THE POWER OF A SMILE:

VISUAL BRAND-RELATED USER GENERATED CONTENT ON INSTAGRAM

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Abstract

A great amount of user-generated content (UGC) is brand-related and therefore consumers are gaining more influence over consumers' purchase intentions of products and brands. Consumers' trust in UGC is greater than their trust in advertisers and consequently, they rely more on this type of content for purchase decisions. The majority of brand-related UGC is shared on social media platforms, such as Instagram. However, prior research did not yet focus on visual characteristics in brand-related UGC on Instagram and the effects of it in combination with textual sentiment on consumer engagement, attitude toward the product, and purchase intention.

For this study an experiment with five conditions was set up (no text with a neutral face, no text with a smiling face, neutral text with a smiling face, positive text with a smiling face, and product only). The experimental questionnaire was filled out by a total of 343 participants. Attitude toward the product and engagement were expected to mediate the relationship between visual sentiment and purchase intention. Furthermore, textual sentiment was expected to moderate the relationship between visual sentiment and purchase intention.

The results showed that, in line with the expectations, a picture with a smiling person leads to a higher purchase intention than a picture with a neutral person on it. Furthermore, there seemed to be an effect of the attitude toward the product on purchase intention. In addition, a picture with a smiling person on it seems to lead to a higher intention to like. However, visual sentiment, as well as textual sentiment, showed no effect on the attitude toward the product.

Keywords: brand-related UGC, Instagram, visual sentiment, textual sentiment, congruence, consumer engagement, attitude toward the product, purchase intention

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Introduction

Before the advent of the Internet, consumers had few resources to rely on for making well-considered purchases. Many consumers relied on their friends' advice via word of mouth to make the right purchase decisions, as they trust the opinion of someone familiar. However, this method was limited to the extent of one's inner circle. Others chose to believe the information put out by marketeers and vendors via advertisements, which were originally distributed via traditional media, such as newspapers and magazines. Later, advertising grew with the technologies of direct mail, radio, and television. This conventional media model, while not limited in volume as was the case for word of mouth, often came with the downside of providing consumers with biased information. Therefore, when making purchase decisions, consumers needed a solution that combined the best of both worlds; the trustworthiness of word of mouth and the scope of media outlets. This solution appeared in the form of brand-related user-generated content (UGC).

UGC enables users to interact and collaborate with other users, as well as to create and share their personal experiences online (Daugherty, Eastin, & Bright, 2008). Moreover, the majority of UGC is brand-related, created by users of a certain brand, so that consumers are gaining greater influence over consumers' purchase intentions of products and brands (Jevons & Gabbott, 2000; Riegner, 2007; Smith, Fischer, & Yongjian, 2012). Brand-related UGC has a large range and is generally less biased than advertisements. Thanks to these characteristics, consumers actively rely on brand-related UGC for purchase decisions (Jonas, 2010; MacKinnon, 2012). Since this development is increasingly shaping consumer markets, it is worthwhile to further investigate the use of brand-related UGC in order to understand consumers' purchase intentions (MacKinnon, 2012).

The creation and experience of brand-related UGC is facilitated by the omnipresence of smartphone cameras and social media such as Facebook, Twitter, YouTube, and Instagram (Kaplan & Haenlein, 2010). Especially Instagram is a powerful combination of smartphone cameras and contemporary communication via social media (Weilenmann, Hillman, & Jungselius, 2013). Instagram enables its 1 billion users all across the world to share their life via photos and videos in a networked community of friends and followers (Clarke, 2018). This visual content is key for creating and presenting online identities and is most popular with consumers (Highfield & Leaver, 2016). Additionally, captions can add an extra textual dimension to the interpretation of an Instagram picture, usually expressed by jokes and word games (Weilenmann et al., 2013). Moreover, its live sharing ability has made Instagram

distinctive from other platforms related to pictures. Consequently, creators of brand-related UGC and the community are able to directly contribute in the live creation (Weilenmann et al., 2013). Hence, this study will focus on visual and textual content created on Instagram to investigate the relationship between brand-related UGC and purchase intentions.

It is important to know that visual and textual content features emotions, also known as sentiment. Sentiment can be described as the feeling that a picture or text evokes (Suler, 2008). When a picture and text are aligned, it is defined as congruence (Powell, Boomgaarden, De Swert, & de Vreese, 2015). Congruence can be beneficial for consumers to understand the information they process more easily (Van Rompay, de Vries, & Pruyn, 2009). Hence, the effect of sentiment and congruence on consumers who interact with brand-related UGC needs to be incorporated when studying their purchase intention. Before covering purchase intention, however, two possibly mediating factors need to be addressed: consumer engagement and attitude toward the product.

First, the interaction between brand-related UGC and the audience is known as consumer engagement. With regard to Instagram, it is defined as the level of involvement the consumer has with the picture, expressed by community interaction in terms of likes and/or comments (Gummerus, Liljander, Weman, & Pihlström, 2012). A recent study among German Instagram bloggers revealed that pictures with people that show positive emotions increase consumer engagement (Jaakonmäki, Müller, & vom Brocke, 2017). These findings are supported by research showing that pictures with smiling faces are more likely to receive likes and comments (Bakhshi, Shamma, & Gilbert, 2014). Indeed, a smile is the most universal human facial expression for a positive visual sentiment (Wang, Xu, Cui, Wang, & Ouyang, 2017). Another study by Lee et al. (2014) showed that a textual message that features emotion increases consumer engagement, while informative content, such as product prices, reduces consumer engagement when used separated (Lee et al., 2014). Textual messages including extremely positive and extremely negative emotions are more likely to go viral compared to neutral and negative ones (Eckler & Bolls, 2011; Berger & Milkman, 2012). Moreover, congruence between picture and text has a positive influence on the audience and user experience (Chang & Lee, 2010). These studies show that the impact of sentiment on consumer engagement is an interesting variable to include.

Second, the consumer's attitude toward the product is defined as a consumer's response, either favorable or unfavorable, based on product evaluations, and can be shaped by a source's emotional expression (Kotler & Keller, 2012). Previous research demonstrated that a happy expression has a positive effect and a sad expression has a negative effect on

the consumer's attitude formation (van Kleef, van den Berg, & Heerdink, 2015). These effects were equal for emotional expressions through words only, and pictures of facial expressions (van Kleef et al., 2015). Another study shows that a marketing object (i.e., advertisement and packaging) with a smiling model produced more positive consumer attitudes toward the product than the same marketing object with the same model with a neutral facial expression (Berg, Söderlund, & Lindström, 2015). Likewise, the use of genuine smiles in advertisements evoke positive consumer emotions which lead to a positive attitude toward products and advertisements (Scanlon & Polage, 2011; Aureliano-Silva, 2018; Trivedi & Teichert, 2019). Moreover, an advertisement with a smiling face on it, leads to a more positive consumer attitude which mediates the relationship between the source (i.e., the advertisement) and the consumers' purchase intention (Kulczynski, Ilicic, & Baxter, 2016; Wang et al., 2017). Furthermore, congruence in an advertisement has a positive influence on a consumer's attitude toward the product (Peracchio & Meyers-Levy, 2005). Another study regarding online web shops found a positive impact of congruence on consumer attitudes (van Rompay, de Vries, & van Venrooij, 2010). Consequently, congruence assists the consumer in forming a clear perception of a product when considering a purchase (van Rompay et al., 2010).

Finally, to investigate the relationship between brand-related UGC and purchase intention, the latter needs to be explained. Purchase intention is "an individual's conscious plan to make an effort to purchase a brand" (Spears & Singh, 2004, p. 56). Several studies already investigated the positive relationship between UGC and purchase intention (Owusu, Mutshinda, Antai, Dadzie, & Winston, 2014; Jin & Phua, 2016; Venkataraman & Raman, 2016; Sethna, Hazari, & Bergiel, 2017). However, the relationship between brand-related UGC on Instagram and purchase intention has been covered less extensively. Therefore, little is known about the visual and textual sentiment used in brand-related UGC and the Instagram audience's attitude toward it.

The majority of research on brand-related UGC examined the creator's motivation to make and share UGC, but research considering the influence of visual and textual characteristics on the Instagram audience is limited. Likewise, marketeers are searching for ways to use social media as a beneficial tool for their company or brand, but knowledge about the relatively new marketing method that is known as UGC is insufficient (Kim & Song, 2017). Consequently, there is a need to identify successful characteristics for brand-related UGC. When marketeers know which visual and textual characteristics in brand-related UGC have a positive influence on consumer's social media behavior, they can encourage their users to create this kind of content, which can be beneficial for a brand's exposure through UGC.

To conclude, it was determined to focus on visual and textual sentiment on Instagram. Next, a content analysis was executed to provide a more detailed insight into the key pre-determined textual and visual sentiment in the content. Finally, an experimental investigation was set up to test and elaborate more specifically on the effects of smiles and textual sentiment in brand-related UGC on Instagram. Accordingly, the research question for this study is formulated as:

***RQ**: What is the effect of visual and textual sentiment in brand-related UGC on consumer engagement, the attitude toward the product, and purchase intention of the Instagram audience?*

Theoretical Framework

Visual brand-related UGC

Social media platforms are the most popular for UGC and enable users to participate, evaluate, create and consume content online (Levina & Arriaga, 2014). Brand-related UGC can be defined as opinions, experiences, advice, and comments about products, brands, companies, and services, mostly based on personal experiences, which are shared on the Internet (Krishnamurthy & Dou, 2008). In addition, brand-related UGC shows a creative effort and is produced independently from paid professionals (Christodoulides, Jevons, & Bonhomme, 2012). For example, an Instagram post featuring a brand product, posted by a fan. Since pictures have become key in online media content (Rainie, Brenner, & Purcell, 2012), this paper is focused on visual brand-related UGC.

Within this scope, Instagram is one of the most popular social media platforms for sharing visual content, including when it is brand-related (Rainie et al., 2012). Instagram is mainly used for, amongst others, entertainment, socializing, and collecting product information, which also includes brand-related UGC (Ting, Ming, Run, & Choo, 2015). Consumers are searching increasingly for product information and other consumers' reviews on Instagram before they make a purchase, as they rely more on brand-related UGC than on paid professionals (Brown, Pope, & Voges, 2003; Bahtar & Muda, 2016). This context narrows the scope of this paper to visual brand-related UGC on Instagram.

Visual Sentiment

The visual brand-related UGC that is shared on Instagram, often contains people's daily sentiments and opinions via pictures of products and people (Hu, Manikonda, Kambhampati, 2014; Lee, Lee, Moon, & Sung, 2015). Pictures with people's faces in particular, are accompanied by visual sentiment (Haxby, Hoffman, & Gobbini, 2000; Bakhshi et al., 2014). Visual sentiment can be expressed in several ways. However, a smile is the most simple and easy to recognize facial expression that can determine the sentiment in the picture (Ekman & Friesen, 1982). Smiling generally represents a positive sentiment (Elfenbein & Ambady, 2002). A prior study showed that the intensity of a smile significantly influences the judgements of positive emotions (Wang et al., 2017). Furthermore, research regarding pictures of smiling people supports the idea that a smiling person is evaluated as more positively, intelligent, bright, friendly, warm, pleasant, trustworthy, and communal than a non-smiling person (Lau, 1982; Krumhuber, Manstead, & Kappas, 2007).

According to the perceived genuineness, this smile can be either Duchenne (i.e., genuine) or non-Duchenne (i.e., posed). A Duchenne smile involves the muscles around the eyes and the main muscle around the mouth area, whereas a non-Duchenne smile is limited to the latter (Ekman, Davidson, & Friessen, 1990). Hence, positive consumer associations such as happiness and genuineness can be established by presenting a person with a Duchenne smile in the picture (Ilicic, Kulczynski, & Baxter, 2016).

The emotions as social information (EASI) theory suggests that emotional expressions of others (i.e., the senders) shape the receivers' behavior by influencing their emotions (Van Kleef, 2009). Smiles, for instance, can be considered as positive emotional expressions relating to happiness and genuineness. As such, they may shape the receivers' behavior in a positive way. More specifically, receivers of positive emotional expressions from senders may be influenced in their decision-making process as well.

Purchase intention

Behavior and decision making play an important role in determining a consumer's purchase intention (i.e., planning to make a purchase effort (Spears & Singh, 2004)). In relation to visual sentiment, smiling people are often used in marketing communications to positively influence consumer emotions and subsequently consumer behavior (Trivedi & Teichert, 2019). This influencing process comes from a positive association between the smiling person and the advertisement through meaning transfer (McCracken, 1989). First, a positive association toward an endorser is transferred to the product. Next, since the product is now meaningful to the consumer, his/her purchase intention is likely to increase (McCracken, 1989).

Consumers in previous studies indicated higher purchase intentions toward the advertised products when the advertisement involved a smiling person (with a Duchenne smile) rather than a neutral expression (Scanlon & Polage, 2011; Ilicic et al., 2016; Kulczynski et al., 2016; Wang et al., 2017; Trivedi & Teichert, 2019). The majority of these studies were focused on the use of a smiling model or celebrity endorser, but none of them took into account the effects of presenting a smiling consumer. Generally, research concerning the effect of pictures with smiling people in visual brand-related UGC on a consumer's purchase intention is under-investigated. Nevertheless, when marketeers have more insight about this effect, they can encourage their users to create visual brand-related UGC, which can be beneficial for a brand's exposure. Therefore, this paper includes the relationship between smiling people in visual brand-related UGC and a consumer's purchase intention in its conceptual framework.

The findings of the studies mentioned above suggest that, if consumers believe the smiling person in visual brand-related UGC is more positive, this perception should positively influence their purchase intention (Scanlon & Polage, 2011; Ilicic et al., 2016; Kulczynski et al., 2016; Wang et al., 2017; Trivedi & Teichert, 2019). As a result, the following hypothesis is stated:

H1: *Visual brand-related UGC with a smiling person on it leads to a more positive purchase intention than visual brand-related UGC with a neutral person on it.*

Attitude toward the product

Over the last years, brand-related UGC on social media has evolved into a major factor in influencing consumer's attitudes and behaviors (Jaakonmäki et al., 2017). Attitude is commonly used as a central mediator of behavior and an antecedent of decision making (like purchase intention) in a specific context (Ajzen, 1985). The theory of planned behavior (TPB) is a well-established model developed by Ajzen (1985) and a key concept for explaining human behavior. According to Ajzen (1991) behavioral intention depends on three determinants: attitude toward behavior, subjective norm, and perceived behavioral control. These three determinants indicate how much an individual is willing to take effort to perform the behavior (Ajzen, 1991). More specifically, the stronger the intention to engage in a behavior, the more likely it is to actually perform this behavior (Park, Jung, & Lee, 2011). For the purpose of this paper, attitude is examined more closely as a central mediator between visual sentiment and purchase intention.

Attitude is related to an individual's positive and negative beliefs and evaluations about performing a certain behavior. Prior research has shown that attitude toward a product indeed influences the relationship between the product and the consumer's behavioral intention, such as their purchase intention (George, 2004; Hansen, Jensen, & Solgaard, 2004; Alam & Sayuti, 2011). Although purchase intention is not equal to actual purchase behavior, it has been shown that purchase intention measurements predict the actual purchase behavior (Brown et al., 2003). This is line with the findings of Fishbein & Ajzen (1975) who state that attitudes influence behavior through behavioral intentions.

Moreover, visual sentiment interacts with attitude as well. Previous studies showed that Duchenne smiles cause more consumer joy, and have a stronger positive effect on influencing consumers' attitudes toward products in comparison to neutral facial expressions (Edell & Burke 1987; Batra & Stayman 1990; Peace, Miles, & Johnston, 2006; Berg et al., 2015). This positive effect was supported by the research of Howard and Gengler (2001), who additionally found that it is caused by emotional contagion. Emotional contagion is defined as

the intention to automatically mimic and synchronize another person's emotional expressions (Hatfield, Cacioppo, & Rapson, 1992). In a later study, Van Kleef et al. (2015) proved again that emotional expressions have symmetrical effects, as receivers showed more positive attitudes after seeing happy expressions when the sender was positive as well. This research supports the EASI theory as people use a source's emotional expressions to establish their own attitudes (Van Kleef et al., 2015). Similarly, the mimicry process that occurs in emotional contagion produces matching emotional experiences, which is in line with the EASI theory as well (Duclos et al., 1989; Larsen, Kasimatis, & Frey 1992).

To summarize, research concerning the influence of Duchenne smiles in advertisements on the attitude toward a product, showed that the products featuring a Duchenne smile were rated more positive and drew more attention from consumers. In addition, according to the findings of Ajzen (1985, 1991), a consumer's attitude toward a product could explain the willingness to purchase the product. Based on the above discussion, and the findings of Scanlon and Polage (2011) and Wang et al. (2017), the following hypothesis is formulated:

H2: *The positive relationship between visual brand-related UGC with a smiling person on it and purchase intention is mediated by a consumer's attitude toward the product.*

Congruence between picture and text

Although the individual effect of visual sentiment to attitude toward the product and purchase intention is predominant, the interactive effect of visual and textual sentiment is covered less extensively, yet it is highly relevant to the multimodality of social media platforms (Powell et al., 2015). When picture and text form an integrated unit, this is known as multimodal content (Martinec & Salway, 2005). Multimodal content increases learning and memory (Paivio, 1991). These positive effects can be improved when the multimodal content is congruent. Indeed, several studies already demonstrated that congruence between a picture and text has a positive influence on the audience and is stronger than incongruent content (Peracchio & Meyers-Levy, 2005; Chang & Lee, 2010; van Rompay et al., 2010; Wu, 2014; Boomgaarden, Boukes, & Iorgoveanu, 2016; Yu & Song, 2017).

Theory on processing fluency motivates the aforementioned findings about picture-text congruence (Winkielman & Cacioppo, 2001; Reber, Schwarz, & Winkielman, 2004). The main idea of this theory is that people evaluate content more positive, the more fluent the content can be understood (Van Rompay et al., 2009). It has been shown that congruence content is evaluated as more positive, and therefore, impacts processing fluency. For example, brand-related UGC on Instagram contains diverse meanings via pictures (e.g., facial

expressions) and text (e.g., captions), which challenges consumers to integrate these diverse meanings into an overall impression to evaluate the product, and make a purchase decision (Van Rompay et al., 2009). In comparison to incongruent content, congruent content, connected by visual and textual elements in online designs, requires less effort to integrate. Therefore, congruent content increases processing fluency, which has a positive effect on a consumer's attitude formation (Lee & Labroo, 2004).

Previous studies proved that congruence between visual and textual content has a positive effect on consumer attitudes, and this relationship is stronger when the content includes a positive sentiment (Chang & Lee, 2010; Eckler & Bolls, 2011). Based on the findings of Van Rompay et al. (2009), and Chang & Lee (2010), the next hypotheses are formulated as:

H3: *The positive effect of a smiling person on visual brand-related UGC is stronger in combination with a positive text compared to no text in relation to purchase intention.*

H4: *The positive effect of a smiling person on visual brand-related UGC is stronger in combination with a positive text compared to a neutral text in relation to purchase intention.*

Consumer engagement

The emergence of social media facilitates users in consumer-to-consumer communication, which makes them increasingly active participants in maintaining social interactions with other consumers and brands (Muniz & O'Guinn, 2001; Brodie, Ilic, Juric, & Hollebeek, 2013). These experiences influence the development of consumer engagement (i.e., likes and comments) (van Doorn et al., 2010). Thus far, the majority of research is focused on engagement between a consumer and a brand with limited attention for engagement between consumers only, such as UGC (Algesheimer, Dholakia, & Herrmann, 2005). However, engagement with other consumers in the community can be of great importance for brands as well since it is an important factor for brand recognition and reputation (Brodie et al., 2013; Dessart, Veloutsou, & Morgan-Thomas, 2015).

For this paper, consumer engagement is the level of involvement the consumer has with the picture, expressed by community interaction in terms of likes and/or comments (Gummerus et al., 2012). Consumer engagement is a multidimensional concept including for example, emotional connection through interactions (Brodie, Hollebeek, Juric, & Ilic, 2011; Brodie et al., 2013). Whether a consumer feels emotionally connected depends on the engagement object that is shared within the community (Hollebeek, 2011; Hollebeek, Glynn, & Brodie, 2014). In this study, the engagement object is the Instagram picture, featuring a neutral or smiling face. The engagement subject is the consumer, which in

this study is the Instagram audience.

The level of engagement (i.e., likes and comments) has been shown to be higher for pictures with smiling faces than for pictures with neutral faces (Jaakonmäki et al., 2017). Additionally, emotional contagion from sender to receiver significantly influences the product attitudes of the receiver (Howard & Gengler, 2001; Berg et al., 2015; Jaakonmäki et al., 2017). Emotional contagion with a positive sentiment should occur as a function of liking (Bavelas, Black, Lemery, & Mullett, 1987). Furthermore, it is argued that emotional contagion is an expression of empathic feelings from one consumer to another, which is not simply expressed by telling the other person "I know how you feel", but by actually showing how you feel (Bavelas et al., 1987). This effect is greater when receivers try to communicate 'a feeling of liking' to senders (Hatfield et al., 1992). Therefore, the expression of emotional contagion helps to create social interactions between consumers.

Moreover, a smiling sender mediates emotional contagion, which in turn positively mediates the receiver's attitude toward a product (Howard & Gengler, 2001). In other words, happy people often smile, and when another person likes them, he or she becomes happy as well. It has been shown that this happy feeling positively biases attitudes toward products (Howard & Gengler, 2001). Since the emotional expressions of the Instagram audience (i.e. receivers) is not visible or hearable, they could communicate their positive expressions via likes and comments on the Instagram post of the sender instead. These positive expressions could lead to a positive feeling of the receivers, which possibly influences their attitude toward a product as well.

The attitude toward the product in this study could be explained by the engagement level of the consumer, expressed in terms of likes and comments. In particular, the consumer's attitude toward the product is more positive when he or she feels a level of engagement with the smiling person in the picture (Howard & Gengler, 2001; Berg et al., 2015; Jaakonmäki et al., 2017). This notion leads to the final hypothesis:

H5: *The effect of visual brand-related UGC with a smiling person on it on attitude toward the product is mediated by a consumer's engagement level.*

Conceptual framework

The hypothesized relationships between visual and textual sentiment in brand-related UGC, consumer engagement, attitude toward the product, and the purchase intention of the consumer are presented in Figure 1.

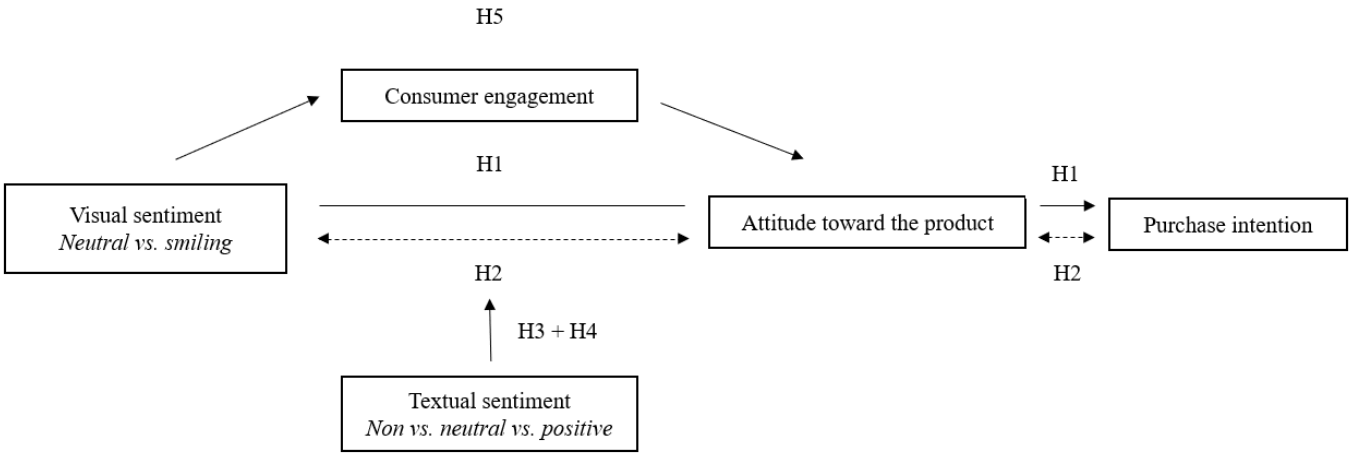

Figure 1. Conceptual model.

Method

This chapter describes the method for the current study, which consists of two parts. First, a content analysis was performed to develop an appropriate base for the creation of stimuli that are similar to real-life Instagram pictures. Second, an experimental research design was executed in order to answer the research question and investigate the hypotheses.

Content analysis

Materials. For this study, the product category 'donuts' was chosen as it is a unisex product with an attractive appearance and a low purchase value. The sample of photos for coding was collected via Instagram. First, the platform was scraped for the 990 most recent photos marked with the hashtag 'dunkindonuts', their number of likes and comments, the owner, time, and date. These photos were first coded by inclusion criteria namely; the Instagram account is a personal account and has at least 30 followers and 30 posts. Consequently, 450 of the remaining photos were chosen at random for the content analysis. These 450 photos were divided amongst three coders who each coded a subsample.

Coding procedures. In consultation with the other coders, photos were coded by overall content category: *headshot, body snap, product-only,* or *other*. These categories were chosen because of the shared data with the other researchers who focused on some of the other categories in their research. All photos were coded on the basis of visual and textual content variables (e.g., logo, emotions, product name and textual sentiment). *Product-only* photos were photos of one or more Dunkin Donuts products. For example, a Dunkin Donuts box filled with donuts. *Headshots* and *body snaps* were photos featuring people and these photos were coded on additional variables (e.g., sex, age, and facial sentiment). When a photo is assigned to the category *other,* it was not further coded. For example, when the photo was not related to Dunkin Donuts.

To obtain a reliable analysis, a codebook with instructions and examples was created to use during the coding process. Furthermore, 10% (N = 15) of each of the three subsamples was re-coded by two other coders, which are 45 photos in total. This intercoder reliability showed high levels of agreement on all variables. The agreement levels, Krippendorff's alpha, can be found in Table 1. As can be seen, the agreement level for the variable *logo* was lowest. This is possibly due to the variation of Dunkin Donuts' logo designs, and because only a minimal part of the logo was visible on several photos. These two factors probably led to less accurate coding of the logo.

Table 1.

Description and reliability of coded variables.

Variable	Description	Type	Kalpha
Photo type	Headshot/body snap/product-only/other	Visual	.88
Logo	Present/absent	Visual	.60
Sex	Male/female/unknown	Visual	1.00
Age	<18/18-35/35>	Visual	1.00
Facial sentiment	Neutral/smiling	Visual	1.00
Textual emoticon	Present/absent	Textual	1.00
Pictorial emoticon	Present/absent	Textual	1.00
Non-human face emoticon	Present/absent	Textual	1.00
Product name	Present/absent	Textual	.77
Sentiment	Negative/neutral/positive	Textual	.68

Results. A one sample chi-square test was performed to analyze the output. There were 17 missing values (3.5%) as these photos have no relation to the brand Dunkin Donuts or the particular photo was not available. Since 95 photos (19.6%) were coded in the category *other*, they were not further coded, for example a photo of a Dunkin Donuts company. Photos in the category *product-only* appeared significantly more (51.8%) than the other categories (i.e. headshot, body snap, and other). The second most appearing category was *body snap* (21.2%). The least appearing category was *headshot* (3.9%). In addition, the number of photos featuring a woman (18.4%) was higher than the number of photos featuring a man (8.5%). In some photos the gender was unidentifiable (1.6%) and the photos without a person were missing values (71.5%).

Furthermore, the textual sentiment was measured based on words indicating negativity (e.g., bad) (0.0%) and positivity (e.g., good) (17.9%). Each coder individually determined which words belonged to which category. When none of these words were found, the textual sentiment was coded as neutral (48.7%). The remaining number of photos did not contain a text (33.4%). The visual sentiment was measured based on the facial expression of the person(s) in the photo. This showed that none of the photos was coded for negative visual sentiment. Thus, only neutral (11.8%) or positive (16.7%) visual sentiment was found. The remaining photos did not contain a visual sentiment (71.5%) because there were no faces included. The findings of this content analysis serve as the base for the stimuli material that has been created for the experiment.

Experiment

Research design. Based on the developed hypotheses in the theoretical framework, an experiment with five different conditions was set up: 1) no text, neutral face, 2) no text, smiling face, 3) neutral text, smiling face, 4) positive text, smiling face, and 5) product-only. The first four conditions were used for the present study. The final condition was used for another research. A Qualtrics survey was conducted in order to gather the data. The Research Ethics and Data Management Committee of Tilburg School of Humanities and Digital Sciences has given permission to conduct this research.

Participants. In total 433 participants were recruited for this study. However, 2 participants were excluded from the data because they did not accept the informed consent, and 6 participants did not answer the informed consent question. In addition, 38 participants did not have a personal Instagram account, and 2 participants did not answer this question. Furthermore, 42 participants dropped out of the survey and were not assigned to one of the conditions. As a result, the sample for this study contains 343 participants.

For the current analysis, condition 5 (product-only) was not used and 275 participants remained. However, for the four conditions in this study, 21 participants failed the manipulation check or did not answer the manipulation question(s), and were excluded from the data as well. Therefore, the final sample consists of 254 participants whose data was used for the analysis. 75 of them were male (29.5%), 175 were female (68.9%), and there were 4 missing values (1.6%). The mean age of the participants was 23.73 (SD = 5.69), with a minimum of 18 and a maximum of 57 years old. Of all participants, 31.9% finished high school, 7.5% MBO, 24.4% HBO, 18.9% WO bachelor, 15.0% their WO master, and 0.8% other (e.g., primary school and premaster).

Materials. The stimuli consisted of Instagram posts, which were created specifically for this study. To match the criteria for brand-related UGC a fictional brand was designed, named ‘Tasty Donuts’. The design of this brand’s logo can be found in Appendix A, Figure 5. The logo was implemented in the Instagram stimuli by editing it afterward. Each condition contained a different combination of visual and textual sentiment, as can be seen in Appendix A, Table 4. In order to create this type of photos, the researcher’s network was consulted. The people in this network were personally asked to voluntarily participate in this study as ‘donut model’. The recruited donuts models filled out an informed consent form. The donut models created two photos of themselves featuring a donut, according to the criteria established by the researcher. On one photo the models have a neutral facial expression and on the other photo, they have a smiling facial expression (i.e., Duchenne smile). Moreover, the stimuli

with text contained one text line, as it was shown in previous research that this amount of text is preferred by social media users (Trefzger, Baccarella, & Voigt, 2016). Examples of all conditions including these photo types can be found in Figure 2. In total 18 donut models were recruited for this study.

Condition 1 (no text, neutral face)

Condition 2 (no text, smiling face)

Condition 3 (neutral text, smiling face)

Condition 4 (positive text, smiling face)

Figure 2. Stimuli example of each condition.

Procedure. Participants were gathered via the donut models who distributed the survey link via their own social media platforms between April 25 and May 8, 2019. The survey started with an introduction of the study and an informed consent question followed after, to check whether participants wanted to participate in the survey. In addition, participants were asked if they own an Instagram account in order to fit in the inclusion criteria. Since this study is aimed at the target audience Instagram users, and participants are asked about their Instagram use, it is necessary for these participants to own an Instagram account.

When participants accepted the informed consent and confirmed that they own an Instagram account, they were forwarded to the survey. As soon as they were sent to the survey, participants were randomly assigned to one of the five conditions, of which four are used for this study. Each donut model has his or her own survey and spread the link in their network. When participants opened this link, they were presented to one of the five random conditions. This was done via the randomizer in Qualtrics.

First, participants were asked to imagine that they were browsing through their Instagram timeline while suddenly they came across the following photo. Consequently, they saw an Instagram photo and had to answer several questions about the photo. The first set of questions involved consumer engagement, attitude toward the brand, tie strength, credibility, and purchase intention. The next set of questions includes the manipulation check. Participants were asked the following two questions: (1) “Is there a person in this photo?” (yes/no), and if they answered *yes* (2) “What is the emotion of the person in the photo?” (neutral/smiling).

Next, participants were asked about their own Instagram productivity. In the same set of questions, participants were asked about their attitude toward brand-related UGC and their attitude toward donuts. Prior to the question about brand-related UGC, this term was explained via a definition.

Finally, participants answered a set of demographic questions regarding their gender, age and level of education. When all questions were answered, the participants were sent to the end of the survey in which they were thanked for participating. Moreover, they were debriefed that Tasty Donuts is a fictional brand and the purpose of the study was explained. The complete experimental survey in Qualtrics can be found in Appendix B.

Measures.

Consumer engagement. Consumer engagement was measured by the scales like intention and comment intention. Both using a 7-point Likert scale from 1 (very unlikely) to 7

(very likely) with higher values represent higher consumer engagement. Like intention was measured using the question: “How would you rank the possibility of you to 'like' this Instagram post?” (*M* = 4.99, *SD* = 1.99). Comment intention was measured using the question: “How likely are you to write a comment on this Instagram post?”. The mean score of the variable consumer engagement was *M* = 2.45 (*SD* = 1.78). The Cronbach’s Alpha for the consumer engagement scale was not reliable in all conditions (α = .61). Therefore, the scales were used separately.

Attitude toward donuts. The attitude toward donuts was added to check whether participants were positive toward donuts as this attitude could influence their purchase intention (Ajzen, 1985, 1991). The attitude toward donuts was measured using a 5-item 7-point semantic differential scale (negative/positive, unpleasant/pleasant, bad/good, unpleasant/pleasant, unfavorable/favorable) with higher values represent a more positive attitude toward donuts (Osgood, Suci, & Tannenbaum, 1957; Spears & Singh, 2004). The scale had good reliability (α = .86). The mean score of the attitude toward donuts was *M* = 4.65 (*SD* = 1.29).

Purchase intention. Purchase intention was measured by the sentence “Please indicate to what extent you intend to buy 'Tasty Donuts' products”, using a 5-item 7-point semantic differential scale (never/soon, absolutely not/absolutely, less interest/much interest, definitely not/definitely, probably not/probably) with higher values representing a higher purchase intention (Spears & Singh, 2004). The scale had good reliability in all conditions (α = .93). The mean score of purchase intention was *M* = 3.43 (*SD* = 1.25).

Attitude toward brand-related UGC. Attitude toward brand-related UGC was measured as a control variable with the sentence “Indicate to what extent you think the words below fit with brand-related user-generated content”. Attitude toward brand-related UGC was measured as a control variable using a 3-item 7-point semantic differential scale (unappealing/appealing, unpleasant/pleasant, not enjoyable/enjoyable) with higher values represent a more positive attitude (Bruner, James, & Hensel, 2001). The scale had good reliability (α = .94). The mean score of the attitude toward brand-related UGC was *M* = 4.37 (*SD* = 1.18).

Brand attitude. Brand attitude is an individual’s set of beliefs and opinions about a brand (Mitchell & Olson, 1981). Brand attitude was measured as a control variable using a 5-item 7-point semantic differential scale (negative/positive, unpleasant/pleasant, bad/good, unpleasant/pleasant, unfavorable/favorable) with higher values represent a more positive

brand attitude (Spears & Singh, 2004). The scale had good reliability in all conditions (α = .94). The mean score of brand attitude was M = 4.67 (SD = 1.31).

Instagram activity. Instagram activity was measured using three categorical questions that serve as control variables. The majority spends half an hour to an hour on Instagram per day (46.5%) and posts less than one post per month on their own Instagram account (53.1%). Moreover, participants mostly indicated to like a post "sometimes" (35.4%), "often" (33.5%), or "very often" (22.0%).

Pretest. In order to check if the stimuli and their manipulations were suitable for this study, a pretest was performed. The main goal of the pretest was to check if the type of visual sentiment was perceived as intended. More specifically, the pictures with smiling models should be rated higher for the emotion "joy" than the pictures with models showing a neutral facial expression. This was measured by using the emotions of a study conducted by Ekman (1992).

The sample consisted of 20 participants who were recruited via the researchers to fill out the pretest. The mean age of the participants was 25.00 years old (SD = 7.95), with a minimum of 20 and a maximum of 57 years old. 40% of the participants were male and 60% were female.

Participants were shown all 36 photos of the donut models; 18 pictures with a smiling person on it and 18 pictures with a neutral person on it. An existing survey was used to check how participants interpreted the facial sentiment of the donut model in the photos (Ekman, 1992). Participants rated the emotions in the photos using a 7-item (anger, contempt, disgust, fear, joy, sadness, surprise) 9-point Likert scale from 1 (absolutely not) to 9 (absolutely). The emotion "joy" was rated more frequently and with a higher score than any other emotion when it concerned pictures with a smiling person on it. Moreover, all seven emotions were rated low on the photo with a neutral person on it. The emotions other than "joy" were used to check if they were rated relatively equal in order to determine if the photo was indeed perceived as neutral. All other emotions were rated below 3, which is below average. This finding confirms that neutral photos were not exclusively associated with any of the seven emotions, as can be seen in Table 2.

Table 2.

Scores of the pretest on the emotion "joy".

Type of emotion in the photo	*N*	*M (SD)*
Smiling	20	7.36 (0.89)
Neutral	20	2.45 (1.24)

Results

Normality check and correlations

Prior to the actual analysis, it was checked whether the data was normally distributed. This was done by calculating the z-scores for skewness and kurtosis, as can be found in Appendix A, Table 5. The data was not normally distributed for all of the following variables: purchase intention, attitude toward UGC, attitude toward donuts, brand attitude, like intention, and comment intention. Therefore, more weight should be placed on the bootstrapped 95% confidence interval that will be provided in the analysis. In addition, the descriptive statistics and correlations for all variables used in the analyses can be found in Table 3.

Table 3.

Means and standard deviations of the scales and their correlations.

	M (SD)	Like intention	Comment intention	Donut attitude
Like intention	5.00 (1.97)			
Comment intention	2.42 (1.74)	**.45**		
Donut attitude	4.65 (1.27)		.18	
Purchase intention	3.44 (1.26)			**.27**

Note. Significant correlations are in **boldface** ($p < .001$).

Mediation of attitude toward the product

To investigate whether the relationship between visual brand-related UGC and purchase intention can be explained by the attitude toward the product, a mediation analysis was performed using the PROCESS macro in SPSS, developed by Preacher and Hayes (Hayes, 2013). Moreover, the relationship between the type of visual sentiment (neutral face vs. smiling face) in brand-related UGC and the attitude toward the product was examined. The first hypothesis predicts that visual brand-related UGC with a smiling person on it leads to a more positive purchase intention than visual brand-related UGC with a neutral person on it. Additionally, the second hypothesis expects that the positive relationship between visual brand-related UGC with a smiling person on it and purchase intention is mediated by a consumer's attitude toward the product.

To test these hypotheses, visual brand-related UGC (neutral face vs. smiling face) was entered as the predictor to purchase intention, and attitude toward the product was entered as a mediator in this analysis. The model can be found in Figure 3. The total effect of visual

sentiment on purchase intention is significant (b = 0.62, SE = 0.18, p < .001). This indicates that the Instagram audience, after being exposed to visual content, shows a significant difference in their purchase intention between being exposed to a picture with a neutral person and a picture with a smiling person on it. More specifically, a picture with a smiling person leads to a higher purchase intention than a picture with a neutral person on it. Therefore, H1 is supported by the data.

This effect remained almost the same when adding the mediator to the model, as the direct effect was also significant (b = 0.54, SE = 0.18, p = .003). However, the total indirect effect was not significant (b = 0.08, SE = 0.05, 95% BCa CI [-0.01, 0.21]). As can be seen in Figure 3, visual sentiment is not related to attitude toward the product, but attitude toward the product was significantly related to purchase intention (b = 0.24, SE = 0.06, p < .001).

In addition, the control variables attitude toward UGC and brand attitude were added to the model as covariates. Only brand attitude showed a significant effect on attitude toward the product and purchase intention. Therefore, attitude toward UGC was excluded from the model. However, the overall model remained the same as there are no additional significant interaction effects. Given these results, it can be concluded that attitude toward the product cannot explain the relationship between visual sentiment and purchase intention. As a result, H2 is not supported by the data.

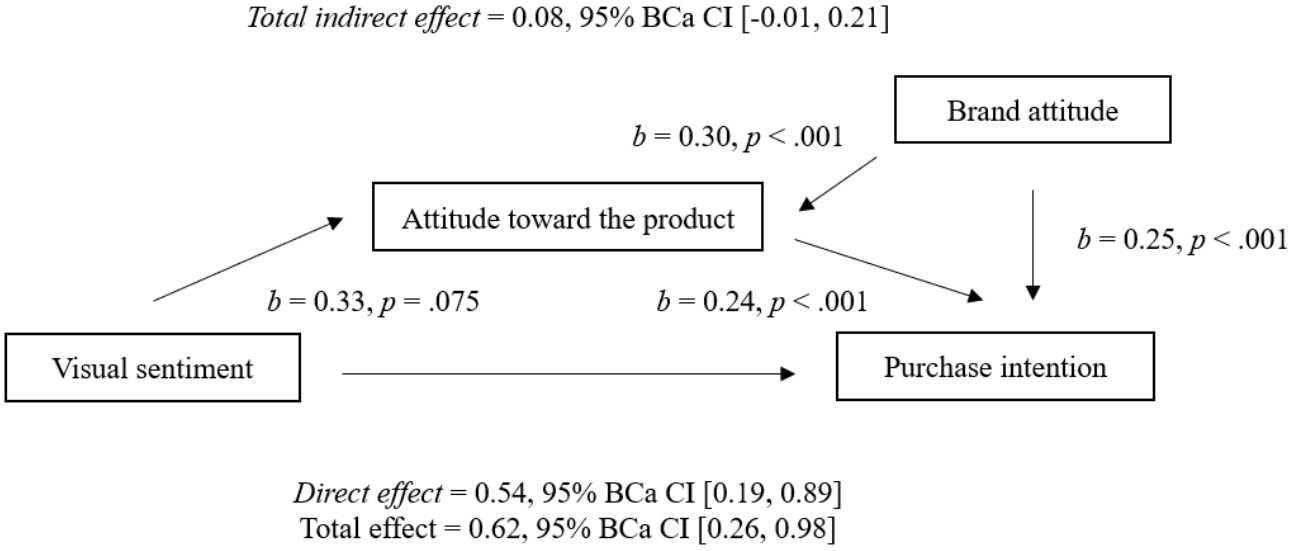

Figure 3. Model with visual sentiment as predictor of purchase intention, mediated by attitude toward the product.

One-way ANOVA for textual sentiment

To test the third and fourth hypothesis, a one-way ANOVA was performed. The independent variable visual sentiment (neutral face vs. smiling face) and the moderator textual sentiment (no text vs. neutral text vs. positive text) were combined to represent one independent variable; experimental condition (1: no text, neutral face, 2: no text, smiling face, 3: neutral text, smiling face, 4: positive text, smiling face). The third hypothesis predicts that the positive effect of a smiling person on visual brand-related UGC is stronger in combination with a positive text compared to no text in relation to purchase intention. In addition, the fourth hypothesis predicts that the positive effect of a smiling person on visual brand-related UGC is stronger in combination with a positive text compared to a neutral text in relation to purchase intention.

The ANOVA showed no significant main effect of experimental condition, $F(3, 246) = 1.90$, $p = .129$, $\eta_{partial}^2 = .02$. This means that there is no significant influence of textual sentiment on the relationship between visual sentiment and attitude toward UGC.

Even though no main effect was found, it was still examined whether there were mutual differences between the types of sentiments. A Bonferroni post hoc test revealed that the difference between the condition with no text and a smiling face, and the condition with a positive text and a smiling face ($M_{dif} = 0.03$) was not significant $p = .890$. This finding rejects the expected positive influence of picture-text congruence on attitude toward the product. Likewise, the difference between the condition with a neutral text and a smiling face, and the condition with a positive text and a smiling face ($M_{dif} = -0.29$) was not significant $p = .197$.

Furthermore, when the control variables attitude toward UGC and brand attitude were added to the model, only brand attitude showed a significant main effect on attitude toward the product $F(1, 244) = 22.06$, $p < .001$, $\eta_{partial}^2 = .08$. Therefore, attitude toward UGC was excluded from the model. Still, the other main effects are non-significant. These results suggest that the Instagram audience's attitude toward the product was not affected by the specific combinations of visual and textual sentiment in the pictures. Consequently, H3 and H4 are both rejected.

Mediation of intention to like and intention to comment

To investigate whether the relationship between visual sentiment and attitude toward the product can be explained by the intention to like and the intention to comment, a mediation analysis was performed using the procedures developed by Preacher and Hayes (Hayes, 2013). The fifth hypothesis assumed that the effect of visual brand-related UGC with

a smiling person on it on attitude toward the product is mediated by a consumer's engagement level.

In this analysis, visual brand-related UGC (neutral face vs. smiling face) was entered as the predictor to attitude toward the product, and consumer engagement was entered by intention to like and intention to comment as two individual mediators. The model can be found in Figure 4. The total effect of visual sentiment on attitude toward the product is not significant, which is in line with the findings of the previous mediation as well as the one-way ANOVA. Likewise, this indicates that the Instagram audience, after being exposed to visual brand-related UGC, shows no significant difference in their attitude toward the product, between being exposed to a picture with a neutral person and a picture with a smiling person on it.

This effect remained almost the same when adding the mediators in the model, as the direct effect was not significant. Similarly, the total indirect effect was not significant. As can be seen, visual sentiment is not significantly related to comment intention, and comment intention is not significantly related to attitude toward the product. However, visual sentiment was indeed significantly related to like intention ($b = 1.53$, $SE = 0.28$, $p < .001$), but like intention was not significantly related to attitude toward the product.

When adding the control variables attitude toward UGC and brand attitude to the model, a significant effect of brand attitude on like intention ($b = 0.49$, $SE = 0.10$, $p < .001$) and on attitude toward the product ($b = 0.28$, $SE = 0.07$, $p < .001$) were found. Attitude toward UGC has no significant effect on any of the variables, hence this control variable was excluded from the model. After adding the control variables, the overall model remains non-significant. Given these results, it can be concluded that like intention as well as comment intention cannot explain any relationship between visual sentiment and attitude toward the product. Thus, H5 is not supported by the data.

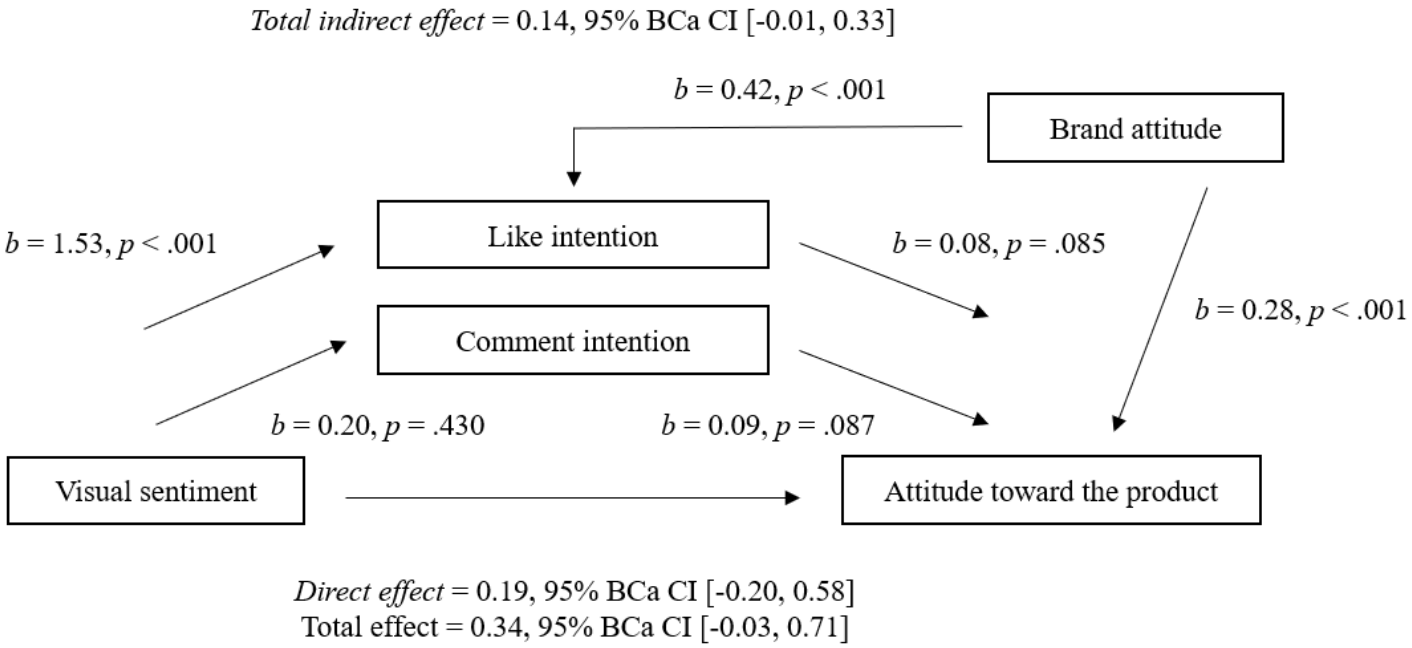

Figure 4. Model with visual sentiment as predictor of attitude toward the product, mediated by like intention and comment intention.

Discussion

The increasing power of brand-related UGC on social media has led to an important new way for consumers to gain product information for their purchase decisions. Nevertheless, prior research did not yet focus on the perceived visual and textual characteristics in brand-related UGC on Instagram. Moreover, little is known about smiling faces and congruence between picture and text in brand-related UGC and their effects on consumer engagement, attitude toward the product, and purchase intention. In response, this study investigated the effects of visual sentiment in brand-related UGC on Instagram and how this relationship influences the Instagram audience's engagement, attitude toward the product and purchase intention. Moreover, this study tested whether there is a moderating influence of textual sentiment on the relationship between visual brand-related UGC on Instagram and a consumer's attitude toward the product.

The results of this study show, in line with the expectations, that visual sentiment has a significant effect on purchase intention. More specifically; a consumer's purchase intention is higher when being exposed to a picture with a smiling person on it compared to a picture with a neutral person on it. Moreover, a more positive attitude toward the product seems to lead to a higher purchase intention. Unexpectedly, however, visual sentiment, as well as textual sentiment, shows no effect on the attitude toward the product. Furthermore, visual sentiment has no effect on the intention to comment. In the same way, the intention to like, as well as the intention to comment, shows no effect on attitude toward the product. However, visual sentiment seems to have an effect on the intention to like: a picture with a smiling person on it seems to lead to a higher intention to like, which is in line with the findings of Lau (1982), Berg et al. (2015), and Jaakonmäki et al. (2017). Nevertheless, this effect should be considered with caution since no main effects are found.

Visual sentiment and purchase intention

Starting with the two types of visual sentiment in the pictures, it was expected that a picture with a smiling person (i.e., Duchenne smile) on it would lead to more positive outcomes than a picture with a neutral person on it. The findings reveal that visual brand-related UGC with a smiling person has a significant effect on the purchase intention of the Instagram audience. More specifically, consumers who were presented to visual brand-related UGC with a smiling person show a higher intention to purchase the product (i.e. the donut).

This significant result finds support in prior research regarding the use of smiling people in marketing communications (Scanlon & Polage, 2011; Ilicic et al., 2016; Kulczynski

et al., 2016; Wang et al., 2017; Trivedi & Teichert, 2019). Moreover, the positive influence of a smiling person on a consumer's purchase intention in the current paper can be explained by the meaning transfer model, as it shows the meaning transfer between the endorser, the product, and the consumer (McCracken, 1989).

Attitude toward the product

Contrary to prior expectations, the findings of this study do not support the hypothesis that the relationship between a smiling person in visual brand-related UGC and purchase intention is mediated by a consumer's attitude toward the product. According to the literature, attitude toward the product can influence a consumer's purchase intention (Ajzen, 1985, 1991; George, 2004; Hansen et al., 2004; Alam & Sayuti, 2011). The present study is focused on visual brand-related UGC and a consumer's attitude toward the product since this may influence a consumer's purchase intention. This specific focus did not lead to a confirmation of the expected mediating relationship.

Furthermore, participants had to review the Instagram post they were assigned to and indicate to what extent they have a positive attitude toward the product. It is possible that participants were generally less involved in this situation compared to when they are actively seeking for product information on a personally chosen product. These less involved consumers are characterized by their "browsing state of mind", and they prefer more vivid content since their goal is to be entertained (Margalit, 2017). For this study, participants were asked to view one particular Instagram post. Thus, they were not browsing and they had no specific goal. These circumstances could explain the existence of a less positive consumer attitude toward the product in this particular study.

Additionally, the low involvement might be due to the unfamiliar brand that was used. The decision to use an unfamiliar brand was made to ensure that participants would not be biased. However, since consumers are not highly involved with an unfamiliar brand, their engagement and loyalty are less strong than with a brand they are fan of (Ouwersloot & Odekerken-Schröder, 2008). Therefore, it seems likely that the insignificant mediation effect of the attitude toward the product is caused by the low involvement of the Instagram audience. Perhaps the visual brand-related UGC would have had an influence on the attitude toward the product if the Instagram audience was highly involved. Indeed, highly involved consumers are motivated to put more effort into a decision-making process (Jager, 2000).

Moreover, several studies found that brand-related UGC is used to search for and connect with like-minded consumers, which, in turn, shapes one's own attitude toward products and brands (Daugherty et al., 2008; Hollebeek, 2011; Brodie et al., 2013). Based on

the uses and gratifications theory (UGT), consumers have psychological needs and they engage in certain media behaviors for gratifications to satisfy these needs (Katz, Gurevitch, & Haas, 1973; McQuail, 1983; Rubin, 1994). However, participants in the present study could not search for the content themselves to satisfy their needs, but were presented to one particular Instagram post. This setting may have no significant influence on their attitude toward the product, which may explain the insignificant result in this study.

Congruence between picture and text

Despite prior expectations, textual sentiment shows no significant effect on the attitude toward the product. This finding indicates that textual sentiment has no influence on the relationship between the visual brand-related UGC and a consumer's attitude toward the product. Moreover, the congruence between textual and visual sentiment was expected to interact. In contrast, there is no interaction between a positive text and a smiling person. Although previous research of Van Rompay et al. (2009), and Chang and Lee (2010) proved that congruence with a positive sentiment has the most positive effect on consumer attitudes, the observed difference between no text and a smiling person, and a positive text and a smiling person in the present study is not significant.

According to Brookes (2010), pictures have a predominant presence on Instagram relative to text. Similarly, the text in this study mainly amplifies or elaborates on the picture in the Instagram stimuli, which is known as an anchorage relationship (McCloud, 1994; Barthes, 1997). Because of the relatively small presence of text as well as the limited diversity between the types of textual sentiment (i.e., no text, neutral text, positive text), the moderating role of textual sentiment might be too limited to make a significant difference.

Consumer engagement

Consumer engagement was expected to mediate the relationship between visual sentiment and the attitude toward the product. Consumer engagement was measured by intention to like and intention to comment. Although there is a significant effect of visual sentiment on the intention to like, there is no effect on the intention to comment and no total effect is found. These findings could be partially explained by previous studies which found that members of online communities are generally inactive (Ridings, Gefen, & Arinze, 2006; Madupu & Cooley, 2010). These members show low involvement, which means the amount of communication, interaction, participation and collaboration with other members in the community is low (Tih, Wong, Lynn, & Reilly, 2016). Research shows that when more effort is required, less interactive behavior is displayed (Antheunis, van Kaam, Liebrecht, &

van Noort, 2016). Writing a comment on an Instagram picture requires more effort than clicking on the "like" button (Antheunis et al., 2016; Alhabash, Almutairi, Lou, & Kim, 2019). Thus, members of an online community, such as the Instagram audience, are less likely to comment on an Instagram post than to like the Instagram post. These arguments are in line with the findings of the present study.

Additionally, it was expected that a smiling person leads to a positive attitude toward the product mediated by consumer engagement in terms of likes and comments. These likes and comments could be an expression of emotional contagion between the smiling sender and the receiver. Prior research showed that emotional contagion with a positive sentiment should occur as a function of liking which in turn has a positive effect on consumer attitudes toward the product (Bavelas et al., 1987; Howard & Gengler, 2001). Yet, no such mediating effect has been found in this study. Similarly, because likes and comments from other Instagram users were not visible for the participants of this study, there is no opportunity for the effects of emotional contagion to manifest. This lack of exposure may explain why no significant mediating effect has been found.

Another explanation for the insignificant effect regards differences in methodology. Previous studies about visual sentiment showed that smiling people ensure a higher level of consumer joy, a positive consumer attitude and a higher level of engagement (Lau, 1982; Bakhshi et al., 2014; Berg et al., 2015; Jaakonmäki et al., 2017). All of these studies used different types of content, variable levels, and operationalizations than were employed in this study. These differences could partially explain the insignificant effects as well.

Limitations and future research

The findings of this study provide new insights for future research on visual brand-related UGC on Instagram. Nevertheless, there were some limitations in this study that could be addressed in future research. First, this study focused on a specific product from an unknown brand: Tasty Donuts. As a result, the findings are limited to the donut industry and not comparable to brands and industries in other segments. Future research could focus on another type of product in the food industry or even on a product from a totally different industry, such as fashion or cosmetics. In addition, future research could contain a comparison of existing brands to investigate if the Instagram audience shows different outcomes as compared to familiar brands. Investigating the different product industries could provide relevant implications for social media marketeers so that consumer responses to visual

brand-related UGC can be validated and become applicable in a wide range of consumer products.

Second, this study was focused on Instagram which is a fast-growing social media platform with ongoing updates and new functions. Because of these developments and innovations, the way visual brand-related UGC is communicated will continue to change in the future. For example, an upcoming update is the shopping function which enables users to directly shop an item from the Instagram post (Gotter, 2019). This shopping function is currently on test modus with the goal to drive more sales with Instagram posts (Canning, 2019). Therefore, the user experience of the Instagram audience will develop, which could influence their attitudes and behaviors, such as their purchase intention. Future research could take into account this new function. Moreover, since each social media platform has its own characteristics, and the effect of visual brand-related UGC may differ per platform, the results from this study are not generalizable to other social media platforms, such as Twitter and Facebook (Trefzger et al., 2016). Consequently, it would be interesting for future research to investigate the differences and similarities of visual brand-related UGC on the most popular social media platforms to obtain a greater understanding of its overall influence on consumer responses.

Finally, the stimuli were not pretested for textual sentiment, which means it is not clear if the sentiment was perceived in the way it was intended. In addition, the content analysis revealed that the majority of the analyzed Instagram posts contained emoji. Emoji can be used to show emotion and creative expression (Stark & Crawford, 2015) and have significant advantages over plain text in facilitating communication via smartphones (Lu et al., 2016). Because of its popularity, Instagram saw a sharp rise in the use of emoji to simplify emotional expressions and create a greater user experience (Lu et al., 2016; Pohl, Domin, & Rohs, 2017). However, due to the time limit and shared data gathering, it was not possible to take emoji as an additional variable in this study. Therefore, the use of emoji as a characteristic in visual brand-related UGC would be an interesting path for future research.

Theoretical and practical implications

Most research on the topic visual brand-related UGC is focused on the creator's motivation to create UGC, but there are few insights into the influence of visual and textual characteristics on the audience, specifically on the social media platform Instagram. The perspective from the audience, their engagement, attitudes, and behaviors are under-investigated. In response, this study is one of the first to examine the positive influence of a smiling person in visual brand-related UGC on a consumer's purchase intention on

the social media platform Instagram. Smiling faces are omnipresent in marketing contexts (Berg et al., 2015) but this characteristic is not previously studied for visual brand-related UGC in particular. Additionally, this study confirms the finding of previous research that smiling people cause a higher intention to purchase a product and to like a picture. Therefore, this study is a contribution to other studies regarding visual brand-related UGC on social media and in particular on Instagram.

Despite the fact that other platforms rapidly incorporated the live-sharing features introduced by Instagram, users find Instagram a simpler, better organized and more up-to-date platform in comparison to Facebook and blogs (Bahtar & Muda, 2016). Hence, they prefer to spend more time scrolling, reading and commenting on their timeline to find feedback from other consumers and interact by giving likes and comments on the Instagram posts (Bahtar & Muda, 2016). The findings suggest direct implications for visual brand-related UGC design on Instagram as it is confirmed that smiling faces positively influence purchase intentions, and seem to gain more likes than neutral faces. When marketeers are aware of the positive effect of smiling faces in visual brand-related UGC on the Instagram audience, they can encourage their users to share content featuring smiling faces.

The results of this study also suggest that it is advisable for marketeers to be aware of the fact that there is a wide range of visual brand-related UGC on Instagram, but not all of this content necessarily has an effect on their consumer's attitude toward the product.
The extent to which visual brand-related content, such as UGC, is distributed is called earned media, and determines the success of content marketing (Antheunis et al., 2016). This study shows that earned media content with smiling faces has a positive influence on a consumer's purchase intention and suggests a positive influence on the intention to like this content.

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Appendices

Appendix A – Additional Figures and Tables

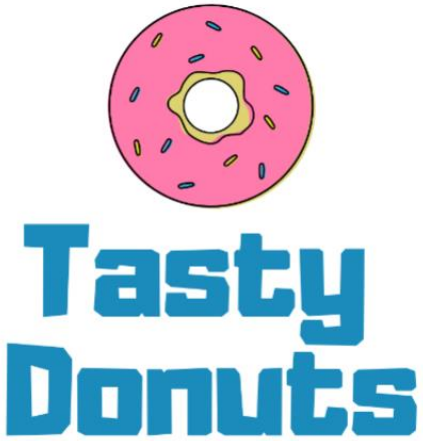

Figure 5. Tasty Donuts brand logo.

Table 4.

Survey overview and number of participants in conditions.

Donut model	**Condition 1**	**Condition 2**	**Condition 3**	**Condition 4**	**Condition 5**
	No text	No text	Neutral text	Positive text	Product-only
	Neutral face	Smiling face	Smiling face	Smiling face	
1	3	4	4	3	2
2	3	2	2	3	1
3	2	2	2	2	2
4	2	2	1	1	3
5	2	2	2	2	1
6	2	2	2	2	2
7	1	1	1	3	2
8	2	2	3	3	2
9	10	8	9	7	10
10	2	2	1	3	2
11	2	3	3	3	3
12	3	3	3	3	3
13	14	13	14	16	15
14	2	2	2	2	2
15	3	2	2	3	2
16	1	2	2	2	3
17	4	4	4	4	3
18	10	10	11	11	10
Total	68	66	68	73	68

Table 5.

Z-scores for Skewness and Kurtosis

Variable name	Skewness	Kurtosis
Purchase intention	-0.59	**-2.16**
Attitude toward UGC	**-3.50**	0.78
Attitude toward donuts	**-2.03**	-0.09
Brand attitude	**-5.09**	1.92
Like intention	**-3.98**	**-3.13**
Comment intention	**7.95**	**2.10**

Note. Not normally distributed z-scores are in **boldface**.

Appendix B - Qualtrics survey

Tasty Donuts Master Thesis

Start of Block: 1. Introduction + informed consent

Consent

Beste participant,

Bedankt voor je deelname aan dit onderzoek.
We zullen je een Instagram post laten zien, waarbij enkele vragen worden gesteld. Op het einde volgen nog enkele demografische vragen. Het invullen van de hele vragenlijst zal ongeveer 5 minuten duren.
Alle dataverzameling gaat conform de nieuwe AVG (Algemene Verordening Gegevensbescherming) regels en de Research Ethics and Data Management Committee van Tilburg School of Humanities and Digital Sciences heeft toestemming gegeven voor het uitvoeren van dit onderzoek. Gegevens zullen anoniem verwerkt en opgeslagen worden, en alleen de onderzoekers zullen toegang hebben tot de data. De data zullen gebruikt worden voor het schrijven van drie master theses en publicatie in een wetenschappelijk tijdschrift.
Deelname is geheel vrijwillig en je mag op ieder moment met de vragenlijst stoppen, om welke reden dan ook, zonder dat dit nadelige gevolgen heeft. Er zijn geen risico's aan het onderzoek verbonden.
Als je de onderstaande knop aanklikt geef je aan mee te willen doen aan dit onderzoek, geef je aan de hierboven gegeven informatie goed te hebben doorgelezen, geef je aan dat je op vrijwillige basis deelneemt, stem je ermee in dat je geanonimiseerde data 10 jaar opgeslagen zal worden, ouder bent dan 18 jaar en weet je dat je te allen tijde en zonder het opgeven van een reden terug mag trekken.
Voor vragen over het onderzoek kun je altijd contact opnemen.

Wij willen je alvast bedanken voor je tijd!

- ○ Ik stem hiermee in en wil starten met het onderzoek
- ○ Ik stem hier NIET mee in en wens niet deel te nemen aan dit onderzoek

Display This Question:

If Beste participant, Bedankt voor je deelname aan dit onderzoek. We zullen je een Instagram post la... = Ik stem hier NIET mee in en wens niet deel te nemen aan dit onderzoek

Eind1 Je hebt zojuist aangegeven niet mee te willen doen aan dit onderzoek. Je kunt nu op onderstaande pijltjes klikken en het onderzoek afsluiten.

Skip To: End of Survey If Je hebt zojuist aangegeven niet mee te willen doen aan dit onderzoek. Je kunt nu op onderstaande...() Is Displayed

End of Block: 1. Introduction + informed consent

Start of Block: Instagram + introductie onderzoek

Insta_check Ben je in het bezit van een persoonlijk Instagram account?

- ○ Ja
- ○ Nee

Display This Question:

If Ben je in het bezit van een persoonlijk Instagram account? = Nee

Eind2 Je hebt zojuist aangegeven dat je geen persoonlijk Instagram account hebt. Onze participanten gaan een Instagram post beoordelen en worden o.a. gevraagd naar hun intentie om deze post te liken. Omdat je hier geen ervaring mee hebt, kun je helaas niet deelnemen aan dit onderzoek. We bedanken je graag alsnog voor de genomen moeite. Je kunt nu op onderstaande pijltjes klikken en het onderzoek afsluiten.

Skip To: End of Survey If Je hebt zojuist aangegeven dat je geen persoonlijk Instagram account hebt. Onze participanten gaa...() Is Displayed

Page Break

Intro1 Je krijgt zo meteen een Instagram post te zien. Probeer je in te beelden dat je door je eigen Instagram feed scrolt en deze post toevallig voorbij ziet komen. Beantwoord daarna de vragen. De post zal zichtbaar blijven bij de vragen.

End of Block: Instagram + introductie onderzoek

Start of Block: Conditie 1: geen tekst, product only

Conditie1

Page Break

Conditie1

Engagement_c1 Geef alsjeblieft antwoord op de volgende vragen:

	1. Zeer onwaarschijnlijk	2.	3.	4.	5.	6.	7. Zeer waarschijnlijk
Hoe waarschijnlijk is het dat je deze Instagram post zou 'liken'?	○	○	○	○	○	○	○
Hoe waarschijnlijk is het dat je een 'comment' zou plaatsen onder deze Instagram post?	○	○	○	○	○	○	○

Brand_attitude_c1 Geef aan in hoeverre je vindt dat onderstaande woorden passen bij het merk 'Tasty Donuts'.

	1	2	3	4	5	6	7	
Negatief	○	○	○	○	○	○	○	Positief
Onaangenaam	○	○	○	○	○	○	○	Aangenaam
Slecht	○	○	○	○	○	○	○	Goed
Ongunstig	○	○	○	○	○	○	○	Gunstig
Niet prettig	○	○	○	○	○	○	○	Prettig

Purchase_c1 Geef aan in hoeverre je van plan bent om producten van 'Tasty Donuts' te kopen:

	1	2	3	4	5	6	7	
Nooit	○	○	○	○	○	○	○	Binnenkort
Ik ben absoluut niet van plan dit merk te kopen	○	○	○	○	○	○	○	Ik ben zeker van plan om dit merk te kopen
Ik heb weinig interesse om dit merk te kopen	○	○	○	○	○	○	○	Ik heb veel interesse om dit merk te kopen
Ik ga dit merk zeker niet kopen	○	○	○	○	○	○	○	Ik ga dit merk zeker kopen
Ik ga dit merk waarschijnlijk niet kopen	○	○	○	○	○	○	○	Ik ga dit merk waarschijnlijk kopen

Page Break

Conditie1

Tie_strength_c1 Geef aan in hoeverre je het eens bent met de volgende stellingen over de afzender van deze post:

	Zeer oneens	Oneens	Neutraal	Eens	Zeer eens
Ik sta dicht bij deze persoon	○	○	○	○	○
Deze persoon is belangrijk voor me	○	○	○	○	○
Als ik een persoonlijk probleem zou hebben, zou ik deze persoon om hulp vragen	○	○	○	○	○
Ik vertrouw deze persoon	○	○	○	○	○

Credibility_c1 Wat vind je van de afzender van deze Instagram post? Deze persoon is...

	1. Zeer oneens	2.	3.	4.	5.	6.	7. Zeer eens
Geloofwaardig	○	○	○	○	○	○	○
Onpartijdig	○	○	○	○	○	○	○
Compleet	○	○	○	○	○	○	○
Betrouwbaar	○	○	○	○	○	○	○
Nauwkeurig	○	○	○	○	○	○	○

Page Break

Conditie1

Check1_c1 Staat er een persoon op deze foto?

- ○ Ja
- ○ Nee

Skip To: End of Block If Staat er een persoon op deze foto? = Nee

Page Break

Conditie1

Check2_c1 Wat is de emotie van de persoon op de foto?

- Neutraal
- Blij

End of Block: Conditie 1: geen tekst, product only

Start of Block: Conditie 2: geen tekst, neutraal persoon

Conditie2

Page Break

Conditie2

Engagement_c2 Geef alsjeblieft antwoord op de volgende vragen:

	1. Zeer onwaarschijnlijk	2.	3.	4.	5.	6.	7. Zeer waarschijnlijk
Hoe waarschijnlijk is het dat je deze Instagram post zou 'liken'?	○	○	○	○	○	○	○
Hoe waarschijnlijk is het dat je een 'comment' zou plaatsen onder deze Instagram post?	○	○	○	○	○	○	○

Brand_attitude_c2 Geef aan in hoeverre je vindt dat onderstaande woorden passen bij het merk 'Tasty Donuts'.

	1	2	3	4	5	6	7	
Negatief	○	○	○	○	○	○	○	Positief
Onaangenaam	○	○	○	○	○	○	○	Aangenaam
Slecht	○	○	○	○	○	○	○	Goed
Ongunstig	○	○	○	○	○	○	○	Gunstig
Niet prettig	○	○	○	○	○	○	○	Prettig

Purchase_c2 Geef aan in hoeverre je van plan bent om producten van 'Tasty Donuts' te kopen:

	1	2	3	4	5	6	7	
Nooit	○	○	○	○	○	○	○	Binnenkort
Ik ben absoluut niet van plan dit merk te kopen	○	○	○	○	○	○	○	Ik ben zeker van plan om dit merk te kopen
Ik heb weinig interesse om dit merk te kopen	○	○	○	○	○	○	○	Ik heb veel interesse om dit merk te kopen
Ik ga dit merk zeker niet kopen	○	○	○	○	○	○	○	Ik ga dit merk zeker kopen
Ik ga dit merk waarschijnlijk niet kopen	○	○	○	○	○	○	○	Ik ga dit merk waarschijnlijk kopen

Page Break

Conditie2

Tie_strength_c2 Geef aan in hoeverre je het eens bent met de volgende stellingen over de persoon in deze Instagram post:

	Zeer oneens	Oneens	Neutraal	Eens	Zeer eens
Ik sta dicht bij deze persoon	○	○	○	○	○
Deze persoon is belangrijk voor me	○	○	○	○	○
Als ik een persoonlijk probleem zou hebben, zou ik deze persoon om hulp vragen	○	○	○	○	○
Ik vertrouw deze persoon	○	○	○	○	○

Crediblity_c2 Wat vind je van de persoon op de foto van de Instagram post? Deze persoon is...

	1. Zeer oneens	2.	3.	4.	5.	6.	7. Zeer eens
Geloofwaardig	○	○	○	○	○	○	○
Onpartijdig	○	○	○	○	○	○	○
Compleet	○	○	○	○	○	○	○
Betrouwbaar	○	○	○	○	○	○	○
Nauwkeurig	○	○	○	○	○	○	○

Page Break

Conditie2

Check1_c2 Staat er een persoon op deze foto?

- ○ Ja
- ○ Nee

Skip To: End of Block If Staat er een persoon op deze foto? = Nee

Page Break

Conditie2

Check2_c2 Wat is de emotie van de persoon op de foto?

- Neutraal
- Blij

End of Block: Conditie 2: geen tekst, neutraal persoon

Start of Block: Conditie 3: geen tekst, blij

Conditie3

Page Break

Conditie3

Engagement_c3 Geef alsjeblieft antwoord op de volgende vragen:

	1. Zeer onwaarschijnlijk	2.	3.	4.	5.	6.	7. Zeer waarschijnlijk
Hoe waarschijnlijk is het dat je deze Instagram post zou 'liken'?	○	○	○	○	○	○	○
Hoe waarschijnlijk is het dat je een 'comment' zou plaatsen onder deze Instagram post?	○	○	○	○	○	○	○

Brand_attitude_c3 Geef aan in hoeverre je vindt dat onderstaande woorden passen bij het merk 'Tasty Donuts'.

	1	2	3	4	5	6	7	
Negatief	○	○	○	○	○	○	○	Positief
Onaangenaam	○	○	○	○	○	○	○	Aangenaam
Slecht	○	○	○	○	○	○	○	Goed
Ongunstig	○	○	○	○	○	○	○	Gunstig
Niet prettig	○	○	○	○	○	○	○	Prettig

Purchase_c3 Geef aan in hoeverre je van plan bent om producten van 'Tasty Donuts' te kopen:

	1	2	3	4	5	6	7	
Nooit	○	○	○	○	○	○	○	Binnenkort
Ik ben absoluut niet van plan dit merk te kopen	○	○	○	○	○	○	○	Ik ben zeker van plan om dit merk te kopen
Ik heb weinig interesse om dit merk te kopen	○	○	○	○	○	○	○	Ik heb veel interesse om dit merk te kopen
Ik ga dit merk zeker niet kopen	○	○	○	○	○	○	○	Ik ga dit merk zeker kopen
Ik ga dit merk waarschijnlijk niet kopen	○	○	○	○	○	○	○	Ik ga dit merk waarschijnlijk kopen

Page Break

Conditie3

Tie_strength_c3 Geef aan in hoeverre je het eens bent met de volgende stellingen over de persoon in deze Instagram post:

	Zeer oneens	Oneens	Neutraal	Eens	Zeer eens
Ik sta dicht bij deze persoon	○	○	○	○	○
Deze persoon is belangrijk voor me	○	○	○	○	○
Als ik een persoonlijk probleem zou hebben, zou ik deze persoon om hulp vragen	○	○	○	○	○
Ik vertrouw deze persoon	○	○	○	○	○

Credibility_c3 Wat vind je van de persoon op de foto van de Instagram post? Deze persoon is...

	1. Zeer oneens	2.	3.	4.	5.	6.	7. Zeer eens
Geloofwaardig	○	○	○	○	○	○	○
Onpartijdig	○	○	○	○	○	○	○
Compleet	○	○	○	○	○	○	○
Betrouwbaar	○	○	○	○	○	○	○
Nauwkeurig	○	○	○	○	○	○	○

Page Break

Conditie3

Check1_c3 Staat er een persoon op deze foto?

- ○ Ja
- ○ Nee

Skip To: End of Block If Staat er een persoon op deze foto? = Nee

Page Break

Conditie3

Check2_c3 Wat is de emotie van de persoon op de foto?

- Neutraal
- Blij

End of Block: Conditie 3: geen tekst, blij

Start of Block: Conditie 4: neutrale tekst, blij persoon

Conditie4

Page Break

Conditie4

Engagement_c4 Geef alsjeblieft antwoord op de volgende vragen:

	1. Zeer onwaarschijnlijk	2.	3.	4.	5.	6.	7. Zeer waarschijnlijk
Hoe waarschijnlijk is het dat je deze Instagram post zou 'liken'?	○	○	○	○	○	○	○
Hoe waarschijnlijk is het dat je een 'comment' zou plaatsen onder deze Instagram post?	○	○	○	○	○	○	○

Brand_attitude_c4 Geef aan in hoeverre je vindt dat onderstaande woorden passen bij het merk 'Tasty Donuts'.

	1	2	3	4	5	6	7	
Negatief	○	○	○	○	○	○	○	Positief
Onaangenaam	○	○	○	○	○	○	○	Aangenaam
Slecht	○	○	○	○	○	○	○	Goed
Ongunstig	○	○	○	○	○	○	○	Gunstig
Niet prettig	○	○	○	○	○	○	○	Prettig

Purchase_c4 Geef aan in hoeverre je van plan bent om producten van 'Tasty Donuts' te kopen:

	1	2	3	4	5	6	7	
Nooit	○	○	○	○	○	○	○	Binnenkort
Ik ben absoluut niet van plan dit merk te kopen	○	○	○	○	○	○	○	Ik ben zeker van plan om dit merk te kopen
Ik heb weinig interesse om dit merk te kopen	○	○	○	○	○	○	○	Ik heb veel interesse om dit merk te kopen
Ik ga dit merk zeker niet kopen	○	○	○	○	○	○	○	Ik ga dit merk zeker kopen
Ik ga dit merk waarschijnlijk niet kopen	○	○	○	○	○	○	○	Ik ga dit merk waarschijnlijk kopen

Page Break

Conditie4

Tie_strength_c4 Geef aan in hoeverre je het eens bent met de volgende stellingen over de persoon in deze Instagram post:

	Zeer oneens	Oneens	Neutraal	Eens	Zeer eens
Ik sta dicht bij deze persoon	○	○	○	○	○
Deze persoon is belangrijk voor me	○	○	○	○	○
Als ik een persoonlijk probleem zou hebben, zou ik deze persoon om hulp vragen	○	○	○	○	○
Ik vertrouw deze persoon	○	○	○	○	○

Credibility_c4 Wat vind je van de persoon op de foto van de Instagram post? Deze persoon is...

	1. Zeer oneens	2.	3.	4.	5.	6.	7. Zeer eens
Geloofwaardig	○	○	○	○	○	○	○
Onpartijdig	○	○	○	○	○	○	○
Compleet	○	○	○	○	○	○	○
Betrouwbaar	○	○	○	○	○	○	○
Nauwkeurig	○	○	○	○	○	○	○

Page Break

Conditie4

Check1_c4 Staat er een persoon op deze foto?

- Ja
- Nee

Skip To: End of Block If Staat er een persoon op deze foto? = Nee

Page Break

Conditie4

Check2_c4 Wat is de emotie van de persoon op de foto?

- ◯ Neutraal
- ◯ Blij

End of Block: Conditie 4: neutrale tekst, blij persoon

Start of Block: Conditie 5: blije tekst, blij persoon

Conditie5

Page Break

Conditie5

Engagement_c5 Geef alsjeblieft antwoord op de volgende vragen:

	1. Zeer onwaarschijnlijk	2.	3.	4.	5.	6.	7. Zeer waarschijnlijk
Hoe waarschijnlijk is het dat je deze Instagram post zou 'liken'?	○	○	○	○	○	○	○
Hoe waarschijnlijk is het dat je een 'comment' zou plaatsen onder deze Instagram post?	○	○	○	○	○	○	○

Brand_attitude_c5 Geef aan in hoeverre je vindt dat onderstaande woorden passen bij het merk 'Tasty Donuts'.

	1	2	3	4	5	6	7	
Negatief	○	○	○	○	○	○	○	Positief
Onaangenaam	○	○	○	○	○	○	○	Aangenaam
Slecht	○	○	○	○	○	○	○	Goed
Ongunstig	○	○	○	○	○	○	○	Gunstig
Niet prettig	○	○	○	○	○	○	○	Prettig

Purchase_c5 Geef aan in hoeverre je van plan bent om producten van 'Tasty Donuts' te kopen:

	1	2	3	4	5	6	7	
Nooit	○	○	○	○	○	○	○	Binnenkort
Ik ben absoluut niet van plan dit merk te kopen	○	○	○	○	○	○	○	Ik ben zeker van plan om dit merk te kopen
Ik heb weinig interesse om dit merk te kopen	○	○	○	○	○	○	○	Ik heb veel interesse om dit merk te kopen
Ik ga dit merk zeker niet kopen	○	○	○	○	○	○	○	Ik ga dit merk zeker kopen
Ik ga dit merk waarschijnlijk niet kopen	○	○	○	○	○	○	○	Ik ga dit merk waarschijnlijk kopen

Page Break

Conditie5

Tie_strength_c5 Geef aan in hoeverre je het eens bent met de volgende stellingen over de persoon in deze Instagram post:

	Zeer oneens	Oneens	Neutraal	Eens	Zeer eens
Ik sta dicht bij deze persoon	○	○	○	○	○
Deze persoon is belangrijk voor me	○	○	○	○	○
Als ik een persoonlijk probleem zou hebben, zou ik deze persoon om hulp vragen	○	○	○	○	○
Ik vertrouw deze persoon	○	○	○	○	○

Credibility_c5 Wat vind je van de persoon op de foto van de Instagram post? Deze persoon is...

	1. Zeer oneens	2.	3.	4.	5.	6.	7. Zeer eens
Geloofwaardig	○	○	○	○	○	○	○
Onpartijdig	○	○	○	○	○	○	○
Compleet	○	○	○	○	○	○	○
Betrouwbaar	○	○	○	○	○	○	○
Nauwkeurig	○	○	○	○	○	○	○

Page Break

Conditie5

Check1_c5 Staat er een persoon op deze foto?

- ○ Ja
- ○ Nee

Skip To: End of Block If Staat er een persoon op deze foto? = Nee

Page Break

Conditie5

Check2_c5 Wat is de emotie van de persoon op de foto?

- Neutraal
- Blij

End of Block: Conditie 5: blije tekst, blij persoon

Start of Block: 4. Controle variabelen

Intro2 Je hoeft nu niet meer de Instagram post te bekijken. Er volgen nu alleen nog enkele algemene vragen over jou.

Insta_dag Hoeveel tijd besteed je per dag op Instagram?

- ○ Minder dan een halfuur
- ○ Halfuur tot een uur
- ○ Meer dan een uur

Insta_like Hoe vaak like je iets op Instagram?

- ○ Bijna nooit
- ○ Soms
- ○ Vaak
- ○ Heel vaak
- ○ Altijd

Insta_post Hoeveel posts plaats je gemiddeld?

- ○ Minder dan 1 post per maand
- ○ 1 post per maand
- ○ 2 posts per maand
- ○ 3 posts per maand
- ○ 4 of meer posts per maand

Page Break

UGC_attitude Brand-related user-generated content zijn meningen, ervaringen, adviezen en reacties over een merk of organisatie, gecreëerd door een gebruiker van dit merk, om te delen met anderen via het internet. Dit kunnen bijvoorbeeld beelden, video's of teksten over merken zijn die je op social media op je tijdlijn tegenkomt.

Geef aan in hoeverre je vindt dat onderstaande woorden passen bij brand-related user-generated content.

	1	2	3	4	5	6	7	
Onaangenaam	○	○	○	○	○	○	○	Aangenaam
Onaantrekkelijk	○	○	○	○	○	○	○	Aantrekkelijk
Onplezierig	○	○	○	○	○	○	○	Plezierig

Donut_attitude
Geef aan in hoeverre je vindt dat onderstaande woorden passen bij donuts in het algemeen.

	1	2	3	4	5	6	7	
Positief	○	○	○	○	○	○	○	Negatief
Onaangenaam	○	○	○	○	○	○	○	Aangenaam
Slecht	○	○	○	○	○	○	○	Goed
Ongunstig	○	○	○	○	○	○	○	Gunstig
Niet prettig	○	○	○	○	○	○	○	Prettig

End of Block: 4. Controle variabelen

Start of Block: 5. Demografische gegevens

Geslacht Wat is je geslacht?

- ○ Vrouw
- ○ Man
- ○ Neutraal

Leeftijd Wat is je leeftijd in jaren?

_____

Opleidingsniveau Wat is je hoogst afgeronde opleiding?

- ○ Vmbo (mavo)
- ○ Havo
- ○ VWO
- ○ MBO
- ○ HBO
- ○ WO Bachelor
- ○ WO Master
- ○ Anders, namelijk _____

End of Block: 5. Demografische gegevens

Start of Block: Debriefing

Einde Je hebt alle vragen nu ingevuld. Als je interesse hebt in het doel van dit onderzoek, kun je dat hieronder kort lezen. Hoef je dit niet te weten, dan kun je doorklikken op het pijltje om je gegevens op te slaan.
In ons onderzoek kijken we naar hoe de inhoud van merkgerelateerde Instagram foto's (foto's met een merk erop) kan beïnvloeden hoe populair een foto is (i.e., hoeveel likes en comments de foto krijgt) en wat mensen over een merk denken. Specifiek keken we in dit onderzoek naar of er een persoon op de foto stond (lachend of neutraal) en wat de relatie is tussen de persoon die op de foto staat en de persoon die de foto bekijkt (Of je degene op de foto persoonlijk kent of niet). Aanwezigheid van een bekende of onbekende op de foto kan effect hebben op of je de foto zou liken of niet. Bovendien kan de relatie tussen de persoon op de foto en de persoon die de foto

bekijkt ook invloed hebben op hoe effectief de foto is als advertentie. Als je ziet dat iemand die je goed kent een donut eet, heeft dit misschien meer invloed op je eigen meningen en gedrag dan als je diegene niet zou kennen.
Als je nog vragen hebt, of de uiteindelijke resultaten van het onderzoek wilt ontvangen, kun je een e-mail sturen.
Hartelijk bedankt voor je deelname!

End of Block: Debriefing