The chicken crossed the road, just not to our restaurants..." (Labuzinski, 2019; Yu et al., 2022). Similarly successful, Alibaba founder Jack Ma averted an online paracrisis for TMall after the company came under public scrutiny for a false statement online. After being accused of false advertising in 2013, Tmall was confronted with substantial criticism on the Chinese social media site Weibo for using false and exaggerated data in their ads. Ma, who is known for his humor online, responded to the crisis in a self-mocking way by blaming his limited math skills for the error in their statement (Kim et al., 2016).

Those examples highlight the complexity and context-dependency of the topic which is also reflected in the current state of academic knowledge on the topic. In general, studies have found that humor can be a successful tool in reacting to crises or negative feedback online (Béal

& Grégoire, 2022; Kim et al., 2016; Nadeau et al., 2020; Vigsø, 2013; Xiao et al., 2018a; Yu et al., 2022). Possible explanations for this are provided by Kim et al. (2016) who suggest that humor-framed crisis responses work because they decrease the public's intention to create counterarguments, or by Xiao et al. (2018a) who explain that humor may underline an organization's confidence in their innocence. Nevertheless, studies also suggest a range of factors that could influence how humor is perceived by its audience, such as crisis characteristics, communication medium, brand characteristics, and types of humor (Béal & Grégoire, 2022; Kim et al., 2016; Nadeau et al., 2020; Vigsø, 2013; Xiao et al., 2018a; Yu et al., 2022).

Despite these particular findings and assumptions, concrete explanations remain underexplored, as research has not yet come to a consensus on the effects of humor in social media crisis communication. Research in the field of online complaints, for example, has shown how brand personality and brand characteristics can affect how humor use is perceived by the audience online and how it interacts with humor types (Béal & Grégoire, 2022). It suggests that sincere brands achieve the best results with affiliative humor, while exciting brands do so by using aggressive humor (Béal & Grégoire, 2022). For the field of social media crisis communication, the effects of brand characteristics on humor type remain to be explored as a potential explanation for the effectiveness of humor use in crisis responses.

Consequently, this study aims to close this gap and provide guidelines for practice by exploring the potential effects of different types of humor and brand characteristics, specifically brand archetypes, on the success of crisis communication via social media. To keep crisis characteristics as a possible factor in mind, this study specifically addresses rumors as a low severity and unconfirmed crisis type. Hence, the following research questions will be addressed:

**RQ1:** To what extent does humor use in response to a rumor on social media affect consumer perceptions?

**RQ2:** To what extent do brand archetypes influence the potential effects of humorous crisis responses?

To answer these questions, an online experiment on the effects of humor and brand archetypes in crisis communication was conducted. In terms of structure, this paper will first provide an overview of important concepts and theoretical contributions on social media crisis communication, as well as the concepts of humor and brand archetype. Afterwards, the research design and methodology will be presented before moving to the results and discussion of those.



## 2. Theoretical Framework

### 2.1 Crisis communication

Organizational crises can be described as sudden breakdowns of a system that potentially violate stakeholders' perceptions about the organization in question (Coombs, 2007, 2014). They have the potential to damage corporate reputation, relationships with stakeholders, and trust in the organization (Beldad et al., 2018; Cornelissen, 2017). To limit such negative outcomes, organizations must make sure to engage in adequate crisis management. Crisis management then refers to a set of factors which are designed to address crises and limit the inflicted damage (Coombs & Laufer, 2018).

How companies should respond depends on the severity and type of crisis. A widely used tool for crisis management is the Situational Crisis Communication Theory (SCCT) which was proposed by Coombs (2007). It distinguishes three crisis clusters, that differ from each other in terms of crisis severity: the victim cluster (lowest severity), the accidental cluster, and the preventable cluster (highest severity). For each type of crisis, specific response strategies are advised (see Table 1) to limit the damage on attitudinal outcomes such as reputation and trust. Next to the general crisis severity, other factors such as prior crisis history are also taken into consideration as they affect the adequate choice of crisis response strategy. In that sense, an organization faced with a victim cluster crisis should for example consider crisis response strategies for accidental clusters if it has been confronted with similar crises in the past (Coombs, 2004, 2014).

The SCCT has been widely accepted and used in the field of crisis communication, but it does not specifically consider new developments in crisis communication, such as the role of social media and the use of humor as a crisis response strategy. Hence, the following sections will discuss the implications that social media and humor use might have for the field of crisis communication.

**Table 1***Crisis types and corresponding crisis response strategies*

Crisis cluster	Corresponding crisis response	
	Response strategy	Tactical actions
Victim Cluster (e.g. natural disaster, rumor, workplace violence, product tampering/malevolence)	Deny strategies	Attack the accuser Denial Scapegoat
Accidental Cluster (e.g. technical-error accidents, technical-error product harm, challenges)	Diminish strategies	Excuse Justification
Preventable Cluster (e.g. human-error accident, human-error product harm, organizational misdeed)	Rebuild strategies	Compensation Apology

---

*Note.* Adapted from Coombs (2007)

## 2.2 Crisis communication in the era of social media

Until recently organizations could let crises pass without using large and consistent interventions, however, with the rise of social media power has been put in the hands of consumers to put pressure on organizations (Nadeau et al., 2020). Hence, managing such crises on social media has become crucial for organizations to influence the rhetoric online and limit the damage on consumers' attitudes.

Crises on social media go beyond just negative feedback online. Nadeau et al. (2020) describes them as "an intense and broadly communicated negative storyline about the brand" (p. 1031), and thereby underlines their systematic and consistent character. Social media crises can therefore be seen in line with the general definition of an organizational crisis as a sudden breakdown of a system that potentially violate stakeholders' perceptions about an organization

(Coombs, 2007, 2014). Therefore, organizations must make sure to engage in adequate crisis management in response to crises on social media.

Despite the widely accepted strategies proposed by Situational Crisis Communication Theory (SCCT), social media further changes the way in which organizations engage in crisis communication with their stakeholders. While traditionally, organizations used press releases or appearances in traditional media for their crisis communications, a growing number of organizations started using social media as their primary instrument for crisis management (Freberg, 2012; Han et al., 2018). In comparison to traditional crisis responses, social media call for a more informal language and tone that matches their conversation-like environment (Kelleher, 2009; Kim et al., 2016; Xiao et al., 2018a). Such a communication style matching this environment could be described as informal, non-verbal, and figurative language, including a satirical tone and emoticons (Kim et al., 2016).

## 2.3 Humor in social media crisis communication

Typically, crisis communication practitioners use a rather serious tone for their messages. Nevertheless, humor can be a powerful instrument when addressing crises online. Humor aligns with the informal environment of most social media and as such is an inherent aspect of many platforms (McGraw et al., 2015; Xiao et al., 2018a; Yu et al., 2022). Adhering to these norms can therefore provide strategic advantages for organizations (McGraw et al., 2015).

Before further elaborating on factors that play a role in the use of humor in social media crisis communication, it is important to understand the concept of humor and its underlying mechanisms.

### 2.3.1 *The concept of humor*

The concept of humor is one that is used in a variety of contexts and can be defined “in terms of heightened arousal, smiles, and laughter exhibited by an audience in response to a particular message” (Sternthal & Craig, 1973, p.13). Research proposes different reasons as to why a particular message is perceived as funny, as for example context, incongruity, social connections, or culture (McBride & Ball, 2022). A more thorough explanation on the underlying mechanism of humor is given in the benign violation theory.

On a theoretical level, benign violation theory explains how humor works based on three conditions taking place in a pre-defined order and can therefore also help understand why some humor attempts are successful while others are not (McBride & Ball, 2022; McGraw et al., 2015). In a first step, humor triggers a norm violation. Secondly, the norm violation is perceived as benign. Thirdly, the first two conditions happen simultaneously and therefore trigger laughter and amusement (Béal & Grégoire, 2022). Therefore, despite a norm being violated, the message connects to an alternative norm that makes that the initial violation is perceived as benign (Béal & Grégoire, 2022). All in all, the positive dynamics between norm violation and connection to alternative norms then “leads to appreciation of the humor and positive behaviors” (Béal & Grégoire, 2022, p. 10).

### *2.3.2 Humor as a tool in crisis communication*

Applying benign violation theory to the context of crisis communication, humor as a crisis response violates a certain norm. This norm violation, however, becomes benign when an alternative norm applies simultaneously. In a social media environment, this alternative norm might for example be the informal communicational norms on those platforms (Béal & Grégoire, 2022; Xiao et al., 2018a). Literature on online reviews, however, also suggests that brand personality is a potential factor that can influence the acceptance of such norm violations and therefore act as an alternative norm in this context (Béal & Grégoire, 2022).

Additionally, research has found several other factors that can contribute to the success of humor in crisis communication, leading to the conclusion that the success of humorous crisis responses is highly context dependent. While Hämpke et al. (2022) advise against using humor in social media crisis communications (in the context of governmental agencies), Yu et al. (2022) have found that humorous responses lead to more favorable consumer responses. The success of humor attempts can also be explained with the role of humor in addressing a crisis. McBride and Ball (2022), for example, suggest that humor is largely relevant as a form of stress relief and coping with a crisis, although the authors do not further specify whether this holds truth for all kinds of crises. Especially in a social media environment, humor is perceived as closer to “human voice” and therefore constitutes an alternative norm that balances out the norm violation and creates greater acceptance of the crisis response (Béal & Grégoire, 2022; Kim et al., 2016; Xiao

et al., 2018a). Nevertheless, other factors identified in literature should also be taken into account when considering the effectiveness of humor in social media crisis communication. For this study, specifically three factors will be discussed. These are crisis type, type of humor, and the role of characteristics associated with a brand.

### ***Humor in different crisis types***

In terms of crisis type, research has found that the success of humorous crisis responses may depend on whether a crisis is confirmed or unconfirmed. Especially for unconfirmed crises, such as rumors that fall under the victim crisis cluster, it can be observed that humor has a positive effect on stakeholder perceptions (Xiao et al., 2018a). Xiao et al. (2018a) reason that in the case of a rumor, humor can minimize stakeholders' perceptions of severity and expresses a confident attitude that the rumor is untrue. Simultaneously, humor-framed messages enhance the acceptance of the crisis responses as they decrease stakeholders' intentions to consider counterarguments (Kim et al., 2016; Xiao et al., 2018b). Similarly, Yu et al. (2022) have found a positive effect of humorous crisis responses which is moderated by the type of crisis (defensible vs. indefensible). Defensible events are events that brands are not responsible for (Yu et al., 2022) and can, therefore, also be categorized within the victim cluster as defined by Coombs (2007). In line with this, Vigsø (2013) concluded that humor could be an effective tool in restoring stakeholder perceptions, given that the severity of the crisis is perceived as low. The author argues that this might be the case because humor may act as a first step in reassuring the public about the company's good intentions.

Summarizing, research suggests humor to be an effective tool in restoring consumer perceptions for defensible, low severity, and unconfirmed crises, as it underlines the organization's attitude that a rumor is untrue and minimizes perceptions of severity. Hence, it can be presumed that humorous crisis responses are more successful than non-humorous responses when used for crises within the victim cluster, such as natural disasters, rumors, workplace violence or product tampering/malevolence. Applied to the social media context of this study, the following hypothesis is proposed:

***H1: Humorous crisis responses are more effective in restoring consumer perceptions than non-humorous messages in the case of a rumor on social media.***

### ***Types of humor***

Next to crisis type, literature proposes type of humor as another factor influencing how humorous crisis responses are perceived. Research distinguishes between two types of humor: aggressive and affiliative humor (Béal & Grégoire, 2022; Martin et al., 2003), or otherwise also labelled appropriate and inappropriate humor (McBride & Ball, 2022). Despite the difference in naming, the essence of the two types remains the same. As summarized in Table 2, affiliative or appropriate humor therefore refers to “safe” topics to use for humor that are “playful, nonthreatening, and benevolent” (Béal & Grégoire, 2022, p.9), while inappropriate or aggressive humor “is a darker form that aims at ridiculing others, victimizing them, and putting them down” (Béal & Grégoire, 2022, p.9). Generally speaking, affiliative humor can be described as ‘laughing with the complainer’, while aggressive humor then is ‘laughing at the complainer’ (Béal & Grégoire, 2022).

**Table 2**

#### *Types of humor*

<i>Type of humor</i>	<i>Description</i>	<i>Examples</i>
<i>Affiliative</i>	Playful, nonthreatening, and benevolent	Playfully poking, fun and telling jokes
<i>Aggressive</i>	Darker humor (ridiculing others, victimizing them, and putting them down)	Sarcasm, derision, and disrespectful teasing

*Note.* Adapted from Béal & Grégoire (2022) and Martin et al. (2003)

Generally, affiliative humor and aggressive humor have been shown to have different effects on their audience. In the field of online public complaints Béal and Grégoire (2022) found that affiliative humor is perceived as better and leads to fewer negative associations as compared to aggressive humor. Similarly, this type of humor leads to higher amusement as opposed to aggressive humor due to its benign aspect (Martin et al., 2003). In the case of crisis communication on social media, it can therefore be expected that affiliative humor yields better results than aggressive humor. Hence, the following hypothesis is proposed:

***H2: Crisis responses using affiliative humor are more effective in restoring consumer perceptions in the case of a rumor on social media than messages using aggressive humor.***

To what extent humor is perceived as appropriate, however, also depends on cultural norms. One form of humor that is highly culture-dependent is self-deprecating humor or self-mocking (McBride & Ball, 2022). If used successfully, this type of humor can direct attention to the self-mockery rather than the negative perceptions (Kim et al., 2016). However, not all cultures are comfortable with this humor. Self-deprecation has been shown to be perceived differently by people from different cultures, with, for example, US-Americans feeling uncomfortable with this type of humor (Martin & Sullivan, 2013). Hence, when deciding on the appropriateness of humor, cultural norms and values must be considered.

### ***The role of brand characteristics***

Lastly, how humor is perceived may depend on the characteristics that are prescribed to the organization in crisis. Prior research indicates that observers also evaluate humor based on how they perceive the sender of the message (e.g., an organization) (Romero & Cruthirds, 2007). Following this line of thought, the characteristics of a brand can be presumed to influence how humor is perceived during a crisis. In a study on online negative reviews Béal and Grégoire (2022) have found that brand personality (sincere vs. exciting) interacts with the type of humor used by the organization. For sincere brands, affiliative humor was shown to be more effective, while for exciting brands a reversed effect was found, despite prior findings in psychology and management acknowledging a general superiority of affiliative humor above aggressive humor (Béal & Grégoire, 2022).

Applying benign violation theory, it can be argued that brand personality may act as an alternative norm that makes the use of aggressive humor appear benign (Béal & Grégoire, 2022). For the field of crisis communication, it could therefore be expected that the characteristics that people prescribe to a brand could influence how people perceive their humor use in crisis communication. The following sections will elaborate further on the role of brand characteristics in this regard.

## 2.4 Brand archetypes and their potential interplay with humor

Brands have certain characteristics that they are commonly associated with by their stakeholders. In the field of crisis communication, these characteristics have been shown to be a powerful lens for brand managers to frame their online communication in consistency with the brand values (Nadeau et al., 2020). Within the field of organizational science, there have been different approaches to describe and operationalize such characteristics.

Most commonly, brand characteristics are seen as brand personalities that are inspired by human personality traits. Brand personality can be defined as a “set of human personality traits that are both applicable to and relevant for brands” (Azoulay & Kapferer, 2003, pp. 151). Brand personality in this sense is generally understood from the sender-side (Geuens et al., 2009; Konecnik & Go, 2008). Aaker’s model of brand personality identifies five different dimensions of brand personality: sincerity, excitement, competence, sophistication, and ruggedness (Aaker, 1997).

Nevertheless, research has identified other models and measures. One other concept that is used in literature on brand characteristics is the concept of brand archetypes. This concept distinguishes between twelve different brand archetypes that are autonomous in themselves (Kreicbergs & Ščeuļovs, 2022). This model offers the advantage that there is clearer distinction between archetypes, while other concepts such as brand personality are not mutually exclusive. Therefore, the concept of brand archetypes will be used for this paper rather than Aaker’s model of brand personality, as it allows for a clearer distinction between different types of brands.

### *2.4.1 The twelve brand archetypes*

Brand archetypes are internal models of typical, generic characters which embody characteristic motives and other qualities that are universally recognizable (Faber & Mayer, 2009). Originally, archetypes are rooted in the work of Jung (1964) who characterized common characters in legends. Focusing on the practical application of such archetypes in branding Mark and Pearson (as cited in Kreicbergs & Ščeuļovs, 2022) provide an overview of twelve brand archetypes, such as jester, sage, jester, outlaw, or caregiver (see Appendix A). Each archetype is autonomous but can be categorized within one of four clusters that share similar characteristics. These clusters



are (1) belonging and enjoyment, (2) independence and fulfillment, (3) stability and control, and (4) risk and mastery.

Looking at the role of humor in combination with these brand archetypes, one archetype stands out based on its characteristics. As the name indicates, the jester archetype is characterized as humorous, entertaining and sometimes irresponsible (Kreicbergs & Ščeulovs, 2022). Spangenberg (2021) describes this archetype as “driven by a desire to make others laugh and connect” (p.8). The author also argues that “jester brands break the rules and liven up everyday situations” (p.8.). Therefore, this archetype is often associated with character traits such as humorous, imaginative, creative and adventurous (Spangenberg, 2021). In terms of congruency of brand personality and humor type as argued for earlier, this humorous and somewhat irresponsible archetype can be expected to elicit more positive customer responses and perceptions of reputation and trust by making use of humor when communicating about a crisis.

Opposed to this humorous and adventurous stands the archetype of the sage that is categorized within the cluster of independence and fulfillment (Kreicbergs & Ščeulovs, 2022). Sage brands are commonly associated with knowledge, truth, sincerity, and understanding (Kreicbergs & Ščeulovs, 2022; Spangenberg, 2021) and use their intelligence and analytical skills to understand the world (Kreicbergs & Ščeulovs, 2022). Hence, this archetype can be summarized as truthful, rational and analytical and therefore embodies a stark contrast to the jester archetype. As this brand personality is therefore incongruent with the use of humor, it may be expected that sage archetypes perform worse in terms of achieving favorable customer outcomes when using humorous crisis responses than jester archetypes do.

Based on these characterizations, the following hypotheses are proposed:

**H3:** *Due to congruency effects with brand archetype, humorous crisis responses work better for jester archetypes in restoring consumer perceptions than they do for sage archetypes.*

Since there is insufficient literature to hypothesize on the effects of humor for sage archetypes, the following sub research question was proposed:

**SRQ:** *To what extent does type of humor (aggressive vs. affiliative) affect the success of the crisis response in restoring consumer perceptions for sage and jester archetypes?*

## 2.5 Overview of hypotheses

To provide a clear overview, a summary of hypotheses is given in Table 3.

**Table 3**

*Overview of hypotheses/sub research questions*

Number	Hypothesis
<b>H1</b>	Humorous crisis responses are more effective in restoring consumer perceptions than non-humorous messages in the case of a rumor on social media.
<b>H2</b>	Crisis responses using affiliative humor are more effective in restoring consumer perceptions in the case of a rumor on social media than messages using aggressive humor.
<b>H3</b>	Due to congruency effects with brand archetype, humorous crisis responses work better for jester archetypes in restoring consumer perceptions than they do for sage archetypes.
<b>SRQ</b>	To what extent does type of humor (aggressive vs. affiliative) affect the success of the crisis response in restoring consumer perceptions for sage and jester archetypes?

### 3. Method

#### 3.1 Research Design

To investigate the effects of brand archetype and type of humor on consumer perceptions, a 3 (no humor vs. affiliative humor vs. aggressive humor) by 2 (jester vs. sage brand archetype) experimental design was conducted (see Table 4). The 3x2 design was chosen to understand the effects and the potential interplay between the two different independent variables and compare the means of the six different conditions. Before conducting the between-subject experiment, this study was reviewed and approved by the BMS Ethics Committee of the University of Twente.

For this experiment a fictional context (organization and crisis) was used to avoid potential bias due to participants having prior experiences with existing organizations. A rumor was used as crisis context as prior research has confirmed the effectiveness of humorous crisis communication for low severity, unconfirmed and defensible crises (Xiao et al., 2018a; Yu et al., 2022).

**Table 4**

Research Design

Brand archetype	Type of humor		
	No humor	Affiliative humor	Aggressive humor
Jester	Jester archetype + no humor	Jester archetype + affiliative humor	Jester archetype + aggressive humor
Sage	Sage archetype + no humor	Sage archetype + affiliative humor	Sage archetype + aggressive humor

#### 3.2 Stimuli

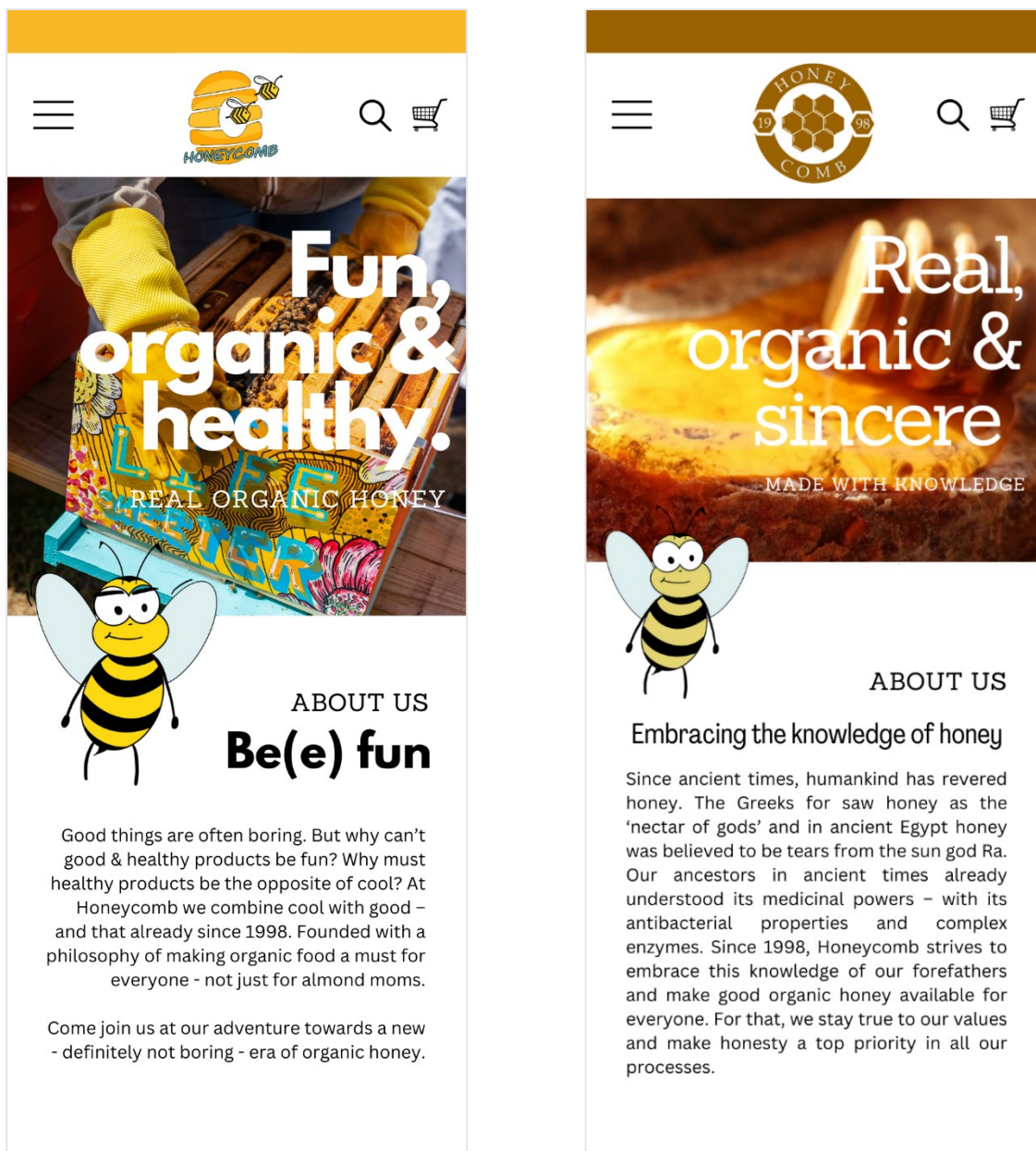
##### 3.2.1 Brand descriptions

To prime respondents on the personality of the (fictional) organization in crisis, participants were presented with an excerpt of the companies' online presence (see Figure 1), that is

tailored to the archetype characteristics as presented in Appendix A. The brand archetypes were chosen based on their associations with humor. First, the jester archetype was chosen based on its characterization as humorous and entertaining, with a desire to make others laugh (Kreicbergs & Ščaulovs, 2022; Spangenberg, 2021). Opposed to that, the sage archetype was chosen due to its serious, sincere, and analytical character (Kreicbergs & Ščaulovs, 2022).

**Figure 1**

*Fictional webpages for the jester (left) and sage archetype (right)*



To introduce the jester brand archetype, an excerpt from a fictional webpage was used, in which the company was presented within an “about us” section. To portray, the fun and entertaining nature of jester archetypes, characteristics such as humor, imagination and creativity were incorporated in the fictional webpage (Kreicbergs & Ščeulovs, 2022; Spangenberg, 2021). This was done by using signaling words such as ‘fun’, ‘cool’ and ‘adventure’, but also by using slang words (e.g., almond moms) and word jokes, such as ‘be(e) fun’. A dynamic and colorful logo and webpage design as well as an illustration of a bee were used to underline the imaginative and fun character of the brand.

To introduce the sage brand archetype to the participants, an excerpt from a fictional webpage was used. This excerpt featured an “about us” section in which the company presented itself and typical brand characteristics resembling the archetype. For the sage archetype, characteristics such as knowledge, sincerity, and truthfulness (Kreicbergs & Ščeulovs, 2022) were incorporated through providing general knowledge about the product and its history, as well as using signaling words such as ‘knowledge’ and ‘honesty’. To underline the knowledgeable character of the brand a neutral logo incorporating the founding year was included and colors of the webpage were kept natural.

### 3.2.2 Crisis description

As mentioned prior, a fictional crisis context was used for this experiment. Since prior research has confirmed the effectiveness of humorous crisis communication for unconfirmed and defensible crises (Xiao et al., 2018a; Yu et al., 2022), a fictional rumor was used.

The crisis was introduced through a (fictional) news article that addresses the rumor that the organization is faced with (see Appendix B). To make the crisis context relatable to a wide range of audience, a crisis context in the food sector has been chosen. The wording of the fictional newspaper article underlined the unverified nature of the rumor (e.g. “Despite the allegations made against Honeycomb, so far there is no definitive proof for any misconduct of the company.”)

### 3.2.3 Crisis response messages

In terms of crisis response, participants were presented with one of three possible scenarios: a response using aggressive humor, a response using affiliative humor, and a serious (no humor)

crisis response (see Figure 2). All responses were portrayed to participants in form of fictional Instagram posts including pictures and text. In line with Coombs (2007) deny strategies (attacking the accuser, denial, scapegoat) were used for all three manipulations of crisis responses. All manipulations were built upon the same structure: reassuring the company's values of honesty and integrity, explaining that the rumor stems from an alleged former employee, deny all allegations, and reassurance of good products and services. To depict the three different variations of humor, signaling words and statements have been used to manipulate the crisis responses.

**Figure 2**

*Fictional crisis responses on social media for the aggressive humor (left), affiliative humor (middle), and non-humorous condition (right)*



To depict aggressive humor in the crisis response, a picture featuring a kicking bee with an aggressive facial expression and the slogan "Kickin' liars out of the hive" was used. The text (see Appendix C) that was shown together with this post used colloquial language and made fun of the accuser ("So dear accuser: just ask us next time and we'll gladly give you a tour through our production sites. Maybe we can then see, where you go those stupid ideas from."), hence

matching darker forms of humor, such as sarcasm, disrespectful teasing, that are described as aggressive humor (Béal & Grégoire, 2022).

To depict affiliative humor in the crisis response, a picture featuring a bee closing a door to a hive and the slogan “Bye bye rumors” was used. The text (see Appendix D) that was shown together with this post used colloquial language but incorporated humor in a playful and benevolent way as described by Béal and Grégoire (2022). This is done by using word jokes such as ‘be(e) kind’ and playful poking (“Oops, looks like a former bee is barking up the wrong tree”).

To depict the non-humorous condition, a picture with a simple statement (“Denouncing current rumors”) and a neutral bee illustration was used in combination with a written response that used more serious and formal language. The non-humorous condition followed the same structure as the other manipulations, but no jokes or word puns were used. Instead, the text (see Appendix E) was kept short and simple, whilst adding a clear statement that denied any accusations (“We deny all claims of malpractices in our production processes”).

### 3.2.4 Pre-tests

To test whether the stimuli for this study served the intended purpose, pretests were conducted (see Appendix F). Participants were gathered through convenience sampling. Significance was evaluated at an alpha level of 5%.

To evaluate the introduction of the brand archetypes, a quantitative pre-test was conducted. Participants ( $n = 10$ ) were asked to read both brand descriptions. Afterwards, participants were asked to indicate to what extent the brand could be characterized based on four descriptions derived from the characteristics of sage and jester archetypes as described by Faber and Mayer (2009). A Wilcoxon Signed-Ranks test confirmed that the jester brand manipulation scored statistically significantly higher on “lives for fun and amusement”,  $Z = 0$ ,  $p = .005$ , and statistically significantly higher on “playful”,  $Z = 0$ ,  $p = .007$ , than the sage brand manipulation. Similarly, the sage brand manipulation scored statistically significantly higher on “values truth and knowledge”,  $Z = 52.5$ ,  $p = .014$ , and “wise”,  $Z = 45$ ,  $p = .007$ , than the jester brand manipulation.

To evaluate the effectiveness of the three humor conditions, participants ( $n = 10$ ) were asked to indicate how they perceive the crisis response based on two 7-point Likert scales,

ranging from non-humorous to humorous and from friendly to aggressive. Wilcoxon Signed-Ranks tests confirmed that affiliative humor scored statistically significantly higher on humor in comparison to the non-humorous condition,  $Z = 0$ ,  $p = .005$ . Furthermore, the test confirmed that aggressive humor scored statistically significantly higher on humor in comparison to the non-humorous condition,  $Z = 1$ ,  $p = .006$ . Next to that, aggressive humor was scored statistically significantly higher on the scale from friendly to aggressive than the benevolent humor condition,  $Z = 5.5$ ,  $p = .024$ .

To evaluate the crisis setting in terms of crisis type and responsibility attributions, participants ( $n = 10$ ) were asked to indicate their agreement to the statements “The situation presented is unverified” and “It is not proven that the organization is responsible for any misconduct” on a 7-point Likert scale. One sample Wilcoxon Signed-Ranks tests showed that the observed median for the statement “The situation presented is unverified” is significantly higher than the midpoint of the scale,  $Z = 33$ ,  $p = .030$ . Similarly, the results showed that the observed median for the statement “It is not proven that the organization is responsible for any misconduct” is significantly higher than the midpoint of the scale,  $Z = 51$ ,  $p = .014$ .

### 3.3 Measures

#### 3.3.1 Reputation

To measure reputation, a selection of items from the reputation quotient (Fombrun et al., 2000) were used (see Appendix G). The reasons, as to why only a selection of items was used are twofold. For one, using the entire scale would have gone beyond the scope of the study in terms of time for the participants. Second, not all dimensions of the reputation quotient were deemed relevant for this study, as participants were only presented with a small introduction of the organization that was mainly incorporating the dimensions of emotional appeal, products and services, vision and leadership, and social and environmental responsibility. Participants were asked to indicate their agreement to the items on a 7-point Likert scale ranging from strongly disagree to strongly agree. Statements for example include “I have a good feeling about the company” and “The company offers high quality products and services”.



### 3.3.2 Trust

Research in public relations commonly measures trust based on three forms of trustworthiness: ability, benevolence, and integrity (Mayer et al., 1995; Nguyen et al., 2009), although some authors have used different synonyms for the same or similar concepts (Hon & Grunig, 1999; Mayer et al., 1995). To measure trust in the fictional organization within this online experiment, a six-item scale by Hon and Grunig (1999) was used (see Appendix H), as this scale has been to be reliable in prior research (Hon & Grunig, 1999; Lee & Jahng, 2020). Participants were asked to indicate their agreement to the items on a 7-point Likert scale ranging from strongly disagree to strongly agree. The wording of the scale has been adapted to fit the research context. Items include for example “The company can be relied on to keep its promises” and “I feel very confident about the company’s skills”.

### 3.3.3 Scale construction

To test the scales used in this experiment, factor and reliability analyses were conducted. A factor analysis, using principal component analyses and varimax rotation, was conducted aiming at confirming the two constructs. Additionally, reliability analyses were used to determine the internal consistency of the scales.

The factor analyses for both the first and second measurement revealed that the items measured did not represent the scales as proposed (see Appendix I). Hence, a more thorough evaluation of the factor analyses was conducted. Based on a comparison of the factor analyses for the first and second measurement (see Appendix J), the following factors and corresponding items were found to be present in both measurements (see Table 5).

Based on these results, two different factors have been deduced from the analysis. These two factors represent two out of three main antecedents of trust. Factor 1 specifically represents aspects of the ability antecedent, as the items represent perceptions of skills and competencies. Nguyen et al. (2009) describe this antecedent of trust as the perception of the trustor that the trustee has “skills and competence to deliver a desired outcome” (p. 896). Hence, it can be argued that items Tru 5 and Tru 6 refer to the perceptions of skills, while Rep 4 refers mostly to the desired outcome of these abilities. Similarly, factor 2 represents aspects linked to the benevolence aspect of trust, as it represents the trustee’s intentions “to want to

do good with the trustor” (Nguyen et al., 2009, p. 896) and the “perception of a positive orientation of the trustee towards the trustor” (Mayer et al., 1995, p. 716). The formulation of the items refers to two specific characteristics of benevolence as described by Mayer et al. (1995): It suggests that the trustee has a specific attachment to the trustor, and it relates to the intrinsic motivation of the trustee.

A scale analysis confirmed the internal consistency of the ability scale for both the first measurement ( $\alpha = .85$ ) and the second measurement ( $\alpha = .79$ ). Similarly internal consistency for the benevolence scale was deemed good for both the first measurement ( $\alpha = .88$ ) and the second measurement ( $\alpha = .85$ ). Considering these findings, the decision was made to use ability and benevolence perceptions as outcome variables.

**Table 5**

New constructs according to factor analyses

Ability	Benevolence
Rep 4 - Honeycomb offers high-quality products.	Tru 2 - Whenever Honeycomb makes an important decision, I know it will be concerned about people like me.
Tru 5 - I feel very confident about Honeycomb’s skills.	Tru 4 - I believe that Honeycomb takes the opinions of people like me into account when making decisions.
Tru 6 - Honeycomb has the ability to accomplish what it says.	Tru 1 - Honeycomb treats people like me fairly and justly.

### 3.4 Procedure

Before starting the experiment, participants were given a description of the study introducing the general aim and duration of the experiment as well as contact information of the researcher (see Appendix K). Additionally, participants were asked to give informed consent. Afterwards,

participants were shown one of the two brand manipulations (jester vs. sage) to prime them on the fictional company. Scales were presented to the participants to measure the outcome variables. Participants were then shown the newspaper article introducing the rumor and allegations towards the organization. Next, participants were presented with one out of the three manipulations of crisis responses featuring either aggressive humor, affiliative humor, or no humor. Afterwards, participants were once again presented with scales to measure the outcome variables. To gain insights into demographics, the survey ended with questions regarding age, gender, nationality, education, and product interest. Upon ending the online experiment, participants were once again informed about the contact information of the researcher and displayed a summary of responses.

### 3.5 Participants

Data was collected from 191 individuals using a convenience sampling approach. The demographic information per condition is summarized in Table 6. Participants' age ranged from 17 to 67, with a mean age of 27. Out of the total of 191 participants, 13 participants did not indicate their age. The sample consisted of 39% male participants, 59% female participants and 2% of participants that indicated other or no gender identity. Since studies indicate that there might be cultural influences of humor (Jiang et al., 2019; Meaney, 2020), participants were collected only within Western and Northern Europe to limit potential biases. 49% of the sample were German, 45% were Dutch, and 6% of participants indicated other Western or Northern European nationalities. In terms of education, the sample mostly indicated high educational levels of a bachelor's degree and above. Out of the 191 individuals 19% had only completed high school, 8% completed an apprenticeship, 51% had a bachelor degree, 19% had a master degree or higher, and 3% indicated other levels of education such as state exams. Regarding product interest ("How often do you eat honey?"), a mean score of 3.1 on a 7-point Likert scale ranging from 'Never' to 'Very often' was found.

**Table 6***Distribution of sample characteristics*

Brand archetype		Type of humor					
		No humor		Affiliative humor		Aggressive humor	
Variable							
Jester	Age <sup>a</sup>	26.32 (SD = 9.86)		23.83 (SD = 5.63)		28.61 (SD = 12.23)	
	Gender <sup>b</sup>	Male	10	Male	11	Male	14
		Female	20	Female	21	Female	18
		Other	2	Other	0	Other	0
	Education <sup>c</sup>	1) 9			1) 7		
		2) 3			2)	1	
		3) 14			3) 15		
		4) 4			4) 6		
		5) 1			5) 1	-	
	Nationality <sup>d</sup>	1) 17			1) 16	1) 14	
		2) 12			2) 14	2) 15	
3) 2				3) 2	3) 3		
Product Interest <sup>e</sup>	2.81 (SD = 1.62)		2.97 (SD = 1.28)		3.03 (SD = 1.60)		
Sage	Age <sup>a</sup>	31.74 (SD = 15.61)		25.35 (SD = 7.43)		26.90 (SD = 11.15)	
	Gender <sup>b</sup>	Male	11	Male	15	Male	14
		Female	16	Female	19	Female	19
		Other	0	Other	1	Other	1
	Education <sup>c</sup>	1) 7			1) 5	1) 5	
		2) 3			2) 3	2) 3	
		3) 10			3) 18	3) 19	
		4) 6			4) 8	4) 6	
		5) 1			5) 1	5) 1	
	Nationality <sup>d</sup>	1) 9			1) 20	1) 18	
		2) 16			2) 13	2) 15	
3) 2				3) 2	3) 1		
Product Interest <sup>e</sup>	3.37 (SD = 2.10)		3.03 (SD = 1.67)		3.18 (SD = 1.78)		

<sup>a</sup> Mean (+ SD) of self-reported age

<sup>b</sup> Gender in total numbers

<sup>c</sup> Educational level in total numbers: 1)= High school level / 2)= Apprenticeship or similar / 3)= Bachelor degree / 4)=Master degree / 5)= Other

<sup>d</sup> Nationality in total numbers: 1)= German / 2)= Dutch / 3)= Other European

<sup>e</sup> Mean (+ SD) of self-reported product interest

To ensure the comparability of the results, tests were conducted to check for significant differences between the sample characteristics per condition (see Table 6). Participants were distributed equally among all six conditions by the survey software, however, due to exclusion of participants and incomplete responses the numbers of participants per condition ranged from 27 to 35 participants per condition. One-way ANOVAs indicated no significant differences in age ( $F(5, 177) = 1.90, p = .097$ ) or product interest ( $F(5, 190) = 0.38, p = .862$ ) between the conditions. Moreover, Chi-Square analyses showed no significant differences between the conditions in terms of gender ( $\chi^2(10, N=191) = 4.28; p = .934$ ), level of education ( $\chi^2(20, N=191) = 12.08; p = .964$ ) and nationality ( $\chi^2(10, N=191) = 5.52; p = .854$ ).

## 4. Results

In the following section results of both the manipulation checks and the analyses to test the proposed hypotheses will be reported. Since the results of the factor analysis suggested different constructs than originally expected, analyses were conducted for the dependent variables 'ability' and 'benevolence' rather than the original hypothesized variables 'reputation' and 'trust'. Hypotheses remained as proposed but were instead tested for 'ability' and 'benevolence'.

### 4.1 Manipulation checks

To check whether the stimuli and manipulations used in the experiment met their intended purpose, manipulation checks were conducted. A selection of items from the pre-tests were used to test the manipulations. A one sample Wilcoxon Signed-Ranks test was conducted to determine whether the mean of the sample for the crisis manipulation significantly differs from the criterion value. Furthermore, independent Mann Whitney-U tests were used to determine whether the group means of the two brand archetypes differed significantly, and whether the three humor conditions differed significantly. Significance was evaluated at an alpha level of 5%.

#### 4.1.2 Crisis description

To test whether the rumor crisis setting was perceived as such, participants were asked to evaluate the crisis setting. This was done by asking to what extent participants agreed to the following statement: "The situation presented is unverified." A 7-point Likert scale was used, ranging from 1 (totally disagree) to 7 (totally agree). Participants agreed that the crisis was unverified ( $M = 5.25$ ,  $SD = 1.28$ ), as a one-sample Wilcoxon Signed-Ranks test confirmed that the observed median significantly differed from the scale midpoint of 4,  $Z = 7.63$ ,  $p = .000$ .

#### 4.1.3 Brand archetype

To evaluate whether the brand personality matched the prescribed characteristics, a manipulation check was conducted. A Mann Whitney-U test confirmed that the jester brand manipulation scored statistically significantly higher on the description "playful",  $Z = -10.08$ ,  $p = .000$ , than the sage archetype, while the sage brand manipulation scored statistically significantly higher on the description "wise",  $Z = -6.23$ ,  $p = .000$ , than the jester brand manipulation (see Table 7).

**Table 7***Mean values (and standard deviations) for manipulation check of brand archetypes*

Brand characteristic	Brand archetype	
	Jester	Sage
“Playful”	5.56 (SD = 0.94)	3.03 (SD = 1.41)
“Wise”	3.92 (SD = 1.29)	5.10 (SD = 1.18)

*Note.* Manipulations were measured on a 7-point Likert scale (1 = description strongly misaligns, 7 = description strongly aligns).

#### 4.1.4 Crisis response messages

To evaluate the humor manipulations used in the crisis responses, participants were asked to evaluate the response that was shown to them on two 7-point bipolar scale ranging from non-humorous to humorous and friendly to aggressive (see Table 8). Mann Whitney-U tests comparing the conditions in sets of two showed that the aggressive humor manipulation was statistically significantly perceived as more humorous,  $Z = -6.10$ ,  $p = .000$ , than the non-humorous condition. Similarly, the affiliative humor manipulation was statistically significantly perceived as more humorous,  $Z = -8.63$ ,  $p = .000$ , than the non-humorous condition. Another Mann Whitney U test comparing the aggressive versus affiliative humor condition showed that the aggressive condition scored significantly higher on the aggressive character,  $Z = -5.81$ ,  $p = .000$ , than the affiliative condition.

**Table 8***Mean values (and standard deviations) for manipulation check of crisis response messages*

Prescribed characteristics	Type of humor		
	Aggressive	Affiliative	No humor
“Non-humorous” to “Humorous”	4.24 (SD = 1.74)	5.27 (SD = 1.20)	2.12 (SD = 1.24)
“Friendly” to “Aggressive”	5.05 (SD = 1.44)	3.37 (SD = 1.48)	3.41 (SD = 1.49)

*Note.* Manipulations were measured on a 7-point bipolar scale (1 = non-humorous / friendly, 7 = humorous / aggressive).

## 4.2 Mixed between-within subjects analyses of variance

Before conducting tests to confirm the hypotheses posed in this paper, an assumption check on normality was conducted for the pre- and post-measurements for ability and benevolence-based trust. Shapiro-Wilk tests revealed statistically non-normal distributions for all four measurements despite close resemblance of the histograms to normal distributions. According to Pallant (2019), however, the violation of the normality assumption should not cause significant problems due to the robustness of most methods for large sample sizes. Assumption checks for homogeneity of variance were conducted separately for each analysis and indicated no violation of this assumption.

Additionally, a correlation analysis between the dependent variables was conducted. The results show significant moderate to large correlation according to Cohen's (1988) guidelines, however, do not pose any concerns in terms of multicollinearity, as suggested by Pallant (2010). The correlations indicate a large correlation between ability-based trust and benevolence-based trust for the first measurement,  $r(191) = .582, p = .000$ , as well as for the second measurement,  $r(191) = .694, p = .000$ . Since multivariate analyses of variance work best for moderately correlated dependent variables (Pallant, 2010), separate mixed between-within subjects analyses of variance were conducted for the two dependent variables.

### 4.2.1 Ability-based trust

A mixed between-within subjects analysis of variance was conducted to assess the impact of humor (aggressive humor, affiliative humor, and no humor) and brand archetype (sage vs. jester) on participants' evaluations of ability across two measurements (pre-crisis score and post-crisis score). The analysis focused on the interactions between the within-subjects and between-subjects variables which indicate how the different experimental conditions reacted to the different crisis responses, but also on the effect of brand archetype as a between subject variable, as this variable was manipulated before the crisis introduction and could therefore have effects independent from crisis effects. Since post-hoc analyses for interactions between within-subjects and between-subjects variables are not possible (de Jong et al., 2020), complementary pairwise repeated measures analyses of variance were conducted for the three



types of humor. Table 9 presents the multivariate test results for the within-subjects effects and interactions with the between-subjects variables for the dependent variable ability.

**Table 9**

*Multivariate test results for the within-subjects effects and interactions with the between-subjects variables – for the dependent variable ‘ability’*

Independent variable	Wilks' Lambda	F	df	Error df	Sig.	Partial Eta Squared
Crisis effects <sup>a</sup>	.809	43.60	1	185	.000	.191
Crisis effects <sup>a</sup> * Brand archetype	.998	.38	1	185	.540	.002
Crisis effects <sup>a</sup> * Humor type	.923	7.71	2	185	.001	.077
Crisis effects <sup>a</sup> * Brand archetype * Humor type	.968	3.03	2	185	.051	.032

<sup>a</sup> Crisis effects refer to the difference between pre- and post-crisis scores.

Regarding the between-subjects variable brand archetype, results showed a significant main effect for brand archetype,  $F(1, 185) = 7.39, p = .007$ , partial eta squared = .038. As shown in Table 9, a significant difference between the two moments of measurement was found, Wilks' Lambda = .809,  $F(1, 185) = 43.60, p = .000$ , partial eta squared = .191. The partial eta squared indicates a substantial difference between the pre- and post-crisis scores. Moreover, a significant interaction effect between crisis effects and humor was found, Wilks' Lambda = .923,  $F(1, 185) = 7.71, p = .001$ , partial eta squared = .077, indicating that the type of humor influenced how participants reacted to the crisis response. No significant interaction effect was found between crisis effects and brand archetype, Wilks' Lambda = .998,  $F(1, 185) = 0.38, p = .540$ , hence indicating that brand archetype did not result in a significant difference between the pre- and post-crisis scores. Finally, the three-way interaction effect between crisis effects, brand archetype and humor, Wilks' Lambda = .968,  $F(2, 185) = 3.03, p = .051$ , was found to be non-significant, though the p-value of .051 could be argued to indicate a tendency.

To specifically investigate the differences between the three types of humor, repeated measures analyses of variance were conducted to compare the humor types in pairs. Table 10 gives an overview of these pairwise comparisons. The results indicate that participants within

the aggressive humor condition evaluated ability significantly more negative than those in the affiliative humor or non-humorous condition (see Table 11). No significant difference was found between the non-humorous and affiliative humor condition. Regarding the almost significant three-way interaction, pairwise comparisons only show a significant interaction effect for the comparison between the affiliative humor and non-humorous condition.

**Table 10**

*Multivariate test results for the pairwise comparisons of within-subjects effects and interactions with the between-subjects variables – for the dependent variable ‘ability’*

Comparison	Wilks' Lambda	F	df	Error df	Sig.	Partial Eta Squared
<b>No humor &amp; aggressive humor</b>						
Crisis effects <sup>a</sup>	.698	51.97	1	120	.000	.302
Crisis effects <sup>a</sup> * Brand archetype	.996	.52	1	120	.474	.004
Crisis effects <sup>a</sup> * Humor type	.965	4.33	1	120	.040	.035
Crisis effects <sup>a</sup> * Brand archetype * Humor type	.986	1.69	1	120	.196	.014
<b>Aggressive humor &amp; affiliative humor</b>						
Crisis effects <sup>a</sup>	.800	32.23	1	129	.000	.200
Crisis effects <sup>a</sup> * Brand archetype	.975	3.31	1	129	.071	.025
Crisis effects <sup>a</sup> * Humor type	.892	15.56	1	129	.000	.108
Crisis effects <sup>a</sup> * Brand archetype * Humor type	.989	1.48	1	129	.226	.011
<b>Affiliative humor &amp; no humor</b>						
Crisis effects <sup>a</sup>	.916	11.14	1	121	.001	.084
Crisis effects <sup>a</sup> * Brand archetype	.998	.20	1	121	.655	.002
Crisis effects <sup>a</sup> * Humor type	.977	2.88	1	121	.093	.023
Crisis effects <sup>a</sup> * Brand archetype * Humor type	.953	5.90	1	121	.017	.047

<sup>a</sup> Crisis effects refer to the difference between pre- and post-crisis scores.

**Table 11**

*Mean ability scores (and standard errors) for different humor types*

Type of humor	Mean (SE) pre-crisis	Mean (SE) post-crisis
No humor	4.81 (SE = 0.13)	4.30 (SE = 0.14)
Aggressive humor	4.88 (SE = 0.12)	3.96 (SE = 0.13)
Affiliative humor	4.64 (SE = 0.12)	4.48 (SE = 0.13)

Though results indicate a significant effect of humor across the measurements, contrary to hypothesis 1 humorous crisis responses in general did not lead to higher post-crisis scores for ability. In line with hypothesis 2, affiliative humor resulted in less negative impact on ability perceptions than aggressive humor. Contrary to hypothesis 3 and in response to SRQ1, no interaction effect was found between crisis effects, brand archetype and humor or between brand archetype and humor, suggesting that there are no congruency effects between brand archetype and type of humor for ability-based trust. Nevertheless, the p-value of .051 could indicate a tendency in the expected direction, with the sage archetype achieving least damage on ability perceptions when using no humor and jester archetype achieving least damage when using affiliative humor. Additionally, brand archetype generally influenced ability perceptions, with the sage archetype scoring higher on ability ( $M = 4.68, SE = 0.09$ ) as compared to the jester archetype ( $M = 4.34, SE = 0.09$ ), though the partial eta squared indicates a small effect size (Cohen, 1988).

#### **4.2.2 Benevolence-based trust**

A mixed between-within subjects analysis of variance was conducted to assess the impact of humor (aggressive humor, affiliative humor, and no humor) and brand archetype (sage vs. jester) on participants' evaluations of benevolence across two measurements (pre-crisis score and post-crisis score). The analysis focused on the interactions between the within-subjects and between-subjects variables which indicate how the different experimental conditions reacted to the different crisis responses, but also on the effect of brand archetype as a between subject

variable. Since post-hoc tests are not possible for this type of analysis, complementary pairwise repeated measures analyses of variance were conducted.

**Table 12**

*Multivariate test results for the within-subjects effects and interactions with the between-subjects variables – for the dependent variable ‘benevolence’*

Independent variable	Wilks' Lambda	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Crisis effects <sup>a</sup>	.918	16.60	1	185	.000	.082
Crisis effects <sup>a</sup> * Brand archetype	.996	.68	1	185	.410	.004
Crisis effects <sup>a</sup> * Humor type	.971	2.78	2	185	.064	.029
Crisis effects <sup>a</sup> * Brand archetype * Humor type	.949	4.99	2	185	.008	.051

<sup>a</sup> Crisis effects refer to the difference between pre- and post-crisis scores.

Regarding the between-subjects variable brand archetype, results showed no significant main effect,  $F(1, 185) = 2.07, p = .152$ . As shown in Table 12, a significant effect for crisis effects was found, Wilks' Lambda = .918,  $F(1, 185) = 16.60, p = .000$ , partial eta squared = .082. The partial eta squared indicates a moderate difference between the pre- and post-crisis scores. No significant interaction effect between crisis effects and humor was found, Wilks' Lambda = .971,  $F(2, 185) = 2.79, p = .064$ . Similarly, no significant interaction effect was found between crisis effects and brand archetype, Wilks' Lambda = .996,  $F(1, 185) = 0.68, p = .410$ . Finally, a significant three-way interaction effect between crisis effects, brand archetype and humor, Wilks' Lambda = .949,  $F(2, 185) = 4.95, p = .008$ , partial eta squared = .051 was found, suggesting that combinations of humor and brand archetype across the two measurements had different effects on perceptions of benevolence.

To specifically investigate the differences between the three types of humor, repeated measures analyses of variance were conducted to compare the humor types in pairs, with focus

on the three-way interaction. Table 13 gives an overview of these pairwise comparisons. With regard to the three-way interaction between crisis effects, humor and brand archetype, the results show significant differences for the ‘aggressive humor – affiliative humor’ comparison and the ‘no humor – affiliative humor’ comparison. No differences were found between the non-humorous and aggressive humor conditions.

**Table 13**

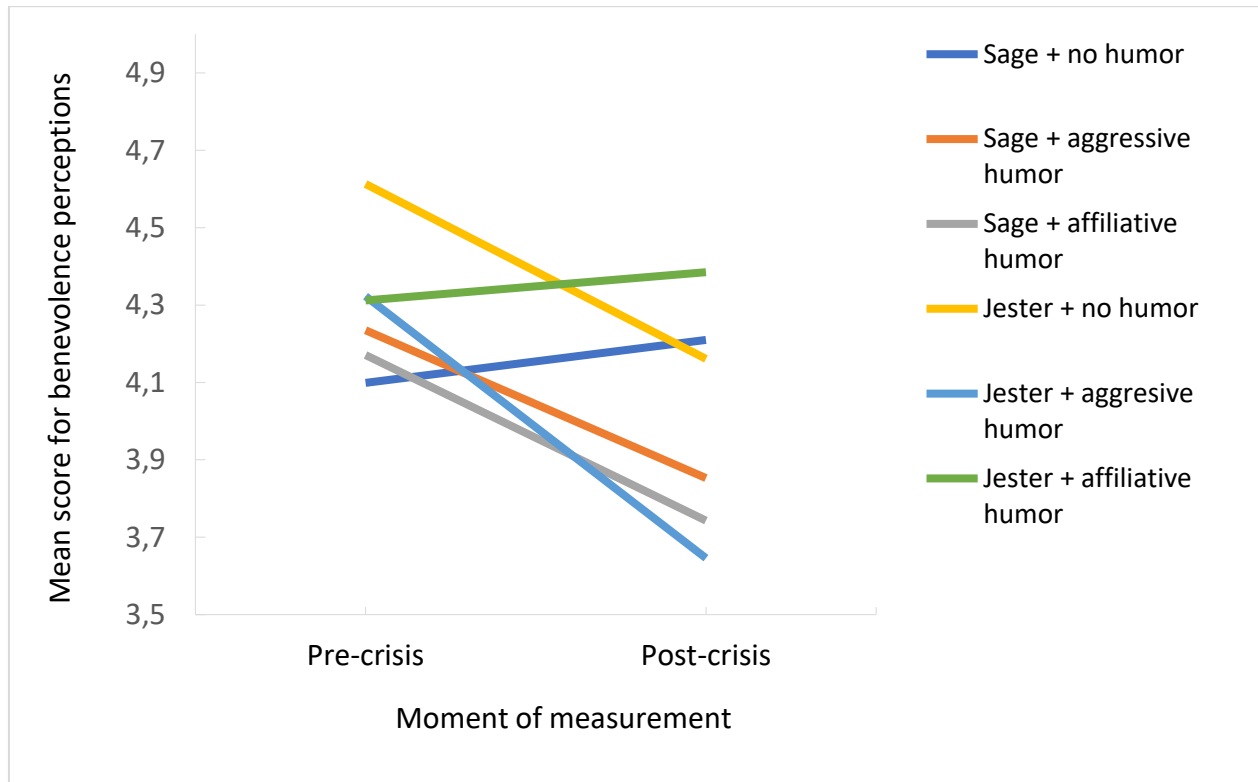
*Multivariate test results for the pairwise comparisons of within-subjects effects and interactions with the between-subjects variables – for the dependent variable ‘ability’*

Comparison	Wilks' Lambda	F	df	Error df	Sig.	Partial Eta Squared
<b>No humor &amp; aggressive humor</b>						
Crisis effects <sup>a</sup>	.885	15.60	1	120	.000	.115
Crisis effects <sup>a</sup> * Brand archetype	.954	5.85	1	120	.017	.046
Crisis effects <sup>a</sup> * Humor type	.967	4.11	1	120	.045	.033
Crisis effects <sup>a</sup> * Brand archetype * Humor type	.995	.57	1	120	.451	.005
<b>Aggressive humor &amp; affiliative humor</b>						
Crisis effects <sup>a</sup>	.888	16.27	1	129	.000	.112
Crisis effects <sup>a</sup> * Brand archetype	.997	.35	1	129	.557	.003
Crisis effects <sup>a</sup> * Humor type	.970	4.03	1	129	.047	.030
Crisis effects <sup>a</sup> * Brand archetype * Humor type	.962	5.15	1	129	.025	.038
<b>Affiliative humor &amp; no humor</b>						
Crisis effects <sup>a</sup>	.968	3.98	1	121	.048	.032
Crisis effects <sup>a</sup> * Brand archetype	1.000	.03	1	121	.861	.000
Crisis effects <sup>a</sup> * Humor type	1.000	.002	1	121	.965	.000
Crisis effects <sup>a</sup> * Brand archetype * Humor type	.929	9.30	1	121	.003	.071

<sup>a</sup> Crisis effects refer to the difference between pre- and post-crisis scores.

**Figure 3**

*Three-way interaction effects between crisis effects (pre- vs. post-crisis), humor and brand archetype on perceptions of benevolence*



The three-way interaction indicates an interplay between brand archetype and type of humor across the two measurements (see Figure 3), though significant differences were only found between aggressive and affiliative humor as well as affiliative humor and no humor. Table 14 gives a summary of the mean values for both pre- and post-crisis scores per experimental condition. Contrary to hypothesis 1, humorous crisis responses were not generally more effective in restoring perceptions of benevolence, rather the interaction indicates that the effect of humor changes as the levels of brand archetype and crisis effects change. Comparing the affiliative and aggressive conditions, affiliative humor only yields better benevolence scores than aggressive humor in the case of the jester archetype, hence only partly confirming hypothesis 2. Contrary to hypothesis 3, the results do not confirm that humorous crisis responses in general work better for jester archetypes in restoring benevolence perceptions,

than they do for sage archetypes. Only affiliative humor seems to be more effective for restoring perceptions of benevolence in the jester archetype. Looking at the mean scores in Table 14, it can be observed that the use of affiliative humor for the jester archetype resulted in an increase in benevolence perceptions, while the non-humorous condition and the aggressive humor condition resulted in comparable decreases in benevolence scores. For the sage archetype, both the humor conditions showed a decrease in benevolence scores, while the non-humorous condition indicates an increase in benevolence perceptions from pre- to post-crisis scores.

**Table 14**

*Mean benevolence scores (pre- and post-crisis) per condition*

Brand archetype	Type of humor	Mean pre-crisis	Mean post-crisis
Sage	No humor	4.10 (SE = 0.19)	4.21 (SE = 0.20)
	Aggressive humor	4.24 (SE = 0.17)	3.85 (SE = 0.18)
	Affiliative humor	4.17 (SE = 0.17)	3.74 (SE = 0.18)
Jester	No humor	4.61 (SE = 0.18)	4.16 (SE = 0.19)
	Aggressive humor	4.32 (SE = 0.18)	3.65 (SE = 0.19)
	Affiliative humor	4.31 (SE = 0.18)	4.39 (SE = 0.19)

## 5. Discussion

### 5.1 Key findings

Inspired by the increasing use of humor in the practice of crisis communication, this study aimed at investigating the extent to which humor, and specifically aggressive and affiliative humor, can be used as a successful crisis communication strategy as opposed to traditional non-humorous crisis responses. Furthermore, this study also explored a potential interplay between types of humor and brand archetype (sage vs. jester). Thereby, this study contributes to a growing body of research on the effects of humor on crisis communication, as it compliments existing knowledge on how humor can be used in crisis communications and how brand characteristics can impact its success.

This paper aimed to answer two main research questions: (1) “To what extent does humor use in response to a rumor on social media affect consumer perceptions?” and (2) “To what extent does brand archetype influence the potential effects of humorous crisis responses?”. Originally, this study conceptualized consumer perceptions as reputation and trust. A factor analysis, however, suggested two other underlying constructs being measured in this experiment: ‘ability’ and ‘benevolence’, which have been shown to be two antecedents of trust (Mayer et al., 1995; Nguyen et al., 2009). Results of these analyses indicate differing results for the two outcome variables.

Due to the complexity of the experiment and analyses, a discussion of the results in relation to the research questions and hypotheses will be differentiated by outcome variable.

#### 5.1.1. Perceptions of ability

Based on the theoretical background discussed in this paper, it was expected that humorous crisis responses are generally more effective in limiting damage to attitudinal outcomes.

Findings, however, did not confirm these expectations as humorous crisis responses were not found to be generally more effective in limiting damage to perceptions of ability. Findings rather indicate to make a clear distinction between affiliative and aggressive humor types when evaluating the effects of humor on ability perceptions. This challenges the notion that humor in general has a positive effect on stakeholder perceptions (Xiao et al., 2018a) as well as the expectation that the alignment between humor and the informal environment of social media



platforms could lead to strategic advantages (McGraw et al., 2015; Xiao et al., 2018a; Yu et al., 2022). Instead, the results align with a study on online public complaints which found that affiliative humor results in better consumer perceptions than aggressive humor, and leads to fewer negative motives, most likely due to the benign aspect eliciting to higher amusement (Béal & Grégoire, 2022).

Unlike expected, brand archetypes did not significantly influence the way in which humor affected perceptions of ability. This contradicts prior findings of Béal and Grégoire (2022) that the personality of a brand can influence the effects of humorous messages on attitudinal outcomes. Despite non-significant results for the interplay between humor and brand archetype, results, however, indicate a tendency in the expected direction. That is that jester archetypes achieve the least perceptual damage on ability perceptions when using affiliative humor, while sage archetypes do so by using non-humorous crisis responses.

Furthermore, findings of this present study suggest a general difference between the perceived ability scores of jester and sage archetypes. Results show generally higher ability scores in the sage conditions than for the jester condition. Even though differences are minimal, a statistically significant effect was found. A possible explanation for this general difference between the archetypes might be the characteristics associated with sage archetypes that could be argued to be highly related to what people perceive as ability.

### 5.1.2 Perceptions of benevolence

As mentioned prior, it was expected that humorous crisis responses are generally more effective in limiting damage to attitudinal outcomes. Additionally, an interaction effect between brand archetype and type of humor across the measurements was expected. More specifically, it was expected that humorous crisis responses work best for jester archetypes due to the congruency effects between brand associations and humor.

A mixed between-within analysis of variance confirmed a three-way interaction effect between humor type, brand archetype and crisis effects and therefore confirms prior findings that there is a relationship between the personality of a brand and the type of humor used (Béal & Grégoire, 2022). For the sage archetype, the non-humorous condition appears to be most effective in restoring benevolence perceptions. In contrast, benevolence scores for the jester

archetype seem to be restored best by affiliative humor. Notably, both jester and sage archetypes did show an increase in benevolence perceptions from pre- to post-crisis scores when using the aforementioned types of humor.

Results for benevolence perceptions defy the general claim that humor has a positive effect on stakeholder perceptions (Xiao et al., 2018a). While the superiority of affiliative humor above aggressive humor, as described by Béal and Grégoire (2022), holds truth for the jester archetype, no indication for that can be found for the sage archetype in this study. Rather, the results of this study add towards existing literature by showing that sage archetypes best restore perceptions of benevolence with non-humorous crisis responses in response to rumor crises on social media.

These differences in the interaction effects between sage and jester archetypes might best be explained with congruency effects between the type of humor and the associations consumers have with a brand. For the jester archetype in specific, these congruency effects might act as an alternative norm (see Béal & Grégoire, 2022) that makes the norm violation of humor during a crisis be perceived as benign. Consequently, affiliative humor might be perceived as more natural for jester archetypes, whereas sage archetypes align better with non-humorous communication.

### *5.2 Theoretical and practical implications*

This study contributes to a growing body of research that examines the effects of humor use in corporate communications. Findings provide implications for both researchers and practitioners on the use of humor as part of social media crisis communications, by specifically looking into the effects of different types of humor and the role that brand archetypes play in this context. Research has already identified effects of humor and brand personality in the context of online public complaints (Béal & Grégoire, 2022). This study therefore builds upon existing knowledge to test the effects of humor and brand characteristics in the context of online crises. Findings indicate effects of humor and brand archetypes for both ability and benevolence perceptions, even though the effects between the outcome variables differ. Therefore, this study adds to existing research and emphasizes the importance of humor as a crisis response strategy on the research agenda.

From a practical standpoint, the results of this study emphasize the benefits that practitioners in the field of crisis communication can potentially gain from considering humor as a crisis response strategy. Several studies have found evidence of the potential positive effects of humor on attitudinal outcomes (Béal & Grégoire, 2022; Xiao et al., 2018a; Yu et al., 2022). In line with this, this study has confirmed the potential positive effects of humor and provides guidelines on the factors and context that influence the effectiveness of humor in crisis communication. Practitioners should generally consider affiliative humor due to its benign character. However, results for benevolence perceptions also indicate a context dependency based on the type of brand archetype. For sage brands, non-humorous responses should be used for best results, while jester brands should consider using affiliative humor instead.

### 5.3 Limitations and recommendations for future research

First and foremost, the dependent variables used in this study should be addressed. Originally this study aimed at investigating the effects of humor and brand archetypes on the dependent variables 'trust' and 'reputation'. However, factor and scale analyses revealed two different outcome variables, namely ability and benevolence perceptions, which are discussed in literature as antecedents of trust (Mayer et al., 1995; Nguyen et al., 2009), so that results could be evaluated in light of that. While results of this study might therefore not answer the research questions in terms of effects on reputation and trust, the results nonetheless offer relevant insights in how humor and brand archetypes as characteristics of social media crisis responses can affect consumer perceptions.

Secondly, it should be noted that a fictional context has been used in this study. While this allowed for better control over confounding variables, it also limits this study in a way that the results do not take into other factors that the SCCT deems important in influencing stakeholder perceptions, such as prior relationship or crisis history (Coombs, 2004). Due to the complexity of organizational crises, it was beyond the scope of the study to consider those potential factors. While results of this study show significant effects for ability and benevolence, researchers and practitioners should evaluate these results in context.

Lastly, the sample of this experiment should be discussed. Scientific literature on humor indicates that there might be cultural influences of humor (Jiang et al., 2019; Meaney, 2020),

however, does not specify on what regional level such differences can be found. For this specific study, a sample including participants from Western and Northern European countries was used. Even though this limits cultural differences to a certain extent, it can be argued that a multinational sample does not fully exclude potential biases based on differences in humor across cultures.

Regarding future directions for research, some recommendations can be made. For one, the present study found results for the effects of humor and brand archetypes on the perceptions of ability and benevolence. As originally intended, future research should aim to understand the effects of these factors on reputation and trust, to support or challenge other findings in literature that mostly focus on those outcome variables. Nevertheless, scales for these two constructs should be considered thoroughly if used in the same study, as trust and reputation are rarely used and tested in combination.

Secondly, the present study focused only on the two brand archetypes sage and jester. Even though the jester archetype is the brand archetype which can be best connected to humor, studies should be conducted to evaluate similar effects for other brand archetypes.

Lastly, according to SCCT rumors belong to the victim crisis cluster that is generally connected to low responsibility attributions (Coombs, 2007). Generally, however, higher responsibility attributions lead to higher initial threats to the organization's reputation (Coombs, 2007; Coombs & Holladay, 1996). Research should be conducted to test whether the effects found in this present study can be confirmed for other types of crises or whether higher responsibility attributions result in humor being perceived as unfitting for the situational context.

## 5.4 Conclusion

Humor is an essential part of human interaction, and with the rise of social media it has also acquired an important position in organizations' communication online. To contribute to the theoretical understanding of this growing field, this study aimed to answer if and to what extent humor can influence consumer perceptions after organizational crises, specifically rumors, and to what extent the success of such humorous crisis responses depends on the characteristics associated to a brand.

The study shows different effects of humor and brand archetypes on perceptions of ability compared to perceptions of benevolence. For ability perceptions, the type of humor influenced participants' reactions towards the crisis response. Moreover, ability scores were shown to depend on the brand associations in general, with sage archetypes receiving generally higher scores than their jester counterparts. For benevolence perceptions, however, the success of humor across the two measurements depended on the brand archetype. Jester archetypes were most successful at limiting attitudinal damage when using strategies including affiliative humor, whereas sage brands did best in limiting damage to benevolence perceptions by using a non-humorous crisis response.

With these findings the present study contributes to a better understanding of the high context-dependency of crisis communication strategies. It builds upon existing research on the effects of humor as a crisis response and uses insights of related fields, such as online public complaints, to build a case for humor use in crisis communication. Findings of this research show the significance of this study as they highlight the ability of factors such as humor or brand associations in influencing the effectiveness of crisis communication strategies.

Nevertheless, results should be evaluated with the experimental design in mind since results of this study are based on a fictional situation and only examined the effects for one specific type of crisis. Hence, future research should further deepen the academic understanding of the role of humor and brand archetypes for different types of crises and investigate potential confounding variables that cannot be controlled for in real-life situations.

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## Appendix A

### Brand archetypes and characteristics

<i>Archetype</i>	<i>Description</i>	<i>Characteristic</i>	<i>Example</i>
<i>Outlaw</i>	They want to shake things up, their basic desire is revolution. They want to destroy what does not work for them or for society.	Rebellious, the survivor and a rulebreaker. Can be wild and destructive	Harley Davidson
<i>Jester</i>	They want to live in the present with full joy.	Living for fun. Entertaining, and sometimes irresponsible	NFL
<i>Lover</i>	They want to achieve intimacy and experience sensual pleasure. Aim to maintain a relationship with people	Intimate, romantic, sensual, and passionate. Seductive, delighted, warm, playful, erotic, and enthusiastic	Old Spice, Victoria's Secret
<i>Sage</i>	They want to find the truth. Use their intelligence and analysis to understand the world.	Values enlightening and knowledge, truth, and understanding	Google
<i>Caregiver</i>	They want to protect others from harm, to help, and to take care of people.	Caring, compassionate and generous. Protective, devoted, friendly, helping, and trusting	Nivea, Pampers, Gillette
<i>Hero</i>	They are all about rising to the challenge. They want to prove their own worth through difficult action.	Courageous, rescuer, crusader, persistent, strong, resilient, determined, disciplined	Nike, Barbasol
<i>Magician</i>	They want to know how the world works and influence its transformation.	The visionary, the alchemist, and focused on natural forces	Disney
<i>Explorer</i>	They seek discovery and fulfillment. Desire to be free, to find out who they are by exploring the world.	Independent, adventurous, and searching for an authentic and fulfilling life	The North Face, Jeep
<i>Creator</i>	They live for creative self-expression and want to participate in forming a vision.	Innovative, artistic, self-driven, inventive, a dreamer. Often nonsocial. Focused on quality	Lego, Apple
<i>Everyman</i>	They have the basic desire to connect with others; want to belong, to fit in.	The working-class or common person, the neighbor, and realistic	GAP, Axe
<i>Ruler</i>	They want to control, raise a family, and/or build a successful company or community. The leader, the boss, and the judge.	Influential and stubborn. High level of dominance, a strong sense of power and control	Dos Equis, Rolex
<i>Innocent</i>	The desire for simple purity, goodness, happiness, faith, and optimism.	Pure, faithful, naive, optimistic, child-like character; humble	Dove

Adopted from Kreicbergs and Ščeuļovs (2022)

## Appendix B

### Crisis description

#### Rumors about ingredient scam

*Honeycomb rumored to use rice syrup to stretch honey*



*A former employee of the honey manufacturer Honeycomb accuses the company of using methods of stretching its honey to press prices on the European market*

At the start of the week, rumors emerged about potential ingredient scams at honey manufacturer Honeycomb. In an interview with EUH News, a former employee made claims that honey produced by Honeycomb is being stretched with rice syrup on a large scale to reduce market prices and gain competitive advantages. So far the company has not responded to the allegations.

The company Honeycomb is well-known on the European market for its affordable organic honey, which is marketed with claims of highest quality at a low price. In the past Honeycomb has had major partnerships with influencers making the brand especially popular with a younger audience. During the start of the week, however, voices on social media have changed after a former employee made allegations about the company scamming customers by adding rice syrup to its honey.

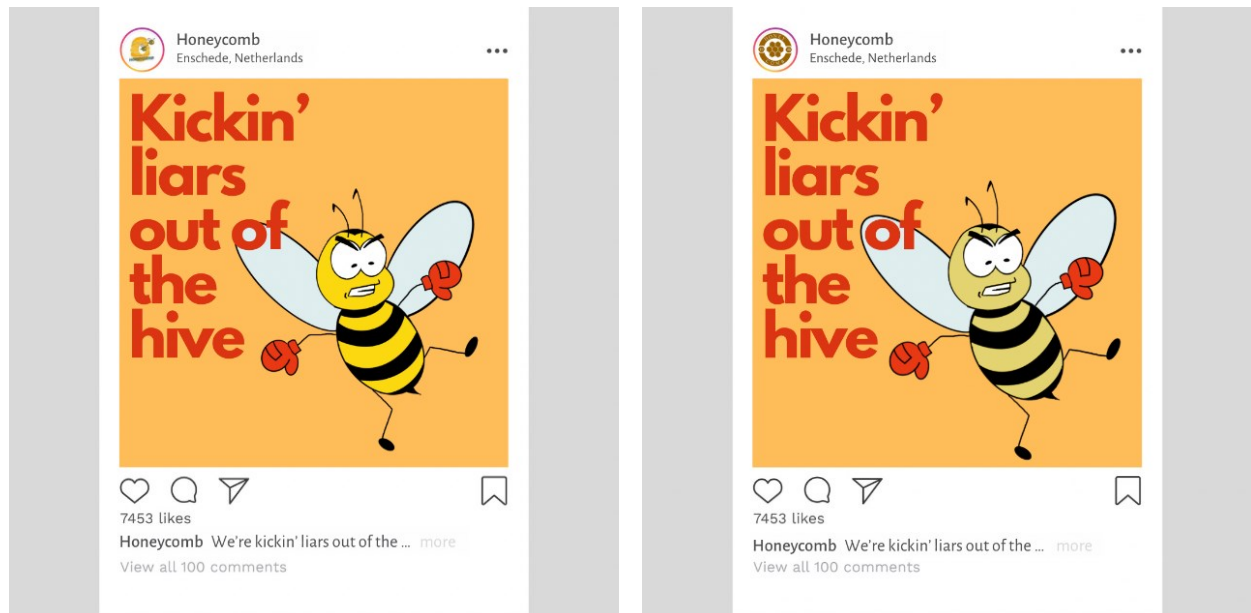
In the interview with EUH news, the employee who decided to stay anonymous, claimed that Honeycomb production sites dry honey before stretching it with rice syrup. Multiple honey manufacturers have been criticized for using such practices in the past, Honeycomb, however, always claimed that its honey is produced 100% naturally and in line with international and European standards. Despite the allegations made against Honeycomb, so far there is no definitive proof for any misconduct of the company.

## Appendix C

### Crisis response – aggressive humor

We're kickin' liars out of the hive. We at Honeycomb value honesty and integrity above all else and don't want to give room to those that hurt others with false allegations. Last week, an allegedly former employee claimed that we use malpractices in our manufacturing processes. So far, we cannot confirm whether this anonymous source has ever worked for us, because our "sting operation" is still in full action. But we can tell you one thing for sure: our honey is as good as ever and produced within highest standards. So dear anonymous source: just ask us next time and we'll gladly give you a tour through our production sites. Maybe we can then see where you got those stupid ideas from.

Everyone else: Rest assured, our busy bees make sure that only the best ingredients land in our Honeycomb honeys.

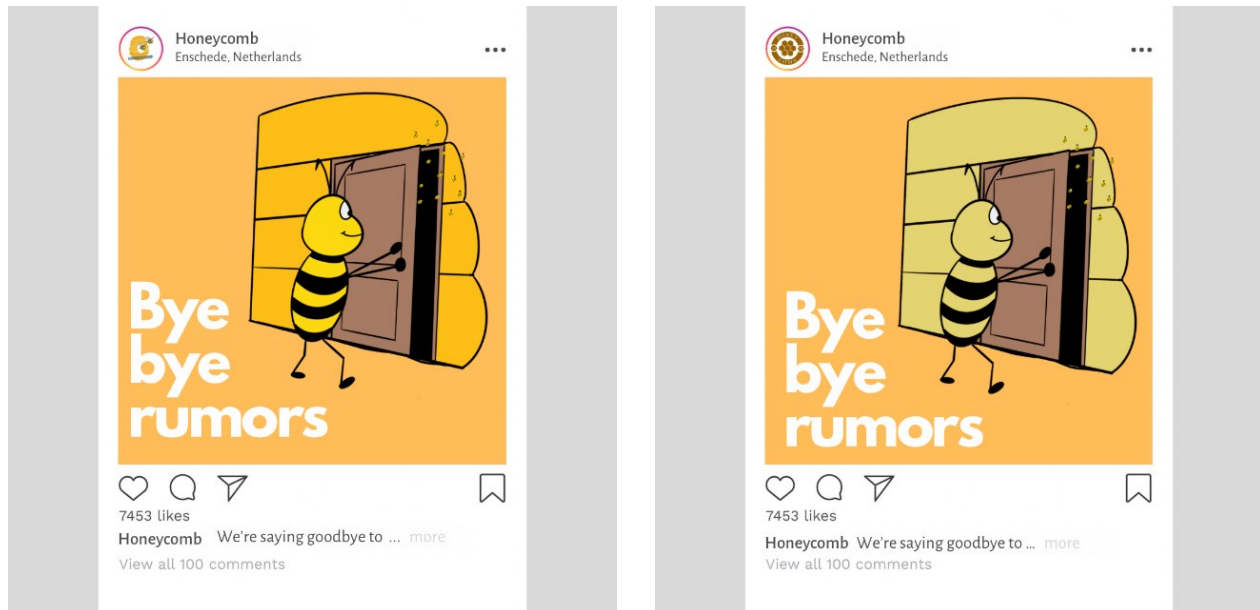


## Appendix D

### Crisis response – affiliative humor

Oops, looks like a former bee is barking up the wrong tree. We at Honeycomb value honesty and integrity above all else and therefore want to say goodbye to rumors. Last week, an allegedly former employee claimed that we use malpractices in our manufacturing processes. While we cannot yet confirm whether this anonymous source has ever worked for us, we can tell you one thing for sure: our honey is as good as ever and produced within highest standards. So, let's be(e) kind to each other and stop the spread of false rumors.

Rest assured, our busy bees make sure that only the best ingredients land in our Honeycomb honeys – just like it is meant to be(e).

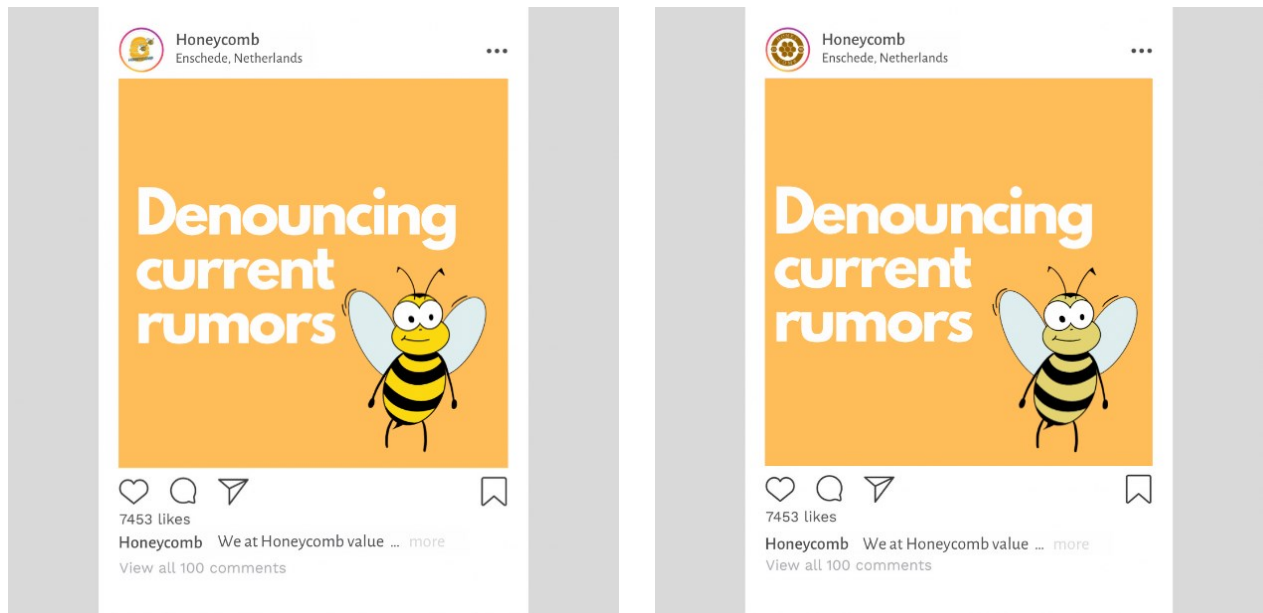


## Appendix E

### Crisis response – no humor

We at Honeycomb value honesty and integrity above all else and don't want to give room to those that spread false allegations. Last week, an allegedly former employee claimed that we use malpractices in our manufacturing processes. While we cannot yet confirm whether this anonymous source has ever worked for us, we can only reiterate that our honey is as good as ever and produced within highest standards. We deny all claims of malpractices in our production processes.

Be assured that we at Honeycomb make sure only the best ingredients land in our honey jars.



## Appendix F

### Pre-tests and manipulation checks

*Dear participant,  
this short survey serves as a pre-test for my master thesis experiment and aims to measure brand perceptions and message tones. The completion of this survey will take approximately 5 minutes.*

*Please agree to your participation below. If you have any questions regarding ethical concerns, please contact the ethics commission of the BMS faculty: [ethicscommittee-bms@utwente.nl](mailto:ethicscommittee-bms@utwente.nl) For questions about the experiment or your participation, please contact the researcher: [I.m.kersens@student.utwente.nl](mailto:I.m.kersens@student.utwente.nl)*

*Thanks in advance,  
Lea Kerßens*

*I agree to participate.*

#### **Pre-test Brand archetypes**

Please read the company website carefully. Afterwards indicate to what extent the following “descriptions” align with your view of the company.

“lives for fun and amusement”

Describes the company badly ←-----→ describes the company well

“values truth and knowledge”

Describes the company badly ←-----→ describes the company well

“playful”

Describes the company badly ←-----→ describes the company well

“wise”

Describes the company badly ←-----→ describes the company well

#### **Pre-test humor types**

Please read the crisis response message carefully. Afterwards, indicate how you perceive the message tone.

The message tone is... non-humorous <-----> humorous

The message tone is... friendly <-----> aggressive



**Pre-test crisis setting**

Read the newspaper article carefully. Afterwards, please indicate to what extent you agree with the statements below.

1. This situation presented is unverified.
2. It is unclear whether the organization is responsible for the situation.

Appendix G  
Scale to measure reputation

Measured concept (authors)	Items
<i>Reputation</i> (Fombrun et al., 2000)	<p>I have a good feeling about Honeycomb.</p> <p>I admire and respect Honeycomb.</p> <p>Honeycomb develops innovative products and services.</p> <p>Honeycomb offers high quality products.</p> <p>Honeycomb is an environmental responsible company.</p> <p>Honeycomb maintains high standards in the way it treats people.</p>

Appendix H  
Scale to measure trust

Measured concept (authors)	Items
<i>Trust</i> (Hon & Grunig, 1999)	Honeycomb treats people like me fairly and justly.  Whenever Honeycomb makes an important decision, I know it will be concerned about people like me.  Honeycomb can be relied on to keep its promises.  I believe that Honeycomb takes the opinions of people like me into account when making decisions.  I feel very confident about Honeycomb's skills.  Honeycomb has the ability to accomplish what it says.

Appendix I  
Initial factor analysis

**First measurement**

	Component	
	1	2
Tru 5 - I feel very confident about Honeycomb's skills.	.825	
Tru 6 - Honeycomb has the ability to accomplish what it says.	.794	
Rep 4 - Honeycomb offers high-quality products.	.786	
Rep 1 - I have a good feeling about Honeycomb.	.769	
Tru 3 - Honeycomb can be relied on to keep its promises.	.558	.532
Rep 2 - I admire and respect Honeycomb.	.545	
Tru 2 - Whenever Honeycomb makes an important decision, I know it will be concerned about people like me.		.800
Tru 4 - I believe that Honeycomb takes the opinions of people like me into account when making decisions.		.743
Rep 3 - Honeycomb develops innovative products and services.		.716
Tru 1 - Honeycomb treats people like me fairly and justly.		.685
Rep 5 - Honeycomb is an environmentally responsible company.		.614
Rep 6 - Honeycomb maintains high standards in the way it treats people.		.577

**Second measurement**

	Component	
	1	2
Rep 4 - Honeycomb offers high-quality products.	.858	
Tru 6 - Honeycomb has the ability to accomplish what it says.	.826	
Rep 5 - Honeycomb is an environmentally responsible company.	.753	
Tru 3 - Honeycomb can be relied on to keep its promises.	.724	
Tru 5 - I feel very confident about Honeycomb's skills.	.704	
Rep 1 - I have a good feeling about Honeycomb.	.648	.537
Tru 2 - Whenever Honeycomb makes an important decision, I know it will be concerned about people like me.		.870
Tru 4 - I believe that Honeycomb takes the opinions of people like me into account when making decisions.		.821
Tru 1 - Honeycomb treats people like me fairly and justly.		.697
Rep 6 - Honeycomb maintains high standards in the way it treats people.	.554	.629
Rep 2 - I admire and respect Honeycomb.	.537	.617
Rep 3 - Honeycomb develops innovative products and services.		

Appendix J  
Factor analysis for new constructs

**First measurement**

Rotated Component Matrix<sup>a</sup>

	Component	
	1	2
Rep 4 - Honeycomb offers high-quality products.	.844	
Tru 5 - I feel very confident about Honeycomb's skills.	.834	
Tru 6 - Honeycomb has the ability to accomplish what it says.	.819	
Tru 2 - Whenever Honeycomb makes an important decision, I know it will be concerned about people like me.		.890
Tru 4 - I believe that Honeycomb takes the opinions of people like me into account when making decisions.		.807
Tru 1 - Honeycomb treats people like me fairly and justly.		.695

**Second measurement**

Rotated Component Matrix<sup>a</sup>

	Component	
	1	2
Tru 2 - Whenever Honeycomb makes an important decision, I know it will be concerned about people like me.	.886	
Tru 4 - I believe that Honeycomb takes the opinions of people like me into account when making decisions.	.825	
Tru 1 - Honeycomb treats people like me fairly and justly.	.7436	
Tru 6 - Honeycomb has the ability to accomplish what it says.		.875
Rep 4 - Honeycomb offers high-quality products.		.849
Tru 5 - I feel very confident about Honeycomb's skills.		.762

## Appendix K

### Survey introduction

Dear participant,

the following questionnaire is part of my master thesis project in communication science at the University of Twente. I would be thankful, if you would take about 10-15 minutes to take part in this online experiment.

In the following experiment you will be shown a crisis scenario of an organization in the food industry. Afterwards you will be asked to respond to a number of questions about this scenario.

Your participation in this experiment is voluntary and can be stopped at any moment of time. The experiment does not pose any risks to you as participant, and all collected data will be treated confidentially.

Please agree to your participation below.

If you have any questions regarding ethical concerns, please contact the ethics commission of the BMS faculty: [ethicscommittee-bms@utwente.nl](mailto:ethicscommittee-bms@utwente.nl)

For questions about the experiment or your participation, please contact the researcher: [l.m.kersens@student.utwente.nl](mailto:l.m.kersens@student.utwente.nl)

Thanks in advance,  
Lea Kerßens