

**Memes that make me forcefully exhale through my nose (due to cultural and personal reasons)**

The moderating effects of personality traits and cultural values on reacting to different humour styles in memes

Student Name: Brontë McClelland  
Student Number: 511987

Supervisor: dr. (Joep) J. Hofhuis

Master Media Studies - Media & Business  
Erasmus School of History, Culture and Communication  
Erasmus University Rotterdam

Master's Thesis  
*June 27, 2019*

## **Memes that make me forcefully exhale through my nose (due to cultural and personal reasons)**

### **ABSTRACT**

*Brands are increasingly making use of social media in order to improve their image and be more connected to their stakeholders, along with aiming to attract new ones. However, with this arises potential communication issues that are not present in traditional media forms. Stakeholders now expect eye-catching posts, as well as fast and effective responses from brands. There is also increasing competition amongst brands. The use of humour is one possible way to overcome these issues, as it grabs internet users' attention, and aids in improving attitudes towards brands. However, using humour can easily backfire or simply be ineffective if a brand is not aware of its audience. This is potentially because of different audiences reflecting different personality traits and cultural values. Even though all human-beings use humour, it can be expressed and received differently depending on these factors. Therefore, this thesis aims to give guidance on this matter, as to how brands can effectively use humour to communicate and improve relations with their stakeholders. Thus, the thesis shall be examining the research question of 'how do personality and culture influence individuals' reactions to different types of humour?'. In order to answer this research question, an online study was conducted through Qualtrics with a within-subjects design. The Humour Styles Questionnaire was used as a taxonomy for the conditions used in the current study, due to the fact it takes into consideration both benign and malign forms of humour, as well as reflecting everyday humour communication. There were four conditions - representing affiliative, self-enhancing, self-defeating and aggressive humour. In order to fit the context of humour on social media, it was decided to use memes to represent each humour style. Items from the five-factor model and GLOBE questionnaires were used in order to evaluate participants' personality traits and cultural values. In order to test the moderating effects of personality traits and cultural values on the relation of reactions to humour styles, several repeated measures ANCOVAs were conducted. The main findings were that the personality trait extraversion had a significant moderating effect on this relation. Furthermore, it was found that gender had a main effect, with females reacting more positively to all four humour styles.*

**KEYWORDS:** *Humour, Personality, Culture, Memes, Social Media*

## Table of Contents

Abstract and keywords	
1. Introduction	4
2. Theoretical Framework	7
2.1. Humour	7
2.2. Reacting to Humour	11
2.3. Humour and Personality	13
2.4. Humour and Culture	16
3. Method	20
3.1. Research design	20
3.5. Procedure	21
3.4. Pilot study	22
3.2. Sample	24
3.3. Materials and measurements	25
3.6. Analysis	36
4. Results	37
4.1. The moderating effects of personality traits	37
4.2. The moderating effects of cultural values	40
4.3. Summary	41
5. Conclusion	43
5.1. Discussion	43
5.2. Implications	45
5.3. Limitations	47
5.4. Conclusion and strengths	49
References	51
Appendix A: Online survey	58
Appendix B: FFM Items	79
Appendix C: GLOBE items	80

## **1. Introduction**

The rise of social network sites, such as *Facebook* and *YouTube*, has drastically changed the ways in which brands communicate and build relationships with their stakeholders. The one-way communication implemented in traditional media, has now transformed into a two-way route. Meaning communication between brands and consumers has become an interactive process, enabling consumers to give immediate feedback to any content brands post (Kaul & Chaudhri, 2017). Considering the amount of brands present on social media, it can be competitive to gain the attention of consumers – implementation of humour is one way to overcome this (Lim, 2013). It has been said that social media is a platform which people use to escape the harsh realities of life, entertain themselves, and search for authenticity and fun. Humour is expressed on social media in many forms, including through the means of memes (Taecharungroj & Nueangjamnong, 2015). Hence, brands should consider the entertainment value of their content, in order to engage with their stakeholders (Erdoğan & Cicek, 2012). Therefore, it is of great benefit for brands to learn how they can better use humour on social media and implement it into their content, in a manner that stimulates positive feedback from their target audience.

Humour is generally known for being a socially desirable characteristic, but it is only somewhat recently that researchers are giving more attention to humour in its malign form (Martin, 2007; as mentioned in Mendiburo-Seguel, Páez & Martínez-Sánchez, 2015). The Humour Styles Questionnaire (HSQ) was the first framework developed that considered how humour can be both benign and benevolent, as well as potentially deleterious to either oneself or to one's relationships (Martin, Puhlik-Doris, Larsen, Gray & Weir, 2003). From this notion, they distinguished four humour styles, namely Affiliative, Self-enhancing, Aggressive and Self-defeating humour (Martin et al., 2003). However, in relation to brands on social media, it does seem that these malign forms of humour can still be received positively by specific audiences. One example would be the success of the fast food chain, Wendy's, who are known for using aggressive humour online (Kim, 2018).

In the original development of the HSQ, Martin et al. (2003) examined how the humour styles correlated with the personality traits from the well-established five-factor model. Since then more correlational studies have been conducted; the results have slightly varied but some patterns have been found (Mendiburo-Seguel et al., 2015). In recent years, brands have been attempting to increasingly personalise their communication and advertisements to potential consumers, and thus research is partially focusing on analysing

consumers' personality traits (e.g. Kosinski, Bachrach, Kohli, Stillwell & Graepel, 2014). Therefore, studying the link between humour and personality, could further aid brands in personalising messages towards specific target audiences. Another focus of both brands and researchers is the strategy of glocalisation, which is altering a single strategy to fit the needs of different cultures (Vignali, 2001). Anthropologists have stated that the use of humour and laughter seems to exist across all cultures and groups. However, it has been discovered that the expression of humour differs across cultures (Apte, 1985; as mentioned in Romero & Cruthirds, 2006). Meaning that it is useful for brands to be able to pinpoint these differences in humour, so that they can better implement glocal strategies.

It seems that most research on humour (in particular the HSQ) and culture tends to compare different nationalities, rather than explicitly measure cultural dimensions (e.g. Kuiper, Kazarian, Sine, & Bassil, 2010). If cultural dimensions are measured, then it is usually limited to out-of-date frameworks, which are not as extensive or contemporary as GLOBE (Taylor, 2010; Czarnecka, Brennan & Keles, 2018). Even though some studies have branched out (e.g. Chen & Martin, 2007), the overall research concerning the HSQ has mainly been conducted on university students from North America (e.g. Martin et al., 2003), so further work is still needed to apply the HSQ to a variety of cultures. Kuiper et al. (2010) is one example of research that tried to establish a causal relationship as to how Canadian and Lebanese students reacted to the four humour styles. In their study, the participants were just responding to how they would react to certain scenarios, wherein each contained a description of one of the four humour styles. They did not respond to actual humorous content; therefore, the external validity is an aspect to be improved on in future research. As already mentioned, concerning personality and humour, most of the studies are correlational, and thus have not been applied to a social media context (Mendiburo-Seguel et al., 2015).

The current research aims to address the issues stated above, through use of an experimental method. Participants shall be exposed to four conditions, which are representative of each of the four humour styles. To ensure external validity, the conditions will consist of actual humorous content, in the form of internet memes, rather than a description of one. This should also help reduce participants figuring out the true nature of the study, and thus preventing them from adjusting their responses. After being exposed to the four conditions, participants will be questioned on their reactions, as well as filling out questionnaires related to the five-factor personality traits model and GLOBE cultural dimensions. This should aid brands in deciding how to implement humour for specific target audiences. In addition, this experiment shall be conducted online, in order for there to be a

range of cultures and backgrounds included in the final sample. Hence the current research question to be addressed is:

*RQ: How do personality and culture influence individuals' reactions to different types of humour?*

## **2. Theoretical Framework**

This section brings attention to the existing literature, and more specifically, it critically analyses relevant scales and previous research findings. The first two subsections focus on the concept of humour, particularly the Humour Styles Questionnaire (HSQ) and how it can be measured within the context of social media. The following subsections are pertaining to how humour relates to personality and culture. More specifically, the five-factor model and GLOBE's cultural dimensions are addressed. The hypotheses are stated underneath the relevant variable. Finally, a visual overview is presented, highlighting the relationships between the variables.

### **2.1. Humour**

Humour, and the laughter that usually accompanies it, is considered an important source of pleasure. It enhances our relationships, as we feel appreciated when we make others laugh and in turn we also like people who make us feel good (Mendiburo-Seguel et al., 2015). Furthermore, the prevailing use of humour in TV shows, movies and advertising further confirms its popularity and effectiveness (Ziv, 2010; Zhang, 1996). Several studies have shown that humour is related to a variety of beneficial constructs (Thorson, Powell & Samuel, 2001). These include using it as a coping mechanism for stress (Kuiper, McKenzie & Belanger, 1995), creativity (Humke & Schaefer, 1996), cheerfulness (Köhler & Ruch, 1996), lowering levels of depression (Thorson & Powell, 1994), as well as relating to increased levels of intimacy (Hampes, 1994). Humour enriches our practices of communication and persuasion (Mendiburo-Seguel et al., 2015). It has also been suggested that implementing humour is an ideal strategy for brands to grab consumers' attention, since humour is more likely to be processed through a peripheral rather than a central route (Zhang & Zinkhan, 2006; Chiu, Hsieh & Kuo, 2012). It has been found that the use of humour has a positive influence on customers' responses, enhancing their cognitive responses (Cline et al., 2003; as mentioned in Lee & Jeong, 2017), their brand liking (Alden et al., 2000), and brand attitudes (Chiu et al., 2012). However, it is also important to note that despite these positives, humour can also have a 'darker' side. Humour can create friction and conflict within or between social groups, it may conceal malice or allow people to express aggression without consequence (Meyer, 2000).

Academics have had a hard time defining the concept of humour, with there being over a hundred theories on the topic (Olsson, Backe, Sörensen & Kock, 2002). The literature offers a variety of theories and taxonomies to measure and assess humour. For example,

Speck's humorous message taxonomy (1991), found there to be five types of humour in the context of advertisements. Namely, comic wit, sentimental humour, satire, sentimental comedy and full comedy. Stern's taxonomy of comic types (1996) based humour on four cells, ranging from physical to verbal, and romantic (laugh with) to satiric (laugh at). Lastly, Kelly and Solomon's technique typology (1975) who categorised humour into "pun, joke, ludicrous, satire and irony" (as mentioned in Hatzithomas, Boutsouki & Zotos, 2011). For the current study however, the Humour Styles Questionnaire (HSQ) was chosen to categorise humour (Martin et al, 2003). This decision was partially made due to the fact the HSQ has a focus on the humour people use in everyday communication, meaning it should also be relevant to the notion of two-way communication online (Kaul & Chaudhri, 2017). The HSQ consists of four humour styles that focus on the intrapsychic and interpersonal uses and functions of humour in everyday life. The four styles are namely Affiliative, Self-enhancing, Aggressive, and Self-defeating (Martin et al., 2003). Showing that the HSQ takes into consideration both the benign and malign forms of humour.

#### Affiliative:

Individuals who score highly on this dimension tend to engage in jokes and witty banter in order to amuse others, to reduce interpersonal conflicts and strengthen relationships (Lefcourt, 2001; as mentioned in Martin et al., 2003). There can also be an element of self-deprecating humour associated with this style; as individuals want to put others at ease by not taking themselves too seriously, however there is still a sense of self-acceptance (Vaillant, 1977; as mentioned in Martin et al., 2003). This style is generally affirming of both self and others, and presumably enhances relationships (Martin et al., 2003).

#### Self-enhancing:

Individuals who score highly on this style generally have a humorous outlook towards life, and tend to be frequently amused by incongruities, and try to see humour even in stressful situations (Kuiper, Martin, & Olinger, 1993; as mentioned in Martin et al., 2003). It is the ability to be able to laugh at oneself and turn bad situations into amusing ones. It is similar to the idea of using humour as a coping mechanism (Martin, Kuiper, Olinger, & Dance, 1993; as mentioned in Martin et al., 2003). This humour style has a more intrapsychic than interpersonal focus compared to affiliative humour (Martin et al., 2003).

### Aggressive:

Aggressive humour is reflected in sarcasm, teasing, ridicule, derision, "put-down", and disparagement humour (Zillman, 1983 as mentioned in Martin et al., 2003). It can also be used as a form of manipulation (Janes & Olson, 2000; as mentioned in Martin et al., 2003). Essentially it is expressing humour without regarding how it may affect others, examples would be racist or sexist humour. One finds it challenging to resist impulses to say things that could be detrimental to others, even if intended as a joke (Martin et al., 2003).

### Self-defeating:

This style is associated with excessive self-disparaging humour. It involves saying or doing humorous things at the expense of oneself, in order to gain approval from others. It also includes laughing at oneself when being ridiculed by others. This style of humour is also associated with being in denial to one's negative feelings and problems, as to avoid constructively dealing with them (Kubie, 1971; as mentioned in Martin et al., 2003). Individuals who score highly on this style may be considered witty, however, there is an underlying emotional neediness and low self-esteem behind it (Fabrizi & Pollio, 1987; as mentioned in Martin et al., 2003).

A number of studies have provided evidence that these four styles exist across a variety of cultures, therefore it is an appropriate classification to use for the current study (Martin et al., 2003; Saroglou & Scariot, 2002; Chen & Martin, 2007; Kalliny, Cruthirds, & Minor, 2006). The HSQ is deemed as being reliable (Martin et al., 2003; Atkinson et al., 2015), and based on current self-report data, and correlations between the four scales and peer ratings, there is also promising evidence to support the HSQ's validity (Martin et al., 2003).

There is also research showing age and sex differences between the humour styles of the HSQ. Martin et al. (2003) analysed a sample of 1195 participants and found that males obtained higher scores on each of the four humour styles, with particularly significant effects on aggressive and self-defeating humour. Men engaging more on the malign humour styles is consistent with other studies as well (Crawford & Gressley, 1991; Lefcourt, Davidson, Prkachin & Mills, 1997; Martin & Kuiper, 1999). In regards to age, it was found that younger participants had higher scores on affiliative humour compared to older participants. This was attributed to older adults engaging in less social activities compared to adolescents. For self-enhancing humour, there was no significant main effects for age or gender,

however, there was a significant interaction effect. This was due to older women having higher scores compared to younger women, meaning that older women seem to practise more coping humour compared to adolescent females. Finally, for aggressive humour it was found that younger participants scored higher in relation to the older participants, meaning that older people are less likely to use humour to ridicule and/or manipulate others as much.

Kuiper et al. (2010) showed that humorous comments can have a distinct impact on recipients, varying from positive to negative. They found that aggressive humour has the most negative impact on recipients, leading to sadness, feelings of rejection and a low desire to continue interacting. Affiliative and self-enhancing led to happier moods and a desire to continue the interaction. They found the recipients' responses to self-defeating humour to overall be ambivalent. However, in the context of brands on social media it has been shown, when a brand knows their audience, that implementing the more malign forms of humour can be successful too. The fast food chain, Wendy's, is known for being actively engaged on social media and specifically for having somewhat controversial interactions with their customers and competitors (Kim, 2018). One could say that Wendy's practises aggressive humour online. For example, they openly mocked fellow fast food chain, McDonald's, for an announcement about their intention to switch from frozen patties to fresh beef.

McDonald's original *Twitter* post only garnered a few thousand likes, whereas Wendy's reply received more than 180,000 likes and close to 80,000 comments (Kim, 2018). On the other hand, in a study by Zhang, Jansen and Chowdhury (2011) they found that most retweeted tweets fell under the category of 'humorous', and that the top contributor was the brand Zappos, an online retail company, who expressed humour mainly in affiliative and self-enhancing forms. Therefore, this stresses the notion that implementing humour successfully is dependent on knowing how the specific characteristics of a target audience can affect their reaction to various humour styles.

Lastly, as mentioned previously, humour is expressed online in many forms including memes (Taecharungroj & Nueangjamnong, 2015). The term '(Internet) meme' can be used for describing a concept or idea, typically humorous in nature, that spreads from one person to another. An Internet meme could be presented as a piece of text, an image, a video file, or "some other unit of cultural stuff" (Knobel & Lankshear, 2007). In Taecharungroj and Nueangjamnong's (2015) content analysis of a thousand memes, they observed memes reflecting all four of the aforementioned humour styles, confirming that the use of the HSQ is appropriate for the context of the current study.

## **2.2. Reacting to Humour**

Central to all communication, including humour, is the audience a message is directed at. It is the reaction of the audience which gives humour its 'success' or 'failure' (Meyer, 2000). People show their appreciation towards humour in many forms. Laughter is considered to be the primary indicator of someone experiencing humour (Apte, 1985; as mentioned in Meyer, 2000). Although it is also common for people to react to humour by smiling, grinning and even through sudden exhalations (Meyer, 2000). However, since the current study is on humour in the context of social media, these intuitive measures of experiencing humour are not considered appropriate for an online study. Especially since it has been shown that people laugh less when watching a comedy show on television by themselves compared to watching the same show with a group of people (Meyer, 2000). People are also more likely to spend time on social media by themselves than with others, thus being less likely to actually respond through laughter. Apart from these non-linguistic cues, another way of measuring evidence of humour experiences is through statements from the person experiencing it (Meyer, 2000).

In previous studies measuring experiences of humour through statements seems to be the norm (e.g. Olson & Roese, 1995; Lawson, Downing & Cetola, 1998). Specifically, when looking at previous research regarding the Humour Styles Questionnaire (e.g. Kuiper et al., 2010) the studies tended to measure participants' reactions to the humour styles by asking questions relating to their mood (happy/sad), feelings of acceptance/rejection, and whether they wanted to continue interacting with the source of the humour style (i.e. person).

Considering that the context of the current study is relating to memes on social media, these measures did not seem fitting as they are aimed more at in-person interactions. However, some previous studies use statements pertaining to 'entertainment value', so that individuals can indicate how funny, entertaining or amusing they found the use of humour in specific contexts, from humour in monologues and performances to advertisements (e.g. Olson & Roese, 1995; Lawson, Downing & Cetola, 1998). 'Entertainment value' is denoted as the perception of intrinsic enjoyment, fun or relaxation (Chow & Shi, 2015). Prior research has shown that attitudinal effects such as satisfaction may be a consequence of an entertaining experience. Therefore, if brands post entertaining content online this will increase emotional value for their stakeholders (Kim, Gupta & Koh, 2007; as mentioned in Chow & Shi, 2015). Meaning, that 'entertainment value' is an appropriate concept to use for the context of the current study.

Again, considering that the context of the study is memes on social media, positive electronic word of mouth (eWOM) was also considered a useful concept for measuring individuals' reactions to humour. In recent years, brands are now considering eWOM as a way of indicating their return on investment (ROI) (Coulter & Roggeveen, 2012; Kaul & Chaudhri, 2017). Social features of social network platforms make it easier for customers to share WOM among online friends (such as 'liking', sharing, etc.), and studies show that satisfied customers are more likely to spread positive WOM (Jansen et al., 2009; as mentioned in Chow & Shi, 2015). This rapid spread or virtual distribution of content (i.e. memes) from one individual to another, and across communities, growing expansively with each cycle is known as 'virality' (Mills, 2012; as mentioned in Taecharungroj & Nueangjamnong, 2015). Researchers have found that humour online has a positive relationship with people's attitudes towards content and the associated brand, as well as increasing individuals' forwarding intentions of this content, thus leading to virality (Vanden Bergh, Lee, Quilliam & Hove, 2011; Hsieh, Hsieh & Tang, 2012). In Botha and Reyneke's (2013) decision tree concerning virality, they stated that people are more likely to forward a video if they perceive themselves to have an emotional connection with the content. Many of the emotional connection examples they found were pertaining to the ideas of entertainment and funniness. Other studies have even suggested that the use of humour can even promote sharing of content concerning taboo topics (i.e. sexual health), as it helps in overcoming stigma (Evers, Albury, Byron & Crawford, 2013). Therefore, as brands want to promote viral content, since this is deemed a positive indicator of ROI, then eWOM is a direct indicator of this. Furthermore, as stated previously, humour tends to be related to increased positive eWOM, making it a relevant measure for the current study.

As mentioned previously, measuring one's mood was used in previous studies to indicate how positively an individual reacted to the use of humour (Kuiper et al., 2010). Even though intuitively this concept may seem feasible to use for the current study, it should be noted that it is likely not appropriate to use in the context of social media. The reason for not including emotion or mood as a measure is because people tend to share things that they connect with emotionally (Dobele et al., 2007; as mentioned in Botha & Reyneke, 2013). Therefore, if one of the conditions were to make a participant 'happy' they wouldn't necessarily be more likely to share it, as it may be lacking in relatability. People tend to like and share content that is relatable to them, therefore asking a participant how happy/sad they are (as in Kuiper et al., 2010) does not necessarily provide information on how much a participant likes a particular meme (Botha & Reyneke, 2013).

## **2.4. Humour and Personality**

As previously mentioned, research has found links between individuals' personality and the type of humour they use, thus indicating that individuals with different personality traits are likely to react differently to various humour styles (Mendiburo-Seguel et al., 2015, Martin et al., 2003). This is particularly useful information for brands as they are increasingly trying to hone their skills at personalising messages to suit different target audiences (Kosinski et al., 2014). Personalisation is known to help satisfy a customer's goal in a specific context, as well as a business's goal. It aids brands in targeting specific audiences, in order for their message or advertisement to achieve its maximum potential effectiveness (Leppaniemi & Karjaluoto, 2005).

The literature consists of a multitude of theories and ways to measure personality traits, for example, Eysenck's (1947, 1967) three factor model and Cattell's 16-factor model (1957; as mentioned in Zuckerman, Kuhlman, Joireman, Teta & Kraft, 1993). The most well-known to date, however, is probably the five-factor model of personality, which is a taxonomy of personality traits, based on five primary dimensions (McCrae & John, 1992). It is widely used and supported due to its consistency across self-reports, peer ratings and spouse ratings; with both adjective factors and questionnaire scales; and across cultures (Amelang & Borkenau, 1982; John, Goldberg, & Angleitner, 1984; as mentioned in McCrae & Costa, 1987).

### Neuroticism:

This dimension can be seen as the opposite of 'emotional stability' (McCrae & Costa, 1987). It is associated with descriptors such as insecure, self-conscious, worrying, self-defeating, anxious and impulsive (McCrae & Costa, 1987; McCrae & John, 1992). Neuroticism is related to the susceptibility to experience a range of negative effects, such as anger, anxiety, depression, and vulnerability (McCrae & Costa, 1987). It is also related to impulsive behaviours, such as overeating, smoking and drinking excessively (Costa & McCrae, 1980; as mentioned in McCrae & Costa, 1987).

### Extraversion:

This dimension is mainly associated with sociability, the enjoyment of others' company (McCrae & Costa, 1987). There is also a 'surgency' element to this trait, meaning it is associated with dominance and activity; which is what helps differentiate it from the

dimension of Agreeableness (McCrae & Costa, 1987). Other descriptors for this dimension would be fun-loving, affectionate, talkative, assertive, gregarious and excitement-seeking (McCrae & Costa, 1987; McCrae & John, 1992).

#### Agreeableness:

This dimension can be seen as the opposite of antagonism (McCrae & Costa, 1987). It is associated with descriptors such as trusting, sympathetic, considerate, warmth, altruism and compliance (McCrae & John, 1992). While antagonism loads highly on adjectives such as uncooperative, stubborn, rude and sceptical (McCrae & Costa, 1987). It is important to note that extreme scores on Agreeableness may also be maladaptive, as it could indicate having a high dependence on others (McCrae & Costa, 1987).

#### Conscientiousness:

On one hand this dimension is associated with being governed by conscience, and so is associated with terms such as dutiful, reliable and perhaps even moralistic (McCrae & Costa, 1987). However, it is also related to terms with a more proactive stance, such as ambitious, persevering, organised, and self-discipline (McCrae & Costa, 1987; McCrae & John, 1992). As mentioned in McCrae & Costa (1987) conscientiousness has been shown to correlate highly with academic achievement (Digman & Takemoto-Chock, 1981) and alcoholism (Conley & Angelides, 1984).

#### Openness to experience:

This dimension can be apparent in terms of feelings, actions, values, fantasy, ideas and aesthetics (Costa & McCrae, 1978, 1980; as mentioned in McCrae & Costa, 1987). It is associated with the idea of being imaginative, daring, original, introspective, artistic and having a broad range of interests (McCrae & Costa, 1987; McCrae & John, 1992).

Psychometric measures have found correlations of .30 between the dimension of Openness with Intelligence, so perhaps one may predispose an individual to the other (McCrae & Costa, 1987).

Mendiburo-Seguel, Páez and Martínez-Sánchez (2015) carried out a meta-analysis based on fifteen correlational studies. Homogenously across the studies it was found that extraversion had a positive relationship with affiliative humour (mean  $r$  of 0.42). In regards to self-enhancing humour, it was consistently found to have a positive relationship with

openness to experience (mean  $r$  of 0.19). The results for aggressive humour were not homogenous across studies, however, agreeableness had a medium effect size (mean  $r$  of -0.33) in accordance with Cohen's rules of thumb (Cohen, 1988, 1992; as mentioned in Field, 2009). They also found that neuroticism is associated (although was not homogeneous across studies) with self-defeating humour (mean  $r$  of 0.23).

In other terms, it has been found that individuals who are extraverted, have high self-esteem and/or are cheerful have a positive relation with using affiliative humour. In addition, affiliative humour is negatively associated with people who are usually serious and in a bad mood (Martin et al., 2003). These correlations seem to make intuitive sense - as these qualities, such as extraversion, are linked to the concept of enjoying others' company, then affiliative humour corresponds well with this as the aim behind it is trying to strengthen one's relationships through the use of humour (McCrae & Costa, 1987; Martin et al., 2003). Individuals who are seen as being open and optimistic have been positively linked with the use of self-enhancing humour. The reason for this is probably due to the fact that the use of self-enhancing humour is known to be an effective coping mechanism, therefore reflecting the idea of optimistic thinking. Also, self-enhancing humour is described as being able to laugh at life's incongruities, in order to be able to do this one would need a level of creativity, and thus openness, to be able to see the positives in a negative situation (McCrae & Costa, 1987; Martin et al., 2003). Individuals who are considered neurotic and more susceptible to mental health issues have been positively associated with the use of self-defeating humour. This is probably due to the self-disparaging element of the humour style decreasing the feeling of cognitive dissonance, as neurotic people tend to have many insecurities and thus a belief of low self-worth. Furthermore, the fact that the partial aim of this humour style is to avoid constructively dealing with negative feelings also corresponds with the idea of deteriorating mental health (McCrae & Costa, 1987; Martin et al., 2003). Individuals who were deemed hostile or had a low score on agreeableness were associated with the use of aggressive humour. Since antagonistic individuals are described as rude and uncooperative, it would make sense why they would feel comfortable using aggressive humour, since use of this humour style does not take into regard others' feelings (McCrae & Costa, 1987; Martin et al., 2003). From these associations and descriptions of the traits and styles, the first set of hypotheses are formulated:

- 1) Individuals who score high on Extraversion, will display more positive reactions to Affiliative humour.

- 2) Individuals who score high on Openness to Experience, will display more positive reactions to Self-enhancing humour.
- 3) Individuals who score high on Agreeableness, will display more negative reactions to Aggressive humour.
- 4) Individuals who score high on Neuroticism, will display more positive reactions to Self-defeating humour.

## **2.5. Humour and Culture**

As well as brands trying to effectively reach specific target audiences through considering their stakeholders' personality traits, another element that should be reflected when trying to effectively communicate with a specific group is culture. Brands are increasingly implementing the strategy of glocalisation, showing support for the need to understand how to successfully reach stakeholders of different cultures (Vignali, 2001).

Humour is considered a universal element of human interaction, and research has yet to find a culture or group where humour or laughter is not expressed. However, expression of humour does seem to vary across cultures, in how it is enacted and understood (Apte, 1985; as mentioned in Romero & Cruthirds, 2006). Humour can provide insights into cultural characteristics of various groups (Vinton, 1989; as mentioned in Duncan, Smeltzer, & Leap, 1990). These differences in cultural characteristics mean that one culture may find humour in something that another culture does not view as humorous (Guo, Zhang, Wang & Xeromeritou, 2011). Furthermore, considering the notion of globalisation, English is usually the main language of humorous texts online. However, due to other cultural and linguistic spaces besides English having increasing access to the internet, the frequency of translations and local adaptions of global internet humour has also increased (Knobel & Lankshear, 2008; as mentioned in Laineste & Voolaid, 2017). From the late 2000s onwards, there has been exponential growth of more localised memes online (Börzsei, 2013; as mentioned in Laineste & Voolaid, 2017).

Various studies, using different contexts, have pointed out the differences in humour between countries. Due to online communication playing a more pervasive role in our daily lives, the humour styles we use in other contexts are likely to transfer onto the online world. For example, Chen and Martin (2007) found that Chinese university students, when compared to Canadians, had significantly lower scores on all of the HSQ's humour styles, particularly Aggressive humour, and were less likely to use humour as a coping mechanism. This is perhaps related to humour not having as much importance in Chinese culture

compared to Western cultures. Especially in American culture humour is deemed as being important due to the role it plays in personality and creativity (Yue, 2008; as mentioned in Guo et al., 2011). This idea is also supported by Thorson, Valero and Carbelo Baquero (2006), who found that Americans scored higher on humour creativity compared to Spanish participants. However, the Spanish participants were found to have scored higher on using humour as a coping mechanism. Also in terms of racial differences, a study found when analysing a sample of American university students, that the White women scored higher on coping humour compared to Black women (Thorson et al., 2001). Therefore, even within one nation, it is likely that there will be differences in humour between the various cultural and ethnic groups.

It has been suggested that previous frameworks used for cross-cultural studies may have become out-dated, due to the fact that culture in itself is dynamic and always changing. Therefore, literature indicates that a more recent framework should be more appropriate, thus items from the recent GLOBE model shall be applied in the current study (Taylor, 2010; Czarnecka, Brennan & Keles, 2018). GLOBE stands for the Global Leadership and Organisational Behaviour Effectiveness research program, and comprises of nine cultural dimensions focusing on both society values and practices (House, Javidan, Hanges, & Dorfman, 2002). These dimensions are namely institutional collectivism, in-group collectivism, power distance, assertiveness, performance orientation, future orientation, humane orientation, gender egalitarianism and uncertainty avoidance (House et al., 2002).

The current study's focus shall be on the dimensions of power distance and in-group collectivism. Power distance pertains to the degree which members of a society or organisation believe and agree that power should be unequally distributed (House et al., 2002). It depicts how much people accept and endorse power differences, authority and status privileges (Czarnecka, Brennan & Keles, 2018). Scoring low on power distance, on the other hand, would indicate an emphasis on equality and a feeling of discomfort with hierarchical differences (Robert, Probst, Martocchio, Drasgow & Lawler, 2000). In-group collectivism is defined as the degree to which individuals demonstrate pride, loyalty and cohesiveness towards their social groups, such as families and organisations (House et al., 2002). Previous literature has stated that India is a country which ranks high on power distance and collectivism, whereas Poland ranks high on power distance but moderate on individualism, and the USA is high on individualism and moderate to low on power distance (Chhokar, 1999; Nasierowski & Mikula, 1998; Triandis, 1995; as mentioned in Robert et al., 2000).

The studies by Kuiper et al. (2010) can be seen as a starting point for researching how the four humour styles may affect social interactions across cultures. They found that both Canadian and Lebanese participants reacted negatively to aggressive humour, implying that this may be universal. When it came to self-enhancing humour, the Canadians reacted more positively, while the Lebanese did not differ significantly in their reactions between self-enhancing with affiliative or self-defeating. Kuiper et al. (2010) make the assumption that the Lebanese participants identify with being part of a collectivistic culture, while the Canadians identify as individualistic. However, the researchers note themselves that this should be explicitly measured, and thus as mentioned this shall be done in the current study. Research also suggests that grandiose narcissism is associated with the use of self-enhancing humour (Besser & Zeigler-Hill, 2011). Individuals from individualistic cultures tend to be more narcissistic compared to those from collectivistic cultures (Twenge, 2011). Furthermore, through the use of self-report questionnaires, another study showed that Singaporeans use humour less when coping with stressful situations (i.e. a lack of self-enhancing humour in terms of the HSQ) compared to an American sample (Nevo, Nevo & Yin, 2001). Singapore is known for scoring high on collectivism, also when compared to the USA (Soh & Leong, 2002). Therefore, since Singaporeans typically have a strong focus and pride towards their nation and social groups, meaning they are less likely to consider their individual needs and desires, this could explain why there is a relative absence of self-enhancing humour within this culture. Therefore, this leads to the fifth hypothesis:

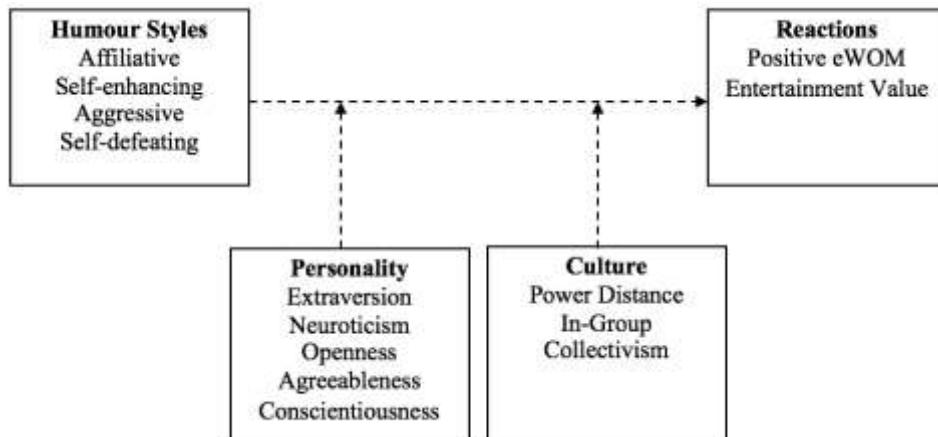
- 5) Individuals who score high on In-group Collectivism, will display more negative reactions to Self-enhancing humour.

When researching humour in the workplace, Evans and Steptoe-Warren (2015) found that managers tended to use aggressive humour significantly more than all other humour styles. Humour may be used by the powerful as a repressive discourse device in order to maintain authority and control (Holmes, 2000). Due to the position of authority of managers, aggressive humour style potentially could be related to the cultural dimension of power distance. Furthermore, it has been found that those who support hierarchy and inequality within groups (elements reflective of power distance) are more likely to endorse aggressive humour (Hodson, MacInnis, & Rush, 2010). Also in the study by Nevo et al. (2001), they found that Singaporeans supplied a greater number of aggressive jokes compared to an American sample. Singaporeans are known to score higher on power distance compared to many countries, such as the USA and Australia (e.g. Nevo et al., 2001; Williams & Tower,

1998). Aggression, including aggressive humour, is associated with individuals using manipulation as well as exerting social control, which are also elements linked to power distance (Martin et al., 2003; Bond, Wan, Leung & Giacalone, 1985; House et al., 2002). Therefore, the sixth hypothesis is:

- 6) Individuals who score high on Power Distance, will display more positive reactions to Aggressive humour.

A conceptual model, providing a visual overview of the variables obtained from the literature and the subsequent hypotheses, is shown in figure 2.1.



*Figure 2.1.* Visual overview of how personality and culture influence people's reactions to various humorous styles.

### **3. Method**

This section of the thesis shall introduce the chosen method used to investigate the hypotheses. This section shall provide details on the research design, procedure and pilot study conducted. Details on sampling shall also be described. An explanation and descriptives on the materials and measures used for each variable shall be given, including a clarification of the manipulation check. Finally, the statistical analysis used to investigate the hypotheses shall be stated.

#### **3.1. Research Design**

The study was a within-subject design, as all of the participants were subjected to all of the ‘conditions’ (i.e. all four of the humour styles). After each condition was viewed, on the following page of the online survey, the respondents received questions relating to their reactions and the manipulation checks. After the experimental part of the study, the respondents were asked to fill out questions in regards to their personality, cultural values and demographics. The conditions (the four humour styles) constitute the independent variable. The dependent variable was participants’ reactions to each condition, and was related to the concepts of positive eWOM and entertainment value. The moderating effects of personality and culture were also analysed, in order to see how they affect the relationship between the independent and dependent variables.

An advantage of a within-subject design is that participants are not divided amongst conditions, therefore, if only the lower limit of required participants was achieved this would still be substantial. Individual differences (other than the ones being measured) should not distort the results as it will be the same participants for the whole experiment; so internal validity does not rely on random assignment (Charness, Gneezy, & Kuhn, 2012). An issue with a within-subject design however, is the occurrence of carry-over and demand effects (Charness, Gneezy, & Kuhn, 2012). Participants may become bored after each condition, or likeability of the ‘Facebook page’ or type of meme used (i.e. text-based) may strengthen or weaken the more the participant is exposed to it. In order to counteract this, each participant viewed the memes in a random order. This is known as a Latin square design (see Figure 3.1.). Concerning demand effects, the participants may consciously or subconsciously change their behaviour based on what they believe the researcher’s intentions are (Charness, Gneezy, & Kuhn, 2012). Therefore, participants completed the experimental section at the beginning of the study, before answering the survey questions, so that they were not primed

to think about how their personality characteristics or cultural values may affect how much they like a specific humour style.

The experiment and survey questions were created together online using *Qualtrics*. A key issue with online studies is that they potentially have a high drop-out rate, however they have advantages such as fitting the timeframe and budget of the study (Birnbaum, 2004; Dandurand, Shultz, & Onishi, 2008). Another main advantage for online studies is that it is an appropriate method to quickly reach a large heterogeneous sample, which was ideal for the current study's target population (Birnbaum, 2004). Furthermore, as participants would naturally view this type of content (independent variable) from their own laptops or phones, it created a more 'natural' setting and thus increased external validity (Birnbaum, 2004).

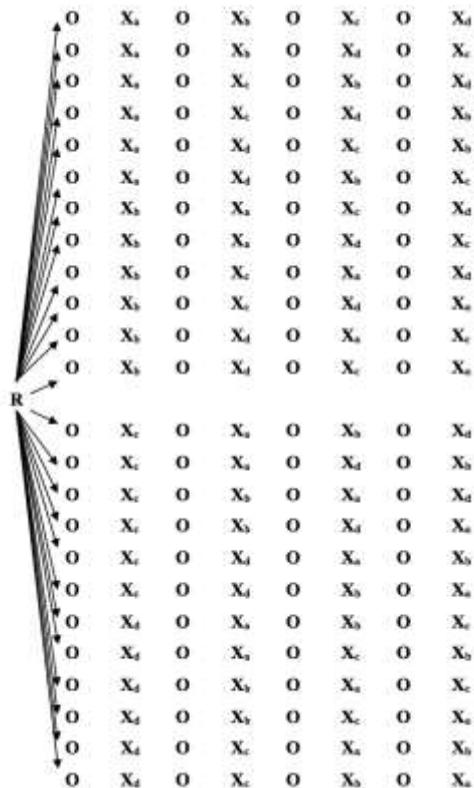


Figure 3.1. Latin square design.

### 3.2. Procedure

Participants were firstly given an overview of the study and their rights, followed by providing their consent before continuing with the study. Participants were required to be at least 18 years of age. Participants were introduced to the concept of memes, and then asked if they had a *Facebook* account and if they followed any meme pages. They then viewed a meme representing each of the humour styles, followed by questions analysing how

participants reacted to each humour style relating to eWOM and entertainment value (i.e. the dependent variable). After each set of questions pertaining to the dependent variable, the manipulation checks were presented to see if the participants agreed on the type of humour style that the meme was intending to represent, and whether or not they understood the humorous element. After, the participants were asked to fill out the survey questions in regards to the moderators (i.e. cultural values and personality characteristics) and their demographics. As previously mentioned, in order to avoid demand effects, the order of the study shall be taken into consideration (Charness, Gneezy, & Kuhn, 2012). As already mentioned, these variables were measured using previously validated scales (House et al., 2002; McCrae & John, 1992), as well as looking to prior empirical studies concerning the dependent variable (Alhabash & McAlister, 2015; Chow & Shi, 2015; Annie Jin, 2012; Warren, Barsky & McGraw, 2018; Hansson & Stanic, 2017). The aim of the study was not revealed to participants until after the entire study had been completed.

### **3.3. Pilot Study**

In order to assess whether the materials chosen for the four conditions in the experiment were appropriate, as well as assessing the other measures and manipulation checks, a pilot study was conducted. This was administered to those in the personal network of the researcher, as this enabled the researcher to be able to call participants afterwards in order to gain elaborate feedback on the study. For a pilot study a minimum of recruiting 12 participants is recommended (Moore, Carter, Nietert, & Stewart, 2011).

A number of pilot studies were run during April 2019 in order to test out different materials. In the initial pilot studies, video content was used. A number of issues arose from this, such as participants not being able to take on the perspective of the actor when answering the manipulation checks, and there being an element of subjectivity concerning whether participants perceived the content as serious or sarcastic. Overall, the results regarding the manipulation checks from these pilot studies were not clear, and so internal validity was not achieved.

Therefore, the stimuli material was changed from video content to text-based memes. Using text-based memes was beneficial and appropriate for an experimental method, as it was much easier to control, meaning that the humour style used was the only difference between each condition. In this pilot study, participants were presented with eight text-based memes, two to represent each humour style. The procedure of this pilot study was the same

as the final study. The final four memes (one per humour style) were chosen based mainly on the results of the manipulation checks, as well as considering grammar, etc. For all eight memes, the mean score was always highest on the manipulation check representing the intended humour style (see Table 3.1). Therefore, all eight memes seemed to be valid, but the researcher chose the final four based on those that best represented the intended humour style and would be most understandable to an international sample.

Overall 27 participants took part in the various pilot studies, however concerning the final version of the pilot study the sample size was  $N = 10$ . Only 10% of participants were male ( $N = 1$ ) and 80% were female ( $N = 8$ ); one value was missing. Participants' age ranged from a minimum of 22 to a maximum of 57 years, with an average age of 33.11 years ( $SD = 14.85$ ). Five of the participants were from the UK, one participant from Ireland, one from the Netherlands, and one from Slovenia (two values were missing). In relation to social media use, 90% of participants had a Facebook account ( $N = 9$ ), and only 30% followed meme pages on social media platforms ( $N = 3$ ). For education, 20% of participants had a Master's degree ( $N = 2$ ), 30% had a Bachelor's degree ( $N = 3$ ), and 40% had completed secondary education ( $N = 4$ ).

Table 3.1. Means and standard deviations for each manipulation check per condition ( $N = 10$ )

Condition	Manipulation Checks							
	Affiliative		Self-enhancing		Aggressive		Self-defeating	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Affiliative 1	6.56	0.73	4.33	1.94	1.22	0.44	1.22	0.44
<b>Affiliative 2</b>	6.33	0.87	1.78	1.09	2.22	1.39	1.22	0.44
Self-enhancing 1	1.56	0.88	5.78	1.30	4.44	1.94	1.67	0.87
<b>Self-enhancing 2</b>	2.33	1.94	5.56	1.13	1.67	0.87	2.67	1.32
<b>Aggressive 1</b>	1.89	1.27	2.56	1.51	6.22	1.09	2.00	1.32
Aggressive 2	1.90	1.45	1.90	1.20	5.40	2.22	3.10	2.18
Self-defeating 1	1.33	0.71	1.22	0.44	1.89	1.69	6.44	0.88
<b>Self-defeating 2</b>	1.40	0.70	1.60	1.08	1.40	0.70	6.30	1.34

*Note.* Conditions in bold indicate the memes used in the final study.

### **3.4. Sample**

The data collection took place during May 2019. In accordance with the Methodological Guidelines Thesis Research (Janssen & Verboord, 2018) a minimum of 150 participants was required based on the type of study.

Due to the nature of the study, the participants were contacted via social media platforms (i.e. *Facebook*, *Instagram*, *WhatsApp*, *Tinder*, etc.) and through e-mail. Participants were also asked to forward the study onto their peers. Specifically, in order to have a sample representative of various cultures, certain individuals in the researcher's network (i.e. from Indonesia, Serbia, etc.) were asked to share the survey. In addition to this, the researcher contacted specific *Facebook* groups that are aimed at expats and students, as well as sharing the study on *Tinder*. The intention behind this was to reach people of a variety of ages, nationalities, and educational backgrounds. This combination of convenience sampling along with snowball sampling, allowed the researcher to obtain a population past her own personal circles.

It was only required that participants were at least 18 years of age so that they could give consent themselves, and thus be in line with the ethical requirements of academic research (Janssen & Verboord, 2018). It was still considered, however, that there would be a strong likelihood of the sample mainly consisting of young adults (18 – 30 year olds; millennials). This age group falls into the category of those who are considered to be active social media users, devoting the highest percentage of their time to social media out of all forms of media (Casey, 2017). Millennials grew up with and are experienced in using social media platforms, and are believed to provide a good indication of future purchase tendencies towards brands. They are deemed as an important consumer group due to their perceptions of social media marketing and communications (Rodney & Wakeham, 2016). Therefore, the study is still appropriate even if the sample has a bias towards this age group.

In the end, a total of 259 participants were recruited for the online study, however, there was quite a high drop-out rate, leading to a  $N = 173$  after cleaning the data. This still made the minimum requirement of 150 participants (Janssen & Verboord, 2018). Among the respondents, 27.7% were male ( $N = 48$ ) and 70.5% were female ( $N = 122$ ). Participants' age ranged from a minimum of 18 to a maximum of 61 years, with an average age of 25.98 years ( $SD = 8.40$ ). In the sample, the most common two nationalities were British and Dutch, with 19.1% each ( $N = 33$  each). This is not surprising, as it is representative of the researcher's own nationality and location. From the remaining participants, 39.6% were from other European countries ( $N = 66$ ), 9.8% were from North America ( $N = 17$ ), 8.8% were from

Asia ( $N = 15$ ), 1.8% were from South America ( $N = 3$ ), 1.2% were from Africa ( $N = 2$ ) and 0.6% from Australia ( $N = 1$ ). The majority of participants had completed some level of tertiary education, with 53.8% having Bachelor's degrees ( $N = 93$ ), 15.0% with a Master's degree ( $N = 26$ ), and 0.6% with a Doctorate ( $N = 1$ ). For the remaining participants, 28.9% had completed secondary education ( $N = 50$ ) and 0.6% who had completed primary education ( $N = 1$ ). Concerning the participants' English level, it was found that the majority of the participants, 56.1%, were 'Near-Native/Native' speakers ( $N = 97$ ). This was followed by 36.4% of the participants having obtained 'Advanced/Proficient (i.e. C1, C2)' level ( $N = 63$ ), 5.8% who were considered 'Intermediate/Upper Intermediate (i.e. B1, B2)' level ( $N = 10$ ), and lastly 0.6% at 'Beginner/Elementary (i.e. A1, A2)' level ( $N = 1$ ). In terms of social media activity, it was found that 96.5% of participants have a Facebook account ( $N = 167$ ), and that 74.0% of participants follow at least one meme page on a social media platform ( $N = 128$ ).

### **3.5. Materials and Measurements**

#### 3.5.1. Humour Styles

Four text-based memes, representing Affiliative, Self-enhancing, Aggressive, and Self-defeating humour styles, from the Humour Styles Questionnaire (HSQ), were selected (Martin et al., 2003; see Appendix A for online survey including selected memes). The HSQ is deemed reliable, with Martin et al. (2003) finding Cronbach's alphas of at least 0.77. Inter-correlations between the four styles are also deemed to be low (with the maximum  $r = .36$ ), suggesting that each sub-scale is measuring a distinct humour style (Martin et al., 2003). Previous experimental research (e.g. Kuiper et al., 2010) only used scenarios of humour, as opposed to actual humorous content. Therefore, this is why memes were used in the current study, in order to increase the external validity (Tessitore & Geuens, 2013). With that being said, it is always important to control for as many variables as possible.

Other than the results from the pilot study, certain criteria were taken into consideration when choosing the final four memes. Firstly, all the memes were purely text-based. This was decided as the researcher did not want different types of images influencing the results. Furthermore, finding four memes with the same image to represent the four humour styles also proved challenging, as images are usually only fitting to one or two of the humour styles. All memes were in English, contained correct spelling and reasonable grammar. All memes were roughly the same length (i.e. two or three lines of text) and the

same font was used for each. As prior research has shown that different font styles can have a range of psychological effects on a reader and manipulate word meaning (Spikermann & Ginger, 2003, Doyle & Bottomley, 2004; as mentioned in Juni & Gross, 2008). It was also taken into consideration whether or not the memes required any prior knowledge or understanding, therefore references to specific people, brands, events, etc. were avoided. For ethical reasons, it was of course also important that the memes contained no profanity or any intentionally offensive content (i.e. no sexism, racism, etc.).

The memes were found via various social media platforms (i.e. *Instagram*, *WhatsApp* and *Facebook*). In order to avoid bias towards a specific social media platform, all the memes were edited to look as though they were posted by the same *Facebook* page ('Fake Facebook,' 2019). There were two main reasons for editing the memes in this way. Firstly, memes are usually found on social media platforms with options such as 'liking' them or forwarding them onto friends. This is known as 'electronic word of mouth' (eWOM) and is of great interest to businesses online (Coulter & Roggeveen, 2012), therefore editing the memes in this way lets the researcher measure eWOM as well as increase external validity. Electronic WOM shall be explained further in the following section. Secondly, *Facebook* was chosen due to the fact it is the most widely used social media platform across the world (Marino, Gini, Vieno & Spada, 2018). In 2014 Facebook had more than 1.35 billion active users (Statista, 2015; as mentioned in Taecharungroj & Nueangjamnong, 2015). Especially since the current study targeted adults of a variety of ages and nationalities, *Facebook* is a platform that most age groups and nationalities should at least be familiar with (Choudhury, 2018). It was deemed that a *Facebook* format would be most recognisable to the majority of respondents to the online survey.

Furthermore, when editing the memes in this way a few more details were taken into consideration. Firstly, all the Facebook posts were shown as if they had been posted 'just now' with no 'likes' or comments attached to them. This was done in order to avoid bias, as prior research has shown that people tend to have a preference for posts that are already deemed popular (Doerr, Fouz & Friedrich, 2012). The posts were all made to look as though they were from the same *Facebook* page, so the same name and icon were used. This was based on a real but rather generic *Facebook* page, called 'Memes' (<https://www.facebook.com/memes/>), in an attempt to have some external validity while avoiding bias at the same time.

Much of popular meme culture arose from *Twitter*, and many text-based memes you find on other social media platforms are based on tweets (Leavitt, 2014). Additionally, many

companies use *Twitter* to communicate with their various stakeholders (Rybalko & Seltzer, 2010). However, regardless of whether a business uses *Twitter* or specifically posts memes, the current stimulus material is still relevant, as text communication is fundamental to social media. Companies may use text communication in other forms, i.e. articles, posts, etc., but the results obtained from the current stimulus material can still be considered useful for these forms as well.

### 3.5.2. Manipulation checks

In order to increase the internal validity of the research, manipulation checks were included in the experiment. These checks were used to justify the measurement validity of the chosen stimuli for the independent variable in the study. Meaning that their objective was to ensure that each condition of the independent variable was performing as intended to eliminate any potential confounding factors to internal validity (Neuman, 2014).

Originally, the researcher looked to the Humour Styles Questionnaire (HSQ; Martin et al., 2003) to use as a basis for the manipulation checks, as this seemed to be the most intuitive approach. However, despite the fact that the items from the questionnaire were adapted to try and fit the stimulus materials used, they were found to be inappropriate for the current study based on the results from an initial pilot study. This was probably due to the fact that the items from the HSQ were created to address how oneself uses and expresses humour, and have an intrapsychic aspect to them, therefore making it difficult to apply to other people, i.e. the creator of the meme (Martin et al., 2003).

Upon further examination of the literature, a content analysis relating to the HSQ and memes, by Taecharungroj and Nueangjamnong (2015), provided guidelines that were deemed appropriate to use as manipulation checks for the final study. Compared to items from the HSQ these guidelines were a lot more distinct from one another, in order to represent each humour style, and were already relevant to the stimuli material of memes. After participants were exposed to each condition, on the following page of the survey they were asked to respond to each of the manipulation checks on a scale of 1 (strongly disagree) to 7 (strongly agree) with regards to the meme they had just viewed. The final manipulation checks can be seen in Table 3.2.

Table 3.2. Humour styles and final manipulation checks

Humour Style	Description	Manipulation Check
Affiliative	This humour style consists of jokes and witty banter, with the intention of amusing others and strengthening relationships.	The creator of this meme describes a situation about <i>someone else</i> in a <i>positive way</i> .
Self-enhancing	This humour style consists of having a humorous outlook on life and being amused by incongruities or in stressful situations.	The creator of this meme describes a situation about <i>themselves</i> in a <i>positive way</i> .
Aggressive	This humour style consists of disparagement towards others, with little regard for how it may negatively impact them.	The creator of this meme describes a situation about <i>someone else</i> in a <i>negative way</i> .
Self-defeating	This humour style consists of excessive self-disparaging humour; wanting to amuse others at the expense of oneself.	The creator of this meme describes a situation about <i>themselves</i> in a <i>negative way</i> .

Multiple paired-samples *t*-tests were conducted, in order to see if the mean score on the manipulation check for the intended humour style was significantly higher compared to the other three manipulation checks, per condition. In all conditions, the manipulation check representing the intended humour style had a significantly higher mean when being compared to the other three manipulation checks ( $p < .000$  in all cases). The means and standard deviations for each manipulation check for each condition can be viewed in Table 3.3.

Table 3.3. Means and standard deviations for each manipulation check per condition

Condition	Manipulation Checks							
	Affiliative		Self-enhancing		Aggressive		Self-defeating	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Affiliative	5.80	1.33	3.18	2.02	1.81	1.16	1.65	1.07
Self-enhancing	2.54	1.81	4.72	1.75	1.80	1.23	3.02	1.68
Aggressive	1.66	1.12	2.39	1.65	5.77	1.49	2.63	1.91
Self-defeating	1.77	1.23	1.90	1.34	2.45	1.98	5.68	1.70

Alongside these manipulation checks, participants were also asked, on a scale of 1 (strongly disagree) to 7 (strongly agree), to respond to the statement “I understood the humour in this meme”. Regardless of whether the participants actually liked the meme or not, this question was used to see whether or not the participants thought there was a humorous element to the meme at all, and if it was understood by them. When looking at this manipulation check for each condition the majority of participants agreed that they understood the humour (aggressive:  $M = 6.07$ ,  $SD = 1.43$ , self-defeating:  $M = 6.06$ ,  $SD = 1.42$ , self-enhancing:  $M = 6.14$ ,  $SD = 1.29$ , affiliative:  $M = 6.28$ ,  $SD = 1.11$ ).

Based on the results above all of the manipulation checks showed that in general the memes used for each condition were valid. However, when looking at the participants on an individual level the results were less clear, for example, someone may have said they understood a meme but then did not score highest on the intended humour style. Therefore, all participants’ values were kept for the final analyses, despite how they scored on the manipulation checks, in order for the sample size to be large enough.

### 3.5.3. Reactions

The dependent variable shall be referred to with the overarching term of ‘reactions’, in the sense of how the participants responded to each condition of the independent variable. Due to the specific context of the study, memes on social media, the notions of positive ‘electronic word of mouth’ (eWOM) and ‘entertainment value’ were chosen to represent the dependent variable.

As mentioned previously eWOM is a way in which companies are measuring their success online (Coulter & Roggeveen, 2012; Kaul & Chaudhri, 2017). As mentioned in the

theoretical framework, if an individual likes a particular type of humour style then they should be more likely to respond positively to this. There are many actions that fit under eWOM, such as ‘liking’ a post, following a page, or sharing content with friends online (Alhabash & McAlister, 2015; Chow & Shi, 2015; Annie Jin, 2012). Three items were used to measure positive eWOM on a 7-point Likert scale of strongly disagree (1) to strongly agree (7). The items were “I would like to follow this Facebook page; I would like to share this meme with my friends online; I would ‘like’ this meme on Facebook”. When looking at these items for each condition, all were normally distributed apart from “I would like to follow this Facebook page” for the aggressive and self-defeating humour conditions. However, this item was still kept for all four conditions, as there was still some spread and due to having only a limited number of items to begin with.

The other aspect of the dependent variable is ‘entertainment value’, which is the perceived intrinsic enjoyment, relaxation or fun created through interacting with a brand (or other social media users) online (Chow & Shi, 2015). Alongside the notion of ‘entertainment value’, much of the literature also relates this to the idea that humour can be seen as a stimulus that elicits ‘amusement’ (Warren, Barsky & McGraw, 2018; Hansson & Stanic, 2017). Therefore, on a scale of strongly disagree (1) to strongly agree (7) the two items of “I find this meme amusing; I think this meme is very entertaining” were used to measure this. When checking these items for normality, they were both found to be normally distributed for each condition.

A reliability analysis was then run for the five items representing the dependent variable per condition. For each condition, the Cronbach’s alpha was a minimum of 0.90, and did not increase if any of the items were deleted (see Table 3.4. for the descriptives).

Table 3.4. Descriptives of reactions to each meme ( $N = 173$ )

Humour Style	<i>M</i>	<i>SD</i>	Minimum	Maximum	Cronbach’s $\alpha$
Aggressive	3.21	1.55	1.00	7.00	0.91
Self-defeating	3.29	1.70	1.00	7.00	0.93
Self-enhancing	3.46	1.65	1.00	7.00	0.93
Affiliative	3.31	1.56	1.00	7.00	0.90

### 3.5.4. Personality traits

In order to gauge participants' personality traits, the well-established Five Factor Model shall be used to measure this (see Appendix B, including reversed items). The revision of the NEO-Personality Inventory is considered to be the most comprehensive and validated measure of the five-factor model, and thus its items shall be used in the current study (NEO-PI-R; Costa & McCrae, 1992; as mentioned in Young & Schinka, 2001). The domain measures are namely Neuroticism, Extraversion, Agreeableness, Openness to Experience, and Conscientiousness (Young & Schinka, 2001).

The IPIP (International Personality Item Pool) representation of the NEO-PI-R has a 10-item scale (per personality trait), with five positive items and five reversed (Costa & McCrae, 1992; <https://ipip.ori.org/newNEODomainsKey.htm>). It was found that each personality trait had fairly good Cronbach's alphas, of at least 0.77 (Costa & McCrae, 1992). However, for the current study only five items per personality domain were selected. This was decided so to minimise the overall duration of the study, and therefore decrease the likelihood of drop-out (Hoerger, 2010). For each personality domain, there was still a mixture of positively keyed and reversed keyed items. All items were measured on a 5-point Likert scale of strongly disagree (1) to strongly agree (5).

Originally the first three positive items and first two reversed items from Costa and McCrae's (1992; <https://ipip.ori.org/newNEODomainsKey.htm>) research were chosen for each domain, however, after gaining feedback from the pilot studies some of these were discarded and replaced. For example, some participants commented that they found the meanings of 'I see myself as someone who is the life of the party' and 'I see myself as someone who is often down in the dumps' to be unclear, as they were not familiar with these English expressions. These comments came from non-native but still proficient English speakers, so the researcher changed these items in order to increase the likelihood that all participants could comprehend all of the items.

When checking for normality, it was found that all items concerning extraversion, neuroticism and conscientiousness were normally distributed. For agreeableness, all items were normally distributed, apart from "I see myself as someone who respects others", which was negatively skewed. In the case of openness, the items "I see myself as someone who...believes in the importance of art; enjoys hearing new ideas; avoids philosophical discussions (reversed)" were also all negatively skewed. The negative skewness may be a result of the sample's demographics, as some previous research has indicated that Millennials and Generation Xers are more open to ideas and change (Lyons, Duxbury &

Higgins, 2007). Despite this all items were still kept for the final analyses, due to there being some spread and not wanting to limit the number of items further. Overall, the reliabilities for each personality trait were relatively high, of at least 0.70. However, the Cronbach's  $\alpha$  for openness was less than ideal, at 0.64 (see Table 3.5. for Cronbach's alphas of all moderators). It should also be noted that for both conscientiousness and neuroticism, if one item was deleted the Cronbach's  $\alpha$  would have increased to 0.71 and 0.75 respectively. The item concerning conscientiousness was "I see myself as someone who does just enough work to get by (reversed)" and for neuroticism it was "I see myself as someone who rarely gets irritated (reversed)". However, all five items were kept for both conscientiousness and neuroticism considering the Cronbach's  $\alpha$  were to a high enough standard.

### 3.5.5. Culture

In order to assess participants' cultural identity, adaptations of scales measuring selected GLOBE cultural dimensions were used (see Appendix C, including reversed items). Javidan, House, Dorfman, Hanges and de Luque (2006) have defended the use of GLOBE over previous frameworks, due to its ability to pass rigorous tests of reliability, validity and aggregability across cultures.

In total, GLOBE consists of nine cultural dimensions, however for the purpose of the current study only the dimensions of Power Distance and In-group Collectivism shall be assessed. On the societal level, Power Distance was found to have Cronbach's alphas of .80 (for 'practices') and .74 (for 'values'), while In-Group Collectivism had a value of .77 and .66 for 'practices' and 'values' respectively (Hanges & Dickson, 2004). The GLOBE items are typically on a 7-point Likert scale and the items for each cultural dimension can be categorised as either 'practices' or 'values'. Furthermore, the items are usually phrased in a way so that they refer to a specific society or organisation. Since the current study is just interested in participants' cultural values, and not in relation to a specific society or organisation, the GLOBE items shall be selected and adapted to fit this purpose.

For In-Group Collectivism, the selected items were already on a scale of 1 (strongly disagree) to 7 (strongly agree), so the only changes made to these items were taking out the phrase "in this society" and rephrasing two of the 'practices' items to reflect values. For example, "In this society, aging parents generally live at home with their children" was adapted to "I believe that ageing parents should live at home with their children". In total, only four items from this measure were considered appropriate to use for the current study.

In the case of Power Distance, not all of the items were on a scale of 1 (strongly disagree) to 7 (strongly agree), therefore, some of the items were split into two items and rephrased in order to fit this format. For example, the item “I believe that followers should obey their leader without question: 1; question their leader when in disagreement: 7”, was transformed into the items “I believe that followers should obey their leader without question” and “I believe that followers should question their leader when in disagreement”. In total, seven items were used (two of which were reversed) to represent this cultural dimension in the current study.

The items for in-group collectivism were all normally distributed and for power distance five out of the seven items were normally distributed. The items “I believe that followers should obey their leader without question” and “I believe that power should be concentrated at the top” were both positively skewed. Again, perhaps this is due to the fact most of the participants are students and/or millennials, who are known to be more likely to challenge the idea of authority (Espinoza, 2012). When running a reliability analysis, the Cronbach’s alpha for power distance was sufficient, at 0.75, however, for in-group collectivism it was quite surprisingly low, at only 0.41. When running a factor analysis for the four items on in-group collectivism, it was apparent that the items could be split into two separate components. One component concerning the element of having pride for another family member, and the other concerning whether one should live with their parents or not under specific circumstances. Considering this variable only consisted of four items to begin with, all four were kept for the final analysis, but keeping in mind that it is a limitation of the study. Despite, some of the power distance items not meeting the condition of normality, all items were kept for the final analyses due to there being some spread and an adequate reliability.

Table 3.5. Descriptives of moderators ( $N = 173$  for cultural values,  $N = 171$  for personality traits)

	<i>M</i>	<i>SD</i>	Minimum	Maximum	Cronbach's $\alpha$
Power Distance	2.16	0.83	1.00	5.14	0.75
In-Group Collectivism	3.91	0.81	2.00	6.25	0.41
Extraversion	3.21	0.89	1.20	5.00	0.85
Neuroticism	2.95	0.85	1.20	5.00	0.73
Agreeableness	3.60	0.63	1.60	5.00	0.70
Openness	4.08	0.61	2.20	5.00	0.64
Conscientiousness	3.50	0.68	1.60	4.80	0.70

### 3.5.6 Demographics and control variables

At the end of the study, the researcher included a number of control variables for participants to fill out. These included: gender, age, nationality, educational level and English level. The reason for including these control variables was to attempt to account for intersectionality of some social categories, and to see whether they would pose a significant effect on the results of the research question. After these demographic-related questions were asked, there was an opportunity for participants to provide feedback on the study.

Prior research has suggested differences relating to humour within these demographic categories. For example, a study by Swani, Weinberger and Gulas (2013) found that men respond more positively to aggressive humour than women. This was in support of other literature in the field, which shows gender differences in humour between males and females from childhood, and that these differences seem to persist into adulthood (Acuff and Reiher 1998, McGhee 1976, Gulas & Weinberger 2006; as mentioned in Swani et al., 2013). Asking about participants' English level was particularly important to have since the target population of the study consisted of people from a variety of cultures, meaning that not all participants necessarily would have a high level of English. Humorous communication is known to be complex, and access to humour is frequently restricted for those learning English within a classroom environment and not by interacting with native speakers (Bell, 2009). Also in regards to education level, Hsieh, Hsieh and Tang (2012) found that well-educated young adults have high cognitive abilities to comprehend and appreciate incongruent humour, suggesting that humour in advertising works best among

this audience. In contrast to this, another study found that using humour in advertising is more effective in persuading those who have a low need for cognition (Zhang, 1996). Perhaps the discrepancy in these results is due to the type of humour used. Therefore, the literature shows that these mentioned demographic variables can have an impact on how an individual reacts to humour, and so they shall be controlled for in this study.

At the beginning of the study there were also questions pertaining to whether or not the participant had an account on *Facebook* and whether they followed any meme-related pages on any social media platforms. As one's familiarity and/or interest in these topics could affect the results. It may even indicate participants' ability to understand the questions, for example if someone is not a *Facebook* user then they may not be familiar with certain terms or actions, such as the notion of 'liking' (Neuman, 2014, p. 322).

It was found that the variable of gender had a significant impact on all the dependent variables. This was assessed through running independent samples *t*-tests. Levene's test was not significant in all cases, therefore equal variance was assumed. For aggressive humour, a *t*-test showed that females have a significantly more positive reaction ( $M = 3.43$ ,  $SD = 1.54$ ) than males ( $M = 2.63$ ,  $SD = 1.48$ ),  $t(168) = -3.11$ ,  $p = .002$ . For self-defeating humour a *t*-test showed that females have a significantly more positive reaction ( $M = 3.50$ ,  $SD = 1.70$ ) than males ( $M = 2.79$ ,  $SD = 1.67$ ),  $t(168) = -2.47$ ,  $p = .015$ . For self-enhancing humour a *t*-test showed that females have a significantly more positive reaction ( $M = 3.71$ ,  $SD = 1.62$ ) than males ( $M = 2.84$ ,  $SD = 1.64$ ),  $t(168) = -3.13$ ,  $p = .002$ . Finally, for affiliative humour a *t*-test showed that females have a significantly more positive reaction ( $M = 3.54$ ,  $SD = 1.58$ ) than males ( $M = 2.77$ ,  $SD = 1.42$ ),  $t(168) = -2.94$ ,  $p = .004$ . In every case females had a significantly higher mean in each condition compared to males.

It was also found that having a *Facebook* account had a significant effect on self-enhancing humour. Those who had a *Facebook* account had a mean score of 3.51 ( $SD = 1.65$ ;  $N = 167$ ) and those who did not have a mean score of 1.72 ( $SD = 0.50$ ;  $N = 5$ ). Levene's test was significant ( $p = .008$ ), meaning equal variances were not assumed,  $t(7.00) = 6.92$ ,  $p < .000$ . Therefore, those who had a *Facebook* account reacted more positively to self-enhancing humour. Whether or not a participant followed any meme pages on social media also had a significant effect on reactions to self-enhancing humour. Those who followed meme pages had a mean score of 3.61 ( $SD = 1.68$ ;  $N = 128$ ) and those who did not have a mean score of 3.01 ( $SD = 1.52$ ;  $N = 44$ ). Levene's test was not significant ( $p = .170$ ), meaning equal variances were assumed,  $t(170) = 2.09$ ,  $p = .038$ . Therefore, those who

already followed meme pages on social media reacted more positively to self-enhancing humour.

### 3.6. Analysis

The accumulated data from *Qualtrics* shall be exported onto and analysed using SPSS Statistics. Firstly, the researcher had to clean the data. This mostly involved checking that all of the participants were at least 18 years of age, deleting participants who had dropped out too early in the study (i.e. those who had not answered any questions relating to the moderators or demographics), as well as making sure missing values were correctly coded. The appropriate items were reversed, and then, as previously mentioned, all were checked for normality and reliability. There were some issues concerning the reliability of the in-group collectivism variable, which shall be discussed in the final chapter.

Afterwards, the researcher computed the means of certain groups of items relating to personality traits to create the five separate variables, namely, extraversion, neuroticism, agreeableness, openness to experience, and conscientiousness. The same was done for the items relating to cultural values, in order to create the variables of power distance and in-group collectivism. Again, the researcher computed items from the participants' reactions so that they had an overall score for each condition. The manipulation checks were also analysed through paired sample *t*-tests, to compare that the mean for the intended humour style was significantly higher than the other three per meme. The results were all significant and thus the manipulation checks were deemed appropriate.

The researcher then checked the demographic variables to see if any had to be controlled for in the final analysis. Depending on the type of variable Pearson correlations, independent sample *t*-tests, and univariate ANOVAs were conducted to see if there were any significant effects on the dependent variables. After this a repeated measures ANCOVA was run in order to test the hypotheses. This included the moderators and also the control variables of gender, whether the participant had a Facebook account or not, and whether the participant followed any meme pages or not as covariates.

## **4. Results**

The repeated measures ANCOVA was used for testing each hypothesis. Meaning that there were seven moderation analyses in total. This section of the thesis presents a detailed examination of the results. All of the statistical tests included the control variables of gender, whether or not a participant had a *Facebook* account, and whether or not they followed meme pages on social media.

### **4.1. The moderating effects of personality traits**

The moderating effect of personality traits were tested on the relation between the humour styles (independent variable) and participants' reactions (dependent variable). The researcher checked for moderation of the five personality traits by running the repeated measures ANCOVA separately for each, with the aforementioned control variables included. All of the personality traits and dependent variables were continuous, whilst the control variables were all categorical.

#### 4.1.1 The moderating effect of extraversion

It was hypothesised (H1) that extraversion would have a moderating effect, such that individuals who scored high on extraversion would display more positive reactions to affiliative humour. Mauchly's test of Sphericity was not significant ( $p = .349$ ), therefore sphericity can be assumed. There was an interaction effect between humour styles and extraversion,  $F(3, 486) = 3.10, p = .026$ , partial  $\eta^2 = .019$ . In order to see where the interaction effect took place, the continuous extraversion variable was transformed into a variable consisting of two categories, which can be named 'low' and 'high'. These categories were based on the median of the extraversion variable, a value of 3.20, so that the participants were somewhat evenly distributed throughout the categories ( $N = 91$  for low, and  $N = 80$  for high). Figure 4.1. shows the interaction effect of extraversion on the reactions to each of the humour styles. To be more specific, the graph does show that those who score high on extraversion, have more positive reactions to affiliative humour than those who score low on extraversion. Therefore, H1 is accepted. However, it should be noted that those who score high on extraversion had more positive reactions to the other three humour styles compared to affiliative. Aggressive humour actually received the most positive reaction from those who had high scores on extraversion, with a mean score of 3.36, and the largest mean difference score of 0.92 concerning the reaction scores between participants with low and high extraversion. Also in the case of those who are low on extraversion, they reacted

more positively to affiliative humour relative to the other humour styles. Affiliative humour had the smallest mean difference score concerning reaction scores between participants with low and high extraversion; a mean difference of 0.46.

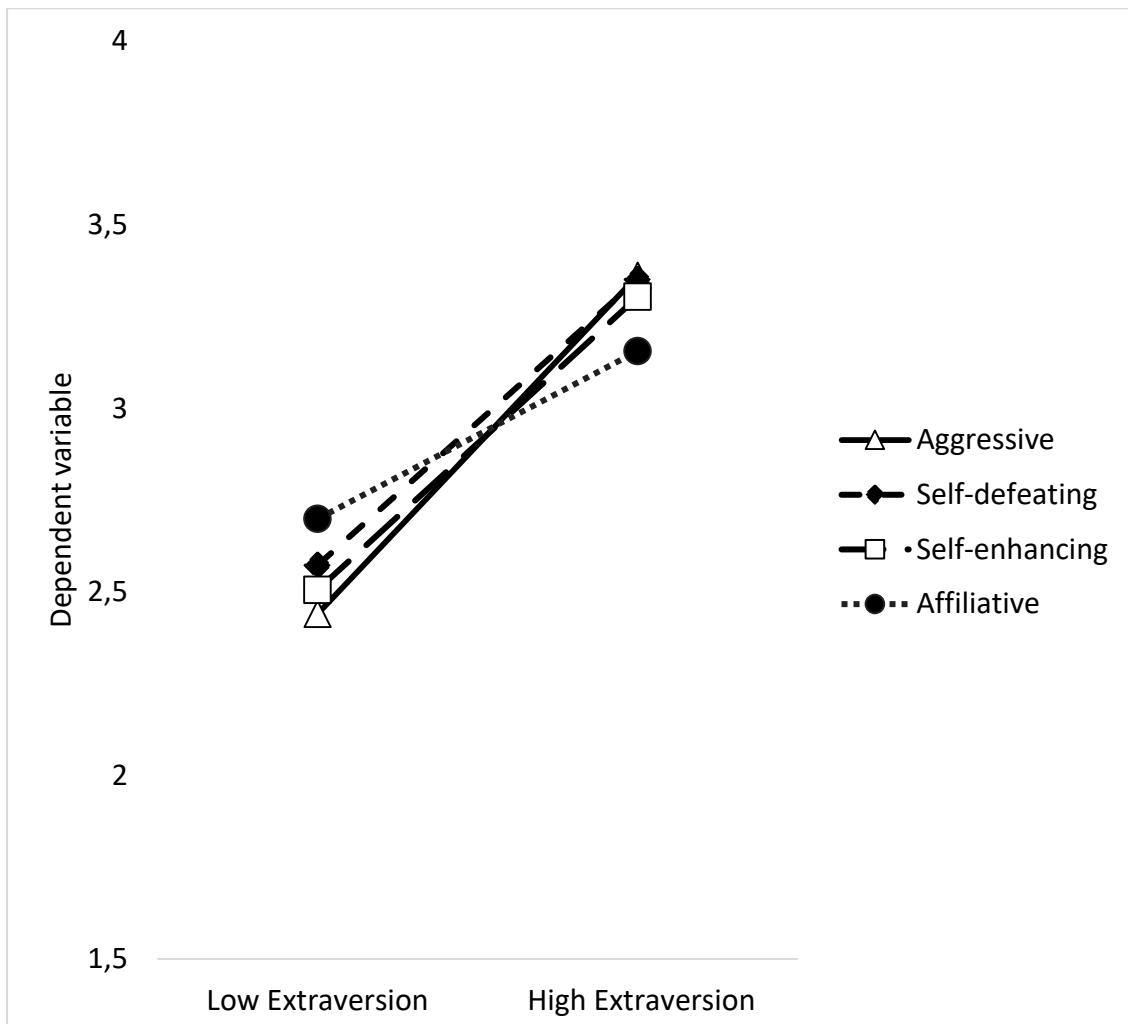


Figure 4.1. Interaction effect of extraversion on reactions to the humour styles.

The repeated measures ANCOVA also revealed that extraversion did not have a main effect on reactions to humour styles,  $F(1, 162) = 1.60, p = .207$ , partial  $\eta^2 = .010$ . However, it was found that gender did have a main effect,  $F(1, 162) = 7.62, p = .006$ , partial  $\eta^2 = .045$ . As mentioned previously, females had higher means on reactions to all humour styles, meaning they viewed all of the humour styles more positively.

#### 4.1.2 The moderating effect of openness to experience

It was hypothesised (H2) that openness to experience would have a moderating effect, such that individuals who scored high on openness to experience would display more positive reactions to self-enhancing humour. Mauchly's test of Sphericity was not significant ( $p = .210$ ), therefore sphericity can be assumed. However, there was no interaction effect between humour styles and openness to experience,  $F(3, 486) = 0.25, p = .863$ , partial  $\eta^2 = .002$ . Therefore, openness to experience has no moderating effect and H2 was not accepted. The repeated measures ANCOVA revealed that openness to experience also did not have a main effect on reactions to humour styles,  $F(1, 162) = 0.06, p = .810$ , partial  $\eta^2 = .000$ . Again, gender showed a main effect,  $F(1, 162) = 8.08, p = .005$ , partial  $\eta^2 = .048$ . Meaning that females reacted more positively to each humour style compared to males.

#### 4.1.3 The moderating effect of agreeableness

It was hypothesised (H3) that agreeableness would have a moderating effect, such that individuals who scored high on agreeableness would display more negative reactions to aggressive humour. Mauchly's test of Sphericity was not significant ( $p = .197$ ), therefore sphericity can be assumed. No interaction effect between humour styles and agreeableness was found,  $F(3, 486) = 0.54, p = .653$ , partial  $\eta^2 = .003$ . Therefore, agreeableness has no moderating effect and H3 was not accepted. The repeated measures ANCOVA revealed that agreeableness also did not have a main effect on reactions to humour styles,  $F(1, 162) = 0.20, p = .655$ , partial  $\eta^2 = .001$ . Gender did have a main effect,  $F(1, 162) = 7.89, p = .006$ , partial  $\eta^2 = .046$ . Meaning that females reacted more positively to each humour style compared to males.

#### 4.1.4. The moderating effect of neuroticism

It was hypothesised (H4) that neuroticism would have a moderating effect, such that individuals who scored high on neuroticism would display more positive reactions to self-defeating humour. Mauchly's test of Sphericity was not significant ( $p = .262$ ), therefore sphericity can be assumed. However, there was no interaction effect between humour styles and neuroticism,  $F(3, 486) = 2.48, p = .061$ , partial  $\eta^2 = .015$ . Therefore, neuroticism has no moderating effect and H4 was not accepted. The repeated measures ANCOVA revealed that

neuroticism also did not have a main effect on reactions to humour styles,  $F(1, 162) = 0.82$ ,  $p = .367$ , partial  $\eta^2 = .005$ . Again, gender was shown to have a main effect,  $F(1, 162) = 7.20$ ,  $p = .008$ , partial  $\eta^2 = .043$ . Meaning that females reacted more positively to each humour style compared to males.

#### 4.1.5. Effect of conscientiousness

Although conscientiousness was not hypothesised as a moderator, it was still measured for and thus the researcher decided to check if it had any effects. Mauchly's test of Sphericity was not significant ( $p = .201$ ), therefore sphericity can be assumed. However, there was no interaction effect between humour styles and conscientiousness,  $F(3, 486) = 0.14$ ,  $p = .938$ , partial  $\eta^2 = .001$ . Therefore, conscientiousness has no moderating effect on the relation between the independent and dependent variables. The repeated measures ANCOVA revealed that conscientiousness also did not have a main effect on reactions to humour styles,  $F(1, 162) = 1.29$ ,  $p = .257$ , partial  $\eta^2 = .008$ . Gender did have a main effect,  $F(1, 162) = 8.33$ ,  $p = .004$ , partial  $\eta^2 = .049$ . Meaning that females reacted more positively to each humour style compared to males.

### **4.2. The moderating effects of cultural values**

The moderating effect of cultural values was tested on the relation between the humour styles (independent variable) and participants' reactions (dependent variable). The researcher checked for moderation of the two cultural values by running the repeated measures ANCOVA separately for each. Again, the appropriate control variables were included. All of the cultural values and dependent variables were continuous, whilst the control variables were all categorical.

#### 4.2.1. The moderating effect of in-group collectivism

It was hypothesised (H5) that in-group collectivism would have a moderating effect, such that individuals who score high on in-group collectivism would display more negative reactions to self-enhancing humour. Mauchly's test of Sphericity was not significant ( $p = .202$ ), therefore sphericity can be assumed. However, there was no interaction effect between humour styles and in-group collectivism,  $F(3, 486) = 0.64$ ,  $p = .593$ , partial  $\eta^2 = .004$ . Therefore, in-group collectivism has no moderating effect and H5 was not

accepted. The repeated measures ANCOVA revealed that in-group collectivism also did not have a main effect on reactions to humour styles,  $F(1, 162) = 3.28, p = .072$ , partial  $\eta^2 = .020$ . As with the previous analyses, gender had a main effect,  $F(1, 162) = 8.16, p = .005$ , partial  $\eta^2 = .048$ . Meaning that females reacted more positively to each humour style compared to males.

#### 4.2.2. The moderating effect of power distance

It was hypothesised (H6) that power distance would have a moderating effect, such that individuals who score high on power distance would display more positive reactions to aggressive humour. Mauchly's test of Sphericity was not significant ( $p = .200$ ), therefore sphericity can be assumed. However, there was no interaction effect between humour styles and power distance,  $F(3, 486) = 0.27, p = .846$ , partial  $\eta^2 = .002$ . Therefore, power distance has no moderating effect and H6 was not accepted. The repeated measures ANCOVA revealed that power distance also did not have a main effect on reactions to humour styles,  $F(1, 162) = 0.14, p = .711$ , partial  $\eta^2 = .001$ . Again, gender did have a main effect,  $F(1, 162) = 8.13, p = .005$ , partial  $\eta^2 = .048$ . Meaning that females reacted more positively to each humour style compared to males.

### **4.3. Summary**

Overall, the results did not show many significant relations between the variables. The moderating variables of openness to experience, agreeableness, neuroticism, conscientiousness, in-group collectivism and power distance all had no significant interaction effect on the relation of how individuals reacted to each humour style. This countered the claims made in theoretical framework. Thus, hypotheses 2, 3, 4, 5 and 6 were rejected.

For extraversion, however, there was a significant interaction effect on the relation between the independent (humour styles) and dependent variables (reactions). It confirmed the claims in the theoretical framework that those who score high on extraversion react more positively to affiliative humour, than those who have low scores on extraversion. Therefore, H1 was accepted. However, it is important to note that those who scored high on extraversion reacted even more positively to aggressive, self-defeating and self-enhancing

humour compared to affiliative humour. Meaning there may be implications that those who score high on extraversion react to humour more positively no matter what style is used.

Concerning the control variables, whether or not the participant had a Facebook account and whether or not they followed any meme pages, were found to not have any significant main or interaction effects. However, the control variable of gender was found to have a significant main effect throughout the analyses. It showed that females consistently reacted more positively to all of the humour styles, and this remained significant even when other variables were taken into consideration.

## **5. Conclusion**

This final section of the thesis provides a discussion of the results, whilst answering the research question. The study's limitations, practical implications and recommendations for future research are also presented in this section. This section ends with the conclusion and strengths of the study.

### **5.1. Discussion**

The aim of this thesis was to test whether and how individual differences, namely personality traits and cultural values, may influence the relation of participants' reactions to various humour styles. Hence, the research question was '*How do personality and culture influence individuals' reactions to different types of humour?*'.

Brands' ability to effectively communicate with their stakeholders online is becoming increasingly important, as it is becoming more competitive to gain consumers' attention. Implementation of humour is one strategy to overcome this, meaning brands should consider the entertainment value of their content to increase engagement with their stakeholders (Lim, 2013; Erdoğmuş & Cicek, 2012). Humour is expressed in many forms online, including through the popular use of memes, thus this was the chosen context for the research (Taecharungroj & Nueangjamnong, 2015). Expressing and reacting to humour is believed to be an innate trait of all humans. However, due to differing personality traits and cultural values, how one individual expresses and reacts to humour may differ to another (Romero & Cruthirds, 2006; Mendiburo-Seguel, 2015). Brands are increasingly personalising their messages towards consumers, as it is known to satisfy customers and thus help brands in achieving their goals (Leppaniemi & Karjaluoto, 2005). Therefore, it is important for brands to understand how to use humour communication effectively, by tailoring it to suit their target audience's characteristics.

For the current study the Humour Styles Questionnaire was used as a taxonomy for defining humour styles, namely affiliative, self-enhancing, self-defeating and aggressive humour (Martin et al., 2003). It was theorised that personality traits and cultural values would have a moderating effect on how individuals reacted to the four humour styles. The dimensions for personality and culture were based from the five-factor model and GLOBE questionnaires (McCrae & John, 1992; House et al., 2002). More specifically, it was theorised that individuals who scored high on extraversion, would display more positive reactions to affiliative humour. Secondly, that individuals who scored high on openness to experience, would display more positive reactions to self-enhancing humour. Thirdly, it was

hypothesised that those who scored high on agreeableness, would display more negative reactions to aggressive humour. Lastly, for individuals who scored high on neuroticism it was hypothesised that they would display more positive reactions to self-defeating humour. For the moderating cultural values, it was firstly theorised that individuals who scored high on in-group collectivism would display more negative reactions to self-enhancing humour, and secondly that those who scored high on power distance would display more positive reactions to aggressive humour.

In order to conduct this research, an online study was created on the platform *Qualtrics* ( $N = 173$ ). This was a within-subjects design, as participants were exposed to all four conditions (i.e. memes representing each humour style). The study also included measures for participants' reactions to the humour styles, which were based on the concepts of entertainment value and eWOM. As well as measures for the personality traits, cultural values and control variables.

The researcher tested for any significant effects through the means of repeated measures ANCOVA. This statistical test was repeated for each moderating variable, to see how they effected participants' reactions to the different humour styles. The control variables of gender, whether or not participants had a *Facebook* account, and whether or not they followed any meme pages were included in all of the analyses.

Based on the results of the analyses, the research question was answered. None of the personality traits or cultural values posed any significant effects on the relation between participants' reactions and the humour styles, apart from one exception. Extraversion was found to have a significant interaction effect on this relation. It was found that those who scored high on extraversion did react more positively to affiliative humour, compared to those who scored low on extraversion, thus the first hypothesis was accepted. However, it was also found that individuals who scored high on extraversion, in fact reacted more positively to the other three humour styles compared to affiliative. Furthermore, the control variable of gender was found to have a significant main effect throughout the analyses.

The theoretical implications, limitations, as well as the overall conclusion are provided in the following sections.

## **5.2. Implications**

### 5.2.1. Personality traits

There was found to be a significant interaction effect for the variable of extraversion on how participants reacted to the different humour styles. This meant that the first hypothesis relating to “individuals who score high on extraversion, will display more positive reactions to affiliative humour” could be accepted. However, as previously mentioned, those who scored high on extraversion also reacted more positively to the other three humour styles compared to those who scored low on extraversion. In fact, the highly extraverted people reacted even more positively to the other three humour styles compared to affiliative humour. This indicates that extraverted individuals may just react more positively to humour in general. People who are deemed as extraverted, also tend to be socially outgoing and have the ability to laugh and smile in a range of situations (Martin, 1996). Extraverted individuals are also associated with being talkative, so perhaps this idea of communicating openly with others reflects being more likely to contribute to and spread positive eWOM (McCrae & Costa, 1987; McCrae & John, 1992). Future research could perhaps investigate the relationship between extraversion and eWOM further.

The remaining personality trait variables, namely neuroticism, agreeableness, openness to experience and conscientiousness, had no significant moderating effects. For conscientiousness this was expected, as no hypothesis was made. However, for the remaining variables, a potential reason for this insignificance could be due to sample characteristics, such as the sample having a bias towards educated millennial females. Also for those who scored high on agreeableness, it could be possible that they would not feel comfortable opting for ‘strongly disagree’ on a Likert scale, thus leading to a more positive reaction towards aggressive humour.

### 5.2.2. Cultural values

Neither in-group collectivism nor power distance were found to have a significant moderating effect. In the case of power distance, a theoretical assumption could provide some insight as to why this was the case. In societies that score high on power distance, it very much depends on the person and their position as to whether their actions are deemed appropriate or not (Bond et al. 1985). For example, if an authority figure was to insult someone deemed beneath them in the societal hierarchy then this would likely be viewed as acceptable, whereas if someone was to insult their superior this would be viewed as

inappropriate. Therefore, in terms of aggressive humour, individuals who score high on power distance may only react positively to it if it is expressed by someone they view as their superior. The context of memes, as opposed to in-person interactions, is probably not the most suitable way to test this particular dynamic since ‘the creator of the meme’ is typically not viewed as a superior or subordinate.

Furthermore, a study by Cruthirds, Wang, Wang and Wei (2012) also found conflicting evidence towards the hypotheses in the current study. They found that Mexican advertisements predominately use self-enhancing humour, while American advertisements use more affiliative, self-defeating and aggressive humour styles. Mexicans are known to score more highly on both power distance and collectivism compared to Americans (Cruthirds et al., 2012). They reasoned that Mexicans would prefer self-enhancing humour, as it was perceived to be incongruous to the real-life experiences of authoritarian power – it has been theorised that incongruity leads to humour (Meyer, 2000). Therefore, this research provides a possible insight as to why neither in-group collectivism nor power distance had significant effects.

Another main reason for the insignificant effect of in-group collectivism, is also probably due to the low reliability of the scale used. The reason for this low reliability is probably because two items that originally reflected ‘practices’ in the GLOBE questionnaire were reframed to reflect ‘values’ in the current study.

### 5.2.3. Gender

Gender was found to have a main effect on the relationship between individuals’ reactions to different humour styles. Females were found to react more positively to all of the humour styles compared to males. This is in contrast to the findings from Martin et al. (2003), who found that males scored higher on all dimensions of the Humour Styles Questionnaire (HSQ), particularly aggressive and self-defeating humour. Previous research has suggested that men tend to score higher on the notion of humour creation, whilst women have a tendency to score higher on humour appreciation (Nevo et al., 2001). So perhaps this explains the difference between the reactions in the current study, compared to the results of which humour style people tend to express themselves from the HSQ.

Another explanation for female’s higher scores could be due to the fact that the researcher is also female and so may have unknowingly selected memes that are more

appealing to a female audience. The majority of the participants in the pilot study were also female, so any differences wouldn't have been obvious at this stage.

#### 5.2.4. Humour Styles

It was found that defining and categorising humour is not a straightforward task. Throughout the study process, particularly during the pilot study period, participants seemed to be in disagreement over what 'person's perspective' they should be viewing the humour from. For example, one of the participant's feedback on the final study mentioned that memes usually consist of positive/negative evaluations of 'self' and 'other' at the same time. A specific example would be that the self-defeating meme could be viewed as the creator/poster evaluating their attractiveness negatively, but implying that they regard their sense of humour positively. Also, when trying to find self-enhancing memes, there was the issue that a lot of them also included an element of aggressive humour at the same time. This is reflective of humour in daily life, as people do not tend to stick with a single humour style when communicating (Martin et al., 2003). This also further points to how finding appropriate manipulation checks for the study was an issue, as it was difficult to indicate what perspective the participant should view it from.

There was also the issue of whether the participants viewed the conditions as being 'sarcastic' or 'serious'. In Taecharungroj and Nueangjamnong's (2015) content analysis on memes, they also considered the notion of 'humour type' (i.e. comparison, personification, exaggeration, pun, sarcasm, silliness and surprise). So perhaps this indicates that measuring humour styles (/HSQ) on its own is too simplistic, and therefore it is something for future research to investigate.

### **5.3. Limitations**

There were some issues relating to the normality of variables. Especially, items on power distance being positively skewed. This may be due to a bias in the sample, as it mainly consisted of students and/or millennials. This group of people have been associated with challenging the idea of authority (Espinoza, 2012). Also for openness, some of the items were negatively skewed. Again, this is potentially related to a bias in the sample towards millennials, which is a group of people said to be more open to new ideas and change (Lyons et al., 2007).

There were also issues with reliability. As previously mentioned, this was specially the case for in-group collectivism. This is partially due to the fact only four items were used. Also, two of the items were adapted from GLOBE's 'practice' items to reflect 'values' (in order to avoid items that referred to 'society'), therefore, this adaptation was probably not reflective of the domain. Perhaps age or a person's social-economic status reflects better if someone would live with their parents until married/with ageing parents. Whether someone would live with their parents out of duty or circumstance, and whether they'd actually want to, are probably two different things.

It was also a difficult task finding appropriate memes for the study. One challenge was controlling for the grammar and spelling between memes, as well as avoiding profanity in order to not offend participants. Many memes online tend to make mistakes in grammar and spelling on purpose as a way of expressing humour. Also in regards to profanity, perhaps having a meme which included this would have represented aggressive humour more appropriately, as profanity is used often in memes online. The current meme that was used perhaps 'pales in aggression' compared to the norm of aggressive memes online. Even though controlling for these elements was appropriate for the current experimental setting, it should be noted that it reduces the external validity.

Another issue from a psychometric perspective, is that the midpoints of the Likert scales were not defined in the study. Only the end points of 'strongly disagree' and 'strongly agree' were defined. By naming (at least) the midpoint as 'neither agree nor disagree', would probably have made things clearer for participants. However, Likert scales are commonly used and something most participants should be familiar with, so hopefully this does not create too much of a concern over the results of this study.

There were also some limitations concerning the control variables. Participants were also not asked if they had seen the meme before. Familiarity with a meme could have had an effect on how amusing a participant found it. Familiarity may have resulted in boredom, or a greater likeability towards the meme (Moreland & Zajonc, 1982; Charness et al., 2012). In addition, the variable of nationality should also be considered. Some participants may have dual nationality, a different nationality from their parents, or have grown up in a different country than the one of their nationality. Perhaps the country a participant resides in or the country they have lived in for the longest would have provided more information relating to preference in humour styles. Furthermore, a participant pointed out in the feedback section that terms such as 'Bachelor' are not relevant to all educational systems. Considering the target population was people from a variety of cultures, perhaps more educational options or

listing alternatives for each option would have been helpful. Also concerning the fact that the target sample wanted to cover a range of cultures, it was perhaps also a limitation that the study was conducted solely in English. Of course, considering the time and financial constraints of the current thesis this would not have been feasible, but it is still a point for future research.

A further concern of this study was the high dropout rate. Despite online studies having many benefits (Birnbaum, 2004; Dandurand et al., 2008), literature has stated that high dropout rate is a common issue of online studies (Hoerger, 2010). Even though the researcher made the effort to reach participants outside of her own personal circles, there is a strong likelihood that those outside of her personal circles were also the participants who were more likely to dropout. Using probability sampling would have been more ideal than snowball or convenience sampling in order to avoid this potential issue, however, given the feasibility of this the current sampling method used is still appropriate.

#### **5.4. Conclusion and strengths**

To summarise, this thesis aimed to see whether personality traits and cultural values had any moderating effects on how individuals reacted to four different humour styles – namely, affiliative, self-enhancing, self-defeating and aggressive. Overall, the results were not as expected, however a significant moderating effect concerning extraversion was found. In addition, gender was also found to have a significant main effect, with females consistently reacting more positively to each humour style.

Despite the limitations mentioned previously, the research also had strengths. The sample was representative of a variety of nationalities, with at least one participant from every continent. Furthermore, even though the majority of participants were considered millennials, there was still a large range of ages included, thus increasing the generalisability of the research. The use of an online study probably aided in achieving these sample characteristics. Using an experimental method enabled the researcher to exert more control, thus minimising potential confounding variables. A within-subjects design was also beneficial, as it eliminated any effects of individual differences between conditions.

Moreover, the current study added to the scientific research, as most of the previous research had only conducted correlational studies between humour and personality traits, rather than trying to determine cause and effect – in addition, the moderating effect of extraversion was found. Also in terms of the GLOBE cultural dimensions, these had not

been incorporated in the literature before concerning humour, so this is a further addition to scientific research.

## References

- Alhabash, S., & McAlister, A. R. (2015). Redefining virality in less broad strokes: Predicting viral behavioral intentions from motivations and uses of Facebook and Twitter. *New media & society*, 17(8), 1317-1339. doi: 10.1177/1461444814523726
- Annie Jin, S. A. (2012). The potential of social media for luxury brand management. *Marketing Intelligence & Planning*, 30(7), 687-699. doi: 10.1108/02634501211273805
- Bell, N. D. (2009). Learning about and through humor in the second language classroom. *Language Teaching Research*, 13(3), 241-258. doi: 10.1177/1362168809104697
- Bond, M. H., Wan, K. C., Leung, K., & Giacalone, R. A. (1985). How are responses to verbal insult related to cultural collectivism and power distance?. *Journal of Cross-Cultural Psychology*, 16(1), 111-127. doi: 10.1177/0022002185016001009
- Botha, E., & Reyneke, M. (2013). To share or not to share: the role of content and emotion in viral marketing. *Journal of Public Affairs*, 13(2), 160-171. doi: 10.1002/pa.1471
- Botha, E., & Reyneke, M. (2013). To share or not to share: the role of content and emotion in viral marketing. *Journal of Public Affairs*, 13(2), 160-171. doi: 10.1002/pa.1471
- Casey, S. (2017). *2016 Nielsen Social Media Report*. Retrieved from The Nielsen Company website: [www.scoop.it/doc/download/6Zym6@x73pTI9\\_2UoXmawSU](http://www.scoop.it/doc/download/6Zym6@x73pTI9_2UoXmawSU)
- Chen, G. H., & Martin, R. A. (2007). A comparison of humor styles, coping humor, and mental health between Chinese and Canadian university students. *Humor: International Journal of Humor Research*, 20, 215-234.
- Choudhury, N. (2018). The Globalization of Facebook: Facebook's Penetration in Developed and Developing Countries. In *Media and Power in International Contexts: Perspectives on Agency and Identity* (pp. 77-97). Emerald Publishing Limited.
- Chow, W. S., & Shi, S. (2015). Investigating customers' satisfaction with brand pages in social networking sites. *Journal of Computer Information Systems*, 55(2), 48-58. doi: 10.1080/08874417.2015.11645756
- Coulter, K. S., & Roggeveen, A. (2012). "Like it or not" Consumer responses to word-of-mouth communication in on-line social networks. *Management Research Review*, 35(9), 878-899. doi: 10.1108/01409171211256587

- Crawford, H. J., & Gregory, G. D. (2015). Humorous advertising that travels: A review and call for research. *Journal of Business Research*, 68(3), 569-577. doi: 10.1016/j.jbusres.2014.09.005
- Crawford, M., & Gressley, D. (1991). Creativity, caring, and context: Women's and men's accounts of humor preferences and practices. *Psychology of women quarterly*, 15(2), 217-231. doi: 10.1111/j.1471-6402.1991.tb00793.x
- Cruthirds, K. W., Wang, V. L., Wang, Y. J., & Wei, J. (2012). A comparison of humor styles in US and Mexican television commercials. *Marketing Intelligence & Planning*, 30(4), 384-401. doi: 10.1108/02634501211231856
- Czarnecka, B., Brennan, R., & Keles, S. (2018). Cultural Meaning, Advertising, and National Culture: A Four-Country Study. *Journal of Global Marketing*, 31(1), 4-17. doi: 10.1080/08911762.2017.1376364
- Doerr, B., Fouz, M., & Friedrich, T. (2012). Why rumors spread fast in social networks. *Communications of the ACM*, 55(6), 70-75. doi: 10.1145/2184319.2184338
- Erdoğmuş, İ. E., & Cicek, M. (2012). The impact of social media marketing on brand loyalty. *Procedia-Social and Behavioral Sciences*, 58, 1353-1360. doi: 10.1016/j.sbspro.2012.09.1119
- Espinoza, C. (2012). Millennial values and boundaries in the classroom. *New Directions for Teaching and Learning*, 2012(131), 29-41. doi: 10.1002/tl.20025
- Evers, C. W., Albury, K., Byron, P., & Crawford, K. (2013). Young people, social media, social network sites and sexual health communication in Australia: "This is funny, you should watch it". *International Journal of Communication*, 7, 263-280.
- Fake Facebook post generator (2019). Retrieved from <https://zeoob.com/generate-facebook-status-post/>
- Guo, J., Zhang, X., Wang, Y., & Xeromeritou, A. (2011). Humour among Chinese and Greek preschool children in relation to cognitive development. *International Electronic Journal of Elementary Education*, 3(3), 153-170. doi:
- Hampes, W. P. (1994). Relation between intimacy and the Multidimensional Sense of Humor Scale. *Psychological Reports*, 74, 1360-1362. doi: 10.2466/pr0.1994.74.3c.1360
- Hanges, P. J., & Dickson, M. W. (2004). The development and validation of the GLOBE culture and leadership scales. *Culture, leadership, and organizations: The GLOBE study of 62 societies*, 50(3), 122-151. doi: 10.1026/0932-4089.50.3.167

- Hansson, L., & Stanic, N. (2017). *Do big laughs and positive attitudes sell?: An examination of sponsored content on Youtube, and how entertainment and attitude influence purchase intentions in millennial viewers* (Unpublished master's thesis). Retrieved from <http://www.diva-portal.org/smash/get/diva2:1108350/FULLTEXT01.pdf>
- Hatzithomas, L., Boutsouki, C., & Zotos, Y. (2011). A Cross-Cultural Analysis of Print Humorous Advertising in the UK and Greece. *International Marketing Review*, 28(1), 57-80. doi: 10.1108/02651331111107107
- Hoerger, M. (2010). Participant dropout as a function of survey length in Internet-mediated university studies: Implications for study design and voluntary participation in psychological research. *Cyberpsychology, behavior, and social networking*, 13(6), 697-700. doi: 10.1089/cyber.2009.0445
- Hsieh, J. K., Hsieh, Y. C., & Tang, Y. C. (2012). Exploring the disseminating behaviors of eWOM marketing: persuasion in online video. *Electronic Commerce Research*, 12(2), 201-224. doi: 10.1007/s10660-012-9091-y
- Humke, C., & Schaefer, C. E. (1996). Sense of humor and creativity. *Psychological Reports*, 82, 544-546. doi: 10.2466/pms.1996.82.2.544
- Juni, S., & Gross, J. S. (2008). Emotional and persuasive perception of fonts. *Perceptual and motor skills*, 106(1), 35-42. doi:10.2466/pms.106.1.35-42
- Kim, P. (2018). Who's winning the burger wars? A closer look at social networking, enterprise social networks, and customer engagement. *Issues in Information Systems*, 19(4), 16-25.
- Knobel, M., & Lankshear, C. (2007). *Online memes, affinities, and cultural production*. In: Knobel, M., and Lankshear, C., (eds.) *A New Literacies Sampler*. Peter Lang, New York, pp. 199-227.
- Köhler, G., & Ruch, W. (1996). Sources of variance in current sense of humor inventories: How much substance, how much method variance? *Humor: International Journal of Humor Research*, 9, 363-397. doi: 10.1515/humr.1996.9.3-4.363
- Kuiper, N. A., McKenzie, S. D., & Belanger, K. A. (1995). Cognitive appraisals and individual differences in sense of humor: Motivational and affective implications. *Personality and Individual Differences*, 19, 359-372. doi: 10.1016/0191-8869(95)00072-E
- Laineste, L., & Voolaid, P. (2017). Laughing across borders: Intertextuality of internet memes. *The European Journal of Humour Research*, 4(4), 26-49. doi: 10.7592/EJHR2016.4.4.laineste

- Lawson, T. J., Downing, B., & Cetola, H. (1998). An attributional explanation for the effect of audience laughter on perceived funniness. *Basic and Applied Social Psychology*, 20(4), 243-249. doi: 10.1207/s15324834basp2004\_1
- Leavitt, A. (2014). From #FollowFriday to YOLO: Exploring the cultural salience of Twitter memes. Weller, Bruns, Burgess, Mahrt & Puschmann (Eds.), *Twitter and Society* (pp. 137-154). Retrieved from <https://core.ac.uk/download/pdf/19541510.pdf>
- Lefcourt, H. M., Davidson, K., Prkachin, K. M., & Mills, D. E. (1997). Humor as a stress moderator in the prediction of blood pressure obtained during five stressful tasks. *Journal of Research in Personality*, 31(4), 523-542. doi: 10.1006/jrpe.1997.2191
- Leppaniemi, M., & Karjalisto, H. (2005). Factors influencing consumers' willingness to accept mobile advertising: a conceptual model. *International Journal of Mobile Communications*, 3(3), 197-213. doi: 10.1504/IJMC.2005.006580
- Lyons, S. T., Duxbury, L., & Higgins, C. (2007). An empirical assessment of generational differences in basic human values. *Psychological reports*, 101(2), 339-352. doi: 10.2466/pr0.101.2.339-352
- Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). The associations between problematic Facebook use, psychological distress and well-being among adolescents and young adults: A systematic review and meta-analysis. *Journal of Affective Disorders*, 226, 274-281. doi: 10.1016/j.jad.2017.10.007
- Martin, R. A. (1996). The situational humor response questionnaire (SHRQ) and coping humor scale (CHS): A decade of research findings. *Humor-International Journal of Humor Research*, 9(3-4), 251-272. doi: 10.1515/humr.1996.9.3-4.251
- Martin, R. A., & Kuiper, N. A. (1999). Daily occurrence of laughter: Relationships with age, gender, and Type A personality. *Humor*, 12(4), 355-384. doi: 10.1515/humr.1999.12.4.355
- Meyer, J. C. (2000). Humor as a double-edged sword: Four functions of humor in communication. *Communication theory*, 10(3), 310-331. doi: 10.1111/j.1468-2885.2000.tb00194.x
- Moreland, R. L., & Zajonc, R. B. (1982). Exposure effects in person perception: Familiarity, similarity, and attraction. *Journal of Experimental Social Psychology*, 18(5), 395-415. doi: 10.1016/0022-1031(82)90062-2
- Neuman, W. (2014). *Social research methods: Qualitative and quantitative approaches*. Essex, UK: Pearson Education.

- Nevo, O., Nevo, B., & Yin, J. L. S. (2001). Singaporean humor: A cross-cultural, cross-gender comparison. *The Journal of General Psychology*, 128(2), 143-156. doi: 10.1080/00221300109598904
- Olson, J. M., & Roes, N. J. (1995). The perceived funniness of humorous stimuli. *Personality and Social Psychology Bulletin*, 21(9), 908-913. doi: 10.1177/0146167295219005
- Olsson, H., Backe, H., Sørensen, S., & Kock, M. (2002). The essence of humour and its effects and functions: a qualitative study. *Journal of nursing management*, 10(1), 21-26. doi: 10.1046/j.0966-0429.2001.00272.x
- Robert, C., Probst, T. M., Martocchio, J. J., Drasgow, F., & Lawler, J. J. (2000). Empowerment and continuous improvement in the United States, Mexico, Poland, and India: Predicting fit on the basis of the dimensions of power distance and individualism. *Journal of Applied Psychology*, 85(5), 643. doi: 10.1037/0021-9010.85.5.643
- Rybalko, S., & Seltzer, T. (2010). Dialogic communication in 140 characters or less: How Fortune 500 companies engage stakeholders using Twitter. *Public relations review*, 36(4), 336-341. doi: 10.1016/j.pubrev.2010.08.004
- Soh, S., & Leong, F. T. (2002). Validity of vertical and horizontal individualism and collectivism in Singapore: Relationships with values and interests. *Journal of Cross-Cultural Psychology*, 33(1), 3-15. doi: 10.1177/0022022102033001001
- Speck, P. S. (1991). The humorous message taxonomy: A framework for the study of humorous ads. *Current issues and research in advertising*, 13(1-2), 1-44. doi: 10.1080/01633392.1991.10504957
- Stern, B. B. (1996). Advertising comedy in electronic drama: The construct, theory and taxonomy. *European Journal of Marketing*, 30(9), 37-59. doi: 10.1108/03090569610130034
- Swani, K., Weinberger, M. G., & Gulas, C. S. (2013). The impact of violent humor on advertising success: A gender perspective. *Journal of Advertising*, 42(4), 308-319. doi: 10.1080/00913367.2013.795121
- Taecharungroj, V., & Nueangjamnong, P. (2015). Humour 2.0: Styles and types of humour and virality of memes on Facebook. *Journal of Creative Communications*, 10(3), 288-302. doi: 10.1177/0973258615614420

- Taylor, C. R. (2010). Towards stronger theory development in international advertising research. *International Journal of Advertising*, 29(1), 9–14. doi: 10.2501/S0265048709201002
- Thorson, J. A., & Powell, F. C. (1994). Depression and sense of humor. *Psychological Reports*, 75, 1473-1474. doi: 10.2466/pr0.1994.75.3f.1473
- Thorson, J. A., Powell, F. C., & Samuel, V. T. (2001). Sense of humour in black and white. *North American Journal of Psychology*, 3(1), 1–12.
- Thorson, J. A., Valero, C., & Carbelo Baquero, C. (2006). A study of sense of humour in Spanish and American samples. *North American Journal of Psychology*, 8(3), 447–454.
- Vanden Bergh, B. G., Lee, M., Quilliam, E. T., & Hove, T. (2011). The multidimensional nature and brand impact of user-generated ad parodies in social media. *International Journal of Advertising*, 30(1), 103-131. doi: 10.2501/IJA-30-1-103-131
- Vignali, C. (2001). McDonald's: "think global, act local" – the marketing mix. *British food journal*, 103(2), 97-111. doi: 10.1108/00070700110383154
- Warren, C., Barsky, A., & McGraw, A. P. (2018). Humor, comedy, and consumer behavior. *Journal of Consumer Research*, 45(3), 529-552. doi: 10.1093/jcr/ucy015
- Williams, S. M., & Tower, G. (1998). Differential reporting in Singapore and Australia: A small business managers' perspective. *The International Journal of Accounting*, 33(2), 263-268. doi: 10.1016/S0020-7063(98)90029-2
- Zhang, M., Jansen, B. J. & Chowdhury, A. (2011). Business engagement on Twitter: a path analysis. *Electronic Markets*, 21(3), 161. doi: 10.1007/s12525-011-0065-z
- Zhang, Y. (1996). The effect of humor in advertising: An individual-difference perspective. *Psychology & Marketing*, 13(6), 531-545. doi: 10.1002/(SICI)1520-6793(199609)13:6<531::AID-MAR1>3.0.CO;2-9
- Zhang, Y., & Zinkhan, G. M. (2006). Responses to humorous ads: Does audience involvement matter?. *Journal of Advertising*, 35(4), 113-127. doi: 10.2753/JOA0091-3367350408
- Ziv, A. (2010). The social function of humor in interpersonal relationships. *Society*, 47(1), 11-18. doi: 10.1007/s12115-009-9283-9
- Zuckerman, M., Kuhlman, D. M., Joireman, J., Teta, P., & Kraft, M. (1993). A comparison of three structural models for personality: the big three, the big five, and the

alternative five. *Journal of personality and social psychology*, 65(4), 757. doi:  
10.1037/0022-3514.65.4.757

## Appendix A - Online Qualtrics survey including memes

# Memes Experiment

---

Start of Block: Block 1 - Intro

Consent

**FOR QUESTIONS ABOUT THE STUDY, CONTACT:**

Brontë McClelland at 511987bm@student.eur.nl

### **DESCRIPTION**

Dear participant, welcome and thank you very much for participating in this study! The purpose of this study is to understand individuals' preferences concerning memes. This study is intended for people aged 18 years and older. It is also recommended to complete this survey on a computer for the best view.

### **RISKS AND BENEFITS**

As far as I can tell, there are no risks associated with participating in this research. I will use the results from this study exclusively for academic work, such as further research, academic meetings and publications.

### **TIME INVOLVEMENT**

Your participation in this study should take no longer than 15 minutes. You may interrupt your participation at any time. The questionnaire has to be filled out individually.

### **PAYMENTS**

There will be no monetary compensation for your participation.

### **PARTICIPANTS' RIGHTS**

If you have decided to accept to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to refuse to answer particular questions. Your individual privacy will be maintained in all published and written data resulting from the study.

### **CONTACTS AND QUESTIONS**

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact (anonymously, if you wish) Dr. (Joep) J. Hofhuis at j.hofhuis@eshcc.eur.nl

### **INFORMED CONSENT**

By clicking on the button to the next page you indicate that: you are at least 18 years of age, you have read and understood all information provided here, and you consent to participate in this study.

The survey shall begin on the next slide. Please read all instructions and information provided to you carefully.

End of Block: Block 1 - Intro

---

Start of Block: Block 2 - Intro

Info

An **Internet meme** is a concept or idea, typically humorous in nature, that spreads "virally" from one person to another via the Internet. An Internet meme could be anything from an image to a video file or a piece of text.

On the coming slides you shall view 4 images consisting of memes that were posted on Facebook. Each meme will be followed by some questions relating to your opinions.

---

Q1 Do you have an account on Facebook?

Yes (1)

No (2)

---

Q2 Do you follow any meme pages on Facebook or another social media platform?

Yes (1)

No (2)

End of Block: Block 2 - Intro

---

Start of Block: Attention Block

Attention  
**ATTENTION**

You will only be able to view each meme once. After each meme a number of questions will follow, so please read carefully.

End of Block: Attention Block

---

Start of Block: Meme 1 - Agg

Agg



Memes

Just now ·

...

I can't wait for natural selection to take out slow walkers

Like

Comment

Share

---

Page Break

---

Q3 Solely based on the meme you just saw, please indicate to what extent you agree or disagree on the following statements.

	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I find this meme amusing. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to follow this Facebook page. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to share this meme with my friends online. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think this meme is very entertaining. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would 'like' this meme on Facebook. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 Solely based on the meme you just saw , please indicate to what extent you agree or disagree on the following statements.

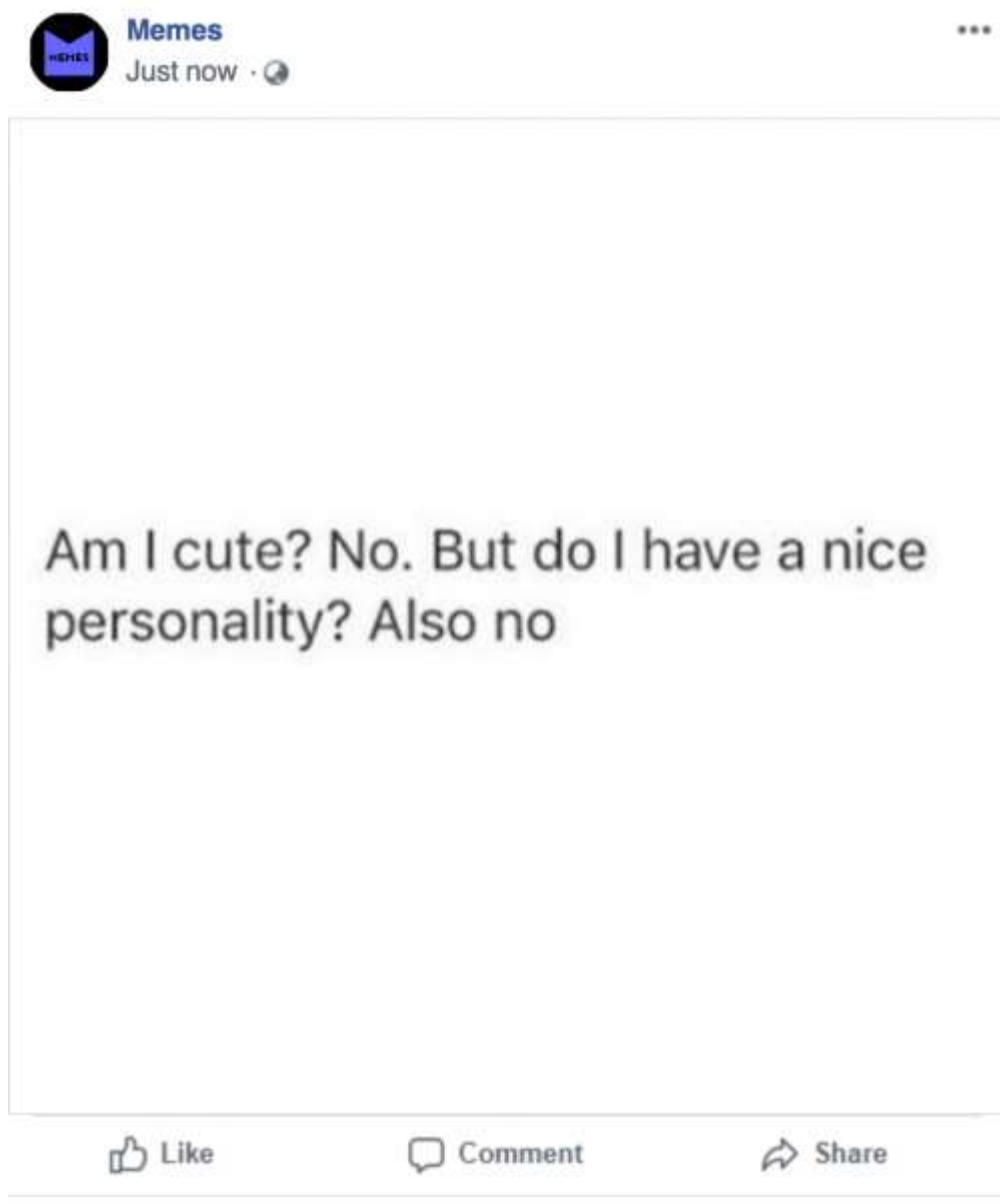
	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I understood the humour in this meme. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>someone else</i> in a <i>positive</i> way. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>themselves</i> in a <i>positive</i> way. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>someone else</i> in a <i>negative</i> way. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>themselves</i> in a <i>negative</i> way. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Meme 1 - Agg

---

Start of Block: Meme 2 - SD

SD



---

Page Break

---

Q5 Solely based on the meme you just saw, please indicate to what extent you agree or disagree on the following statements.

	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I find this meme amusing. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to follow this Facebook page. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to share this meme with my friends online. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think this meme is very entertaining. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would 'like' this meme on Facebook. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 Solely based on the meme you just saw , please indicate to what extent you agree or disagree on the following statements.

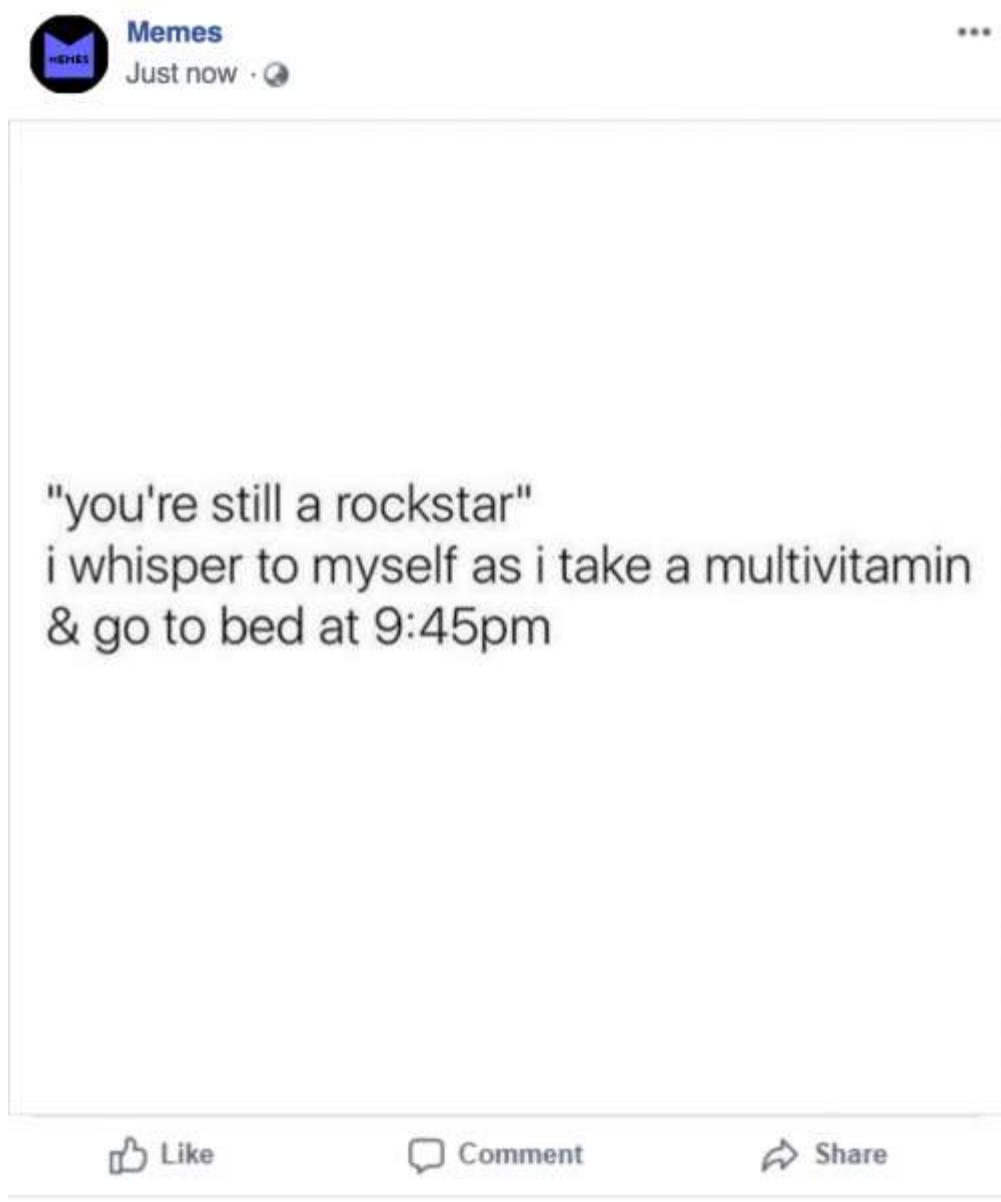
	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I understood the humour in this meme. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>someone else</i> in a <i>positive</i> way. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>themselves</i> in a <i>positive</i> way. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>someone else</i> in a <i>negative</i> way. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>themselves</i> in a <i>negative</i> way. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Meme 2 - SD

---

Start of Block: Meme 3 -SE

SE



---

Page Break

---

Q7 Solely based on the meme you just saw, please indicate to what extent you agree or disagree on the following statements.

	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I find this meme amusing. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to follow this Facebook page. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to share this meme with my friends online. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think this meme is very entertaining. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would 'like' this meme on Facebook. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Solely based on the meme you just saw , please indicate to what extent you agree or disagree on the following statements.

	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I understood the humour in this meme. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>someone else</i> in a <i>positive</i> way. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>themselves</i> in a <i>positive</i> way. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>someone else</i> in a <i>negative</i> way. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>themselves</i> in a <i>negative</i> way. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Meme 3 -SE

---

Start of Block: Meme 4 - Aff

Aff



---

Page Break

---

**Q9** Solely based on the meme you just saw, please indicate to what extent you agree or disagree on the following statements.

	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I find this meme amusing. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to follow this Facebook page. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to share this meme with my friends online. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think this meme is very entertaining. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would 'like' this meme on Facebook. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Q10 Solely based on the meme you just saw, please indicate to what extent you agree or disagree on the following statements.

	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I understood the humour in this meme. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>someone else</i> in a <i>positive</i> way. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>themselves</i> in a <i>positive</i> way. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>someone else</i> in a <i>negative</i> way. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The creator of this meme describes a situation about <i>themselves</i> in a <i>negative</i> way. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Meme 4 - Aff**

---

**Start of Block: Culture**

Description That was the last meme. The following two slides shall ask questions relating to your values and characteristics.

---

**Q11**

Here are a number of statements, concerning cultural values, that may or may not apply to you. Please indicate from a scale of strongly disagree (1) to strongly agree (7) the extent to which you agree or disagree with each statement.

	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree (7) (7)
I believe children should take pride in the individual accomplishments of their parents. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that followers should obey their leader without question. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe parents should take pride in the individual accomplishments of their children. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that people in positions of power should try to increase their social distance from less powerful individuals. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When in disagreement with adults, young people should defer to elders. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that power should be concentrated at the top. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that a person's influence should be based primarily on the	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

authority of  
one's position.  
(10)

I believe that  
followers should  
question their  
leader when in  
disagreement.  
(11)

I believe that  
people in  
positions of  
power should try  
to decrease their  
social distance  
from less  
powerful people.  
(12)

I believe that  
ageing parents  
should live at  
home with their  
children. (14)

I believe  
children should  
live at home  
with their  
parents until they  
get married. (15)

End of Block: Culture

---

Start of Block: Personality

Q12 Here are a number of characteristics that may or may not apply to you. Please indicate from a scale of strongly disagree (1) to strongly agree (5) the extent to which you agree or disagree with each statement.

*I see myself as someone who...*

	Strongly disagree (1) (1)	2 (2)	3 (3)	4 (4)	Strongly agree (5) (5)
Often feels blue (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feels comfortable around people (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Believes in the importance of art (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a vivid imagination (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Makes friends easily (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is always prepared (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a good word for everyone (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoids philosophical discussions (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dislikes myself (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pays attention to details (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does just enough work to get by (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is skilled in handling social situations (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Believes that others have good intentions (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Carries out my plans (14)	<input type="radio"/>				
Accepts people as they are (15)	<input type="radio"/>				
Rarely gets irritated (16)	<input type="radio"/>				
Doesn't talk a lot (17)	<input type="radio"/>				
has frequent mood swings (18)	<input type="radio"/>				
Makes plans and sticks to them (19)	<input type="radio"/>				
Is not interested in abstract ideas (20)	<input type="radio"/>				
Enjoys hearing new ideas (21)	<input type="radio"/>				
Suspects hidden motives in others (22)	<input type="radio"/>				
Keeps in the background (23)	<input type="radio"/>				
Panics easily (24)	<input type="radio"/>				
Respects others (25)	<input type="radio"/>				

End of Block: Personality

---

Start of Block: Block 7 - Demographics

Description2 The following and final questions are related to your demographics.

Q13 What is your gender?

Male (1)

Female (2)

Other (3)

---

Q14 What is your age?

Please fill in your age in numbers. For example, when you are 25 years old, you fill in 25.

---

Q15 What is your nationality?

AD - Andorra (1) ... ZW - Zimbabwe (250)

---

Q16 What is the highest degree or level of school you have completed? (If you're currently enrolled in school, please indicate the highest degree you have *received*).

No schooling (1)

Primary education (2)

Secondary education (3)

Bachelor's degree (e.g. BA, BS) (4)

Master's degree (e.g. MA, MS, MEd) (5)

Doctorate (e.g. PhD, EdD) (6)

Q27 What level of English do you currently have?

- Beginner / Elementary (i.e. A1, A2) (1)
- Intermediate / Upper Intermediate (i.e. B1, B2) (2)
- Advanced / Proficient (i.e. C1, C2) (3)
- Near-Native / Native (5)

End of Block: Block 7 - Demographics

---

Start of Block: Feedback

Feedback Do you have any feedback or comments regarding this survey? (If yes, please elaborate. If no, then just type 'no' in the box below.)

---

End of Block: Feedback

---

## **Appendix B – Five-factor model personality trait items**

Please note that the reversed items are marked with an asterisk (\*).

The following abbreviations indicate which cultural dimension the items are related to:

E = extraversion, N = neuroticism, C = conscientiousness, A = agreeableness, O = openness

I see myself as someone who...

- 1) Often feels blue (N)
- 2) Feels comfortable around people (E)
- 3) Believes in the importance of art (O)
- 4) Has a vivid imagination (O)
- 5) Makes friends easily (E)
- 6) Is always prepared (C)
- 7) Has a good word for everyone (A)
- 8) Avoids philosophical discussions\* (O)
- 9) Dislikes myself (N)
- 10) Pays attention to details (C)
- 11) Does just enough work to get by\* (C)
- 12) Is skilled in handling social situations (E)
- 13) Believes that others have good intentions (A)
- 14) Carries out my plans (C)
- 15) Accepts people as they are (A)
- 16) Rarely gets irritated\* (N)
- 17) Doesn't talk a lot\* (E)
- 18) Has frequent mood swings (N)
- 19) Makes plans and sticks to them (C)
- 20) Is not interested in abstract ideas\* (O)
- 21) Enjoys hearing new ideas (O)
- 22) Suspects hidden motives in others\* (A)
- 23) Keeps in the background\* (E)
- 24) Panics easily (N)
- 25) Respects others (A)

## **Appendix C – GLOBE cultural value items**

Please note that the reversed items are marked with an asterisk (\*).

The following abbreviations indicate which cultural dimension the items are related to:

IC = In-group collectivism, PD = power distance.

- 1) I believe children should take pride in the individual accomplishments of their parents. (IC)
- 2) I believe that followers should obey their leader without question. (PD)
- 3) I believe parents should take pride in the individual accomplishments of their children. (IC)
- 4) I believe that people in positions of power should try to increase their social distance from less powerful individuals. (PD)
- 5) When in disagreement with adults, young people should defer to elders. (PD)
- 6) I believe that power should be concentrated at the top. (PD)
- 7) I believe that a person's influence should be based primarily on the authority of one's position. (PD)
- 8) I believe that followers should question their leader when in disagreement. \* (PD)
- 9) I believe that people in positions of power should try to decrease their social distance from less powerful people. \* (PD)
- 10) I believe that ageing parents should live at home with their children. (IC)
- 11) I believe children should live at home with their parents until they get married. (IC)