



## **Content marketing on social media**

Investigating the impact of humoristic social media content and the influence of gender on attitudes, and online consumer engagement

Daan Nouwens  
ANR 192711

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Communication and Information Sciences  
*Specialization: Business communication and Digital Media*

Faculty of Humanities  
Tilburg University, Tilburg

Supervisor: Dr. C. C. Liebrecht  
Second Reader: Dr. A. P. C. I. Hong

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## **Abstract**

With content marketing brands attempt to provide relevant content tailored to the needs of the consumer. The current study is focused on the influence of humour, gender, and the humoristic target on content attitude, interactivity, and word-of-mouth intention in content marketing on Facebook. To test the hypotheses an experimental 2 (gender) x 2 (humoristic target: men vs. women) x 4 (type of humour: irony, sarcasm, cynicism, and humourless) mixed design, in which the type of humour was measured within-subjects ( $N = 138$ ), was performed. The type of humour and the humoristic were manipulated.

The results suggested ironical humour as most effective regarding content attitude, interactivity, and word-of-mouth intention. Furthermore, the effectiveness of humour appeared to be dependent on the humoristic target. No interaction effect was found between the independent variables type of humour and gender.

Humour appears to be a complex collective term consisting of multiple forms, and is often defined and operationalized differently. The present study is a step towards a specified idea of humour and its effectiveness. In summary, the current study provides guidance in how to use humour on social media. The use of humour is not by definition effective. The present research is a step towards a framework for successful implementing humour in social media content.

Based on the findings of the current study, the deployment of ironical humour is recommended regarding content marketing on social media. However, the influence of additional factor (e.g., age or culture) call for further research.

*Keywords: content marketing, social media, humour, content attitude, consumer engagement.*

## 1. Introduction

Approximately 90% of the inhabitants of the Netherlands is active on social media (Marketingfacts, 2016). Therefore, social media seem interesting for brands and companies. In contrast to traditional media, social media offer users the opportunity to interact with content, brands, and other users. Furthermore, users are given the possibility to tailor information based on their personal situation and interests (Dijkmans, Kerkhof, Buyukcan-Tetik, & Beukeboom, 2015). Thus, the exposure of information is more or less self-chosen (Dijkmans, et al., 2015). These social media characteristics advocate for a different manner of consumer approach compared to approaching consumers through traditional media.

In the modern media setting, producing and providing relevant content – also known as *content marketing* – has become increasingly important for brands and companies. Content aberrant from the consumer's goal or motivation is frequently avoided (Cho & Cheon, 2004). With content marketing brands attempt to provide content that is so relevant, consumers voluntarily absorb the information, become curious about upcoming content, and are willing to spread the content among others. In contrast to other communication strategies, content marketing is user concentrated and often presented on the owned channels of a company or brand (Liebrecht, 2015).

According to Muntinga, et al. (2011) entertainment is an important motivation regarding consumer brand-related social media use. Antheunis, Van Kaam, Liebrecht, and Van Noort (2016), label entertainment as the primary motivation for interacting with a brand page and brand-related content on social networking sites (e.g., Facebook). Entertainment seems effective and worth considering with regard to the development of content. Thus, entertainment can be valuable for content marketing.

Entertainment is often been the subject of examination. Research into the effectiveness of entertainment in traditional advertising suggests positive effects regarding the deployment

of entertainment (e.g., Sternthal & Graig, 1973). However, research into online consumer behaviour (e.g., Cvijikj & Michahelles, 2013), and content marketing (Antheunis, et al., 2016) is often focussed on entertainment as genre without a distinction of different practices of entertainment. As a result, the effects of separate entertainment forms remain relatively unexplored. The current study focusses on a single application of entertainment, namely humour, and examines different forms. More specifically, the current study sheds light on the effects of three practices of humour on consumer attitudes and online consumer engagement.

As stated by Stearns (as cited in Malone, 1980), humour appreciation is determined by: age, education, language, culture, and gender. Research into humour appreciation indeed illustrates gender preferences regarding specific forms of humour (Mundorf, Bhatia, Zillmann, Lester, & Robertson, 1988; Buijzen & Valkenburg, 2004). Women appear to appreciate more gentle types of humour, while men prefer more harsh practices (Mundorf, et al., 1988). In addition, research into humour in magazine advertising labels gender as determinant for the effectiveness (Madden & Weinberger, 1982). Gender as in the form of a humoristic target could also be determinant for the valuation of humour. Mundorf, et al. (1988), denote an impact of the humoristic target (men vs. women) on humour appreciation. In summary, the effectiveness of humour in social media content might not be as straightforward as suggested in research regarding traditional media (e.g., Sternthal & Graig, 1973). Unknown is which specific factors with regard to humour lead to more consumer engagement on social media.

Consumer engagement is an overarching term for the consumer interactions with an organization or with other consumers in a brand-related context (Schamari & Schaefer, 2015). The current study operationalized consumer engagement as the amount of interactivity and word-of-mouth intention. Due to social media, the opportunities for consumer engagement have grown (Goyette, Ricard, Bergeron, & Marticotte, 2010). Additionally, the

interactive, transparent character of social media and the increased consumer empowerment, has led to a loss of control for companies (Schamari & Schaefer, 2015). Internet users can be more selective with regard to the information they receive, the moment of inclusion, and the content they create (Mangold & Faulds, 2009). By providing relevant content, companies can attempt to provoke favourable consumer engagement (Mangold & Faulds, 2009). However, little research has examined the potential gender specific differences in attitudes, and consumer engagement. The same applies to the potential impact of different forms of entertainment, and the effect of the presence of a humoristic target on consumer attitudes, and engagement. Therefore, the research question is formulated as:

**RQ:** *What is the effect of humoristic (ironical, sarcastic, and cynical) content on the brand attitude, content attitude and engagement of male and female consumers, and are these effects moderated by the presence of a humoristic target?*

## 2. Theoretical framework

### 2.1 Content marketing

Kerkhof (2010) defined content marketing as: “building and maintaining a relationship with the customers by providing relevant content, without sales as a direct goal”. According to Liebrecht (2015) content marketing is, in contrast to traditional communication strategies, user focused and primary executed on channels supervised by the brand (e.g., Facebook brand pages). Content marketing seems to be the answer to the modern media setting, and the decreasing effectiveness of traditional media.

Previous research has illustrated a decline in effectiveness of traditional media advertising (Sethuraman, Tellis, & Briesch, 2011). Consumers often avoid advertisements when it is experienced as manipulative (Friestad & Wright, 1994). This evasive behaviour seems to be correlated with the development of persuasion knowledge among consumers. According to the *Persuasion Knowledge Model*, consumers develop awareness to cope with persuasion attempts (Friestad & Wright, 1994). The persuasion knowledge model describes the interplay between persuasion targets and agents. Targets are those for whom the persuasion attempt was intended (e.g., consumers). Agents are those considered responsible for the development of the persuasion attempt (e.g., brands). Those involved regularly switch between the roles of agent and target. The interplay between the target and agent leads to the formation of persuasion knowledge. The persuasion knowledge includes information available from experience with persuading others and general information about how to persuade. Based on this information, consumers develop coping knowledge. The coping knowledge enables customers to identify, interpret, and assess persuasion attempts. Furthermore, this coping knowledge enables them to select and execute coping tactics believed to be effective (Friestad & Wright, 1994). The general public’s persuasion knowledge regarding traditional advertising – television, radio, and newspapers – is well

developed. As a result, this type of advertising has become less effective.

The effectiveness of internet advertising is also declining. Due to the quantity of internet advertisements, consumers develop aversion towards online ads and often avoid them (Cho & Cheon, 2004). Furthermore, deceiving techniques (e.g., “Congratulations! You are the 1,000th visitor! You’ve won an iPhone 7”), often used in internet advertising, lead to the growth of a negative attitude towards internet advertisements and the advertised brand (Cho & Cheon, 2004). Attitudes are relatively stable predictors of consumer’ behaviour (Mitchell & Olson, 2000). So, negative attitudes seem to be a bad portent regarding online brand-related behaviour.

Consumers often are goal-oriented in using the internet (Cho & Cheon, 2004). Content not in line with their goal or personal situation is frequently avoided. At the same time, content consistent with the goal or situation of the customer seems to be effective. With the use of social media, consumers can tailor content to their personal situation and interests (Dijkmans, et al., 2015). The exposure of content on social media is largely self-chosen. In other words, consumers can be more selective in the adoption of information, and voluntarily pull and absorb valuable content. Irrelevant content is often ignored. Thus, providing relevant and valuable content in line with the consumer’ interests has become crucial. The creation and distribution of suitable content by brands can also be defined as *content marketing*. Due to the popularity, the reach, and the interactive character, social media seem to be an appropriate channel to execute content marketing.

## 2.2 Social media presence

Social media are defined as: “internet-based applications that build on the foundations of web 2.0, and that allow the creation and exchange of user-generated content” (Kaplan & Haenlein, 2010). Social media present new opportunities for brands to monitor opinions or needs, and to interact with consumers in a direct and personalized manner (Constantinides & Fountain,

2008). Social media are exceedingly popular among consumers. Hence, social media are interesting for brands to construct and maintain consumer relationships (Hennig-Thurau, Malthouse, Friege, Gensler, Lobschat, Rangaswamy, & Skiera, 2010).

Dijkmans et al. (2015) examined the impact of organizational social media use and found a longitudinal effect of exposure to brand-related social media activities on corporate reputation. By employing social media activities and presenting social media content, companies might be able to improve the perception of their corporate reputation. Thus, being active on social media could be profitable.

Gotsi and Wilson (as cited in Dijkmans et al., 2015) label corporate reputation as: “a stakeholder’s overall evaluation of a company over time”. Fombrun, Gardberg, and Sever (2000) circumscribe a reputation as an attitudinal construct that consists of an emotional and rational component. This suggests that the corporate reputation is partially determined by emotions and feelings experienced by stakeholders with regard to an organization. The concept corporate reputation has similarities with brand attitude, the focus of the current study.

Brand attitude is defined as: “the individual internal evaluation of an object such as a brand” (Mitchell, & Olson, 2000). According to the *Experiential Processing Theory*, attitudes (e.g., relative to a brand) are the result of the experienced emotions arising from processing a message (Meyers-Levy & Maliviya, 1999). The experiential processing theory describes the idea underlying the processing of a brand-related message. The theory presumes that the experienced emotions are converted into a matching attitude. In summary, both corporate reputation and brand attitude appear to be an evaluation regarding an object (e.g., a brand) to an extent determined by the emotional state of those involved. Consequently, with regard to the impact of employing social media activities and presenting social media content on the

brand attitude, similar results are expected as in Dijkmans et al. (2015), which examined the effect on the corporate reputation. Hence, the hypothesis is formulated as:

**H1:** *Exposure to brand-related social media content is beneficial for the brand attitude.*

### *2.3 Consumer social media use*

The *Uses & Gratification theory* (U&G) theory from Katz, Blumler, & Gurevitch (1973), is often employed for describing consumer' media use. The U&G theory refers to gratifications that attract and hold consumers to certain media and forms of content, which satisfy their needs (Ruggiero, 2000). The theory initially was not intended to circumscribe social media use. Nevertheless, the applicability with regard to social media was demonstrated by Ruggiero (2000). The U&G theory introduces four underlying motivational needs that drive social media use: information, entertainment, social interaction, and personal identity (Brandtzæg & Heim, 2009). In other words, users are seeking for information, entertainment, social interaction or content related to their (desired) personal identity.

Muntinga, et al. (2011), investigated the motivational needs from the U&G theory regarding social media use in a brand-related context. The authors linked the motives for social media use to consumers' online brand-related activities (COBRAs). Muntinga, et al. (2011) created a continuum from low to high consumer activeness. As a result, three COBRA dimensions were differentiated: consuming, contributing, and creating. Consuming (e.g., consulting a brand-related video) is characterized by the lowest level of brand-related activeness, while contributing (e.g., rating brands) is marked by a medium level of consumer activeness, and creating (e.g., writing a product review) by the highest level of brand-related activeness. The COBRAs provide insight into the consumer' criteria for brand-related social media use and online behaviour. The underlying motivational needs serve as the foundation on which consumers tailor, pull and absorb content. Thus, the COBRAs and underlying motives form a starting point for the development of relevant content, tailored to the

consumer' needs. Additionally, the consumer' online brand related activities provide insight in how to provoke consumer' engagement on social media (e.g., word-of-mouth communication).

Consumer engagement is an umbrella term for non-transactional consumer interactions with an organization or with other users in a brand-related context (Schamari & Schaefers, 2015). However, consumer engagement is often defined differently and examined in different settings. Mathwick (2002), examined consumer internet use and operationalized four different user types: lurkers, socialisers, personal connectors, and transactional community members. These user types differ in online activities and motivations for internet use. Li and Bernoff (as cited in Muntinga, et al., 2011) linked the user types to social media. The authors distinguished six social media user types: inactives, spectators, joiners, collectors, critics, and creators. According to Muntinga et al. (2011), the social media user types are insufficient in describing social media behaviour, as user can engage in multiple roles. Consequently, Muntinga et al. (2011) developed the Consumer Online Brand Related Activities.

Consumer engagement can be passive as well as active (Schamari & Schaefers, 2015). Reasoned from the COBRAs, consuming is classified as passive consumer engagement, while contributing and creating are marked as active consumer engagement. Active consumer engagement appears to affect attitudes and behaviour of those who observe the content (Schamari & Schaefers, 2015). The emergence of social media has led to more opportunities to engage with brands and other users. The current study is focused on active online consumer engagement on social media. Therefore, in the present investigation consumer engagement is operationalized as the level of interactivity and word-of-mouth intention. Interactivity is operationalized as indicator of interest, and is aimed at the social media content or related brand (e.g., liking the message). Word-of-mouth is operationalized as an active contribution

to the available content, and is aimed at communication with other users (e.g., recommendation of content).

According to Brodie, Juric, and Hollebeek (2013), positive consumer engagement can be beneficial for a brand or company. Thus, brands attempt to increase the consumer engagement. Entertaining content appear to lead to more consumer engagement, and is advisable with regard to constructing a relationship with consumers (Cvijikj & Michahelles, 2013).

Enjoyment is one major underlying motives regarding consumer engagement on social media (Muntinga et al., 2011). This also applies to brand-related behaviour on social networking sites (e.g., Facebook), as shown by the investigation of Antheunis, et al. (2016). The authors examined consumer behaviour and motives regarding social networking sites. Antheunis et al. (2016) label pleasure as the most prominent motivation for following a brand page or interacting with content on social networking sites. Both enjoyment and pleasure are categorized as part of the concept entertainment. Therefore, it seems interesting for companies to consider a form of entertainment in their content on social media content.

Entertainment is often been the subject of examination. However, these studies often differ regarding the manner in which entertainment is defined and operationalized. Muntinga et al. (2011) defined entertainment as: “related to escaping or being diverted from problems or routines (e.g., relaxation)”, while Aaker and Norris (1992) labelled entertainment as emotional or transformational. In the study of Cvijikj and Michahelles (2013) posts not referring to a particular brand or products were operationalized as entertaining. According to Liebrecht (2015) entertaining content includes amusing information (e.g., an appealing photo), and the content can be linked to a brand or product. Thus, there appears to be indistinctness about the meaning of entertainment. Additionally, a distinction in different entertainment forms is often absent. Liebrecht (2015) distinguished only two types of content:

informative (e.g., product-related content), and non-informative (e.g., an appealing video).

The study of Cvijikj and Michahelles (2013) lacks a clear distinction in entertainment forms.

The authors categorized content as entertaining when it had no link to a brand or product. To obtain more clarity with regard to entertaining content, the current study is focussed on one specific form of entertainment: humour.

#### 2.4 Humour

Chapman and Foot defined humour as "a process initiated by a humorous stimulus, such as a joke or cartoon, and terminating with some response indicative of experienced pleasure, such as laughter" (as cited in Malone, 1980). The effectiveness of humour in advertising is repeatedly been the subject of examination. Humour appears to attract attention (Sternthal & Graig, 1973; Madden & Weinberger, 1982; Madden & Weinberger, 1984), and improve persuasion (Madden & Weinberger, 1984).

The *Experiential Processing Theory* (Meyers-Levy & Maliviya, 1999) presumes a positive change in attitudes as result of the use of humour in social media content. The theory implies a change in attitude, dependent on the emotion of a consumer while processing a message. The experienced emotion is converted into an attitude towards the message and an attitude towards the related brand. (Meyers-Levy & Maliviya, 1999). As stated earlier, attitudes are relatively stable predictors of consumer' behaviour (Mitchell & Olson, 2000). Positive attitudes seem to be a good portent regarding online brand-related behaviour. In summary, the effectiveness of social media content is related to the emotions it evokes. Humour is intended to provoke a response of experienced pleasure (Chapman & Foot, as cited in Malone, 1980). The experienced pleasure is presumable converted into a positive attitude. Hence, the use of humour in social media content seems advisable.

However, Stearns (as cited in Malone, 1980) stated that, the quality and effectiveness of humour is dependent on the judgement of the audience. The determination of what is

amusing is influenced by five variables: age, education, language, culture, and gender (Stearns, as cited in Malone, 1980). To obtain more clarity with regard to the impact of related variables on the effectiveness of humour in the context of social media, the current study is focused on the interaction between humour and gender.

### *2.5 The interaction between humour and gender*

Several studies denote gender differences in humour appreciation. Hostile and aggressive types of humour are generally more appreciated by and effective for men (Crawford, 2003; Buijzen & Valkenburg, 2004), while women prefer more gentle practices of humour (Schmehl, 2009). Colston and Lee (2004) illustrated that irony is thought to express negative emotions, to be humorous, to insult, to be rude, and to deemphasize. It can be assumed that irony, defined as in Colston and Lee (2004), is more appreciated by men.

Irony is often been the focus of investigation. Nevertheless, the studies often differ regarding the manner in which irony is defined and operationalized. Colston and Lee (2004) operationalized verbal irony, in their examination named sarcastic criticism, as using literally positive words to describe an unpleasant situation. Kotthoff (2006) operationalized sarcasm as an aggressive practice of irony, indicating unequal power. Kunneman, Liebrecht, Van Mulken, and Van den Bosch (2015) defined a sarcastic message as: “a message that often conveys a negative opinion using only positive words”. According to Leggitt and Gibbs (2000), the expression of emotions with regard to ironical messages differs from the expressed emotions in a literal message. The authors circumscribe sarcasm as kind of ironic language. The concepts irony and sarcasm appear to have much overlap. Additionally, sarcasm is regularly referred to as a practice of irony.

In the master’s thesis ‘*Humor en toch leuk?*’ (Kuitenbrouwer, 2008) the labels irony and sarcasm are related to the perceived emotions by the public. More specifically, the labels are related to the perceived level of hostility and contempt. Kuitenbrouwer (2008) labelled

irony as not hostile or contemptuous, while sarcasm is classified as hostile but not contemptuous. Kuitenbrouwer (2008) also categorized cynicism as part of the list. Cynicism is marked as highly hostile and contemptuous. The operationalization of type of humour in the current study is based on the continuum of Kuitenbrouwer (2008). Humour is often used as an overarching term to denote different forms. Therefore, it is interesting to investigate the effect of different types of humour on the dependent variables. Based on the differentiation of the types of humour in the current study, it is expected that:

**H2:** *Ironical, sarcastic, and cynical humour differ regarding the impact on content attitude (a), interactivity (b), and word-of-mouth intention (c).*

In line with gender specific differences in humour appreciation, it can be assumed that:

**H3:** *Ironical content on social media will lead to a higher content attitude in comparison with sarcastic and cynical content among women.*

**H4:** *Sarcastic and cynical content on social media will lead to a higher content attitude in comparison with ironical content among men.*

Men and women also differ in the way they use humour. Women primarily use humour to create solidarity and build intimacy, while men mainly employ humour as a form of competition (Crawford, 2003). Nevertheless, Hay (2001) revealed that men also appear to use humour to build solidarity in same-gender groups. Furthermore, Green (as cited in Crawford, 2003) revealed a more harsh use of humour by women in a speech community, to vent their anger at men. These contradictory results indicate the importance of the context in which humour is used. Crawford (2003) demonstrated general gender differences regarding the use of humour, whereas Hay (2003) investigated the use of humour in an informal context. As stated by Coser (as cited in Kotthoff, 2006), women are reluctant with the use of humour in a formal setting. This reluctance in use of humour is related to cultural gender expectations.

Women are expected to be passive and receptive, rather than active and initiating (Coser, as cited in Kotthoff, 2006). People are less constrained in the production of humour with regard to more informal settings. The function of humour seems to be related to gender in combination with the setting. However, according to Kotthoff (2006) humorous aggression is gender-related. Humorous aggression is defined as: ‘a component of many types of teasing, mocking, parodying, and ridiculing’ (Kotthoff, 2006). Consistently, Baron (as cited in Kotthoff, 2006) demonstrated a differences in verbal put-down irony between men and women in comments following paper presentations. In contrast to men, women barely used downgrading forms of humour in evaluating the papers. According to Crawford (2003), men and women generally use the same kinds of humour.

The results regarding the relation between gender and type of humour are somewhat contradicting. The interaction between type of humour and gender on social media content is almost entirely unexplored. Therefore, the current study investigates the interaction effect between gender and type of humour on interactivity and word-of-mouth intention.

Furthermore Mundorf, et al. (1988) denote a possible third influencing factor *the humoristic target*. Humour in which the opposite sex is teased, is more effective. According to Mundorf, et al. (1988), the effect of the humoristic target is more prominently noticeable among women than men. Furthermore, Kotthoff (2006) stated that sexual jokes are often intended to make fun of women. Additionally, Coser (as cited in Kotthoff, 2006) demonstrated that the direction of humour is related to authority structures. Humour is frequently directed at people who have less authority. Consequently, common targets are junior members in an organization. Furthermore, in the study Colston and Lee (2004), men reported a greater likelihood for using humour relative to women. In summary, the humoristic target seems to be a factor of interest in the use of humour. Unknown is whether the interaction between type of humour, gender and the humoristic target influences attitudes and

consumer engagement. The humoristic target in the current study is related to men and women. Thus, the effect of gender as a consumer characteristic as well as the experimental manipulation is examined.

In the present study humour is related to type of humour, gender, and consumer engagement. As mentioned earlier, entertaining content leads to more consumer engagement (Cvijikj & Michahelles, 2013). Antheunis et al. (2016) denote similar results with regard to social networking sites, as Facebook. Based on the gender specific differences in humour appreciation and use, the following hypothesis emerged:

- H5:** *Ironical content on social media will lead to a higher interactivity (a) and word-of-mouth intention (b), in comparison with sarcastic and cynical content, among women.*
- H6:** *Sarcastic and cynical content on social media will lead to a higher interactivity (a) and word-of-mouth intention (b), in comparison with ironical content, among men.*
- H7:** *The interaction between gender and type of humour on content attitude (a), interactivity (b), and word-of-mouth intention (c) is affected by the humoristic target.*

### 3. Method

To answer the overarching research question and examine the hypotheses, an experiment was conducted. The experimental materials contained a manipulation regarding the type of humour and the humoristic target.

#### 3.1 Design

The current study contained a mixed factorial design. More specifically, a 2 (gender of participant: male vs. female) x 2 (humoristic target: men vs. women) x 4 (humour type: irony, sarcasm, cynicism, and not humorous) design, in which the last factor was measured within-subjects. Consequently, participants assessed all types of humour. Due to the experimental design, the current study consisted of sixteen conditions (Appendix A) and four experimental groups (Table 1). Throughout the experiment participants were exposed to four fictional humoristic Facebook messages (one ironic, one sarcastic, one cynical, and one humourless message) and two filler messages. Dependent on the within factor, four questionnaires were developed. Participants were exposed to a single questionnaire.

Table 1

*Overview experimental groups*

	Gender participant	Humoristic target	Type of humour
Experimental group 1	Men	Men	All
Experimental group 2	Men	Women	All
Experimental group 3	Women	Men	All
Experimental group 4	Women	Women	All

#### 3.2 Participants

The experimental material consisted of fictional Facebook content. Thus, the participants had to be familiar with Facebook content. In total 138 participants were assembled aged between 20 and 71 years old ( $M = 31.33$ ,  $SD = 12.72$ ). The research sample consisted of 76 men and

62 women. The average age of men was 32.17 years old ( $SD = 13.11$ ), while the average age of female participants was 30.31 years old ( $SD = 12.26$ ). The research sample was quite varied with regard to the level of education. However, most participants had a Higher Vocational Education (50.7%) or Intermediate Vocational Education (23.5%) certificate. Furthermore, 19.9% of the participants had a university degree. Dependent on language and the transmitters used in the experiment, only Dutch participants were gathered.

The participants were randomly assigned to a specific group. Participants were equally distributed among the four experimental groups in terms of age ( $F(1, 134) = 1.83, p = .179$ ). Furthermore, nor the interaction between experimental group and education level ( $X^2(4) = 5.22, p = .265$ ), nor the interaction between gender and education level ( $X^2(4) = .573, p = .966$ ) was significant, indicating an equal distribution of education level among the groups. Since gender is part of the main analysis, it has been excluded from this check.

### *3.3 Material*

#### *3.3.1 Pre-test*

According to the master's thesis of Beyaert (2012) the distinction between the types of humour is dependent on the interpretation of the content by the readers. More specifically, the label (ironic, sarcastic or cynical) is related to the perceived level of hostility and contempt, as described in the master's thesis of Kuitenbrouwer (2008). Content interpreted as cynical by one participant, can be interpreted as sarcastic by others. The pre-test was intended to test the level of hostility and contempt of self-made content versions. More specifically, multiple humoristic messages were tested on level of hostility and contempt. An example of the pre-test questionnaire can be seen in Appendix B. In total 31 participants participated in the pre-test (men: 61.3%, women: 38.7%).

Participants of the pre-test ( $N = 31$ ) were exposed to twelve humoristic messages (four messages per type of humour) and four filler messages. The filler messages were not intended

to be amusing but as distraction. Therefore, the filler messages were excluded from the pre-test. All the pre-test materials can be found in Appendix C. Participants were asked to rank their perceived level of hostility and contempt on seven point Likert scales. Content classified as not hostile and not contemptuous, indicated ironical content (Table 2). Content classified as hostile but not contemptuous pointed to sarcasm, and content classified as highly hostile and contemptuous, suggested cynical content (Table 2). This operationalization of humour types is based on the continuum of Kuitenbrouwer (2008).

Table 2

*Presence of hostility and contempt by humour technique*

	Humour type	Level of hostility	Level of contempt
Experienced level of hostility and contempt 	Irony	Not hostile	Not contemptuous
	Sarcasm	Hostile	Not contemptuous
	Cynicism	Hostile	Contemptuous

*Reliability of related scales*

The pre-test constructs (hostility, and contempt) consisted of two scales. The interconnected scales were intended to examine the same construct, but were conversely formulated. All the pre-test scales can be found in Appendix B. The positive formulated scales were recoded to measure the reliability. The Kendall's Tau ( $\tau$ ) was calculated to examine whether the related scales could be combined. Table 3 shows the reliability of scales for each pre-test construct.

Table 3

*Reliability of related scales per pre-test construct*

Pre-test construct	Correlation
Hostility	$\tau(31) = .44, p = .001$
Contemptuous	$\tau(31) = .59, p < .001$
Jocular	$\tau(31) = .21, p = .108$

The scales showed an insufficient degree of correlation (Table 3). Therefore, combining them was not justified. Consequently, the determination of suitable content per type of humour was based on the hostility and contempt scales separately. Based on the mean scores, most suitable content per humour type was identified. Whenever content yielded comparable scores on hostility and contempt, the amusement value became decisive.

*Most suitable content*

Based on the pre-test results, a message was chosen that satisfies the experienced level of hostility and contempt per type of humour. The average scores of the pre-test (Appendix D) indicated appropriate variants per type of humour. The pre-test was not intended to identify suitable filler messages. The filler messages were meant as distraction and were excluded from these results. The most suitable content version per humour technique can be seen in Table 4.

Table 4

*Most suitable content per humour technique*

Type of humour	Most suitable content
Irony (content version 4)	What is the similarity between a man/woman and a fish? → Catching is the best part.
Sarcasm (content version 9)	What do you call a man/woman from Helmond? → A Hell monster.
Cynicism (content version 13)	What is a man/women who lost 90% of his/her intelligence? → A widower/widow

To test whether these content versions differ in degree of hostility and contempt, a mixed design ANOVA was executed.

*Hostility*

A mixed design ANOVA was executed to compare the level of hostility in the ironical, sarcastic, and cynical content. Mauchly's test indicated that the assumption of sphericity was met for both hostility ( $X^2(2) = 3.36, p = .186$ ), and friendliness ( $X^2(2) = 1.18, p = .554$ ). The results indicate a significant difference in hostility,  $F(2, 29) = 8.05, p = .002$ . Contrasts revealed a significant lower rating of hostility in ironical content compared to sarcastic ( $p = .019$ ) and cynical content ( $p < .001$ ). Furthermore, the sarcastic content scored significantly lower on hostility compared to the cynical content ( $p = .032$ )

Moreover, the results exposed a significant difference in friendliness,  $F(2, 29) = 12.19, p < .001$ . The ironical content differed significantly in friendliness compared to sarcastic ( $p = .001$ ) and cynical humour ( $p < .001$ ). Sarcastic and cynical content not significantly differed regarding friendliness ( $p = .140$ ). The chosen content per humour type matched the continuum of differences in level of hostility (Kuitenbrouwer, 2008), indicated by the pre-test results (Appendix D).

### *Contempt*

A second one-way repeated measures ANOVA was executed to compare the level of contempt in the ironical, sarcastic, and cynical content. The assumption of sphericity was met for both contempt ( $X^2(2) = 1.70, p = .428$ ), and respectfulness ( $X^2(2) = 1.75, p = .417$ ). The results indicated no significant difference in contempt,  $F(2, 29) = 2.36, p = .112$ . To examine differences between the content, contrasts were studied. The contrasts exposed no significant difference between the ironical and sarcastic content regarding contempt ( $p = .363$ ).

Additionally, there was no significant difference between the sarcastic and cynical humour concerning degree of contempt ( $p = .112$ ). However, the ironical content scored significantly lower on contempt compared to the cynical content ( $p = .038$ ).

Furthermore, the results exposed a significant difference in respectfulness,  $F(2, 29) = 11.39, p < .001$ . The contrasts indicated a significant respectfulness difference between ironic, sarcastic ( $p = .021$ ), and cynical ( $p < .001$ ) content. Additionally, the sarcastic content significantly differed from cynical ( $p = .008$ ) content regarding respectfulness. The chosen content per humour type matched the continuum of differences in level of contempt (Kuitenbrouwer, 2008), indicated by the pre-test results (Appendix D). The pre-test suggested suitable content per humour type that matched the overall description of Kuitenbrouwer (2008). Thus, it can be concluded that the pre-test was successful.

### *3.3.2 Experimental material*

The fictional content in the experiment was related to two existing Dutch transmitters. The transmitter choice was based on the permissibility of deploying humour relative to men and women. Consequently, two transmitters were selected which differed in target audience. While one transmitter (RTL 7) is aimed primarily at men, the other transmitter (Net 5) is focused on women. Content in which men were the humoristic target was linked to Net 5, while the content in which women were the target was linked to RTL 7.

The participants were exposed to four fictional humoristic messages. These messages differed in degree of hostility and contempt. The ironical message was the least hostile and contemptuous version. The sarcastic version was highly hostile, but not contemptuous. The cynical version was both highly hostile and contemptuous. Additionally, the ironical, sarcastic, and cynical content consisted of a form of ridicule. The humourless content does not contain a form of ridicule and was based on a fact. Per humour type, two messages were constructed. The content per humour technique was identical, except for the target. The humoristic target was manipulated. The humoristic target was operationalized as relative to men or women. The set-up was the same for all types of humour. Thus, eight content versions were constructed in which the humoristic target of the content differed regarding the two versions (Figure 1 and 2). All the experimental materials can be found in Appendix E.



Figure 1. Cynical content (target: women)

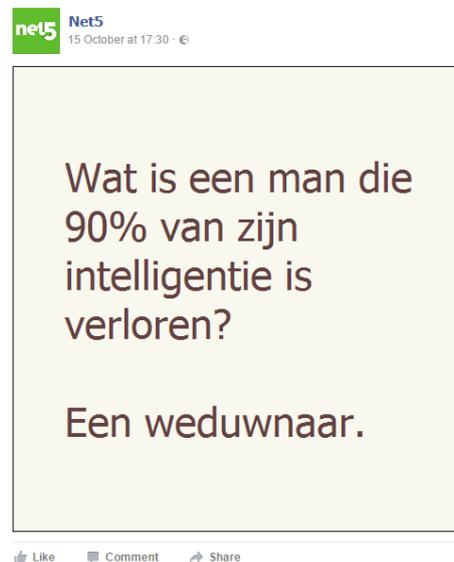


Figure 2. Cynical content (target: men)

The humourless content referred to gender differences, in which one sex is better relative to the opposite sex. The humourless content was based on an imaginary fact regarding driving competence of men and women. More specifically, facts about parking manoeuvres. This

content was not intended as humorous. The humourless examples can be seen in Figure 3 and 4.



Figure 3. Humourless content (target: women)



Figure 4. Humourless content (target: men)

The filler messages served as distraction concerning the purpose and the subject of the study. These messages were related to channel information. In order to make them as truthfully as possible, these filler messages were based on actual Facebook communication of the transmitters. Thus, the filler messages deviated in terms of communicated information compared to the humoristic content. However, the social media lay-out was identical to the humoristic content. Examples of the filler messages can be seen in Figure 5 and 6. Each questionnaire consisted of 4 types of humoristic messages and 2 filler messages. The order of these messages was randomized.



Figure 5. Filler message RTL 7

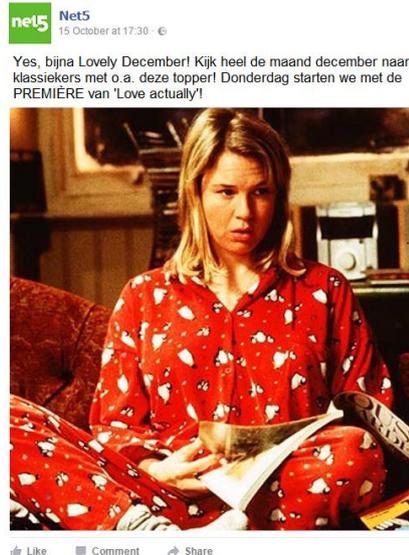


Figure 6. Filler message Net 5

### 3.4 Instruments

All the constructs were measured on seven point Likert scales. The participants were asked to determine their opinion to each statement, ranging from 1 (completely disagree) to 7 (completely agree).

First, *brand attitude* was measured on six statements (e.g., It is pleasant to watch RTL 7). These statements were based on the measurement scales of Mitchell and Olson (2000), and Lafferty and Goldsmith (1999). Second, the *content attitude* was tested on five statements (e.g., The content is amusing). These statements were based on findings of Markiewicz (1974). The statements were focused on content and humour appreciation. Third, the *interactivity* was assessed on six statements (e.g., I would like the content). These statements were based on the consumers' online brand-related activities, described by Muntinga, Moorman, and Smit (2011). The statements relate to the intention to interact with the content and the social media page (RTL 7 or Net 5). Fourth, the *word-of-mouth intention* was investigated using five statements (e.g., I would recommend the content to a friend.). The word-of-mouth statements were based on the study of Goyette, et al. (2010). A complete

overview of the statements regarding the experimental constructs can be found in Appendix F.

Lastly, participants were asked about their awareness of and viewing habits towards the specific transmitter. Subsequently, some control items were asked (e.g., Do you have a Facebook account?). At the end of the questionnaire, age, level of education, and gender were asked.

#### *Principal component analyses and scale reliability*

Prior to the main analyses the sub dimensions were tested for convergent validity, using a multiple principal component analyses (Appendix G). As correlation between components was expected, an Oblimin rotation was used to test the validity. All factor loadings were above .56, indicating an appropriate convergent validity. Moreover, all Cronbach's Alpha's were above .75, indicating an appropriate scale reliability. Thus, the interconnected statements were combined to form 1 variable to test the hypotheses.

#### *3.5 Procedure*

Participants were primarily gathered through social media and e-mail. Incomplete groups (e.g., with a divergent number of women) were supplemented by participants gathered in public spaces. Participants were primarily gathered using a snowball technique, in which the experiment is shared with the network of participants using an online weblink.

Participants were guided to the online experiment with the use of an online weblink. At the start of the experiment the research was introduced, participants were informed about the scientific purpose, and were asked to sign a consensus form. After the introduction, participants were randomly assigned to an experimental group using Qualtrics<sup>1</sup>. Randomly assignment helps to assure the similarity of the experimental groups. At the start of the experiment, participants were asked to determine their opinion to the *brand attitude*

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<sup>1</sup> Online survey software

statements. Subsequently, participants were exposed to six manipulated Facebook messages and were asked to determine their opinion to the *content attitude*, *intention to interact*, and *word-of-mouth intention* statements. Afterwards the participants were asked again to determine their attitude towards the brand. Lastly, the participants were debriefed and thanked for their time. The average duration of the experiment was 22.34 minutes.

## 4. Results

### 4.1 Control variables

Prior to the hypotheses testing, the impact the of control variables on the dependent variables was examined. The results illustrate no significant influence of the demographic variables age and education level. Therefore, age and education level were excluded from the main analysis as covariate. Furthermore, the possession of a Facebook account, the frequency of Facebook use, and the Facebook posting rate had no significant influence on the dependent variables. Consequently, these variables were also excluded as covariates in the main analysis. The variables familiarity with and viewing behaviour towards the transmitters appear to significantly influence the dependent variables content attitude, interactivity, and word-of-mouth intention. Thus, these two control variables were included as covariates in the analyses regarding these dependent variables. However, only the viewing behaviour towards the transmitters significantly influence the brand attitude before experimental manipulation. Hence, the analysis regarding the brand attitude contained only one covariate. The complete analysis with regard to the control variables can be found in Appendix H.

### 4.2 Hypotheses testing

The first hypothesis was linked to the *brand attitude* (H1). The second hypothesis was connected to the *differences in effectiveness of the types of humour* (H2). The third and fourth hypothesis were related to content attitude of *women* (H3) and *men* (H4). The fifth and sixth hypotheses were linked to online engagement of *women* (H5) and *men* (H6). A distinction was made between *interactivity* (a) and *word-of-mouth intention* (b). The last hypothesis was connected to the impact of *the humoristic target* (H7) on the *content attitude* (a), *interactivity* (b), and *word-of-mouth intention* (c). The analyses and related hypotheses are described in succession.

To calculate the impact of the independent constructs on *content attitude* (a),

*interactivity* (b), and *word-of-mouth intention* (c), multiple mixed design ANOVAs were performed. Associated assumptions will be extensively discussed and briefly mentioned when the same dependent variable is addressed later in text.

An overview regarding all contrasts investigated in the forthcoming sections can be found in Appendix I.

### ***Brand attitude***

To investigate the impact of exposing social media content on brand attitude, a dependent paired t-test was performed. The data (*Mdif*) was not normally distributed, indicated by a significant Kolmogorov-Smirnov test ( $D(138) = .097, p = .003$ ), and the presence of a significant amount of kurtosis ( $z\text{-score}_{\text{kurtosis}}: 2.89$ ). Therefore, the t-test was bootstrapped. The results exposed no significant difference between the brand attitude before ( $M = 3.65, SD = .98$ ) and after ( $M = 3.55, SD = 1.40$ ) content was exposed,  $Mdif = .10, t(137) = .95, p = .343, 95\% \text{ CI } (-.11, .29)$ . Hypothesis 1 assumed a positive influence of presenting social media content on brand attitude. Thus, hypothesis 1 need to be rejected.

To examine gender specific differences in brand attitude, and the effect of a humoristic target, a mixed design ANOVA was executed. The analysis regarding brand attitude contained one covariate, as solely the viewing behaviour towards the transmitters significantly influenced both the brand attitude before as well as after experimental manipulation<sup>2</sup>. Since there were only two levels of repeated measures, there was merely one set of difference scores, and nothing to compare those scores with to test the assumption of sphericity. Therefore, the assumption of sphericity was not taken into account. Nevertheless, the

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<sup>2</sup> Facebook consulting rate, the familiarity with, and the viewing behaviour towards the transmitters had a significant influence on the brand attitude after experimental manipulation. However, with regard to the brand attitude before experimental manipulation only the viewing behaviour towards the transmitters had a significant influence. Whether or not adding multiple covariates had little effect on the results. Following interaction effects are inclusive of the covariates Facebook consulting rate, the familiarity with, and the viewing behaviour towards the transmitters.

- Interaction effect between gender and brand attitude:  $F(1, 131) = 3.69, p = .057, \eta^2 = .027$ .

- Interaction effect between humoristic target, gender and brand attitude:  $F(1, 133) = .200, p = .656$ .

assumption of homogeneity of variance was met, indicated by non-significant Levene's tests regarding the brand attitude before ( $F = 1.83, p = .145$ ), and after manipulation ( $F = 1.286, p = .282$ ).

The results revealed a significant interaction effect between gender and presenting social media content on brand attitude,  $F(1, 133) = 4.78, p = .031, \eta^2 = .133$ . Gender appear to be determinative in the evaluation of a brand.

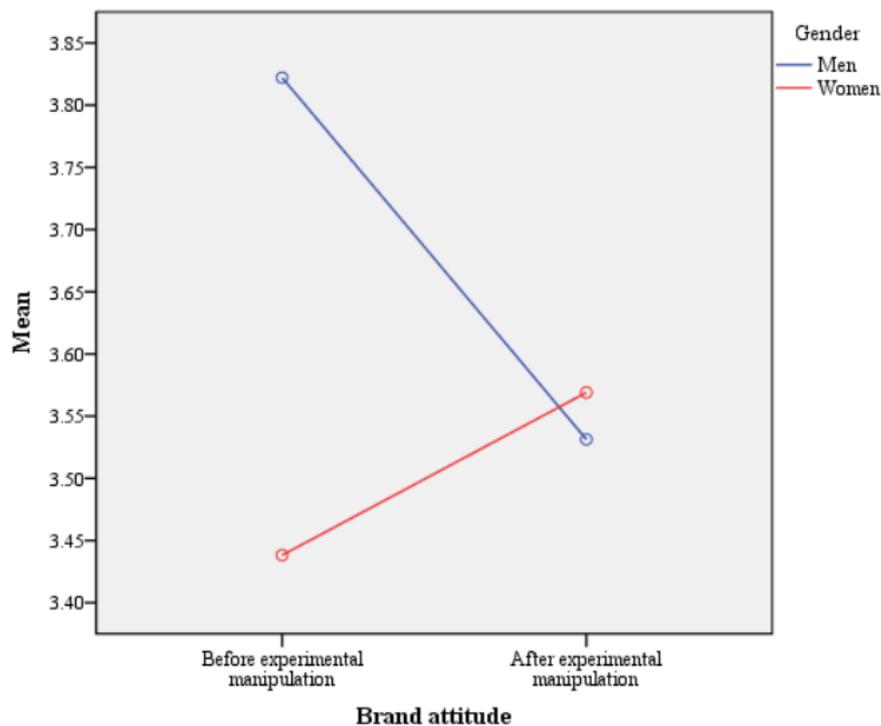


Figure 1. The interaction effect between brand attitude and gender of the participant.

As can be seen from Figure 1, the initial difference between men ( $M = 3.82, SE = .10$ ) and women ( $M = 3.44, SE = .11$ ) in brand attitude seems completely subsided after social media content was presented. The brand attitude among men ( $M = 3.53, SE = .12$ ) and women ( $M = 3.57, SE = .14$ ) after being exposed to social media content was comparable.

The interaction effect between the humoristic target and presenting social media content on brand attitude was not significant,  $F(1, 133) = .353, p = .554$ . Furthermore, the interaction effect between gender, humoristic target, and presenting social media on brand

attitude was not significant either,  $F(1, 133) = .086, p = .770$ . Thus, the brand attitude seems independent from the presence of a humoristic target.

### *Type of humour*

The upcoming section evaluates the effect of humour type on the dependent variables content attitude, interactivity, and word-of-mouth. With regard to the analyses, type of humour was included as within-factor, while gender and humoristic target operated as between factor, and familiarity with and viewing behaviour towards the transmitters were involved as covariates.

### *Content attitude*

To test the effect of different types of humour on the content attitude (H2) a mixed design ANOVA was performed. The assumption of sphericity was met, as Mauchly's test was not significant ( $X^2(5) = 7.08, p = .215$ ). Nevertheless, Levene's test regarding humourless content ( $F(3, 134) = 3.53, p = .017$ ) and cynical content ( $F(3, 134) = 4.77, p = .003$ ) was significant. Thus, the assumption of homogeneity of variance was not met. As the mixed design ANOVA is relatively robust and the experimental groups were similar in size, no action was taken.

The results indicated a trend towards significance regarding the effect of type of humour on content attitude,  $F(3, 396) = 2.42, p = .066, \eta^2 = .018$ . Thus, hypothesis 2a must be accepted with caution. Contrasts revealed that the ironical humour was ranked marginal significantly better regarding content attitude compared to no humour ( $p = .077$ ), and significantly better compared to sarcastic ( $p = .026$ ) and cynical ( $p = .004$ ) humour. The other contrasts were not significant. Means and standard errors for humour type on content attitude can be found in Table 5.

Table 5

*Means and standard error for type of humour on content attitude (7-point Likert scale)*

Type of humour	Mean (SE)
Humourless	3.34 (.12)
Irony	3.72 (.14)
Sarcasm	3.32 (.15)
Cynicism	3.22 (.15)

### *Interactivity*

To test the effect of different types of humour on the interactivity (H2b) a mixed design ANOVA was performed. Mauchly's test indicated that the assumption of sphericity had been violated,  $X^2(5) = 16.60, p = .005$ . The Greenhouse-Geisser estimate was greater than .75 ( $\epsilon = .92$ ). Therefore, the degrees of freedom were corrected using the Huynh-Feldt estimate ( $\epsilon = .98$ ). Nevertheless, the assumption of homogeneity of variance was met, indicated by non-significant Levene's tests ( $p > .05$ ).

The results showed a significant effect of type of humour on interactivity,  $F(2.95, 388.75) = 3.21, p = .024, \eta^2 = .110$ . Hence, support was found for hypothesis 2b. Contrasts exposed that humourless content significantly scored better regarding interactivity compared to the sarcastic content ( $p = .009$ ). Additionally, humourless content was marginal significantly rated higher with regard to interactivity compared to the cynical content ( $p = .067$ ). Furthermore, the interactivity difference between ironical and sarcastic content showed a trend towards significance ( $p = .078$ ) in favour of the ironical content. The other contrasts were not significant. Means and standard errors for humour type on interactivity can be found in Table 6.

Table 6

*Means and standard error for type of humour on interactivity (7-point Likert scale)*

Type of humour	Mean (SE)
Humourless	2.41 (.10)
Irony	2.30 (.10)
Sarcasm	2.08 (.08)
Cynicism	2.15 (.09)

### *Word-of-mouth intention*

To examine the effect of different types of humour on the word-of-mouth intention (H2c) a mixed design ANOVA was performed. The assumption of sphericity was not met, as the Mauchly's test was significant ( $X^2(5) = 17.31, p = .004$ ). The Greenhouse-Geisser estimate was greater than .75 ( $\epsilon = .93$ ). Consequently, the degrees of freedom were corrected using the Huynh-Feldt estimate ( $\epsilon = .99$ ). Moreover, the assumption of homogeneity of variance was not met, as the Levene's test regarding cynical content ( $F(3, 134) = 2.74, p = .046$ ) was significant. Nevertheless, as the mixed design ANOVA is relatively robust and the experimental groups were comparable in size, no action was taken.

The results exposed a significant effect of type of humour on word-of-mouth intention,  $F(2.96, 390.48) = 3.15, p = .026, \eta^2 = .023$ . Therefore, hypothesis 2c was accepted. Contrasts showed that humourless content significantly scored higher regarding word-of-mouth intention compared to sarcastic ( $p = .015$ ) and cynical ( $p = .012$ ) content. Additionally, ironical content scored marginal significantly higher with regard to word-of-mouth intention than cynical content ( $p = .078$ ). The other contrasts were not significant. Means and standard errors for the effect of humour type on word-of-mouth intention can be found in Table 7.

Table 7

*Means and standard error for type of humour on word-of-mouth intention (7-point Likert scale)*

Type of humour	Mean (SE)
Humourless	2.58 (.11)
Irony	2.45 (.11)
Sarcasm	2.18 (.10)
Cynicism	2.21 (.10)

### ***Gender***

The forthcoming section evaluates the moderating effect of gender on the dependent variables. In other words, this section addresses the twofold interaction between gender and type of humour on the dependent constructs content attitude, interactivity, and word-of-mouth intention. Again type of humour was included as within-factor, while gender and humoristic target functioned as between factors, and familiarity with and viewing behaviour towards the transmitters were involved as covariates.

### ***Content attitude***

To examine the moderating effect of gender on the content attitude (H3) a mixed design ANOVA was performed. The assumption of sphericity was met, indicated by a non-significant Mauchly's test ( $p = .215$ ). However, the Levene's test with regard to humourless ( $p = .017$ ), and cynical content ( $p = .003$ ) was significant. Hence, the assumption of homogeneity of variance was violated. No action was taken, as the mixed design ANOVA is relatively robust and the experimental groups were comparable in size.

The results illustrated no significant interaction effect between type of humour and gender,  $F(3, 396) = 1.54, p = .203$ . Thus, no support for hypothesis 3 was found. To examine differences within the group of men and women, contrast were studied. Contrasts exposed no significant differences in content attitude among men. However, the contrasts showed a

marginal significant higher content attitude ( $p = .053$ ) regarding ironical content compared to humourless content among women. Additionally, the contrasts revealed a significant higher content attitude with regard to ironical content among women compared to sarcastic ( $p = .034$ ) and cynical content ( $p = .001$ ). The other contrast were not significant. Means and standard errors for the interaction effect between gender and type of humour on content attitude can be seen from Table 8.

Table 8

*Means and standard error for gender on content attitude (7-point Likert scale)*

Type of humour	Gender	Mean (SE)
Humourless	Men	3.46 (.16)
	Women	3.23 (.18)
Irony	Men	3.62 (.19)
	Women	3.83 (.21)
Sarcasm	Men	3.39 (.20)
	Women	3.24 (.22)
Cynicism	Men	3.44 (.21)
	Women	3.00 (.23)

### *Interactivity*

To test the moderating effect of gender on the interactivity (H5a and 6a) a mixed design ANOVA was performed. The assumption of sphericity was not met, as the Mauchly's test was significant ( $p = .005$ ). The degrees of freedom were corrected using the Huynh-Feldt estimate ( $\epsilon = .98$ ), because the Greenhouse-Geisser estimate was greater than .75 ( $\epsilon = .92$ ). Nevertheless, the assumption of homogeneity of variance was met, indicated by non-significant Levene's tests ( $p > .05$ ).

The interaction effect between gender and humour type on interactivity was not significant,  $F(2.95, 388.75) = 1.09, p = .352$ . Thus, hypotheses 5a and 6a must be rejected. To examine differences within the group of men and women, contrast were studied. The contrasts

revealed a significant higher interactivity rate with regard to humourless content compared to sarcastic content ( $p = .037$ ) among men. Furthermore, the contrast also demonstrated a marginal significant interactivity difference between ironical and sarcastic content ( $p = .071$ ) among women. Again, ironical content scored higher regarding interactivity. The other contrast were not significant. Means and standard errors for the interaction effect between gender and type of humour on interactivity can be seen from Table 9.

Table 9

*Means and standard error for gender on interactivity (7-point Likert scale)*

Type of humour	Gender	Mean (SE)
Humourless	Men	2.45 (.13)
	Women	2.37 (.14)
Irony	Men	2.17 (.13)
	Women	2.42 (.14)
Sarcasm	Men	2.07 (.11)
	Women	2.09 (.12)
Cynicism	Men	2.17 (.13)
	Women	2.14 (.14)

#### *Word-of-mouth intention*

To examine the moderating effect of gender on the word-of-mouth intention (H5b and 6b) a mixed design ANOVA was performed. Mauchly's test was significant ( $p = .004$ ). Thus, the assumption of sphericity had been violated. As the Greenhouse-Geisser estimate was greater than .75 ( $\epsilon = .93$ ), the degrees of freedom were corrected using the Huynh-Feldt estimate ( $\epsilon = .99$ ). Moreover, the assumption of homogeneity of variance was not met, as Levene's test regarding cynical content ( $p = .046$ ) was significant. Nevertheless, no action was taken as the mixed design ANOVA is relatively robust and the experimental groups were comparable in size.

The interaction effect between gender and type of humour on word-of-mouth intention

was not significant,  $F(2.96, 390.48) = 2.05, p = .108$ . Hence, hypotheses 5b and 6b must be rejected. To examine differences within the group of men and women, contrast were studied. The contrasts revealed no significant differences in word-of-mouth intention among men regarding the different types of humoristic content. However, the contrasts showed word-of-mouth differences regarding the types of humour among women. Ironical content scored significantly better than sarcastic ( $p = .013$ ) and cynical ( $p = .007$ ) content among women. The other contrast were not significant. Means and standard errors for the interaction effect between gender and type of humour on word-of-mouth intention can be seen from Table 10.

Table 10

*Means and standard error for gender on word-of-mouth intention (7-point Likert scale)*

Type of humour	Gender	Mean (SE)
Humourless	Men	2.60 (.15)
	Women	2.56 (.17)
Irony	Men	2.27 (.15)
	Women	2.62 (.17)
Sarcasm	Men	2.27 (.14)
	Women	2.10 (.15)
Cynicism	Men	2.26 (.14)
	Women	2.16 (.15)

### ***Humoristic target***

This section addresses the threefold interaction effect between type of humour, gender, and humoristic target on the independent constructs. With regard to the analyses, type of humour was included as within-factor, while gender and humoristic target functioned as between factors, and familiarity with and viewing behaviour towards the transmitters were involved as covariates.

### ***Content attitude***

To examine the moderating effect of the humoristic target on the content attitude (H7a) a

mixed design ANOVA was performed. The assumption of sphericity was met, indicated by a non-significant Mauchly's test ( $p = .215$ ). However, the Levene's test with regard to humourless ( $p = .017$ ), and cynical content ( $p = .003$ ) was significant. Hence, the assumption of homogeneity of variance was violated. No action was taken, as the mixed design ANOVA is relatively robust and the experimental groups were comparable in size.

The interaction effect between type of humour, gender, and the humoristic target on content attitude was marginal significant ( $F(3, 396) = 2.26, p = .082, \eta^2 = .017$ ). Thus, hypothesis 7a must be accepted with caution. Figure 2 illustrates the interaction effect between the type of humour, gender, and the humoristic target on content attitude. Contrasts exposed no significant content attitude differences among men. Nevertheless, ironical content in which women were the humoristic target was marginal significant ( $p = .066$ ) rated better with regard to content attitude compared to cynical content among women. Furthermore, ironical content in which men were mocked was significantly graded better regarding content attitude among women, compared to sarcastic ( $p = .001$ ) and cynical ( $p = .040$ ) content. The other contrasts were not significant.

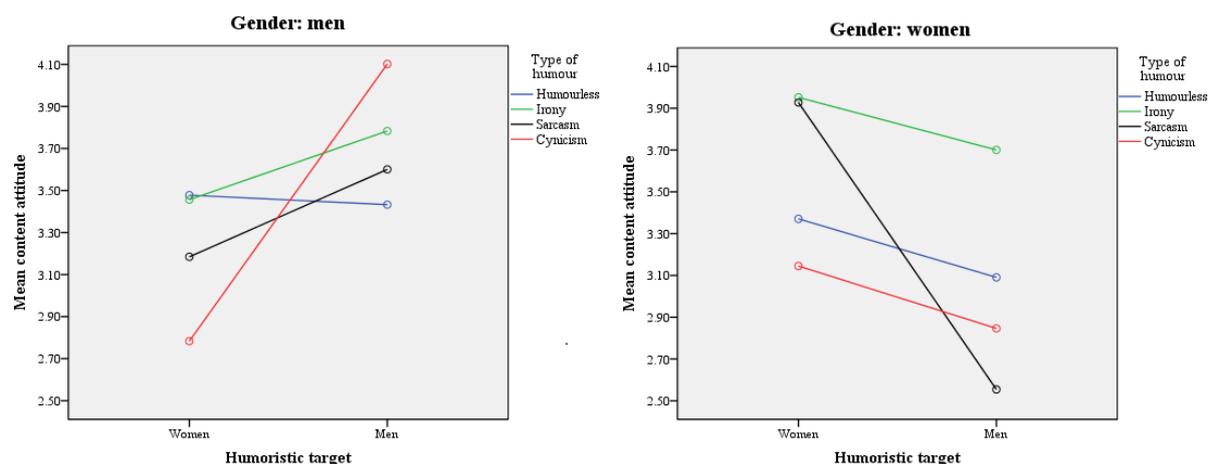


Figure 2. Interaction effect between gender, humoristic target, and type of humour on content attitude.

Means and standard errors for the interaction effect between type of humour, gender, and humoristic target on content attitude can be seen from Table 11.

Table 11

*Means and standard error for humoristic target on content attitude (7-point Likert scale)*

Type of humour	Gender	Humoristic target	Mean (SE)
Humourless	Men	Women	3.48 (.26)
		Men	3.43 (.24)
	Women	Women	3.37 (.26)
		Men	3.09 (.26)
Irony	Men	Women	3.46 (.31)
		Men	3.78 (.28)
	Women	Women	3.95 (.31)
		Men	3.70 (.30)
Sarcasm	Men	Women	3.18 (.32)
		Men	3.60 (.29)
	Women	Women	3.93 (.32)
		Men	2.55 (.31)
Cynicism	Men	Women	2.78 (.33)
		Men	4.10 (.30)
	Women	Women	3.15 (.33)
		Men	2.85 (.33)

### *Interactivity*

To investigate the moderating effect a humoristic target on the interactivity (H7a) a mixed design ANOVA was performed. The sphericity assumption had been violated indicated by Mauchly's test ( $p = .005$ ). The degrees of freedom were corrected using Huynh-Feldt estimate ( $\epsilon = .98$ ), because the Greenhouse-Geisser estimate was greater than .75 ( $\epsilon = .92$ ). Levene's tests were non-significant ( $p > .05$ ). Thus, the assumption of homogeneity of variance was met.

The interaction effect between gender, type of humour, and humoristic target on interactivity was not significant,  $F(2.95, 388.75) = 1.44, p = .232$ . Subsequently, hypothesis H7b need to be rejected. To examine differences within the group of men and women, contrast were studied. The contrasts exposed a significant interactivity difference between humourless and cynical content ( $p = .035$ ) in which women were the humoristic target, rated

by men. Regarding content in which men were mocked, no significant interactivity differences were noticeable among men. The same applies to the interactivity among with regard to content in which women were the humoristic. However, the contrasts showed a significant higher interactivity rate among women with reference to ironical content compared to sarcastic content ( $p = .015$ ) in which men were the humoristic target. The other contrasts were not significant. Means and standard errors for the interaction effect between type of humour, gender, and humoristic target on interactivity can be seen from Table 12.

Table 12

*Means and standard error for humoristic target on interactivity (7-point Likert scale)*

Type of humour	Gender	Humoristic target	Mean (SE)
Humourless	Men	Women	2.34 (.21)
		Men	2.57 (.19)
	Women	Women	2.49 (.21)
		Men	2.26 (.21)
Irony	Men	Women	1.97 (.20)
		Men	2.37 (.19)
	Women	Women	2.49 (.21)
		Men	2.35 (.20)
Sarcasm	Men	Women	1.81 (.18)
		Men	2.32 (.16)
	Women	Women	2.40 (.18)
		Men	1.78 (.18)
Cynicism	Men	Women	1.72 (.20)
		Men	2.61 (.19)
	Women	Women	2.29 (.20)
		Men	1.99 (.20)

#### *Word-of-mouth intention*

To examine the moderating effect a humoristic target on the word-of-mouth intention (H7c), a mixed design ANOVA was performed. Mauchly's test was significant ( $p = .004$ ). Thus, the assumption of sphericity had been violated. As the Greenhouse-Geisser estimate was greater

than .75 ( $\epsilon = .93$ ), the degrees of freedom were corrected using the Huynh-Feldt estimate ( $\epsilon = .99$ ). Moreover, the assumption of homogeneity of variance was not met, as Levene's test regarding the cynical content ( $p = .046$ ) was significant. Nevertheless, no action was taken as the mixed design ANOVA is relatively robust and the experimental groups were comparable in size.

The interaction effect between gender, humoristic target, and type of humour on the word-of-mouth intention showed a trend towards significance,  $F(2.96, 390.48) = 2.34$ ,  $p = .074$ ,  $\eta^2 = .017$ . Therefore, hypothesis 7c need to be accepted with caution. Figure 3 shows the interaction effect on the word-of-mouth intention.

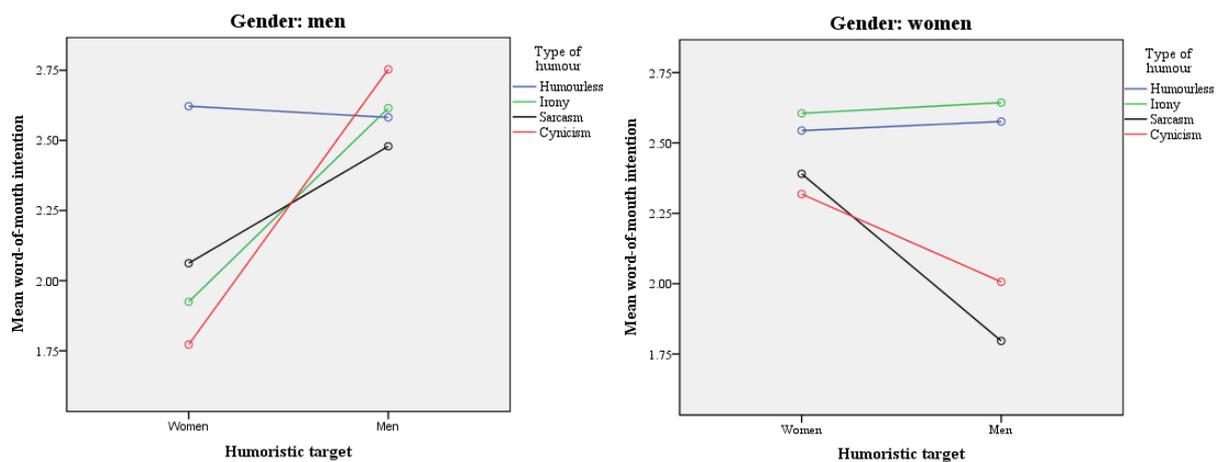


Figure 3. Interaction effect between gender, humoristic target, and type of humour on word-of-mouth intention.

Contrasts exposed that humourless content in which women were mocked scored marginal significant better compared to ironical content ( $p = .067$ ) among men. Additionally, humourless content in which women were ridiculed, scored significantly better compared to cynical ( $p = .006$ ) content among men. With regard to content in which men were teased, no word-of-mouth differences were noticeable among men. The same applies to content in which women were mocked, valued by women. Nevertheless, humourless content in which men were the humoristic target scored significantly better on word-of-mouth intention among

women, compared to sarcastic content ( $p = .006$ ). Additionally, ironical content in which men were the humoristic target was ranked significantly higher regarding word-of-mouth intention among women compared to sarcastic ( $p = .004$ ) and cynical content ( $p = .011$ ). The other contrasts were not significant. Means and standard errors for the interaction effect between type of humour, gender, and humoristic target on content attitude can be seen from Table 13.

Table 13

*Means and standard error for humoristic target on interactivity (7-point Likert scale)*

Type of humour	Gender	Humoristic target	Mean (SE)
Humourless	Men	Women	2.62 (.24)
		Men	2.58 (.22)
	Women	Women	2.54 (.24)
		Men	2.58 (.24)
Irony	Men	Women	1.93 (.24)
		Men	2.62 (.22)
	Women	Women	2.61 (.24)
		Men	2.64 (.24)
Sarcasm	Men	Women	2.06 (.22)
		Men	2.48 (.20)
	Women	Women	2.39 (.22)
		Men	1.80 (.22)
Cynicism	Men	Women	1.77 (.22)
		Men	2.75 (.21)
	Women	Women	2.32 (.22)
		Men	2.01 (.22)

## 5. Conclusion and discussion

In order to answer the overall research question (*What is the effect of humoristic (ironical, sarcastic, and cynical) content on the brand attitude, content attitude and engagement of male and female consumers, and are these effects moderated by the presence of a humoristic target?*) the current study examined the effect of ironical, sarcastic, cynical, and humourless content, on the dependent variables brand attitude, content attitude, and consumer engagement. More specifically, the present study shed light on the impact of social media presence on brand attitude, and potential gender specific attitude and engagement differences regarding social media content. Additionally, the potential moderating effect of gender as a humoristic target was investigated. The forthcoming section evaluates the corresponding hypotheses and explanations. Furthermore, the limitations and propositions for future research will be addressed, as well as the practical and theoretical implications.

### 5.1 Social media presence

The current study revealed no difference between the brand attitude before and after manipulation. The brand evaluation by participants was not significantly improved, after being exposed to social media content. Therefore, hypothesis 1, which insinuated a positive effect of exposure to brand-related social media content on the brand attitude, was rejected.

In contrast to the current study, Dijkmans et al. (2015) found beneficial effects of social media exposure on the corporate reputation. This contradiction in results is attributable to several explanations. Firstly, Dijkmans et al. (2015) investigated a longitudinal effect with a one-year interval, while the current study investigated the effect of single exposure to social media content on the brand attitude. The formation of the corporate reputation is based on a longer period and dependent on more frequently contact with the brand. In contrast to the current study, Dijkmans et al. (2015) investigated the effect of social media exposure over time. Thus, the participants in the study of Dijkmans et al. (2015) were more frequently

exposed to brand-related social media content during one year. The time span and frequency of exposure could explain the absence of a positive effect in the current study.

Secondly, the explanation for the contradictory results possibly is related to a difference in examined industry and the nature of social media use. The airline industry and company (KLM) assessed in Dijkmans et al. (2015), are known as “socially devoted”. Social media is often deployed for customer service. The active and benevolent social media deployment possibly generates sympathy with regard to the brand, and contributes to the image of successful service delivery. The more passive deployment of social media use, assessed in the current study, is no indicator of successful management. The more passive form of social use does not contribute to perception of the firm’s ability to deliver valued outcomes to its stakeholders. In summary, the explanation possibly is related to the manner in which social media is used.

### *5.2 The impact of humour*

The results revealed differences between ironical, sarcastic, and cynical humour regarding content attitude, interactivity, and word-of-mouth intention. Therefore, support was found for hypotheses 2a, b, and c. With regard to the content attitude, ironical humour was rated better compared to humourless, sarcastic, and cynical humour. Regarding interactivity and word-of-mouth intention especially no humour and ironical humour were effective.

The difference in effectiveness of the assessed types of humour is a striking finding. Due to a blurred image regarding the assessed types of humour, the difference hardly can be explained with available literature. The differences with regard to the types of humour could be related to the valence of the content. In the current study, sarcasm and cynicism are labelled as hostile and harsh. Hostile and harsh forms of humour may lead to anger among receivers resulting a decrease in effectiveness.

### *5.3 The interaction between humour and gender on content attitude*

Ironical content appear to lead to a higher content attitude in comparison with sarcastic and cynical content among women. Thus, support for hypothesis 3, which assumed a greater effect of ironical content on the content attitude among women, was found. This finding is in line with gender specific humour preferences. However, contrary to the findings of Buijzen and Valkenburg (2004) no significant differences in content attitude was found among men. Therefore, hypothesis 4, which presumed a more prominent effect of sarcastic and cynical humour on content attitude among men, must be rejected. In summary, the results are not completely in accordance with the direction which was expected from humour appreciation differences.

The explanation could be related to the experiential processing theory (Meyers-Levy & Maliviya, 1999). The experiential processing theory presumes a change in attitude dependent on the emotional state of consumers during the processing of a message. Pleasant emotions are converted into a matching attitude. Processing a sarcastic or cynical message potentially not led to more pleasant emotions. Consequently, sarcastic and cynical content did not resulted an in higher content attitude in comparison with ironical content. The sarcastic and cynical content in the current study possibly not provoke pleasant emotions. This could be the reason for the inconsistent results.

Furthermore, the explanation for the inconsistency could also be linked to the operationalization of humour. Several examinations demonstrate gender specific humour differences with the use of overarching terms (e.g., hostile types), and do not distinguish different practices of humour. Furthermore, irony and sarcasm is often defined and operationalized differently. Colston and Lee (2004) defined irony as an expression of negative emotions, to insult, to be rude, to deemphasize, or to be humorous. Colston and Lee (2004) use the terms irony and sarcasm almost interchangeably, while several other studies (e.g.,

Leggitt & Gibbs, 2000) circumscribe sarcasm as a practice of irony. Furthermore, while Kunneman et al. (2015) mark sarcasm as: “a factor that causes the polarity of a message to flip”, other studies use a similar operationalization for the term irony (e.g., Colston & Lee, 2004). The current study differentiated three types of humour based on the level of hostility and contempt. The operationalization of the current study does not correspond to the description of humour in earlier research. The differentiation in the current study could be the explanation for the contradictory results.

#### *5.4 The interaction between humour and gender on consumer engagement*

The results of the current examination revealed an interactivity difference among women with regard to ironical content compared to sarcastic content. However, an interactivity difference related to the comparison of ironical and cynical content is absent. Therefore, hypothesis 5a, which assumed that ironical content on social media will lead to a higher interactivity compared to sarcastic and cynical among women, is only partially supported. With regard to the word-of-mouth intention, the results revealed a difference among women regarding ironical content in comparison with sarcastic, and cynical content. Thus, support was found for hypothesis 5b, which presumed a higher word-of-mouth intention among women as result of exposure to ironical content, compared to sarcastic and cynical content.

However, the results revealed no significant interactivity difference in favour of sarcastic and cynical content among men. The same applies to word-of-mouth intention. Again no significant difference in favour of the sarcastic and cynical content was noticeable among men. The results are not in line with the presumed direction of hypothesis 6. Therefore, hypothesis 6a as well as hypothesis 6b are rejected.

An explanation for the absence of expected results could be related to the use of humour. Hay (2001) demonstrated that men, like women, use humour to build solidarity. The use of harsh and hostile form of humour, does not contribute to the sense of solidarity.

Furthermore, Lampert and Ervin-Tripp (as cited in Crawford, 2003) concluded that men and women generally employ similar kinds of humour. This is confirmed by Crawford and Gressley (1991), which demonstrated similarities in self-reported humour use between men and women. This offline use of humour, examined in these studies, is potentially also visible in an online context, and converted into interactivity and word-of-mouth on social media.

### *5.5 The effect of the humoristic target*

The results of the current study exposed that the interaction effect between type of humour and gender on the content attitude and word-of-mouth intention was affected by the humoristic target. Thus, support was found for hypothesis 7a as well as for hypothesis 7c. Nevertheless, no influence of the humoristic target on the interaction effect between type of humour and gender on interactivity was found. Therefore, hypothesis 7b was rejected.

The explanation for the results could be related to content drivers that influence interactivity and word-of-mouth intention. According to De Vries, Gensler, and Leeflang (2012) there are differences in drivers that enhance interactivity and word-of-mouth intention. Vividness appears to enhance the number of likes with regard to social media content, while an inviting character of the content provokes comments. The target in humoristic content possibly is a driver that enhances word-of-mouth communication. Nevertheless, the humoristic target seems to have no effect on the level of interactivity.

### *5.6 Limitations and future research*

Some limitations of the current study need to be addressed. Firstly, the effect of the exposed content on the brand attitude is measured at the beginning and at the end of the experiment. In other words, the change in brand attitude was measured after the participants had seen all types of content. Therefore, it was not possible to determine the effect on brand attitude by content type. The results of the current study can only be associated with the online presence of a brand. Future research could benefit by examining the effect on brand attitude for each

type of humour separately. For example, by measuring the effect of type of content between subjects. Due to feasibility reasons the effect of humour on brand attitude was not examined between subjects in the current study. This would affect the required number of participants. Moreover, the effect of different types of humour on the brand attitude is outside the initial focus of the examination. Future research, also could focus on the impact of gender on brand attitude. The results of the present study revealed a significant interaction effect between gender and the exposure of social media content on brand attitude. Therefore, it is interesting to investigate the role of gender in brand attitudes. Future research, with regard to this impact of gender on brand attitude, would benefit by including a control group in which no social media content is exposed. As a result, the effect of online brand presence becomes even more apparent.

Secondly, the humourless content in the current study was related to an issue that possibly yielded pleasant emotions. According to the experiential processing theory, these emotions result in a matching attitude and perhaps stimulate consumer engagement. Additionally, favourable content regarding topics on which disagreement exist between men and women, probably provokes consumer engagement whenever it is in line with the expectations and desired personal identity of the consumer. Future research would benefit by avoiding these undesirable effects by using content unrelated to the subject or variables of the study. Consequently, emotional differences might be obviated, as long as the experimental groups are comparable. Additionally, future research should include the humourless content in the pre-test.

Thirdly, as stated by Stearns (as cited in Malone, 1980), the appreciation of humour and indirectly the effectiveness of certain types of humour is related to age, gender, education, language, and culture. The current study focussed on gender as determinant factor. Age, education, language, and culture were not taken into account. However, Kotthoff (2006)

indicated the importance of age with regard to the effectiveness of humour. Kotthoff (2006) also suggested the importance of the living environment milieu. The author stated that the use of humour is possibly milieu-specific. Moreover, Colston and Lee (2004) suggested an impact of culture and language on humour expression. Thus, future research into the effectiveness of humour in social media content, would benefit by taken these additional factors into account.

Lastly, based on experimental criteria the current study was focused on two transmitters. The use of these specific transmitters justified the use of hostile forms of humour relative to men and women. However, the results are limited to one specific sector. Consequently, the results cannot be generalized to a larger population. Future research could benefit by taking multiple brands and sectors into account. Furthermore, additional research is needed to test whether the conclusions of the current study can be extended to other areas (e.g., purchase behaviour). This will enhance the external validity.

### *5.7 Practical and theoretical implications*

First and foremost, the current study makes a theoretical contribution to the literature regarding the effectiveness of humour in social media content, by showing that the effect of humour in social media content is not that straightforward as suggested in some earlier research (Sternthal & Graig, 1973; Madden & Weinberger, 1982; Madden & Weinberger, 1984). Humour appears to be a complex collective term consisting of multiple forms, and is often defined and operationalized differently. Earlier research about humour in content marketing often was focused on humour as genre. Little is known about potential differences between types of humour. Moreover, results regarding the effectivity of humour and related factors are somewhat contradictory. These conflicting results are possibly caused by differences between the investigations in the operationalization of humour. The current study exposed effectivity differences between types of humour. The present study is a step towards a more specified idea of humour and its effectiveness. The effectiveness of the types of

humour requires further examination.

Second, the current research contributes to the understanding of gender specific online behaviour differences. The differences between men and women in online behaviour are relatively unexplored. The results of the current study indeed indicated that men and women diverge in some aspects of online behaviour affected by content factors. The current study revealed that men and women differ regarding content attitude and word-of-mouth intention as result of exposure to humoristic content with a humoristic target. The contrasts between men and women exhibited online behaviour differences resulting from different types of humour. This contributes to knowledge into gender specific social media behaviour. However, the results revealed no substantial differences between men and women. As mentioned in earlier research (Crawford, 2003), gender difference regarding humour are somewhat overrated.

Third, the present study contributes to the knowledge about the effect of using a humoristic target. In other words, the results provided evidence for the effectiveness of this specific personalization factor. According to several previous studies, personalization affects the effectiveness of social media content. The results provide valuable information about the implementation of a humoristic target, and a suitable direction.

In summary, the current study provides guidance in how to use humour on social media. The use of humour is not by definition effective. The present research is a step towards a framework for successful implementing humour in social media content. The results can be used as a starting point in developing more personalized and targeted social media content.

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## Appendix

### Appendix A: experimental conditions

Table 14

*Experimental conditions*

Experimental group	Gender (Factor 1)	Content (Factor 2)	Subject of content (Factor 3)
Experimental group 1	Male	1. Ironic message 2. Sarcastic message 3. Cynical message 4. Humourless message	Male
Experimental group 2	Male	1. Ironic message 2. Sarcastic message 3. Cynical message 4. Humourless message	Female
Experimental group 3	Female	1. Ironic message 2. Sarcastic message 3. Cynical message 4. Humourless message	Male
Experimental group 4	Female	1. Ironic message 2. Sarcastic message 3. Cynical message 4. Humourless message	Female

## Appendix B: pre-test questionnaire

	Volledig mee oneens						Volledig mee eens	
	1	2	3	4	5	6	7	
De content is vriendelijk. ( <i>Hostility</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De content is minachtend. ( <i>Contempt</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De content is grappig. ( <i>Amusement</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De content is respectvol. ( <i>Contempt</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De content is vijandig. ( <i>Hostility</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De content is flauw. ( <i>Amusement</i> )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### *Gender*

Wat is jouw geslacht?

- Man
- Vrouw

## Appendix C: pre-test materials

Table 15

*Stimuli per humour type (pre-test)*

---

Type of humour	Stimuli
Irony	<ol style="list-style-type: none"><li>1. Vrouwen zijn om van te houden, niet om te begrijpen.</li><li>2. Vrouwen zijn leuk van ver, maar ver van leuk.</li><li>3. Hoe zou de wereld eruitzien zonder mannen? Vol dikke gelukkige vrouwen.</li><li>4. Wat is de overeenkomst tussen een man en een vis? Het vangen is het leukste deel.</li></ol>
Sarcasm	<ol style="list-style-type: none"><li>1. Wat gebeurt er als een man tot zijn navel in het water staat? Dat gaat zijn verstand te boven.</li><li>2. Waarom zijn grappen over vrouwen zo kort? Omdat mannen ze zo kunnen onthouden.</li><li>3. Wat is het verschil tussen een vrouw en een batterij? Een batterij heeft tenminste één positieve kant.</li><li>4. Hoe noem je een vrouw die uit Helmond komt? Een Hel-monster.</li></ol>
Cynicism	<ol style="list-style-type: none"><li>1. Hoe kun je je man van de verdrinkingsdood redden? Door je voet van zijn kop te halen.</li><li>2. Hoe kun je zien dat een man gelukkig is? Wie kan dat wat schelen?</li><li>3. Wat is een vrouw die 90% van haar intelligentie heeft verloren? Een weduwe.</li><li>4. Hoe noem je een man met maar 1 hersenhelft? Getalenteerd.</li></ol>
Fillers	<ol style="list-style-type: none"><li>1. Mannen zijn competitiever ingesteld dan vrouwen.</li><li>2. Mannen zijn slecht in het opvangen van non verbale signalen.</li><li>3. Vrouwen praten meer dan mannen.</li><li>4. 1 op de 113 vrouwen is kleurenblind.</li></ol>

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## Appendix D: pre-test results

Table 16

*Overview pre-test scores (ironical content)*

	Hostility		Contempt		Amusement	
	Hostile	Friendly (recoded)	Contemptuous	Respectful (recoded)	Silly (recoded)	Amusing
Content version 1	M = 3.94 SD = 1.90	M = 4.06 SD = 1.97	M = 3.74 SD = 2.00	M = 4.71 SD = 1.72	M = 3.61 SD = 1.59	M = 4.58 SD = 1.63
Content version 2	M = 3.90 SD = 1.83	M = 4.97 SD = 1.49	M = 4.65 SD = 1.50	M = 5.10 SD = 1.30	M = 2.84 SD = 1.51	M = 4.13 SD = 1.77
Content version 3	M = 3.94 SD = 1.91	M = 4.29 SD = 1.76	M = 4.16 SD = 1.86	M = 4.58 SD = 1.77	M = 3.29 SD = 1.87	M = 4.26 SD = 2.10
Content version 4 <sup>a</sup>	M = 3.29 SD = 1.79	M = 3.84 SD = 1.59	M = 3.87 SD = 1.78	M = 4.19 SD = 1.42	M = 3.48 SD = 1.67	M = 4.52 SD = 1.77

Table 17

*Overview pre-test scores (sarcastic content)*

	Hostility		Contempt		Amusement	
	Hostile	Friendly (recoded)	Contemptuous	Respectful (recoded)	Silly (recoded)	Amusing
Content version 6	M = 3.81 SD = 1.72	M = 4.39 SD = 1.65	M = 4.13 SD = 1.78	M = 4.61 SD = 1.48	M = 2.90 SD = 1.42	M = 4.03 SD = 1.96
Content version 7	M = 3.84 SD = 1.66	M = 4.35 SD = 1.76	M = 4.48 SD = 1.84	M = 4.90 SD = 1.25	M = 2.87 SD = 1.36	M = 4.74 SD = 1.55
Content version 8	M = 4.58 SD = 1.84	M = 5.45 SD = 1.75	M = 5.23 SD = 1.84	M = 5.45 SD = 1.50	M = 3.10 SD = 1.78	M = 4.61 SD = 2.01
Content version 9 <sup>b</sup>	M = 4.29 SD = 1.76	M = 5.32 SD = 1.72	M = 4.26 SD = 1.86	M = 5.03 SD = 1.52	M = 3.39 SD = 1.89	M = 4.68 SD = 1.92

Table 18

*Overview pre-test scores (cynical content)*

	Hostility		Contempt		Amusement	
	Hostile	Friendly (recoded)	Contemptuous	Respectful (recoded)	Silly (recoded)	Amusing
Content version 11	M = 4.26 SD = 1.79	M = 5.65 SD = 1.36	M = 4.48 SD = 1.82	M = 5.10 SD = 1.60	M = 3.16 SD = 1.85	M = 4.13 SD = 2.08
Content version 12	M = 3.84 SD = 1.86	M = 4.81 SD = 1.78	M = 4.39 SD = 1.98	M = 5.19 SD = 1.40	M = 3.00 SD = 1.71	M = 3.06 SD = 1.98
Content version 13 <sup>c</sup>	M = 5.00 SD = 1.73	M = 5.84 SD = 1.53	M = 4.97 SD = 1.98	M = 5.84 SD = 1.10	M = 3.19 SD = 1.92	M = 3.97 SD = 2.11
Content version 14	M = 4.10 SD = 1.74	M = 5.45 SD = 1.63	M = 4.94 SD = 1.88	M = 5.35 SD = 1.58	M = 3.35 SD = 1.85	M = 3.71 SD = 2.00

Note.

<sup>a</sup> Most suitable ironical content. <sup>b</sup> Most suitable sarcastic content. <sup>c</sup> Most suitable cynical content.

## Appendix E: experimental materials

Target women:

### 1. Humourless content



Onderzoek toont aan dat 25% van alle vrouwelijke bestuurders ooit een ongeluk heeft gehad tijdens het parkeren.

Onder de mannelijke bestuurders is dit slechts 13%.



### 2. Ironical content



Wat is de overeenkomst tussen een vrouw en een vis?

Het vangen is het leukste deel.



Target men:

### 1. Humourless content



Onderzoek toont aan dat 25% van alle mannelijke bestuurders ooit een ongeluk heeft gehad tijdens het parkeren.

Onder de vrouwelijke bestuurders is het slechts 13%.



### 2. Ironical content



Wat is de overeenkomst tussen een man en een vis?

Het vangen is het leukste deel.



### 3. Sarcastic content

RTL 7  
15 October at 17:30 · €

Hoe noem je een  
vrouw uit Helmond?

Een Hel-monster.

Like Comment Share

### 3. Sarcastic content

net5 Net5  
15 October at 17:30 · €

Hoe noem je een  
man uit Helmond?

Een Hel-monster.

Like Comment Share

### 4. Cynical content

RTL 7  
15 October at 17:30 · €

Wat is een vrouw  
die 90% van haar  
intelligentie is  
verloren?

Een weduwe.

Like Comment Share

### 4. Cynical content

net5 Net5  
15 October at 17:30 · €

Wat is een man die  
90% van zijn  
intelligentie is  
verloren?

Een weduwnaar.

Like Comment Share

*Filler content*

**RTL 7**  
15 October at 17:30 · €

Vanavond te gast bij Voetbal Inside: Jan (Bamblok) Boskamp.

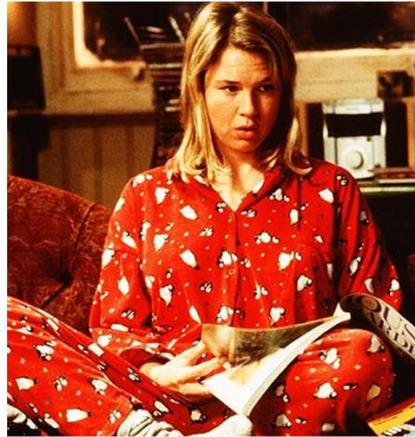


Like Comment Share

*Filler content*

**net5** Net5  
15 October at 17:30 · €

Yes, bijna Lovely December! Kijk heel de maand december naar klassiekers met o.a. deze topper! Donderdag starten we met de PREMIÈRE van 'Love actualy'!



Like Comment Share

*Filler content*

**RTL 7**  
15 October at 17:30 · €

Kunnen onze Nederlandse ploegen overwinteren in Europa? Kijk vanavond vanaf 19:00u naar de UEFA Europa League!



Like Comment Share

*Filler content*

**net5** Net5  
15 October at 17:30 · €

Woensdag zie je haar weer in House Rules, maar vandaag is onze Daphne jarig! Felicitier deze mooie dame met een like!



Like Comment Share

## **Appendix F: experimental questionnaire**

### **- Introduction and consensus form**

Beste participant,

Bedankt voor je interesse en deelname. Voor mijn studie Communicatie- en Informatiewetenschappen aan de universiteit van Tilburg onderzoek ik hoe mensen Facebook berichten beoordelen. Middels onderstaande tekst wil ik jou informeren over het onderzoek. Lees onderstaande tekst a.u.b. aandachtig door voordat je start met het onderzoek.

Doel van het onderzoek: Met dit onderzoek wil ik toetsen hoe mensen Facebook berichten beoordelen. De beoordeling is op basis een aantal stellingen. Aan jou de taak zo eerlijk mogelijk aan te geven in hoeverre je het eens bent met deze stellingen. Goede of foute antwoorden bestaan niet, het gaat om jouw mening. Het onderzoek is volledig onafhankelijk van de betrokken merken uitgevoerd.

Opzet van het onderzoek: Het onderzoek start met een aantal stellingen, welke jij dient te beoordelen. Vervolgens krijg je een Facebook bericht van hetzelfde merk te zien. Na het intensief bestuderen van dit bericht, dien je aan te geven in hoeverre je het eens bent met de daaropvolgende stellingen. Dit proces wordt 6 keer herhaald. Tot slot, worden er een aantal algemene vragen gesteld. Het onderzoek duurt ongeveer 15 minuten. Het onderzoek is volledig anoniem. Er worden dus geen verbanden gelegd tussen de gegeven antwoorden en jou als persoon.

Vrijwillige deelname: Je bent niet verplicht om aan dit onderzoek deel te nemen. Als je toestemt in deelname, kun je op elk moment je deelname aan het onderzoek opzeggen zonder opgaaf van redenen en dit zal zonder gevolgen zijn.

Contact: Mocht je na afloop van dit onderzoek nog vragen hebben, dan kun je contact opnemen met Daan Nouwens.

Toestemming: Met het doorklikken naar de volgende pagina, geef je aan bereid te zijn te participeren in het onderzoek. Jouw antwoorden zullen dan anoniem worden meegenomen in de analyse. De resultaten worden uitsluitend voor wetenschappelijke doeleinden gebruikt.

Ik verklaar dat ik bovenstaande tekst gelezen en begrepen heb en ga hiermee akkoord zodra ik op '>>' klik.

### **- Introductory wording**

Beeld je in dat je door je Facebook timeline aan het scrollen bent. Op deze timeline staat een van de komende berichten. Geef, met dit in gedachte, zo eerlijk mogelijk aan in hoeverre jij het eens bent met de stellingen.

**- Experimental statements**

***Brand attitude:***

	Volledig mee oneens						Volledig mee eens
	1	2	3	4	5	6	7
Merknaam - is een goede zender.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik kijk graag naar - merknaam.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het is plezierig om naar - merknaam - te kijken.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Merknaam - is een zender van hoge kwaliteit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik zou - merknaam - aanraden bij een vriend(in).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Merknaam - is een sympathieke zender.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

***Content attitude:***

	Volledig mee oneens						Volledig mee eens
	1	2	3	4	5	6	7
Dit Facebook bericht is amusant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dit Facebook bericht is origineel.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dit Facebook bericht is humoristisch.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik kan dit Facebook bericht	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

wel waarderen.

Ik zou graag meer vergelijkbaar materiaal willen zien.	<input type="checkbox"/>						
--	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

***Interactivity:***

	Volledig mee oneens						Volledig mee eens
	1	2	3	4	5	6	7
Ik zou dit Facebook bericht liken.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik zou reageren op dit Facebook bericht.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik zou dit Facebook bericht delen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik zou de reacties lezen onder dit Facebook bericht.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik zou deze Facebook pagina volgen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik zou berichten creëren en delen op deze Facebook pagina.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

***Word-of-mouth intention:***

	Volledig mee oneens						Volledig mee eens
	1	2	3	4	5	6	7
Ik zou dit Facebook bericht aanbevelen bij een vriend(in).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ik zou een vriend(in) taggen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

in dit Facebook bericht.

Ik zou positief praten over deze Facebook pagina.

Ik zou de Facebookpagina aanbevelen bij een vriend(in).

Ik ga deze informatie zelf gebruiken (bijv. in een gesprek).

**- Control questions (transmitters)**

*Familiarity with transmitter*

Ik ken het – merknaam:

Helemaal niet        Heel erg goed

*Viewing behaviour towards transmitter*

Merknaam – kijk ik:

Nooit        Vaak

**- Manipulation check**

The participants were asked to rank the experimental materials on perceived hostility and contempt.

**- Control questions (Facebook)**

*Possession of a Facebook account*

Beschik je over een Facebook account?

- Ja
- Nee

*Frequency of Facebook use*

Hoe vaak raadpleeg je Facebook?

- Dagelijks
- Meerdere keren per week
- Een keer per week
- Een keer per maand
- Nooit

*Facebook posting rate*

Hoe vaak plaats je iets op Facebook?

- Dagelijks
- Meerdere keren per week
- Een keer per week
- Een keer per maand
- Nooit

**- Demographic variables**

*Gender*

Wat is jouw geslacht?

- Man
- Vrouw

*Age*

Wat is jouw leeftijd?

*Education*

Wat is jouw hoogst afgeronde of huidige opleiding?

- Basisschool
- Middelbaar onderwijs (VMBO/HAVO/VWO)
- MBO
- HBO

WO

Anders

**- Purpose of the study**

Waarover denk jij dat het onderzoek ging?

## Appendix G: multiple principal component analyses

Table 19

*Principal component analysis (PCA) and reliability of brand attitude scales*

Construct	Items	Factor Loadings (Oblimin Rotation)	Mean (SD)
Brand attitude before	RTL 7/Net 5 is een goede zender.	.71	3.87 (1.39)
	Ik kijk graag naar RTL 7/Net 5.	.75	3.56 (1.57)
	Het is plezierig om naar RTL 7/Net 5 te kijken.	.74	3.86 (1.51)
	RTL 7/Net 5 is een zender van hoge kwaliteit.	.58	3.52 (1.42)
	Ik zou RTL 7/Net 5 aanraden bij een vriend(in).	.64	3.44 (1.51)
	RTL 7/Net 5 is een sympathieke zender.	.56	3.63 (1.45)
	<b><i>Eigen value = 2.67</i></b>		
<b><i>Cronbach's <math>\alpha = .75</math></i></b>			
Brand attitude after	RTL 7/Net 5 is een goede zender.	.91	3.87 (1.61)
	Ik kijk graag naar RTL 7/Net 5.	.89	3.36 (1.75)
	Het is plezierig om naar RTL 7/Net 5 te kijken.	.93	3.64 (1.64)
	RTL 7/Net 5 is een zender van hoge kwaliteit.	.78	3.48 (1.40)
	Ik zou RTL 7/Net 5 aanraden bij een vriend(in).	.88	3.13 (1.56)
	RTL 7/Net 5 is een sympathieke zender.	.85	3.72 (1.49)
	<b><i>Eigen value = 4.61</i></b>		
<b><i>Cronbach's <math>\alpha = .94</math></i></b>			

Table 20

*Principal component analysis (PCA) and reliability of humourless scales*

Construct	Items	Factor Loadings (Oblimin Rotation)	Mean (SD)
Content attitude	Dit Facebook bericht is amusant.	.83	3.39 (1.72)
	Dit Facebook bericht is origineel.	.80	3.29 (1.70)
	Dit Facebook bericht is humoristisch.	.85	3.32 (1.66)
	Ik kan dit Facebook bericht wel waarderen.	.93	3.70 (1.72)
	Ik zou graag meer vergelijkbaar materiaal willen zien.	.85	3.07 (1.65)
	<b><i>Eigen value = 3.63</i></b>		
<b><i>Cronbach's <math>\alpha = .91</math></i></b>			
Interactivity	Ik zou dit Facebook bericht liken.	.72	2.80 (1.86)
	Ik zou reageren op dit Facebook bericht.	.79	2.52 (1.75)
	Ik zou dit Facebook bericht delen.	.86	1.93 (1.31)
	Ik zou de reacties lezen onder dit Facebook bericht.	.58	3.44 (1.96)
	Ik zou deze Facebook pagina volgen.	.82	2.08 (1.37)
	Ik zou berichten creëren en delen op deze Facebook pagina.	.70	1.75 (1.07)
<b><i>Eigen value = 3.37</i></b>			
<b><i>Cronbach's <math>\alpha = .82</math></i></b>			
Word-of-mouth intention	Ik zou dit Facebook bericht aanbevelen bij een vriend(in).	.89	2.38 (1.58)
	Ik zou een vriend(in) taggen in dit Facebook bericht.	.78	2.80 (1.83)
	Ik zou positief praten over deze Facebook pagina.	.84	2.77 (1.63)
	Ik zou de Facebookpagina aanbevelen bij een vriend(in).	.87	2.24 (1.40)
	Ik ga deze informatie zelf gebruiken (bijv. in een gesprek).	.71	2.72 (1.72)
	<b><i>Eigen value = 3.34</i></b>		
<b><i>Cronbach's <math>\alpha = .87</math></i></b>			

Table 21

*Principal component analysis (PCA) and reliability of ironic condition*

Construct	Items	Factor Loadings (Oblimin Rotation)	Mean (SD)
Content attitude	Dit Facebook bericht is amusant.	.90	3.92 (1.96)
	Dit Facebook bericht is origineel.	.86	3.69 (1.92)
	Dit Facebook bericht is humoristisch.	.93	4.14 (2.02)
	Ik kan dit Facebook bericht wel waarderen.	.93	3.84 (1.95)
	Ik zou graag meer vergelijkbaar materiaal willen zien.	.85	3.00 (1.81)
<b><i>Eigen value = 4.01</i></b>			
<b><i>Cronbach's <math>\alpha = .94</math></i></b>			
Interactivity	Ik zou dit Facebook bericht liken.	.81	2.93 (2.02)
	Ik zou reageren op dit Facebook bericht.	.85	2.21 (1.48)
	Ik zou dit Facebook bericht delen.	.81	1.83 (1.26)
	Ik zou de reacties lezen onder dit Facebook bericht.	.69	3.04 (1.97)
	Ik zou deze Facebook pagina volgen.	.81	2.14 (1.46)
	Ik zou berichten creëren en delen op deze Facebook pagina.	.66	1.59 (.84)
	<b><i>Eigen value = 3.58</i></b>		
<b><i>Cronbach's <math>\alpha = .85</math></i></b>			
Word-of-mouth intention	Ik zou dit Facebook bericht aanbevelen bij een vriend(in).	.90	2.46 (1.69)
	Ik zou een vriend(in) taggen in dit Facebook bericht.	.84	2.62 (1.80)
	Ik zou positief praten over deze Facebook pagina.	.89	2.56 (1.65)
	Ik zou de Facebookpagina aanbevelen bij een vriend(in).	.89	2.24 (1.43)
	Ik ga deze informatie zelf gebruiken (bijv. in een gesprek).	.79	2.32 (1.55)
<b><i>Eigen value = 3.71</i></b>			
<b><i>Cronbach's <math>\alpha = .91</math></i></b>			

Table 22

*Principal component analysis (PCA) and reliability of sarcastic condition*

Construct	Items	Factor Loadings (Oblimin Rotation)	Mean (SD)
Content attitude	Dit Facebook bericht is amusant.	.93	3.45 (1.96)
	Dit Facebook bericht is origineel.	.89	3.40 (1.94)
	Dit Facebook bericht is humoristisch.	.95	3.69 (2.05)
	Ik kan dit Facebook bericht wel waarderen.	.92	3.38 (1.94)
	Ik zou graag meer vergelijkbaar materiaal willen zien.	.88	2.73 (1.79)
<b><i>Eigen value = 4.16</i></b>			
<b><i>Cronbach's <math>\alpha = .95</math></i></b>			
Interactivity	Ik zou dit Facebook bericht liken.	.70	2.51 (1.79)
	Ik zou reageren op dit Facebook bericht.	.80	1.93 (1.23)
	Ik zou dit Facebook bericht delen.	.76	1.70 (1.04)
	Ik zou de reacties lezen onder dit Facebook bericht.	.59	2.93 (1.81)
	Ik zou deze Facebook pagina volgen.	.86	1.86 (1.18)
	Ik zou berichten creëren en delen op deze Facebook pagina.	.75	1.57 (.93)
<b><i>Eigen value = 3.36</i></b>			
<b><i>Cronbach's <math>\alpha = .81</math></i></b>			
Word-of-mouth intention	Ik zou dit Facebook bericht aanbevelen bij een vriend(in).	.82	2.11 (1.31)
	Ik zou een vriend(in) taggen in dit Facebook bericht.	.81	2.29 (1.61)
	Ik zou positief praten over deze Facebook pagina.	.87	2.43 (1.55)
	Ik zou de Facebookpagina aanbevelen bij een vriend(in).	.88	2.00 (1.25)
	Ik ga deze informatie zelf gebruiken (bijv. in een gesprek).	.82	2.16 (1.43)
<b><i>Eigen value = 3.53</i></b>			
<b><i>Cronbach's <math>\alpha = .89</math></i></b>			

Table 23

*Principal component analysis (PCA) and reliability of cynical condition*

Construct	Items	Factor Loadings (Oblimin Rotation)	Mean (SD)
Content attitude	Dit Facebook bericht is amusant.	.96	3.36 (2.09)
	Dit Facebook bericht is origineel.	.89	3.36 (2.01)
	Dit Facebook bericht is humoristisch.	.96	3.58 (2.11)
	Ik kan dit Facebook bericht wel waarderen.	.96	3.28 (2.08)
	Ik zou graag meer vergelijkbaar materiaal willen zien.	.89	2.72 (1.77)
	<b><i>Eigen value = 4.37</i></b> <b><i>Cronbach's <math>\alpha = .96</math></i></b>		
Interactivity	Ik zou dit Facebook bericht liken.	.78	2.50 (1.90)
	Ik zou reageren op dit Facebook bericht.	.79	2.08 (1.54)
	Ik zou dit Facebook bericht delen.	.84	1.72 (1.25)
	Ik zou de reacties lezen onder dit Facebook bericht.	.63	3.13 (2.00)
	Ik zou deze Facebook pagina volgen.	.86	1.95 (1.42)
	Ik zou berichten creëren en delen op deze Facebook pagina.	.80	1.62 (1.01)
<b><i>Eigen value = 3.70</i></b> <b><i>Cronbach's <math>\alpha = .85</math></i></b>			
Word-of-mouth intention	Ik zou dit Facebook bericht aanbevelen bij een vriend(in).	.89	2.14 (1.45)
	Ik zou een vriend(in) taggen in dit Facebook bericht.	.86	2.38 (1.71)
	Ik zou positief praten over deze Facebook pagina.	.87	2.40 (1.54)
	Ik zou de Facebookpagina aanbevelen bij een vriend(in).	.94	1.99 (1.26)
	Ik ga deze informatie zelf gebruiken (bijv. in een gesprek).	.87	2.25 (1.47)
<b><i>Eigen value = 3.94</i></b> <b><i>Cronbach's <math>\alpha = .93</math></i></b>			

## Appendix H: control variables

### Age

To check whether age has an influence on the dependent variables, multiple regression analyses were performed. The first regression analysis was executed to check whether age had an influence on the brand attitude before manipulation. The Kolmogorov-Smirnov test was not significant ( $p > .05$ ), indicating normally distributed residuals. The analysis revealed that age does not predict brand attitude before manipulation ( $b = -.002$ ,  $\beta = -.03$ ,  $t(136)$ ,  $p = .729$ ). In addition, age does not explain a significant proportion of variance (.10%) in brand attitude before manipulation ( $R^2 = .001$ ,  $F(1, 136) = .12$ ,  $p = .729$ ). 0% of the residuals fell outside the range of -3 and 3, and 3.68% fell outside the range of -2 and 2. The largest Cook's distance was .177, and the errors were independent (Durbin-Watson: 1.68).

The second regression analysis was executed to check whether age had an impact on the brand attitude after manipulation. The regression analysis showed that age does not predict brand attitude after manipulation ( $b = -.013$ ,  $\beta = -.12$ ,  $t(136)$ ,  $p = .167$ ). In addition age does not explain a significant proportion of variance (1.4%) in brand attitude after manipulation ( $R^2 = .014$ ,  $F(1, 136) = 1.93$ ,  $p = .167$ ). The Kolmogorov-Smirnov test was not significant ( $D(138) = .07$ ,  $p = .200$ ). However, a significant amount of kurtosis ( $z\text{-score}_{\text{kurtosis}}: 2.28$ ) indicated non-normally distributed residuals. Therefore, the regression analysis has been run again with bootstrap. The effect of age on brand attitude after manipulation was not significant as the 95% confidence intervals cross zero (-.034, .005). 0% of the residuals fell outside the range of -3 and 3, and 0% fell outside the range of -2 and 2. The largest Cook's distance was .14, and the errors were independent (Durbin-Watson: 1.97).

A third regression analysis was executed to check whether age had an impact on content attitude. The regression analysis showed that age does not predict content attitude ( $b = -.003$ ,  $\beta = -.03$ ,  $t(136)$ ,  $p = .712$ ). In addition age does not explain a significant proportion of variance (.1%) in content attitude ( $R^2 = .001$ ,  $F(1, 136) = .14$ ,  $p = .712$ ). The data was

normally distributed, indicated by a non-significant Kolmogorov-Smirnov test ( $D(138) = .06$ ,  $p = .200$ ), and the absence of skewness and kurtosis. .74% of the residuals fell outside the range of -2 and 2, and .74% fell outside the range of -3 and 3. The largest Cook's distance was .145, and the errors were independent (Durbin-Watson: 1.93).

A fourth regression analysis was performed to check whether age had an influence on interactivity. The regression analysis showed that age does not predict interactivity ( $b = .006$ ,  $\beta = .08$ ,  $t(136)$ ,  $p = .352$ ). In addition age does not explain a significant proportion of variance (.6%) in interactivity ( $R^2 = .006$ ,  $F(1, 136) = .87$ ,  $p = .352$ ). However, the Kolmogorov-Smirnov test was significant ( $D(138) = .09$ ,  $p = .005$ ), which suggest not normally distributed data. Therefore, the regression analysis was run again with bootstrap. The effect of age on interactivity was not significant as the 95% confidence intervals cross zero (-.009, .022). 0% of the residuals fell outside the range of -3 and 3, and 1.47% of the residuals fell outside the range of -2 and 2. The largest Cook's distance was .42, and the errors were independent (Durbin-Watson: 2.07).

A fifth regression analysis was performed to check whether age influences the word-of-mouth intention. The regression analysis showed that age does not predict word-of-mouth intention ( $b = -.005$ ,  $\beta = -.06$ ,  $t(136)$ ,  $p = .465$ ). In addition age does not explain a significant proportion of variance (.4%) in word-of-mouth intention ( $R^2 = .004$ ,  $F(1, 136) = .54$ ,  $p = .465$ ). However, the data was not normally distributed, indicated by a significant Kolmogorov-Smirnov test ( $D(138) = .08$ ,  $p = .028$ ), and a significant amount of skewness ( $z\text{-score}_{\text{skewness}} = 3.04$ ). Therefore, the analysis was run again with bootstrap. The effect of age on word-of-mouth intention was not significant as the 95% confidence intervals cross zero (-.019, .007). 4.41% of the standardized residuals fell outside the range of -2 and 2 and 0% fell outside the range of -3 and 3. The largest Cook's distance was .11 and the errors were independent (Durbin-Watson: 2.04).

### *Education level*

To check whether education level influences the dependent variables, multiple one-way ANOVAs were performed. The first ANOVA was performed to check whether education level has an influence on the brand attitude before manipulation. The Kolmogorov-Smirnov tests were non-significant regarding all education levels. However, a significant amount of skewness ( $z\text{-score}_{\text{skewness}}: -2.13$ ) and kurtosis ( $\text{score}_{\text{kurtosis}}: 2.13$ ) indicated non-normal distribution in data for the primary education group. Furthermore, the assumption of homogeneity of variances was not met as the Levene's test was significant ( $F(4, 131) = 2.72, p = .032$ ). The overall ANOVA ( $F(4, 131) = 1.96, p = .105$ ) showed no significant impact of education level on the brand attitude before manipulation.

A second ANOVA was performed to check whether education level has an influence of the brand attitude after manipulation. The Kolmogorov-Smirnov tests were non-significant regarding all education levels. However, a significant amount of kurtosis ( $\text{score}_{\text{kurtosis}}: -2.02$ ) indicated non-normal distribution in data for the primary education group. Nevertheless, the assumption of homogeneity is met, as the Levene's test was not significant ( $F(4, 131) = 2.18, p = .075$ ). The overall ANOVA showed no significant influence of the education level on the brand attitude after manipulation,  $F(4, 131) = .316, p = .867$ .

The third ANOVA was performed to check whether education level has an influence on the content attitude. The Kolmogorov-Smirnov tests were non-significant. In addition, all z-scores were within the range of -1.98 and 1.98, indicating normal distributed data. Furthermore, the assumption of homogeneity was met, as the Levene's test was not significant ( $F(4, 131) = .70, p = .596$ ). The overall ANOVA was not significant ( $F(4, 131) = .42, p = .797$ ), indicating no significant effect of education level on content attitude.

The fourth ANOVA was performed to check whether education level has an influence on the interactivity. The Kolmogorov-Smirnov tests were non-significant. However, the

skewness z-scores show non-normal distribution in the data for the MBO group ( $z\text{-score}_{\text{skewness}}: 2.18$ ) and HBO group ( $z\text{-score}_{\text{skewness}}: 2.57$ ). As a result, the p-value could be biased. The assumption of homogeneity of variance is met, as Levene's test was not significant ( $F(4, 131) = .66, p = .619$ ). The overall ANOVA was not significant ( $F(4, 131) = .92, p = .453$ ), indicating no significant influence of education levels regarding interactivity.

The fifth ANOVA was performed to check whether education level has an influence on the word-of-mouth intention. The Kolmogorov-Smirnov test ( $D(69) = .11, p = .036$ ) and significant amount of skewness ( $z\text{-score}_{\text{skewness}}: 2.73$ ) indicated non-normal distribution in the data for the HBO group. There were no significant differences in the variances, as the Levene's test was not significant ( $F(4, 131) = .64, p = .633$ ). The overall ANOVA ( $F(4, 131) = .68, p = .608$ ) showed that there are no significant impact of education level on word-of-mouth intention. As the effect of education is non-significant regarding all dependent variables, it can be excluded as covariate.

#### *Facebook account*

Of all female participants ( $N = 67$ ), 97% had a Facebook account ( $N = 65$ ). Of all male participants ( $N = 71$ ), 98% had a Facebook account ( $N = 70$ ). An independent t-test was performed to measure whether having a Facebook account had an effect on the content attitude, brand attitude, interactivity, and word-of-mouth intention. The data was not normally distributed as the Kolmogorov Smirnov tests were significant ( $p > .05$ ). Therefore, a bootstrapped independent t-test was executed. The assumption of equal variances was met, as all Levene's tests were non-significant. The results indicate no significant effect of having a Facebook account on content attitude ( $M_{\text{dif}} = -.206, t(136) = -.271, p = .787, 95\% \text{ CI } (-1.71, 1.30), r^2 < .001$ ), brand attitude before manipulation ( $M_{\text{dif}} = .663, t(136) = 1.157, p = .249, 95\% \text{ CI } (-.47, 1.80), r^2 = .01$ ), brand attitude after manipulation ( $M_{\text{dif}} = .731, t(136) = .897, p = .372, 95\% \text{ CI } (-.88, 2.34), r^2 = .006$ ), interactivity ( $M_{\text{dif}} = -.436, t(136) = -.848, p = .398,$

95% CI (-1.45, .58),  $r^2 = .005$ ), and word-of-mouth intention ( $M_{dif} = -.583$ ,  $t(136) = -.995$ ,  $p = .322$ , 95% CI (-1.74, .58),  $r^2 = .007$ ). Therefore, having a Facebook account was excluded as covariate.

### *Consulting Facebook*

To check whether the Facebook consulting rate influences the dependent variables, multiple correlation analyses were performed. The first correlation analysis was executed

to check whether the consulting rate had an influence on the brand attitude before manipulation. The data regarding the consulting rate was not normally distributed, indicated by a significant Kolmogorov-Smirnov test ( $D(138) = .49$ ,  $p < .001$ ) and the presence of a significant amount of skewness (z-score<sub>skewness</sub>: 11.67) and kurtosis (z-score<sub>kurtosis</sub>: 11.55).

Therefore, the analysis (Pearson) is bootstrapped and more importance is placed on the confidence intervals. The consulting rate does not significantly influence the brand attitude before manipulation, as the analysis was not significant ( $p > .05$ ) and the bootstrapped confidence intervals cross zero ( $r = .05$ , 95% CI [-.127, .195],  $p = .573$ ). .23% of the brand attitude before manipulation was accounted for by the Facebook consulting rate. It represented a very small effect.

The second correlation analysis was executed to check whether the consulting rate had influence on the brand attitude after manipulation. The data regarding the brand attitude after manipulation was not normally distributed, indicated by a significant Kolmogorov-Smirnov test ( $D(138) = .076$ ,  $p = .048$ ) and a significant amount of kurtosis (z-score<sub>kurtosis</sub>: -2.23).

Therefore, the analysis (Pearson) was bootstrapped and more importance was placed on the confidence intervals. The consulting rate does significantly influence the brand attitude after manipulation, as analysis is significant and the bootstrapped confidence intervals do not cross zero ( $r = -.18$ , 95% CI [-.334, -.021],  $p = .031$ ). 3.40% of the brand attitude before manipulation was accounted for by the Facebook consulting rate. It represented a small effect

size. The results suggest that the consulting rate correlate significantly with brand attitude after. Therefore, it will be included as covariate in the main analyses regarding brand attitude after manipulation.

A third correlation analysis was executed to check whether the consulting rate had an influence on the content attitude. The data regarding the content attitude was normally distributed, as the Kolmogorov-Smirnov test was not significant ( $p = .200$ ), and absence of significant amount of skewness or kurtosis. However, the data regarding the consulting rate was not normally distributed ( $p < .001$ ). Therefore, the analysis (Pearson) was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The consulting rate does not significantly influence the content attitude, as the analysis is not significant and the confidence intervals cross zero ( $r = -.08$ , 95% CI  $[-.257, .103]$ ,  $p = .375$ ). .58% of the interactivity was accounted for by the consulting rate. It represented a very small effect.

A fourth correlation analysis was performed to check whether the consulting rate had an influence on interactivity. The data regarding interactivity was not normally distributed, indicated by a significant Kolmogorov-Smirnov test ( $D(138) = .09$ ,  $p = .005$ ) and a significant amount of skewness ( $z\text{-score}_{\text{skewness}}: 3.74$ ). Thus, the Pearson correlation analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The consulting rate does not significantly influence the interactivity, as the analysis is not significant and the bootstrapped confidence intervals do cross zero ( $r = -.040$ , 95% CI  $[-.189, .138]$ ,  $p = .641$ ). .16% of the interactivity was accounted for by the consulting rate. It represented a very small effect.

A fifth correlation analysis was performed to check whether the consulting rate had influence on the word-of-mouth intention. The data regarding the word-of-mouth intention was not normally distributed as the Kolmogorov-Smirnov test was significant ( $D(138) = .087$ ,  $p = .012$ ) and the presence of a significant amount of skewness ( $z\text{-score}_{\text{skewness}}: 3.09$ ).

Consequently, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The consulting rate does not significantly influence the word-of-mouth intention, as the analysis was not significant and the confidence intervals cross zero ( $r = -.01$ , 95% CI [-.163, .156],  $p = .887$ ). .01% of the word-of-mouth intention was accounted for by the consulting rate, representing a very small effect.

### *Posting on Facebook*

To check whether the posting rate had an influence on the dependent variables, multiple correlation analyses were performed. The first correlation analysis was performed to check whether the posting rate had influence on the brand attitude before manipulation. The data regarding the posting rate was not normally distributed, as the Kolmogorov-Smirnov test was significant ( $D(138) = .26$ ,  $p < .001$ ), enhanced by a significant amount of skewness (z-score<sub>skewness</sub>: -4.52). The data regarding brand attitude before manipulation was normally distributed as the Kolmogorov-Smirnov test was not significant ( $p = .073$ ) and an absence of significant skewness or kurtosis. However, due to the non-normality in the posting data, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The posting rate does not significantly influence the brand attitude before manipulation, as the analysis was not significant and the confidence intervals cross zero ( $r = -.05$ , 95% CI [-.149, .230],  $p = .599$ ). .20% of the brand attitude before manipulation was accounted for by the posting rate, representing a very small effect size.

The second correlation analysis was performed to check whether the posting rate had an influence on the brand attitude after manipulation. The data regarding the brand attitude after manipulation was not normally distributed as the Kolmogorov-Smirnov test was significant ( $D(138) = .08$ ,  $p = .048$ ), and there was a significant amount of kurtosis (z-score<sub>kurtosis</sub>: -2.23). Consequently, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The posting rate does not significantly

influence the brand attitude after manipulation as the analysis was not significant, and because the bootstrapped confidence intervals cross zero,  $r = .02$ , 95% CI [-.171, .226],  $p = .856$ . .02% of the brand attitude after manipulation was accounted for by the posting rate, representing a very small effect.

A third correlation was performed to check whether the posting rate had influence on the content attitude. The data regarding the content attitude was normally distributed, as the Kolmogorov-Smirnov test was not significant ( $p = .200$ ) and no significant amount of skewness or kurtosis was present. However, the data regarding the posting rate was not normally distributed ( $p < .001$ ). Thus, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The posting rate does not significantly influence the content attitude, as the analysis was not significant and the confidence intervals cross zero ( $r = .07$ , 95% CI [-.112, .252],  $p = .408$ ). .50% of the content attitude was accounted for by the posting rate, representing a very small effect.

A fourth correlation analysis was executed to check whether the posting rate had an impact on interactivity. The data regarding the posting rate, as well as with regard to the interactivity, was not normally distributed. Consequently, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The posting rate does not significantly influence interactivity, as the analysis was not significant and the confidence intervals cross zero,  $r = -.02$ , 95% CI [-.207, .164],  $p = .814$ . .04% of the interactivity was accounted for by the posting rate, representing a very small effect.

A fifth correlation analysis was executed to check whether the posting rate had an influence on the word-of-mouth intention. The data regarding the word-of-mouth intention, as well as the data regarding the posting rate, was not normally distributed. As a result, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The posting rate does not significantly influence the word-of-mouth intention as the

analysis was not significant and the confidence intervals cross zero ( $r = .043$ , 95% CI [-.148, .208],  $p = .613$ ). .18% of the word-of-mouth intention was accounted for by the posting rate, representing a very small effect.

#### *Familiarity with exposed transmitters*

To check whether the familiarity with the exposed transmitters had influence on the dependent variables, multiple correlation analyses were performed. The first correlation analysis was performed to check whether familiarity with the exposed transmitters had influence on the brand attitude before manipulation. The data regarding the familiarity with the transmitters was not normally distributed as the Kolmogorov-Smirnov test was significant ( $D(138) = .211$ ,  $p < .001$ ), and a presence of a significant amount of skewness (z-score<sub>skewness</sub>: -2.82). The data regarding the attitude before manipulation was normally distributed, as the Kolmogorov-Smirnov test was not significant ( $p = .073$ ), and an absence of a significant amount of skewness or kurtosis. Due to the distribution of the familiarity data, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. Familiarity with the exposed transmitters does not significantly influence the attitude before manipulation, as the analysis was not significant and the bootstrapped confidence intervals cross zero ( $r = .07$ , 95% CI [-.096, .257],  $p = .314$ ). .74% of the attitude before manipulation is accounted for by the familiarity with the transmitters, representing a very small effect.

The second analysis was executed to check whether the familiarity with the transmitters had influence on the brand attitude after manipulation. As mentioned earlier, the data regarding the brand attitude after manipulation as well as the data regarding the familiarity with the transmitters was not normally distributed. Thus, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The familiarity with the transmitters does significantly influence the brand attitude after manipulations, as the analysis was significant and the confidence intervals do not cross zero,

( $r = .27$ , 95% CI [.113, .417],  $p = .002$ ). 7.13% of the brand attitude after manipulation was accounted for by the familiarity with the TV-stations. It represents a small to medium effect.

A third correlation analysis was executed to check whether the familiarity with the transmitters had influence on the content attitude. The data regarding the content attitude was normally distributed, as the Kolmogorov-Smirnov test was not significant ( $p = .200$ ), and no significant amount of skewness or kurtosis. However, the data regarding the familiarity with the transmitters was not normally distributed ( $p < .001$ ). Therefore, the analysis was bootstrapped and more importance was placed on the confidence intervals. The familiarity with the transmitters does significantly influence the content attitude, indicated by a significant p-value and confidence intervals that do not cross zero ( $r = .225$ , 95% CI [.073, .383],  $p = .008$ ). 5.06% of the content attitude was accounted for by the familiarity with the TV-stations, representing a small effect.

A fourth correlation analysis was executed to check whether the familiarity with the transmitters had an effect on the interactivity. The data regarding the familiarity as well as interactivity was not normally distributed. Consequently, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. Familiarity with the transmitters does significantly influence interactivity, indicated by a significant analysis and the confidence intervals which do not cross zero ( $r = .18$ , 95% CI [.007, .330],  $p = .035$ ). 3.24% of interactivity was accounted for by the familiarity with the TV-stations, which represents a small effect.

A fifth correlation analysis was executed to check whether the familiarity with the transmitters had an influence on the word-of-mouth intention. The data regarding the word-of-mouth intention as well as the data regarding the posting rate was not normally distributed. Thus, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The familiarity with the transmitters does significantly influence the

word-of-mouth intention, indicated by a significant analysis and the bootstrapped confidence intervals,  $r = .23$ , 95% CI [.068, .385],  $p = .006$ . 5.33% of the word-of-mouth intention was accounted for by the familiarity with the TV-stations, representing a small effect.

#### *Viewing behaviour with regard to the transmitters*

To check whether the viewing behaviour with regard to the transmitters had an influence on the dependent variables, multiple correlation analyses were performed. The first correlation analysis was performed to check whether the viewing behaviour had an influence on the brand attitude before manipulation. The data regarding the viewing behaviour was not normally distributed, as the Kolmogorov-Smirnov test was significant ( $D(138) = .22$ ,  $p < .001$ ), and there was a significant amount of skewness ( $z\text{-score}_{\text{skewness}}: 2.66$ ) and kurtosis ( $z\text{-score}_{\text{kurtosis}}: 1.99$ ). The data regarding the attitude before manipulation was normally distributed, as the Kolmogorov-Smirnov test was not-significant ( $p = .073$ ), and there was no significant amount of skewness or kurtosis. However, due to the non-normal distributed viewing behaviour data, the analysis was bootstrapped. The results showed that viewing behaviour with regard to the transmitters does significantly influence the brand attitude before manipulation, as the analysis was significant and the confidence intervals do not cross zero ( $r = .39$ , 95% CI [.213, .538],  $p < .001$ ). 15.13% of the brand attitude before manipulation was accounted for by the viewing behaviour with regard to the TV-stations. It represents a medium effect.

A second correlation analysis was executed to check whether the viewing behaviour had influence on the brand attitude after manipulation. The data regarding the brand attitude after manipulation, as well as the data regarding the viewing behaviour, was not normally distributed. Thus, the analysis was bootstrapped. Viewing behaviour does significantly influence the brand attitude after manipulation, indicated a significant analysis and the confidence intervals which do not cross zero ( $r = .65$ , 95% CI [.521, .764],  $p < .001$ ). 42.38%

of the brand attitude after manipulation was accounted for by the viewing behaviour. It represented a large effect size.

The third correlation analysis was performed to check whether the viewing behaviour had an influence on the content attitude. The data regarding the content attitude was normally distributed, as the Kolmogorov-Smirnov test was not significant ( $p = .200$ ), and indicated by an absence of significant amount of skewness or kurtosis. However, the data regarding the familiarity with the transmitters was not normally distributed ( $p < .001$ ). Therefore, the analysis was bootstrapped and more importance was placed on the confidence intervals. Viewing behaviour does significantly influence the content attitude as the p-value was significant and the confidence intervals do not cross zero ( $r = .32$ , 95% CI [.135, .480],  $p < .001$ ). 9.92% of the content attitude was accounted for by the viewing behaviour, which represents a medium effect size.

A fourth correlation analysis was performed to check whether the viewing behaviour had an impact on interactivity. The data regarding viewing behaviour, as well as interactivity, was not normally distributed. Consequently, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. Viewing behaviour does significantly influence interactivity, indicated by a significant analysis and the confidence intervals which do not cross zero ( $r = .35$ , 95% CI [.177, .500],  $p < .001$ ). 12.18% of interactivity is accounted for by the viewing behaviour. It represents a medium effect.

A fifth correlation analysis was executed to check whether the viewing behaviour had influence on the word-of-mouth intention. The data regarding the word-of-mouth intention, as well as the data regarding viewing behaviour, was not normally distributed. Thus, the analysis was bootstrapped and more importance was placed on the bootstrapped confidence intervals. The results showed a significant influence of viewing behaviour on the word-of-mouth

intention ( $r = .37$ , 95% CI [.178, .503],  $p < .001$ ). 13.47% of the word-of-mouth intention was accounted for by the viewing behaviour, which represents a medium effect size.

*Equally distributed groups (age and education level)*

To check whether the age was equally distributed among the (four) groups, a two-way ANOVA was conducted. The data was not normally distributed, as the Kolmogorov-Smirnov tests were significant ( $p < .001$ ). However, the two-way ANOVA does not have a non-parametric alternative. So, as the p-value of the interaction effect could be biased, it should be handled with caution. The assumption of homogeneity of variance was met, as Levene's test was not significant ( $F(3, 134) = .71$ ,  $p = .546$ ). The interaction effect regarding the two between variables was not significant ( $F(1, 134) = 1.83$ ,  $p = .179$ ). The results indicate an equal distribution of age regarding the between-subject groups.

To check whether the education level was equally distributed among the between-subject groups, a Chi-square crosstab analysis was performed. The assumption of expected frequencies was not met, as the 'other' group did not had a frequency higher than 5. However, the Fisher exact test can only be used for testing one dependent and one independent variable. The interaction between humoristic target and education level ( $X^2(4) = 5.22$ ,  $p = .265$ ), and the interaction between gender and education level ( $X^2(4) = .57$ ,  $p = .966$ ) not were significant, indicating an equal distribution of education level among the between subject groups.

## Appendix I: overview contrasts

Table 24

*Overview 'humour' contrasts content attitude*

Type of humour	Humourless	Irony	Sarcasm	Cynicism
Humourless ( $M = 3.34, SE = .12$ )	-	$p = .077^{**}$	$p = 1.000$	$p = 1.000$
Irony ( $M = 3.72, SE = .14$ )	$p = .077^{**}$	-	$p = .026^*$	$p = .004^*$
Sarcasm ( $M = 3.32, SE = .15$ )	$p = 1.000$	$p = .026^*$	-	$p = 1.000$
Cynicism ( $M = 3.22, SE = .15$ )	$p = 1.000$	$p = .004^*$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance

Table 25

*Overview 'humour' contrasts interactivity*

Type of humour	Humourless	Irony	Sarcasm	Cynicism
Humourless ( $M = 2.41, SE = .10$ )	-	$p = 1.000$	$p = .009^*$	$p = .067^{**}$
Irony ( $M = 2.30, SE = .10$ )	$p = 1.000$	-	$p = .078^{**}$	$p = .511$
Sarcasm ( $M = 2.08, SE = .08$ )	$p = .009^*$	$p = .078^{**}$	-	$p = 1.000$
Cynicism ( $M = 2.15, SE = .09$ )	$p = .067^{**}$	$p = .511$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance

Table 26

*Overview 'humour' contrasts word-of-mouth intention*

Type of humour	Humourless	Irony	Sarcasm	Cynicism
Humourless ( $M = 2.58, SE = .11$ )	-	$p = 1.000$	$p = .015^*$	$p = .012^*$
Irony ( $M = 2.45, SE = .11$ )	$p = 1.000$	-	$p = .130$	$p = .078^{**}$
Sarcasm ( $M = 2.18, SE = .10$ )	$p = .015^*$	$p = .130$	-	$p = 1.000$
Cynicism ( $M = 2.21, SE = .10$ )	$p = .012^*$	$p = .078^{**}$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance

Table 27

Overview 'gender x type of humour' contrasts content attitude

Gender		Humourless	Irony	Sarcasm	Cynicism
Men	Humourless ( $M = 3.46, SE = .16$ )	-	$p = 1.000$	$p = 1.000$	$p = 1.000$
	Irony ( $M = 3.62, SE = .19$ )	$p = 1.000$	-	$p = 1.000$	$p = 1.000$
	Sarcasm ( $M = 3.39, SE = .20$ )	$p = 1.000$	$p = 1.000$	-	$p = 1.000$
	Cynicism ( $M = 3.44, SE = .21$ )	$p = 1.000$	$p = 1.000$	$p = 1.000$	-
Women	Humourless ( $M = 3.23, SE = .18$ )	-	$p = .053^{**}$	$p = 1.000$	$p = 1.000$
	Irony ( $M = 3.83, SE = .21$ )	$p = .053^{**}$	-	$p = .034^*$	$p = .001^*$
	Sarcasm ( $M = 3.24, SE = .22$ )	$p = 1.000$	$p = .034^*$	-	$p = 1.000$
	Cynicism ( $M = 3.00, SE = .23$ )	$p = 1.000$	$p = .001^*$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance

Table 28

Overview 'gender x type of humour' contrasts interactivity

Gender		Humourless	Irony	Sarcasm	Cynicism
Men	Humourless ( $M = 2.45, SE = .13$ )	-	$p = .352$	$p = .037^*$	$p = .227$
	Irony ( $M = 2.17, SE = .13$ )	$p = .352$	-	$p = 1.000$	$p = 1.000$
	Sarcasm ( $M = 2.07, SE = .11$ )	$p = .037^*$	$p = 1.000$	-	$p = 1.000$
	Cynicism ( $M = 2.17, SE = .13$ )	$p = .227$	$p = 1.000$	$p = 1.000$	-
Women	Humourless ( $M = 2.37, SE = .14$ )	-	$p = 1.000$	$p = .411$	$p = .724$
	Irony ( $M = 2.42, SE = .14$ )	$p = 1.000$	-	$p = .071^{**}$	$p = .144$
	Sarcasm ( $M = 2.09, SE = .12$ )	$p = .411$	$p = .071^{**}$	-	$p = 1.000$
	Cynicism ( $M = 2.14, SE = .14$ )	$p = .724$	$p = .144$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance

Table 29

Overview 'gender x type of humour' contrasts word-of-mouth intention

Gender		Humourless	Irony	Sarcasm	Cynicism
Men	Humourless ( $M = 2.60, SE = .15$ )	-	$p = .309$	$p = .360$	$p = .200$
	Irony ( $M = 2.27, SE = .15$ )	$p = .309$	-	$p = 1.000$	$p = 1.000$
	Sarcasm ( $M = 2.27, SE = .14$ )	$p = .360$	$p = 1.000$	-	$p = 1.000$
	Cynicism ( $M = 2.26, SE = .14$ )	$p = .200$	$p = 1.000$	$p = 1.000$	-
Women	Humourless ( $M = 2.56, SE = .17$ )	-	$p = 1.000$	$p = .102$	$p = .144$
	Irony ( $M = 2.62, SE = .17$ )	$p = 1.000$	-	$p = .013^*$	$p = .007^*$
	Sarcasm ( $M = 2.10, SE = .15$ )	$p = .102$	$p = .013^*$	-	$p = 1.000$
	Cynicism ( $M = 2.16, SE = .15$ )	$p = .144$	$p = .007^*$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance

Table 30

*Overview contrasts content attitude*

Gender	Target		Humourless	Irony	Sarcasm	Cynicism
Men	Women	Humourless ( $M = 3.48, SE = .26$ )	-	$p = 1.000$	$p = 1.000$	$p = .238$
		Irony ( $M = 3.46, SE = .31$ )	$p = 1.000$	-	$p = 1.000$	$p = .197$
		Sarcasm ( $M = 3.18, SE = .32$ )	$p = 1.000$	$p = 1.000$	-	$p = 1.000$
		Cynicism ( $M = 2.78, SE = .33$ )	$p = .238$	$p = .197$	$p = 1.000$	-
	Men	Humourless ( $M = 3.43, SE = .24$ )	-	$p = 1.000$	$p = 1.000$	$p = .181$
		Irony ( $M = 3.78, SE = .28$ )	$p = 1.000$	-	$p = 1.000$	$p = 1.000$
		Sarcasm ( $M = 3.60, SE = .29$ )	$p = 1.000$	$p = 1.000$	-	$p = .750$
		Cynicism ( $M = 4.10, SE = .30$ )	$p = .181$	$p = 1.000$	$p = .750$	-
Women	Women	Humourless ( $M = 3.37, SE = .26$ )	-	$p = .460$	$p = .710$	$p = 1.000$
		Irony ( $M = 3.95, SE = .31$ )	$p = .460$	-	$p = 1.000$	$p = .066^{**}$
		Sarcasm ( $M = 3.93, SE = .32$ )	$p = .710$	$p = 1.000$	-	$p = .178$
		Cynicism ( $M = 3.15, SE = .33$ )	$p = 1.000$	$p = .066^{**}$	$p = .178$	-
	Men	Humourless ( $M = 3.09, SE = .26$ )	-	$p = .366$	$p = .773$	$p = 1.000$
		Irony ( $M = 3.70, SE = .30$ )	$p = .366$	-	$p = .001^*$	$p = .040^*$
		Sarcasm ( $M = 2.55, SE = .31$ )	$p = .773$	$p = .001^*$	-	$p = 1.000$
		Cynicism ( $M = 2.85, SE = .33$ )	$p = 1.000$	$p = .040^*$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance

Table 31

*Overview contrasts interactivity*

Gender	Target		Humourless	Irony	Sarcasm	Cynicism
Men	Women	Humourless ( $M = 2.34, SE = .21$ )	-	$p = .739$	$p = .113$	$p = .035^*$
		Irony ( $M = 1.97, SE = .20$ )	$p = .739$	-	$p = 1.000$	$p = 1.000$
		Sarcasm ( $M = 1.81, SE = .18$ )	$p = .113$	$p = 1.000$	-	$p = 1.000$
		Cynicism ( $M = 1.72, SE = .20$ )	$p = .035^*$	$p = 1.000$	$p = 1.000$	-
	Men	Humourless ( $M = 2.57, SE = .19$ )	-	$p = 1.000$	$p = 1.000$	$p = 1.000$
		Irony ( $M = 2.37, SE = .19$ )	$p = 1.000$	-	$p = 1.000$	$p = .914$
		Sarcasm ( $M = 2.32, SE = .16$ )	$p = 1.000$	$p = 1.000$	-	$p = .774$
		Cynicism ( $M = 2.61, SE = .19$ )	$p = 1.000$	$p = .914$	$p = .774$	-
Women	Women	Humourless ( $M = 2.49, SE = .21$ )	-	$p = 1.000$	$p = 1.000$	$p = 1.000$
		Irony ( $M = 2.49, SE = .21$ )	$p = 1.000$	-	$p = 1.000$	$p = 1.000$
		Sarcasm ( $M = 2.40, SE = .18$ )	$p = 1.000$	$p = 1.000$	-	$p = 1.000$
		Cynicism ( $M = 2.29, SE = .20$ )	$p = 1.000$	$p = 1.000$	$p = 1.000$	-
	Men	Humourless ( $M = 2.26, SE = .21$ )	-	$p = 1.000$	$p = .197$	$p = 1.000$
		Irony ( $M = 2.35, SE = .20$ )	$p = 1.000$	-	$p = .015^*$	$p = .248$
		Sarcasm ( $M = 1.78, SE = .18$ )	$p = .197$	$p = .015^*$	-	$p = 1.000$
		Cynicism ( $M = 1.99, SE = .20$ )	$p = 1.000$	$p = .248$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance

Table 32

*Overview contrasts word-of-mouth*

Gender	Target		Humourless	Irony	Sarcasm	Cynicism
Men	Women	Humourless ( $M = 2.62, SE = .24$ )	-	$p = .067^{**}$	$p = .286$	$p = .006^*$
		Irony ( $M = 1.93, SE = .24$ )	$p = .067^{**}$	-	$p = 1.000$	$p = 1.000$
		Sarcasm ( $M = 2.06, SE = .22$ )	$p = .286$	$p = 1.000$	-	$p = 1.000$
		Cynicism ( $M = 1.77, SE = .22$ )	$p = .006^*$	$p = 1.000$	$p = 1.000$	-
	Men	Humourless ( $M = 2.58, SE = .22$ )	-	$p = 1.000$	$p = 1.000$	$p = 1.000$
		Irony ( $M = 2.62, SE = .22$ )	$p = 1.000$	-	$p = 1.000$	$p = 1.000$
		Sarcasm ( $M = 2.48, SE = .20$ )	$p = 1.000$	$p = 1.000$	-	$p = 1.000$
		Cynicism ( $M = 2.75, SE = .21$ )	$p = 1.000$	$p = 1.000$	$p = 1.000$	-
Women	Women	Humourless ( $M = 2.54, SE = .24$ )	-	$p = 1.000$	$p = 1.000$	$p = 1.000$
		Irony ( $M = 2.61, SE = .24$ )	$p = 1.000$	-	$p = 1.000$	$p = .942$
		Sarcasm ( $M = 2.39, SE = .22$ )	$p = 1.000$	$p = 1.000$	-	$p = 1.000$
		Cynicism ( $M = 2.32, SE = .22$ )	$p = 1.000$	$p = .942$	$p = 1.000$	-
	Men	Humourless ( $M = 2.58, SE = .24$ )	-	$p = 1.000$	$p = .035^*$	$p = .148$
		Irony ( $M = 2.64, SE = .24$ )	$p = 1.000$	-	$p = .004^*$	$p = .011^*$
		Sarcasm ( $M = 1.80, SE = .22$ )	$p = .035^*$	$p = .004^*$	-	$p = 1.000$
		Cynicism ( $M = 2.01, SE = .22$ )	$p = .148$	$p = .011^*$	$p = 1.000$	-

\* Significant ( $p < .05$ )

\*\* Trend towards significance