Taking People at Face Value

An Experiment on the Effects of the Presence of People and Their Facial Expressions in Visual Brand-Related User-Generated Content on Social Media Engagement

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Abstract

While visual brand-related UGC is shared more than ever on SNS, very little research has been done on the topic. This study investigates which factors in visual brand-related UGC are beneficial to the post attitude and social media engagement and what part personal relevance plays in these effects. Two factors that were specifically investigated were the presence of people and the expressions on their faces in the visuals. Based on previous research, a conceptual model was proposed that expected that post attitude would mediate the effect between the presence of people and their facial expressions on social media engagement. It was also expected that personal relevance of the brand in visual brand-related UGC would moderate the effects on post attitude and directly affect social media engagement. To test this model, an online experiment ($N = 227$, $M_{age} = 21.62$, $SD_{age} = 2.61$) was conducted with a 2 (presence of people: absent/present) x 2 (facial expression: neutral/happy) x 2 (personal relevance: low/high) within-subject design. To test the results of the experiment, five dependent t-tests, two mediation analyses and two one-way ANOVAs were performed. The results indicated that a person in the content would increase the willingness of users to like it and when the person had a neutral facial expression, this increases the willingness to comment on the content. Furthermore, post attitude positively influences both the willingness to like and comment on visual brand-related UGC. With this result, the current study adds to the knowledge on social media engagement by stressing that post appeals matter in regards to user's willingness to engage with them. Directions for future research and practical implications will be discussed.

Keywords: visual user-generated content, presence of people, facial expressions, social networking sites, social media engagement.

Index

1 Introduction

Back in 2014, luxury watch brand Shinola started with their #MyShinola campaign, where customers shared pictures showing off their Shinola watch on their social media pages using the hashtag #MyShinola. Thanks to the customers sharing their new watch with their own audience, the relatively new company rapidly increased their reach and that of the products. On top of that, Shinola went one step further and used these photos (after receiving permission) by posting them on their own Instagram and Twitter while crediting the customer in the caption. This way, they were not only able to increase their number of posts and their engagement, but they could also build relationships with their customers by giving them credit for the picture (Terwindt, 2016).

The #MyShinola campaign is one of many examples where it is not the brand who passes on a message to consumers, but where a campaign relies on, and is driven by, consumers' intent to share content online. This content is then called brand-related user-generated content (UGC) (Liu-Thompskin & Rogerson, 2012). Even when Shinola takes the picture and uploads it on their own channels, it can still be considered UGC. The customers were eventually the ones who took the pictures and were presented to viewers as the photographer by getting credit in the caption (Terwindt, 2016). This way, customers could still be perceived as creators of the content.

While brand-related UGC can come in many different forms such as videos, blogs, podcasts, reviews, and in the case of the Shinola campaign pictures (Liu-Thompskin & Rogerson, 2012), most research has focused on textual brand-related UGC and almost none has focused on visual brand-related UGC (Bakhshi et al., 2015; Ismagilova, Slade, & Williams, 2016). To add to the small body of knowledge, this study will focus on examining visual brand-related UGC. It is however remarkable that little research has been done around visual brand-related UGC, since both textual and visual UGC can contain either positive or negative online statements by customers (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). On top of that, images have been noted to be determinants in the persuasiveness of UGC (Ismagilova et al., 2016). For example, the addition of an image in UGC (for example in a blog) has been shown to increase credibility (Lin, Lu, & Wu, 2012). Users automatically put more trust in visual content, certainly with pictures, than in textual content because of its realism heuristic. Stated differently, it is more trustworthy to perceive what a product is like when it is displayed in pictures than when they are solely written about. Even when digital manipulation is easier and more accessible, consumers still believe that pictures do not lie (Sundar, 2008).

Not only does brand-related UGC help create a perception of products, it can also potentially influence consumers' perception of brands (Smith, Fischer, & Yongjian, 2012). A study by Mir and Rehman (2013) even showed that potential consumers put more trust in brand-related UGC on YouTube regarding the brand and its products, compared to content that is created by the brand itself (i.e., marketer generated content or MGC). For a start, this is because consumers do not have a financial interest in creating brand-related content. Also, brand-related UGC is based on consumers' own experiences and with its personal touch, a UGC marketing campaign can ensure a brand of authentic content (Terwindt, 2016). To add to that, consumers that create brand-related UGC are seen as "one-of-us" by receivers while brands are not (Liu-Thompskin & Rogerson, 2012). This causes them to be liked more, since perceived similarity with another individual can exhibit more empathy towards that individual, which leads them to be trusted more, because information from similar others is considered more personal and insightful (Wang, Walhter, Pingree, & Hawkins, 2008). By not using or showcasing UGC, a brand would miss out on opportunities for brand equity (Christodoulides, Jevons, & Bonhomme, 2012).

Because UGC is shared easily on social media (Kaplan & Haenlein, 2010), not making use of UGC could also cause brands to miss out on social media engagement (the number of likes and comments), which has been a way to measure the success of social media content (Bakhshi, Shamme, Kennedy, & Gilbert, 2015). An important factor that recently has been found to influence social media engagement is the attitude consumers have towards the social media content (Wagner, Baccarella, & Vogt, 2017), meaning that it is more likely that a post will receive social media engagement when it appeals to users. Hence, this research can be beneficial for brands since it is seeking to understand what factors cause visual brand-related UGC to generate such a positive attitude with users on social networking sites, in particular Instagram. This social networking site has seen great success since its launch and is built around sharing of visual content (Hu, Maniknda, & Kambhampati, 2014).

A factor that could possibly influence consumers' attitude towards visual brand-related UGC is the human face, which is present in most visual content posted on Instagram in either selfies or pictures that users post with friends (Hu et al., 2104). This means faces are usually central in the pictures, which in traditional marketing have been found to grab consumers' attention (Palermo & Rhodes, 2007) and improve their responses towards an advertisement, especially when the face was to be found attractive (Baker & Churchill, 1977). Another important factor alongside the face is the expression that is displayed on it, because with their expressions faces can trigger emotions in consumers similar to those on the expressions

(Söderlund & Rogerson, 2010). For instance, smiles (happy facial expressions) are used in marketing to make consumers enthusiastic about brands or products (Mizerski & Dennis White, 1986), but they can even elicit positive feelings towards marketing communications (Berg, Söderlund, & Lindström, 2015). In this study, it will be investigated whether the findings from traditional marketing research are also applicable to visual brand-related UGC.

Not only do users share pictures on Instagram in which they feature themselves or friends, they can also share pictures that display products and their brands on their own (Hu et al., 2014). These products can differ in perceived personal relevance, because not every product or brand is as interesting for every consumer (Shiv, Edell Britton, & Payne, 2004). It has been shown that personal relevance with a product can influence consumers' attitude (Matthes, Schemer, & Wirth, 2007), especially when consumers do not expect to be persuaded (Friestad & Wright, 1994), which presumably would be the case with brand-related UGC.

Next to that, personal relevance can also influence consumers' cognitive processing (Bart, Stephen, & Sarvary, 2014). According to the Elaboration Likelihood Model (ELM), the processing of any message can go through two possible routes, either a central or peripheral one (Petty & Cacioppo, 1986). When a message is not a personally relevant, consumers lack motivation to process it thoroughly (Ajzen, Brown, & Rosenthal, 1996). In that case, they can still process the message indirectly through the peripheral route (Petty & Cacioppo, 1986). Faces and their expressions can than act as peripheral cues (Burgoon, Guerrero, & Floyd, 2016, p.371), which are attributes that can be used to attract one's attention even when they lack the willingness to process the message thoroughly. Eventually, peripheral cues can aid in changing the perception about the content (Petty & Cacioppo, 1986).

Taking all of this into account, this study proposes a conceptual model in which the presence of people in pictures and their facial expression are combined with the personal relevance of the brands for consumers to explain the effect on the attitude towards the content and subsequently the social media engagement with it. By testing this model, this study will focus on answering the following research question: "What is the effect of the presence of people and their facial expression in visual brand-related UGC on the attitude consumers have towards the content and their intent to engage with the content and what is the role of personal relevance in this process?"

2 Theoretical Framework

2.1 SNS and Instagram

The typology by Kaplan and Haenlein (2010) provides us with six types of social media, including social networking sites (SNS; e.g., Facebook and Linkedin). In the current study, SNS are defined as online applications that enable users to connect by creating personal information profiles, inviting their network (i.e., connections, friends, and colleagues) to have access to those profiles, and sending instant messages to each other (Kaplan & Haenlein, 2010).

One social networking site that has rapidly become popular over the past years (Hu et al., 2014) and is continuing to be an increasing trend (Fox, Bacile, Nakhata, & Weible, 2018) is Instagram. A report on Dutch social media use has shown that Instagram has seen a constant growth in the number of daily users with over two million at the beginning of this year (Oosterveer, 2018), an increase of 40% as compared to the previous year. Recently, it was even announced by the social network that it had one billion users worldwide back in June of 2018 (Carman, 2018).

Instagram lends itself well for self-expression by enhancing online presence and identity and letting users broadcast an ideal image of themselves (Abbott, Donaghey, Hare, & Hopkins, 2013). Users can broadcast this image by posting aesthetically-filtered pictures or short videos. To the picture or video, a textual element can be added (i.e., a caption) in which users can either use the @-symbol to tag or mention other profiles and pages or hashtags (#) to make the content searchable in the application (Pha, Jin, & Kim, 2017; Pittman & Reich, 2016). Posts are mostly received by users on their homepage in a flow of pictures and videos from their connections (Hu et al., 2014).

2.2 Visual Brand-Related UGC

The ability to create and share content is a big difference between SNS and traditional media (e.g., television and radio) (Kaplan & Haenlein, 2010; Pittman & Reich, 2016). It has even been noted as one of the primary functions of SNS to not only consume but also distribute content (Ellison, Vitka, Steinfeld, Gray, & Lampe, 2011). Content that is created by consumers is defined as UGC and exists in many different forms such as (but not limited to) pictures, videos, blogs, podcasts, reviews and even games (Liu-Thompskin & Rogerson, 2012).

However, it is proposed in Kaplan and Haenlein's article (2010) that UGC has to meet certain requirements. Firstly, UGC has to be published on a publicly accessible website, excluding content that is exchanged in private channels such as e-mail or instant messaging applications. Secondly, UGC is a somewhat creative attempt, excluding replications of existing

content. Thirdly, UGC has to be created without a professional hand in it, excluding content that is created with a commercial intent from marketers.

On Instagram and other SNS, consumers can share content with their connections about a product or the experience with a service (Akar & Topçu, 2011). When UGC involves products and services of certain brands, whether it is the focus of the content or a supporting attribute, it can be considered brand-related (Smith et al., 2012). Brand-related UGC has been noted to change consumers' perceptions of brands (Smith et al., 2012). With brand-related UGC, customers are not simply passive receivers of mass communication like television and radio anymore, but they can also be the senders of direct communication towards other consumers (Deighton & Kornfeld, 2009). This changes the power relations between consumers and brands, because consumers can be swayed by social influence from other consumers in their purchasing decisions, of which the number has grown over time (Singh, 2009).

The social influence of other consumers is a result of the declined level of skepticism that individuals have when consuming UGC opposed to MGC (Senecal & Nantel, 2004). The credibility of a sender is mostly based on the perceived trustworthiness consumers have (Erdem & Swait, 2004), which is higher for UGC compared to brands and their MGC (Wang et al., 2008). A big reason for this difference is the belief that MGC is created with the intent to persuade consumers and let brands gain financially while UGC is created without a commercial intent (Mir & Rehman, 2013; Sparks, Perkins & Buckley, 2013; Wang et al., 2008).

The perceived trustworthiness is grounded in homophily, meaning that people like people who they perceive to be similar regarding certain characteristics (Ayeh, Au, & Law, 2013; Wang et al., 2008). As creators of brand-related content, other consumers are perceived to be "one-of-us" more than brands (Liu-Thompskin & Rogerson, 2012). This perceived similarity makes individuals accept and take in the information from other consumers more, because it is assumed the consumers have values that are congruent to their own and are therefore believed to be an appropriate reference for obtaining information (Chang, 2011).

The fact that brand-related UGC is created from a user's own experience, gives the content an authentic nature (Terwindt, 2018). Authenticity is one of three normative values related to source credibility as proposed by Hayes, Singer, and Ceppos (2007) next to accountability and autonomy. It is something that is uniquely possessed in UGC, because main reasons for consumers to create brand-related UGC are to simply share information or habit (Malik, Dhir, & Nieminen, 2016) and cannot be attained with deliberate actions (Singer & Ashman, 2009).

Most studies concerning brand-related UGC have focused mostly on textual content like blog posts or consumer reviews, but there has been little research on visual brand-related UGC (Bakhshi, Shamme, & Gilbert, 2014; Ismagilova, Slade, & Williams, 2016). This is rather odd, since information can be communicated more efficiently with visuals than words alone. The meaning in visuals can be derived immediately and in an instance while text has to be processed in a serial process (Trumbo, 1999). In persuasive messages images have often times been shown to even overpower text when it comes to capturing attention and changing attitudes (Griffin, 2008).

Previous research on visual brand-related UGC in marketing, specifically in the form of selfies, has shown that brand-related UGC can elicit a more positive repsonse than MGC when it concerns a visual (Lobinger & Brantner, 2015; Holiday, Loof, Cummins, McCord, & 2018). Just like in textual content, authenticity plays a role in this effect and is possessed when the visuals are considered to have a lower production value counter to more professional photographs (Meier, 2009). A study that investigated the effect of selfies in print advertisements showed that the attitude was reported to be higher for the advertisement that featured the people taking a selfie than advertisements that featured people in a regular professionally taken photograph (Holiday et al., 2018). A similar effect was found in a study that investigated visual UGC on SNS. Results showed that individuals reported a higher likeability with the content that was considered authentic (a selfie) than content that was staged by the researchers to come across as inauthentic (pictures with a staged setting and a more professional editing) (Lobinger & Brantner, 2015).

On SNS, there has been a rise in the interest for easily understood visual UGC over textual UGC, now making it an important part of users' online social activity. If a user were to post a message on a social networking site such as Facebook, that is not even facilitated around the circulation of visual content like Instagram, chances are small that this will only contain text (Highfield, & Leaver, 2016). Especially when users want to share an experience, they will share visual UGC instead of textual UGC, since images can help receivers form an immediate impression (Munar & Jacobsen, 2014). An example of this are the large number of holiday pictures and short videos users share, which are now considered as the new type of postcard (Munar & Jacobsen, 2013).

2.3 Post Attitude and Social Media Engagement

When users post content on SNS, the content can receive likes, comments, and shares from other users, which is referred to as social media engagement. Since liking and commenting are

the main social media engagement features on Instagram (Bakhshi et al., 2014), it is simply defined as likes and comments in this current study. Instagram makes use of an algorithm that decides which picture you see first on your feed and which pictures appear on the application's explore page. This algorithm is partly based on the amount of engagement with the visual content (Loren, 2018). When users engage with social posts in this manner, it could further its reach and spread it to a larger audience, making it valuable to gain knowledge on social media engagement (Lipsman, Mudd, Rich, & Bruich, 2012).

Social media engagement often is a representation of the positive attitude users have towards posts on SNS (Taecharungroj & Nueangjamnong, 2015). Post attitude can be defined according to the general definition of an attitude by Kotler and Keller (2006, p.194), which goes as follows: "a person's enduring favorable or unfavorable evaluation, emotional feeling, and action tendencies towards an object or idea." With attitudes, consumer's minds can be shaped or changed, which can cause them to perceive (in this case) posts on SNS as enjoyable (Kotler & Keller, 2006, p. 194).

A user's attitude is also a great predictor for one's behavior, according to the Theory of Reasoned Action (Ajzen & Fishbein, 1977) among others (Bentler & Speckart, 1981). This theory states that any behavior is preceded by the intention to perform this behavior. A stronger intention increases the effort put in to perform the behavior, which naturally increases the likelihood that the behavior is acted out. One's behavioral intention is the sum two factors: the subjective norm associated with the behavior (i.e., the perceived social pressure to perform the behavior) and the attitude towards the behavior (i.e., the negative or positive evaluation of the behavior). For example, results from a study by Madrigal (2001) has shown that a positive attitude towards purchasing sponsored products was positively related towards purchase intention of these products.

Because of this, it is believed in this study that the user's attitude towards the brand-related UGC can act as an important mediator to engage with the content on Instagram. The intention to engage with posts on SNS was namely found to be positively related with the overall experience users have with it, which includes the way they perceive it (Martinez-Lopez et al., 2017). Also, it has been stated by Wagner et al. (2017) that users form a positive attitude toward content on SNS that appeal to them, which in turn affects engagement. This is line with findings by Lee, Hansen, and Lee (2016), that found that enjoyment, next to the interpersonal relationship with the sender, was an important motive for liking any post. Based on these studies, the following hypothesis is proposed:

H1: A more positive attitude towards visual brand-related UGC will result in a higher probability to engage with the content in the form of liking and commenting.

2.4 Presence of People

In this study, we will thus look at factors that are expected to influence the way in which users perceive and then engage (Wagner et al. 2017) with visual brand-related UGC. First, we look at the presence or absence of people in pictures. A content analysis by Hu et al. (2014) showed that, although a good portion of Instagram pictures feature products (e.g., gadgets or fashion items), almost half of the pictures feature a person showing their own face (i.e., a selfie) or their friends'. In a previous quantitative study where the effect of faces on Instagram pictures was investigated, it was found that pictures with faces on them (regardless of age or gender) were more likely to be engaging (regarding both likes and comments) than those without faces (Bakhshi et al., 2014).

Human faces are often used in marketing, since they are able to attract the consumer's attention towards an advertisement (Palermo & Rhodes, 2007). Even in "busy" scenes (where one could be distracted by many different objects) people tend to devote their attention to human faces almost immediately (Birmingham, Bischof, & Kingstone, 2008) and spent more time looking at the faces than other objects, starting from a very early age (Young, McWeeny, Hay, & Ellis, 1986). A recent study on print advertisements, another form of visual brand-related content, examined the difference between advertisements with or without faces (Guido, Pichierri, Pino, & Nataraajan, 2018). Aside from the attention-grabbing ability of faces, the results from this study also showed that participants also looked at the advertisement with faces for a longer time and remembered the advertisement better.

Most importantly, beyond these results the participants showed a preference towards the advertisement with faces (Guido et al., 2018). Before that, another study on print advertisements had already shown that faces can alter the way advertisements are perceived and change one's attitude towards them (Xiao & Ding, 2014). The researchers in this study concluded that advertisements with faces on them were not only preferred as well as evaluated more positively opposed to advertisements without them. Following the findings from previous studies, it is proposed that visual brand-related UGC that features a person opposed to just the product will results in a more positive evaluation from the receiver. Thus, the second hypothesis below was formed:

H2: Visual brand-related UGC where a person is present will evoke a more positive attitude towards visual brand-related UGC than content where a people is absent.

2.5 Facial Expression

Next to investigating the presence of people, this study also focuses on the facial expression that is displayed. Facial expressions have been noted to be a powerful channel to communicate emotions nonverbally (Takeuchi & Nagao, 1993) and in marketing, this can play a big role in the decision-making processes of consumers (Barreto, 2017). Emotions in advertising have mostly been used to give prominence to emotions that are felt when experiencing a product or service (Bagozzi, Gopinath, & Nyer, 1999). This occurs through emotional contagion, which is the phenomenon where the displayed emotions of one person can directly trigger the same emotions in others (Söderlund & Rosengren, 2010). This means that we feel better when we see people smile or feel sadder when we see people cry. This phenomenon occurs automatically through mirror neurons, when the brain recognizes an emotional facial expression (Berg et al., 2015). Generally, people immediately try to interpret facial expressions and understand the meaning behind the expression on one's face, even in computer mediated settings (Takeuchi & Naito, 1995).

Most advertisements are meant to come across amusing or joyful to receivers (Szirtes et al., 2017) and make a consumer feel good or excited about a brand or product (Mizerski & Dennis White, 1986). Therefore, the most frequent facial expression in marketing communications is the smile (Calvo, Gutiérrez-García, Fernández-Martín, & Nummenmaa, 2014; Berg et al, 2015). Smiles namely have been shown to transfer a feeling of enjoyment, favorite appraisal and anticipation to the receiver of a message (LaFrance & Hecht, 1999) and associate the product or service with optimism and success (Lukež, Katić, Lauš, Grbeša, & Špalj, 2017). Research from the field of psychology (Bayliss, Frischen, Fenske, & Tipper, 2007) has even shown that when individuals are smiled at directly, they tend to like the person smiling at them more than when the person did not smile at them directly.

However, what is most important for the current study, is that smiles have also been found to elicit positive feelings towards visual marketing communications. In an experiment by Berg et al. (2015) concerning product packaging, the researchers looked at the difference between a design with smiling models or a design where the models did not smile. The pictures with smiling models ensured more feelings of joy with the consumers which produced a more positive attitude towards the packaging itself. The same effect was found in a different experiment, where the researchers did not use human faces but designed cartoons that either

smiled or not (Berg, Söderlund, & Lindström, 2014). Since these studies have both shown that smiles can cause positive evaluations of visual brand-related content, it is expected that the effect of a happy facial expression can also be found with visual brand-related UGC in this current study. This is why the following hypothesis is proposed:

H3: Visual brand-related UGC where a positive facial expression is displayed in the form of a smile will evoke a more positive attitude towards the visual brand-related UGC than content where people display a neutral facial expression.

2.6 Personal Relevance

To investigate the effects of the preceding factors, it is necessary to discuss the way messages are processed. Although not accounted for originally as a separate element of a message, the processing of visual content can also be described following the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986) just like textual content can. While textual content is often regarded to as a series of words that have to be processed one at a time, visual content also often consists of various components that can be processed separately (Lazard & Atkinson, 2015).

In the ELM model, two routes are proposed in which processing can occur, either central or peripheral, that will eventually lead to attitude change. With central processing, receivers respond with more cognitive effort to process individual components of a message and information that can be derived from the message is more critically assessed. Attitudes that are the outcome of central processing are generally resistant to change and more enduring. With peripheral processing, individuals are low in elaboration likelihood and put in less cognitive effort to shape or change their attitude (Petty & Cacioppo, 1986). Instead, their attitude change is primarily based on peripheral cues (Petty & Wegener, 1999). These are message attributes that are not directly related to the subject matter (Petty & Cacioppo, 1986). Examples of peripheral cues include the use of humor in advertisements (Zhang & Zinkhan, 2006), the packaging of the product (Spack, Board, Crighton, Kostka, & Ivory, 2012), the perceived credibility of the message source (Chaiken & Maheswaran, 1994), and even the use of emotions (Tiedens & Linton, 2001), which this study is partially focused on.

Which processing route will occur, depends on two factors: ability and motivation. Ability is defined as the absence of distractions and availability of cognitive capacity to process a persuasive message. Motivation, a necessary prerequisite for information processing (Wagner et al., 2017), is referred to as the extent individuals are willing to process information (Petty & Cacioppo, 1986). Shortly after an individual is exposed to a persuasive message, the

determination for a processing route begins. For this reason, the initial impression of the message is critical to the attention and interest of receivers (Lazard & Atkinson, 2015).

A factor that determines the motivation to process a persuasive message is whether the message's subject is relevant to the receiver (Ajzen et al., 1996). Personal relevance is defined as "the extent to which consumers perceive the object/objective to be self-related or in some way instrumental in achieving their personal goals and values" (Celsi & Olson, 1988, p. 211). When a message is relevant for someone, their motivation to process information will be higher than when the message is not personally relevant. After that, individuals' elaboration likelihood will also be higher, causing them to be more likely to devote any cognitive effort to process a persuasive message in detail. For whom the message is not relevant, it will be more likely that they process the message indirectly and that peripheral cues take hold of their attention (Petty, Cacioppo, & Schumann, 1983).

A study by Winter, Brückner, and Krämer (2015) can help to demonstrate this in a social media context. When a topic of a Facebook post was personally relevant to participants, they would be more persuaded by comments that included relevant arguments than comments with subjective opinions or the number of likes on the post (i.e., peripheral cues). It was concluded that participants were more concerned with arguments, because they were more interested in the subject matter and arguments were more ideal to deliberate with opposed to the opinions of others.

When content on SNS is personally relevant, this can also have an effect on the user's intention to like the post or comment on it. Wagner et al. (2017) proposed that social media engagement is not only influenced indirectly through the attitude towards the post, but can also be influenced directly through their motivation to process it. Users for which certain products are relevant, will be more likely to interact with posts where more information about this product is available to them. This was also shown in a content analysis on the Facebook page "Humans of New York". The analysis showed that topics in the posts that were most relevant to users, also received the most social media engagement (Wang, Kim, Xiao, and Jung, 2017). Considering that the same effects from these two studies on social media content could be expected for visual-brand-related UGC that is posted on Instagram, the following hypothesis is proposed:

H4: When the content of visual brand-related UGC is relevant to users, they will be more likely to engage with the content in the form of a like or a comment.

In this study, it is not only expected that personal relevance can have a direct effect on social media engagement, but it is also expected that personal relevance can moderate the described effects of people and their facial expressions in visual brand-related UGC (see Hypothesis 2 and 3). Results from previous research on visual brand-related content (Bart et al., 2014; Chang, 2011) have shown that personal relevance can influence through which route of the ELM consumers process the information. A study by Bart et al. (2014) showed that mobile advertisements were processed via the central route and most effective in changing participants' attitudes, when a product was personally relevant to the participant. Results from an experiment by Chang (2011) showed that participants who were self-reported potential buyers of a product, were more concerned with a bad bargain and wasting their money, causing them to take more effort to process the advertisement.

Schemer and Wirth (2007) showed a moderating effect of the personal relevance of products on attitude in another form of visual brand-related content, in this case product placements in a television broadcast. In this study, they also researched the effects of persuasion knowledge, which is defined as consumers' theories and beliefs about the motivations and tactics of marketers and ways to deal with their persuasive messages. When consumers feel like another individual is attempting to persuade them (e.g., to sell a product), it could cause them to avoid the message or developing resistance against it (Friestad & Wright, 1994). When participants perceived the television broadcast as a persuasive attempt (equating a high level of persuasion knowledge) and the advertised products were not perceived to be relevant to them, this actually deteriorated their attitude towards the brand. However, the opposite effect was also found. When the level of persuasion knowledge of the participants was low and the placed products were more relevant to them, participants were more devoted in the television broadcast and reported a more positive attitude towards the brand of the product. Considering that the level of persuasion knowledge with UGC is generally low (Friestad & Wright, 1994), it could be expected that the same positive effect regarding attitude, as was found in the study by Schemer and Wirth (2007) can be found towards visual brand-related UGC.

However, when a picture solely displays a product, this can elicit the receiver's persuasion knowledge. When users have a low personal relevance with the brand and are less focused on the content, they will associate a high brand prominence in the content more easily with commercial intentions (Cowley & Barron, 2008). This can be detrimental for attitude change, as was shown in the study by Schemer and Wirth (2007). In this current study, it could therefore be expected that the same effect occurs for the attitude towards visual brand-related, because the content does not gratify the needs of the user (Wagner et al. 2017).

Since individuals process visual brand-related content that is relevant to them via the central route of the ELM (Bart et al., 2014) and are more devoted to it (Schemer & Wirth, 2007), they are then more focused on details (Petty et al., 1983) and look for information about the product in the content (Wagner et al., 2017). It is then expected that they will have a more positive attitude towards Instagram posts that feature only the product, because the product is displayed more prominently and more information can be obtained, making it more gratifying and pleasing for the receiver. It is thus expected that when the product in visual brand-related UGC is more relevant to users, they will have a more positive attitude towards pictures that feature only the product as compared to pictures that feature people than users for whom the product is less relevant. Based on this reasoning, the following hypothesis was proposed:

H5a: The effect of a person in visual brand-related UGC is stronger for individuals for whom the featured product is not relevant and weaker for individuals for whom the featured product is relevant.

When the content is processed via the peripheral route of the ELM, the brand-related information in the content is not processed as extensively as it would be if it was processed via the central route (Warrington & Shim, 2000). Smiles can then function as peripheral cues (Burgoon et al., 2016, p.371) and still grab the attention of individuals for whom the content is not relevant. This means that individuals can still have a positive attitude towards the visual content, since smiles can cause positive evaluations (Berg et al., 2014; Berg et al., 2015) as was noted before (see Hypothesis 3). However, it is expected that these users will have a less positive attitude towards the content that features people with happy facial expressions than individuals for whom the product is more relevant. To users with a high level of perceived personal relevance, the content will still be more pleasing to consume since not only the smile will be pleasing to them, but also the brand-related information (Wagner et al., 2017). Thus, Hypothesis 5b was proposed.

H5b: The effects of the facial expression in visual brand-related UGC is stronger for individuals for whom the featured product is not relevant and weaker for individuals for whom the featured product is relevant.

A model with all six proposed hypotheses from this current study can be seen below in Figure 1.

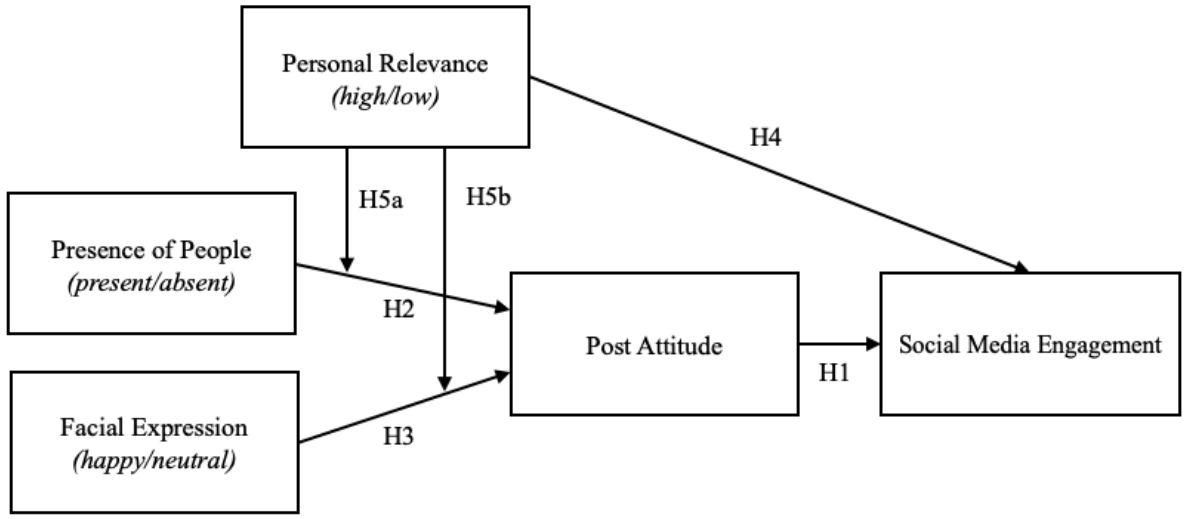

Figure 1. Hypothesized Model

3 Method

3.1 Design

This study focused on the effects of personal relevance, the presence of people and when present, their facial expression in visual brand-related UGC on post attitude and social media engagement. In order to investigate this relationship, an experiment was conducted with a 2 (personal relevance: low/high) x 2 (presence of people: absent/present) x 2 (facial expression: neutral/happy) within-subject design. This resulted in six conditions, since the facial expression conditions only applied to the conditions where people were present in the pictures (see below in Table 1).

Table 1

Conditions in this Study

Condition	Personal Relevance	Presence of People	Facial Expression
Condition 1	High	Absent	None
Condition 2	High	Present	Neutral
Condition 3	High	Present	Happy
Condition 4	Low	Absent	None
Condition 5	Low	Present	Neutral
Condition 6	Low	Present	Happy

3.2 Material

Since pictures on Instagram show a lot of variety between them and this is unique for the social networking site, it was important to take this into account in this experiment and the stimuli. Thus, not only were original pictures obtained from Instagram opposed to creating visual content, but also multiple pictures were obtained per condition opposed to using a single picture. This made it possible to control for any influences that were not accounted for in this experiment such as attractiveness of the user pictured in the content (Baker & Churchill, 1977) or filters used on the picture (Bakhshi, Shamma, Kennedy, & Gilbert, 2015). The pictures were found by searching in the explore page of the Instagram application with either the hashtag #bmw or #nike. Nonetheless, the pictures had to meet the requirements for UGC as proposed by Kaplan and Haenlein (2010).

For each one of the six conditions, the choice was made to use five different pictures, which means that thirty pictures were chosen in total. After the final pictures were selected for the final set of stimuli (with the use of another pretest, as will be discussed in section 3.3), they were made into Instagram posts. To prepare them for the experiment, everything that could identify the user was blurred out of the post. This included the username, profile picture, comments, and any indicator that the picture was a repost. On top of that, no other text was visible, other than #nike or #bmw in the caption, since this could influence participants' perceptions and the current study did not focus on textual components of the post. Elements of the post that were in fact shown to participants were the number of likes and the actual picture. This way, the post would mimic an Instagram post as much as possible when users were to scroll through their Instagram feed.

The number of likes was added, since it was predicted that if the number of likes would be zero, participants would be hesitant be the first one to like or comment on the post. The number of likes was based on a database that consisted of all pictures that were obtained from Instagram. It was decided that the number of likes should be nineteen, because this was the mode of the database meaning that it was most common and thus believable. Since users have been found to like something on SNS when more other users do so (Gerlitz & Helmond, 2013), the number of likes was kept the same for every picture. This prevented the participants from being influenced by the number of people that presumably already liked the post before them.

The presence of people on the visual brand-related UGC was manipulated by either showing a person with the product of the brand (present) or the product on its own (absent). In the conditions where a person was present in the picture, products by either brand were not prominently shown, but were still visible. Also, their facial expression was manipulated by

having a visible smile (happy) or not (neutral). The pictures also featured persons of different ethnicities and ages and the number of men and women was close to equal within the conditions. This was done to control for any effects of these factors.

In the conditions where a person was absent from the picture, the product and its brand were prominently shown. Personal relevance was operationalized by displaying either a sport item from Nike or a car from BMW. A prerequisite for selecting the brands was that they had to represent actual products and not a service. It was expected that these two products would differ in personal relevance for the sample, since it was known that the survey would be filled in by students and the sample would thus consist of young adults. BMW cars are fairly expensive and purchasing one would therefore not be realistic for a large part of the sample while Nike sport items would be more accessible. All stimuli with their corresponding numbers can be seen in Appendix C.

3.3 Pretest

Before the main study started, a pretest was conducted to decide which pictures of the database would be suited best to display a neutral face or a happy face. This resulted in twenty pictures, since there were four conditions where a person was present that each needed five stimuli. At the beginning, participants were assured that their data would be safe and reminded that participation was voluntary. After that, demographic data were asked and an instruction about the experiment was given. Then, to choose which pictures were best suited for the experiments, participants were randomly shown twenty (five per one of the four conditions) from forty pictures (ten per one of the four conditions). After every picture, participants were asked to which extent the emotions anger, contempt, disgust, fear, joy, sadness, surprise appeared on the face on a Likert scale from 1 (not at all) to 9 (a lot). These emotions (even the negative emotions) were measured, so it could be checked if the person in the picture did not display any other emotion then was intended in this study. This is also why it was expected that the pictures would all rate low on most emotions, causing the average scores to be fairly low. This pretest is included in Appendix A.

The pretest was spread through convenience sampling and was finished by 41 participants. Out of these participants, seven were filtered out and thus deleted from the sample, since they were above the age of 35. After all, 90% off all Instagram users are under the age of 35 (Jang, Han, Shih, & Lee, 2015), which is why this study is aimed at understanding these users. Based on their age, it was expected that people above the age of 35 were not or less familiar with Instagram or its content and therefore were not suitable to make perceptions about

the pictures that were used in the pretest. This brought the total number of participants in the sample to 34. This sample consisted of mostly women (N = 24, 70.6%) and ranged in age from 21 to 32 years (M = 24.47, SD = 2.93).

For the pictures with neutral faces, pictures with the lowest mean scores of all emotions were chosen for the main study. The scores of the selected pictures ranged from 1.34 till 2.08 and on average scored 1.83 (SD = 0.24). For the pictures with happy faces, the pictures that rated highest on joy were chosen only if they rated low on the other emotions, so it was made sure that they only scored high on joy and scored low on all the negative emotions. The pictures that were selected had an average score of 7.19 (SD = 1.69) on joy and 1.37 (SD = 0.22) on all other emotions. Next to their emotional rating, the final selection of the pictures was also based on the ratio between men and women. Then, brand prominence was also controlled for to make sure that the chosen pictures actually showed the brand that was mentioned in the caption. This way, there would be a fit between the caption and the picture. After the final selection was made, the pictures were put in an Instagram frame.

3.4 Participants

Participants were recruited through a participant pool, consisting of first year bachelor and pre-master students of the study Communication and Information Sciences. Although it was expected that this would lead to a fairly young sample, students were not selected based on their age, gender, educational level or in any other way. Since Instagram is a SNS that is used mostly by younger generations (Abbott, Donaghey, Hare, & Hopkins, 2013), the sample actually represents the type of users that are on Instagram well. The questionnaire was conducted on Qualtrics and linked to the participant pool system. For fulfilling the questionnaire, participants were granted half a credit for their efforts.

A total of 227 participants took part in the experiment, of which 153 (67.4%) were female and 74 were male (32.6%). The average age of the sample was 21.62 years (SD = 2.61) and varied from 18 to 32 years old. Most participants of the sample (N = 177, 85.1%) had an Instagram account and the vast majority of these participants (N = 197, 86.8%) reported that they checked their Instagram daily, of which 135 (59.5%) even reported that they checked it multiple times a day.

3.5 Procedure

At the start of the questionnaire, participants had to read a consent form that stated what the experiment was about (mentioned as the perception of brand-related Instagram posts), that their data would be stored safely and that participation was completely voluntary. At the bottom, participants were given the options to either accept the terms of participation or decline. When they declined, they would be led straight to the end of the questionnaire. When they accepted, participants were asked to submit their gender and age.

Following these questions, participants were given the items that measured their personal relevance of the products and brands and they were asked to indicate their Instagram use. Then, on the next page an instruction was given: participants would be shown six Instagram posts and were asked to take a good look at them and answer the statements below. Finally, participants were shown one Instagram post of every condition in a random order. After looking at the post, they were asked to answer the questions that measured their attitude towards it and their willingness to engage with the Instagram post. Finally, they were thanked for their participation.

3.6 Instrumentation

Post Attitude. After participants were shown one of the stimuli, they were given seven semantic differentials to measure participants' attitude towards it. These items were a combination from the studies of Spears and Singh (2004) and Shiv et al. (2004), namely, *positive – negative (r), fun – not fun (r), bad – good, interesting – not interesting (r), not pleasant – pleasant, uncomfortable – comfortable, unfavorable – favorable*. The alphas and descriptives can be seen below in Table 2.

Table 2

Alphas and Descriptives for Post Attitude Measures per Condition

Condition	Cronbach's Alpha	Mean Score (SD)
Condition 1	.93	4.38 (1.11)
Condition 2	.93	4.36 (1.08)
Condition 3	.94	4.60 (1.13)
Condition 4	.94	4.36 (1.24)
Condition 5	.94	4.18 (1.17)
Condition 6	.94	4.23 (1.11)

Social Media Engagement. Social media engagement was measured with three questions, based on the main aspects of engagement on Instagram, which are liking and commenting (Bakhshi et al., 2014). Participants were asked to indicate the probability that they would like and/or comment on the post on a seven-point Likert scale. The complete survey can be viewed in Appendix B.

Personal Relevance. To test whether manipulation of the personal relevance of the products in this study was successful, this was checked with three measures. Firstly, participants were asked to rate their attitude towards the product type (sport items or cars in general) and secondly the brand (Nike and BMW). The same items as post attitude from Spears and Singh (2004) and Shiv et al. (2004) were used, since these scales are used often in studies measuring attitudes. Certain items of the attitude scales had to be recoded in order to let a high score on every item represent a positive evaluation. After the Cronbach's alphas showed that the reliability of the scales was good for every variable (as can be seen in Table 3), mean variables were computed. Thirdly, participants were asked to indicate their intention to purchase products from the brand with four items (e.g., *I am never going to buy this brand - I am going to buy this brand soon*). The four items did show themselves to be reliable. The descriptives of these variables can be seen together with their alphas in Table 3.

Table 3

Alphas and Descriptives for the Personal Relevance Measures

Measure	Cronbach's Alpha	Mean Score (SD)
Attitude Towards Cars	.87	5.14 (1.12)
Attitude Towards Sport Items	.90	5.19 (1.12)
Attitude Towards BMW	.93	4.82 (1.25)
Attitude Towards Nike	.88	5.49 (0.97)
Purchase Intention for BMW	.97	4.44 (1.75)
Purchase Intention for Nike	.96	5.63 (1.41)

4 Results

4.1 Manipulation Checks

Before the relation between the variables in this study could be analysed, it was first checked whether participants rated their personal relevance of Nike higher than their personal relevance of BMW. To check the manipulation of personal relevance, three dependent sample t-tests were performed to compare the average scores of both the attitude towards cars and sport items, the attitude towards BMW and Nike and the purchase intention of BMW and Nike.

First, variables were computed that expressed the difference between the attitude and purchase intention scores, to check whether the differences between the two brands or product types met the assumption of normality. In Table 4 (see Appendix D) it can be seen that only the difference between the scores for the attitude towards the product types was not distributed normally. Therefore, bootstrap was performed for this dependent sample t-test.

There were 227 valid cases in the test. Results have shown that on average, participants did not rate their attitude towards cars significantly different from their attitude towards sport items (*Mdiff* = -0.06, $t(226) = -0.66$, $p = .510$, 95% CI [-0.23, 0.12]). However, the results did show that participants reported a higher evaluation of Nike than BMW (*Mdiff* = -0.67, $t(226) = -7{,}28$, $p < .001$) and a higher purchase intention of Nike than BMW (*Mdiff* = -1.20, $t(226) = 9.01$, $p < .001$). For brand attitude, the difference represented a medium effect size ($r = .44$, $d = .60$) and for purchase intention the difference represented a large effect size ($r = .51$, $d = .75$). These results show that Nike was considered more personally relevant than BMW for the sample of this study, which is in line with what was expected. Based on these results, it can be confirmed that the visual UGC related to Nike can be considered more personally relevant than the content related to BMW in this study.

Before Hypothesis 4 could be investigated, in which it was proposed that personal relevance would have an effect on social media engagement, another dependent sample t-test had to be run. With the analysis, it was checked whether the scores for liking differ from the scores for commenting, now that social media engagement is considered as both likes and comments in the current study. First, two variables were computed with either all the liking scores or commenting scores, regardless of their condition. Then, a difference variable was computed and normality tests were performed. This gave us a significant z-score for skewness (3.31), but a z-score for kurtosis that was not significant (-0.54). However, the KS-test was significant ($p < .001$), so bootstrapping was performed with this test. The test showed that the difference between these two features of social media engagement was significant (*Mdiff* =

1.49, $t(226) = 22.04$, $p < .001$, 95% CI [1.35, 1.63]). This means that the participants' intention to like the visual brand-related UGC ($M = 3.03$, $SD = 1.21$) was significantly higher than their intention to comment on it ($M = 1.54$, $SD = 0.71$), with a high effect size ($r = .83$, $d = 1.50$). Based on these results, the choice was made to investigate the effects on social media engagement separately for liking and commenting, because apparently, the participants' intention to like and comment differed from each other.

4.2 Mediation Model Analysis

To investigate whether the presence of people and their facial expression have an influence on the intention to engage with the content that can be explained by their attitude towards the post and their personal relevance of it, a mediation analysis was performed using PROCESS v.2.16.3 by Andrew F. Hayes in SPSS (Hayes, 2013). In this model, presence of people and facial expression were entered as predictors. These variables were merged into one variable with three levels: person present with a happy facial expression, person present with a neutral facial expression and person absent. Post attitude was entered as mediator with personal relevance as the moderator to this effect. Lastly, social media engagement was registered as outcome variable. Because the previous manipulation check showed us that scores differed significantly between the two features of social media engagement (liking and commenting) and the effects of personal relevance were different for these two features, the choice was made to test effects on them separately and perform one mediation analysis for liking and another one for commenting. The models are displayed below in Figure 2 and 3.

In Figure 2 it can be seen that the presence of people and their facial expression were not related to post attitude ($b = 0.12$, $SE = 0.12$, $p = .313$) and personal relevance of course then did not serve as a moderator in this relation ($b = -0.06$, $SE = 0.08$, $p = .463$). However, the analysis did show a significant direct effect of the presence of people and their facial expression on the intention to like the visual brand-related UGC ($b = -0.28$, $SE = 0.05$, $p < .001$), which initially was not expected. Next to that, the effect of post attitude on intention to like was found to be significant ($b = 0.89$, $SE = 0.03$, $p < .001$), which represents a large effect.

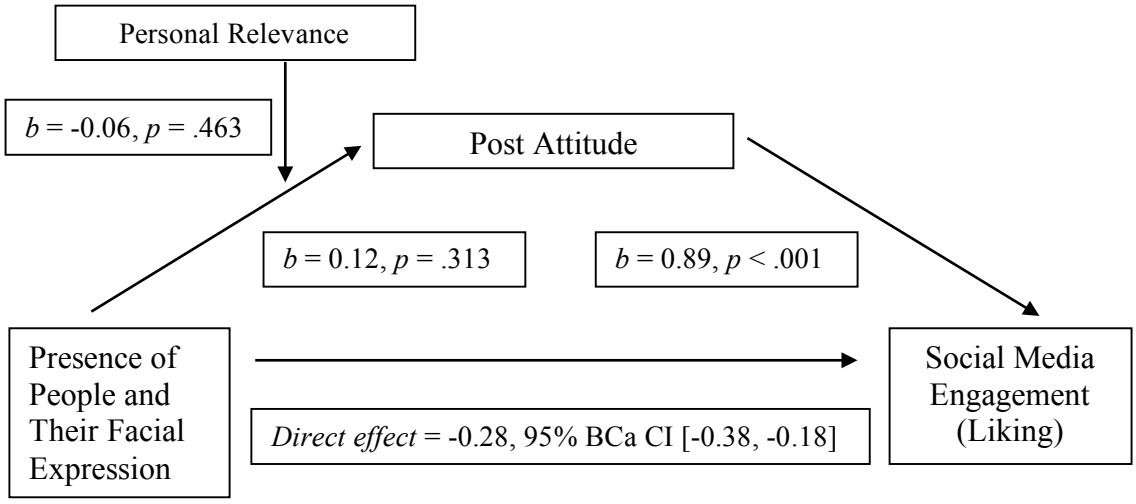

Figure 2. The relationship between presence of people, facial expression, and liking visual brand-related UGC.

In Figure 3, similar effects can be found. In this model, the effect of presence of people and their facial expression were also not found to be significant predictors of post attitude (b = 0.12, SE = 0.12, p = .313) and naturally personal relevance did not serve as a moderator here (b = -0.06, SE = 0.08, p = .463). Because these effects have not been found in both mediation analyses, Hypothesis 2, 3, 5a and 5b are therefore rejected. This means that for both liking and commenting, the presence of people and their facial expressions were shown to not have a direct effect on post attitude and this effect was also not moderated by personal relevance. Again, a direct effect of post attitude (b = 0.54, SE = 0.03, p < .001) on commenting intention was found. This means that Hypothesis 1 is hereby supported since a direct effect has been found for both features of social media engagement. Also in this model, the presence of people with their facial expressions were unexpectedly found to have a significant effect on commenting intention (b = 0.25, SE = 0.05, p < .001). Since this is an overall effect, more analyses will be performed to further investigate the distinctive effects.

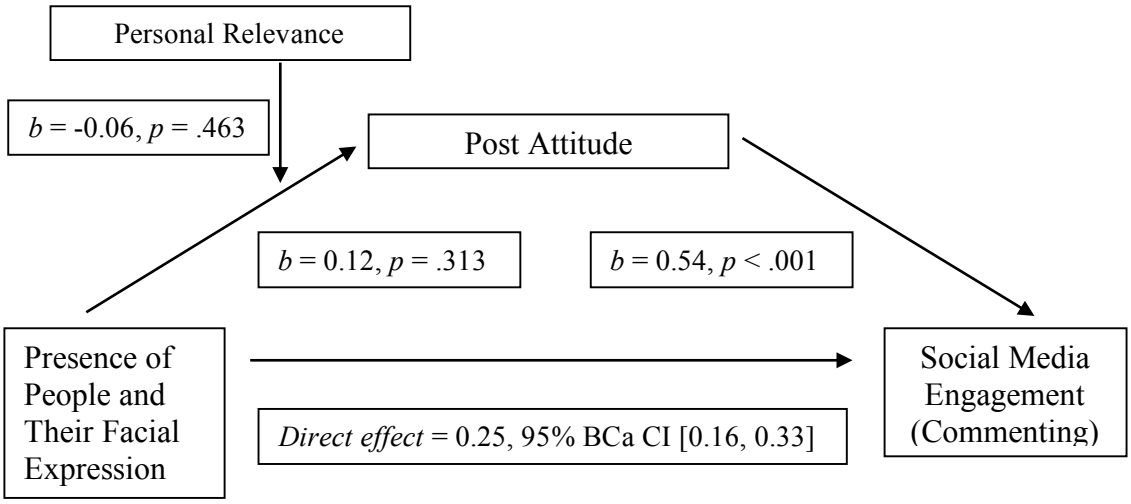

Figure 3. The relationship between presence of people, facial expression, and commenting on visual brand-related UGC.

The variable of people and facial expressions was multicategorical (three categories: person with a happy face, person with a neutral face and person absent) and the effect did not involve a mediator of moderator, so two one-way ANOVAs were performed to investigate the differences between the three categories and their effect on both liking and commenting. Since all z-scores and Kolmogorov - Smirnov tests (which can be seen in Table 5 in Appendix D) were significant, it was decided to perform a bootstrap with the ANOVAs. The Levene's test for liking ($F(2, 1359) = 0.16$, $p = .855$) showed that the assumption of homogeneity of variance is met, indicating that there were no significant differences in the variance between the three categories. The opposite was true for the Levene's test for commenting ($F(2, 1359) = 78.59$, $p < .001$). For this reason, the Welch statistics will be reported for the analysis of this specific social engagement feature. For liking, the overall ANOVA was significant ($F(2, 1359) = 7.97$, $p < .001$). For commenting, the Welch's $F(2, 863.33) = 38.440$, $p < .001$ was also significant. This means that for both social engagement features, there were differences between the three categories.

This allows us to further investigate the differences and look at the contrasts. In these tests, we took the same contrasts as were proposed in Hypothesis 2 and 3 that assumed effects on post attitude. First, we looked at the difference between pictures with or without persons on them, meaning that the condition where a person was absent was compared to the conditions where a person was present with either a happy or neutral facial expression. Secondly, when a person was present on the picture, we looked at the difference between the pictures with either

a happy or neutral facial expression. The contrast tests show us that the presence of people has a significant effect on their intention to like a picture ($t(1359) = -3.58$, $p = .001$, $r = .10$), but their facial expression did not ($t(1359) = 1.77$, $p = .069$, $r = .05$). The contrast test for commenting showed the opposite. The effect of people in pictures was not significant $t(803.57) = 1.75$, $p = .093$, $r = .06$, but the effect of the person's facial expression was, $t(764.44) = -7.97$, $p = .001$, $r = .28$. Looking at the average scores in Figure 4 below, it can thus be concluded that the liking scores for pictures with a happy facial expression ($M = 3.27$, $SD = 1.86$) or neutral facial expression ($M = 3.05$, $SD = 1.86$) were significantly higher than the liking scores for pictures without people on them ($M = 2.78$, $SD = 1.85$), in line with expectations from Hypothesis 2. It can also be concluded that pictures with a neutral facial expression ($M = 2.35$, $SD = 1.70$ rated higher for commenting intention than pictures with a happy facial expression ($M = 2.13$, $SD = 1.61$), which is opposite of what was expected from Hypothesis 3.

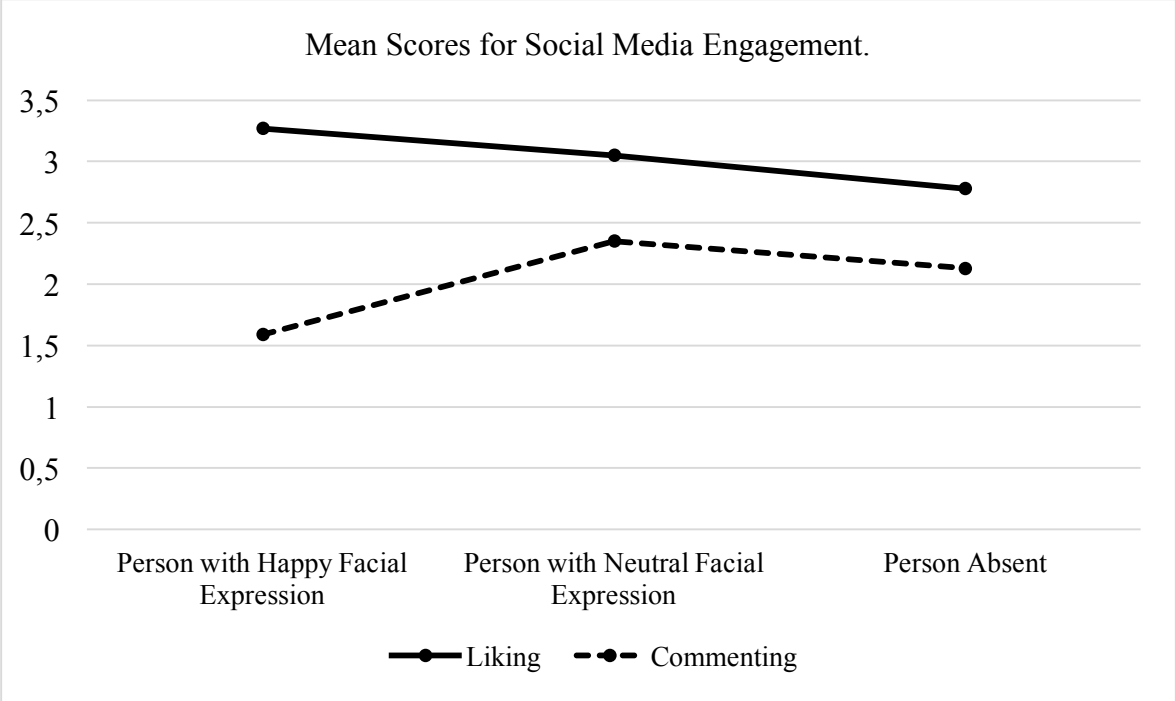

Figure 4. Mean scores for social media engagement.

4.3 The Effect of Personal Relevance on Social Media Engagement

Since the proposed model could not fit one of the model templates of PROCESS in its entirety, the choice was made to investigate Hypothesis 4 separately. To investigate whether there was effect of personal relevance on social media engagement, the last dependent t-test was performed. A variable was computed to show the difference between the average liking scores for all BMW pictures and those for all Nike pictures. The same goes for the average

commenting scores. Based on the normality tests for the differences between the intention to engage with the different brands (see Table 6 in Appendix D), it was decided that bootstrap needed to be performed.

For liking, results of the dependent t-test showed that the difference between the intention to like BMW pictures (M = 2.89, SD = 1.42) and Nike was significant (M = 3.19, SD = 1.35) ($Mdiff$ = -0.30, t(226) = -3.31, p = .001, 95% CI [-0.48, -0.13]), meaning that participants were more willing to like pictures related to Nike than BMW. This difference represented a small effect size (r = .22, d = .22) For commenting, the test showed that the difference between the intention to comment on BMW pictures (M = 1.51, SD = 0.84) was not significant form the intention to comment on Nike pictures (M = 1.58, SD = 0.79) ($Mdiff$ = -0.07, t(226) = -1.41, p = .172, 95% CI [-0.18, 0.03]). Thus, Hypothesis 4 can be partially supported in the sense that the effect of personal relevance was found for liking but not for commenting.

5 Conclusion and Discussion

The aim of this study was to investigate the influence of people and their facial expression combined with the personal relevance of the products in visual brand-related UGC on the post attitude and social media engagement. An online experiment was conducted to examine a conceptual model that contained six hypotheses. Post attitude was found to positively influence social media engagement, in the form of both liking and commenting. Moreover, personal relevance positively affected the intention to like visual brand-related UGC. Then, effects were found of both the presence of people in pictures and their facial expression. When a person was present in a picture, it elicited a higher intention to like it. Also, when the person's facial expression in the picture was neutral opposed to happy, it had a positive effect on the intention to comment on the picture. The results from this study will be discussed below and with them, implications will be provided.

5.1 Effects of the Presence of People and Their Facial Expression

This study could not find factors that would influence the users' attitude towards the pictures. It was first expected that when people were present in the visual brand-related UGC, this would lead to more a positive attitude towards visual brand-related UGC (Hypothesis 2) since the study by Guido et al. (2018) had shown that the presence of faces can indeed enhance consumers' preference and attitude towards print advertisements. When the expression on the face was happy (thus displaying a smile) it was expected that this would further improve the

attitude towards the visual brand-related UGC (Hypothesis 3). This hypothesis was primarily based on two studies that researched facial expressions in product packaging designs (another form of visual advertisement) (Berg et al., 2014; Berg et al., 2015). These studies both showed that the designs with smiles on them, caused participants to have a more positive attitude towards them. This was caused by the positive feelings that were triggered by the smiles on the packaging, a phenomenon that is called emotional contagion (Söderlund & Rosengren, 2010).

Yet, both Hypothesis 2 and 3 were rejected, causing us to consider that the positive feelings that derive from smiles, were not directed towards the visual brand-related UGC in which they were displayed. Although previous research has found that when a person smiles in visual advertisements positive emotions can transfer through emotional contagion and cause positive attitudes towards, the results from the present study cannot support this finding. It can be concluded that in this study, happy expressions on faces did not improve the participants' attitude towards the content. Further research should thus focus on other factors that could possibly influence a user's perception of visual brand-related UGC, such as the attractiveness of the person in the picture. Early research on visual advertisements has namely shown that attractive models as opposed to unattractive models cause consumers to evaluate the advertisement positively (Baker & Churchill, 1977).

Nevertheless, the results did show direct effects of faces and their expression on social media engagement, which is in line with findings from the content analysis by Bakhshi et al. (2014). This can be explained with a study in which it was stated that social media engagement does not always entail a great thinking process, but especially likes are often given automatically (Hayes, Carr, & Wohn, 2016). Being that information processing demands cognitive effort from a limited resource (Lang, 2000) and the feeds of SNS can contain an overflow of information, this makes it necessary for users to be selective with their attention and decide what content in the feed to focus on (Süflow, Schäfer, & Winter, 2018). Even specifically on Instagram it was reported that going through the feed is a habitual practice, meaning users have little attention for every distinctive post (Carah & Shaul, 2016).

Taken this into account, it could also explain the finding that a person in a picture could positively influence the intention to like it, despite their facial expression. Even in complex settings where people can be distracted by many elements, people still tend to look at faces first (Birmingham et al., 2008), which allows them to put in cognitive effort necessary to process the picture. Whether the person in the picture is then smiling or not did not increase the willingness to like it in this study, although a smile has also been noted to grab users' attention (Burgoon et al., 2016). It could be reasoned that because faces are more prominently present in

a picture, they are already attention-grabbing enough on their own, regardless if they express a smile or not.

The other direct effect on social media engagement in the current study showed the influence of facial expressions on the willingness to comment on visual brand-related UGC, yet in an unexpected way. Contrary to what could be expected along the lines of Hypothesis 3, pictures that featured people with neutral facial expressions scored higher than pictures that featured people smiling in regards to commenting intention from the participants. This is not just challenging to explain theoretically, it actually opposes what could be derived from previous studies, since smiles have been noted to let other types of visual brand-related content be evaluated more positively (Berg et al., 2014; Berg et al., 2015). Further research would thus be needed to determine whether this effect does not apply to visual brand-related UGC on Instagram.

At the same time, there is always the possibility that the effect of facial expressions simply does not exist. It was observed by Small and Verrochi in their study (2009) that facial expressions did not affect the participants' choice to observe an advertisement. Their results did show that a sad facial expression could cause a feeling of sympathy with the viewers, demonstrating that emotional contagion did occur. However, participants were just as likely in choosing to view an advertisement, whether it showed a sad, happy of neutral facial expression, when given the freedom. This could mean that participants' attitude towards the advertisements was not altered by the facial expression, as it was shown in an earlier study on advertisements that the attitude towards the advertisement did in fact change consumer's choice (Biehal, Stephens, & Curio, 1992).

It could then be possible that other more influential factors in the pictures made participants more eager to comment on pictures with neutral faces. For these factors, further research could conduct an experiment with a between subjects design. In this experiment, stimuli for the different conditions can be produced as similar to one another as possible instead of taking pictures directly from Instagram. Recommendations for these stimuli would then be to use the same person in all the pictures, to take all pictures in the same setting, to adjust them with the same filter and other visual corrections (e.g., brightness and contrast) and to display the same product from each brand. Also, it would be recommended to incorporate products by brands that are not well-known. Then, it can be made sure that existing brand associations and attitudes do not influence the participants beforehand. This way, it can be made sure that any difference in engagement scores would be caused by variables that are manipulated in the study.

5.2 Effects of Personal Relevance

Manipulation checks confirmed the expectation that BMW and Nike differed in their personal relevance for the group of participants in this study. Results revealed that Nike was more relevant to the participants than BMW, which is coherent with their purchasing behavior concerning these brands. It is highly probable that the fairly young group of participants were not in a position to purchase a luxury car from BMW while sport items from Nike are more likely to be purchased and used by the sample.

For personal relevance, it was first expected that it would influence the willingness to engage with the Instagram posts in form of likes and comments (Hypothesis 4). However, results from the analysis did not fully support Hypothesis 4. They showed that personal relevance of a brand could not cause users to comment on a post, but it could influence their willingness to like it. This is somewhat in line with the results of the manipulation check on social media engagement. Here, it could be seen that participants were more eager to like the content than to comment on it overall, regardless what was shown on the picture or how relevant the content was to participants. It can be concluded that liking and commenting should be regarded as two different entities of social media engagement, meaning that in further research, it is advised to also investigate the effects on liking and commenting separately.

Hypothesis 4 was mainly based on the notion that users who perceive a message to be relevant for them, are more motivated to process it. This means that it is more likely that they will focus their attention to message (Petty et al., 1983) and details in the message that matter to the receiver (Winter et al., 2015). By two studies (Wagner et al., 2017; Wang et al., 2017) showing these effects in a social media context, it sustained the expectations that personal relevance could positively influence the willingness to engage with the visual brand-related UGC.

That the results only showed support for this expectation concerning liking and not commenting, can be explained in two ways. First, in previous research it was stated that commenting is a more active way to engage with content on SNS and takes more effort than liking, sharing or looking at it. This is more passive and would in turn decrease the likability that users engage in this type of behavior (Antheunis et al., 2016; Tosun, 2012). Secondly, the persons that were displayed in the visual brand-related UGC were strangers to the participants, meaning that participants were not connected with them. This could explain why participants were less willing to comment on the pictures, because commenting usually signals that you are investing in an online social relationship (Tong & Walther, 2011). Comments can be used to initiate or maintain a connection with someone from your social network (Ellison, Vitak, Gray,

& Lampe, 2014). It is therefore that users would not comment on posts from just any social connection, but mostly the ones that they feel they have a relatively close relationship with.

Next, it was predicted that personal relevance would moderate the effect of the presence of people and facial expressions on post attitude. This was mainly based on the ELM, which proposed two routes through which information can be processed. When a product is personally relevant, it was assumed that participants would process the visual brand-related UGC via the central route and when the product was not personally relevant, the peripheral route (Bart et al., 2014). Because personal relevance of a product is likely to influence the route through which users process information, it was expected that this will have an impact on the way in which users perceive the visual brand-related UGC.

The effect of a person in visual brand-related UGC was expected to be stronger for individuals for whom the product is not relevant and weaker for individuals for whom the featured product is relevant (Hypothesis 5a). For visual brand-related UGC that does not display a person but only a product, this is why it was expected that the content would be received more positively by participants for which the product would be personally relevant than by participants for whom they were not. When users process content via the central route, they are more focused on details of the product (Petty et al., 1983), which are more available in a picture where the product is prominently shown. These pictures are then more gratifying to them than those for whom the product is less relevant (Wagner et al., 2017).

In addition to that, it was expected that the effect of these happy facial expressions would be weaker for participants for whom the product was relevant and stronger for participants for whom the product was not relevant (Hypothesis 5b). Users who process content via the peripheral route, are usually not concerned with the product and will focus on peripheral cues (Petty & Wegener, 1999), which in this study was expected to be facial expression (Burgoon et al., 2016, p. 371). It was thus still possible for participants to have a positive attitude towards the picture via these cues. However, it would be less positive as compared to perceptions of users for whom the products are more relevant. For them, more objects on the pictures are gratifying (Wagner et al., 2017). This would mean that participants for whom the product was relevant would have a more positive judgement over these pictures than participants for whom the product was less relevant.

Although the manipulation check for personal relevance showed that the manipulation was successful, this moderating effect of personal relevance was not found. It was then considered that the pictures did not differ in the way they gratified the informational needs of the participants, since the only information that could be derived from the visual was the

exterior of the product (Sundar, 2008). However, the products used in this experiment can both be considered experience products, meaning that it is not just important what they look like, but it is also important how well they function. This is more difficult to determine for experience products, because opposed to search products (for which all necessary information is available prior to purchasing them) not all information that determines their functionality can be acquired online or in a picture (Bei, Chen, & Widdows, 2004). To be familiar with the characteristics of the products, one would then have to actually experience the products by for example sitting in the car or trying on the sport items.

5.3 Effect of Post Attitude

The only finding from the current study, that was in line with what was expected, was that a positive attitude towards visual brand-related UGC on SNS would lead to a greater intention to engage with the content in form of likes and comments (Hypothesis 1). This was based on studies by Martinez-Lopez et al., (2017) and Lee et al. (2016), where it was stated that enjoyment and overall experience were motives for users to engage with the content on SNS. The results of this study support the hypothesis, which means that it can be concluded that when a post appeals to users, this will positively influence their social media engagement behavior, consistent with findings from an earlier study by Wagner et al. (2017).

5.4 Implications

Since it can be concluded in this study that a positive attitude is of importance for users to engage with visual brand-related UGC on SNS, this study adds to the understanding of the motivations behind liking and commenting on Instagram and contributes to knowledge from literature on social media engagement. This study is one of few that incorporates user's motivation to process visual brand-related UGC and can serve future research that looks to further investigate this topic, especially with the given recommendations in this discussion.

With respect to practical implications, results from this study do allow us to provide marketers with guidelines. First and foremost, this study underlines the recommendation that the focus in social media advertising should be put on the way visual brand-related UGC appeals to users. This is important, since a positive appeal can increase the chance that users like and comment on this type of content on SNS. For example, in the #MyShinola campaign, as discussed in the introduction, users posted pictures of solely their timepiece (with no people present). With the findings in this study, it can be recommended to let users post pictures that also feature their face, since this positively affected the social media engagement with it.

Secondly, it would be recommended for any brand to share visual brand-related UGC with people on them (opposed to just the product) on their social networking channels. When consumers are displayed on the picture, it is clearer that they are the creator of the visual brand-related UGC than when they are simply credited in the caption or tagged in the picture. This way, the brand can maintain the authentic nature of UGC, despite being used on a brand owned channel. To add to that, it would be advised for brand to repost UGC on their own channels, because this way brands can directly reach an audience for whom the content is more relevant. Since it was concluded from this study that personal relevance has a direct positive effect on the liking intention and it is probable that followers of a particular brand will find its products more relevant than people who do not follow the brand, this will be beneficial for the number of likes that will be received by the visual brand-related UGC.

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Appendix A: Pretest

Welkom!

Heel fijn dat je mee wilt doen! Dit onderzoek van de Universiteit van Tilburg kijkt naar welke emoties mensen uitstralen op verschillende foto's. Tijdens dit onderzoek zullen we je steeds vragen om naar een foto te kijken, en aan te geven welke emotie door de persoon op de foto wordt uitgedrukt.

Alle dataverzameling gaat conform de nieuwe AVG (Algemene Verordening Gegevensbescherming) regels en de Ethische commissie van de Universiteit van Tilburg 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.

Deelname aan dit onderzoek zal ongeveer 20 minuten in beslag nemen. Je deelname is geheel vrijwillig. Er zijn geen risico's aan deelname met het onderzoek verbonden.

Tijdens het onderzoek heb je het recht om je te allen tijde terug te trekken, om welke reden dan ook en zonder dat dit nadelige gevolgen heeft. 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 je te allen tijde en zonder het opgeven van een reden terug mag trekken.

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

Wat is je geslacht?

- Man
- Vrouw

Hoe oud ben je? (open field)

Tijdens dit onderzoek krijg je steeds een foto te zien met een persoon erop. De bedoeling is dat je steeds aangeeft welke emoties je ziet op het gezicht van deze persoon. Er zijn geen goede of foute antwoorden, het gaat om jouw mening.

Voor elke emotie kun je op een schaal van 1 (helemaal niet) tot en met 9 (heel erg veel) aangeven of je vindt dat deze emotie voorkomt of niet.

Kies 1 als de emotie absoluut niet terug te zien is op het gezicht. Kies 9 als de emotie overduidelijk terug te zien is op het gezicht. Gebruik de getallen 2 t/m 8 voor alles wat er tussenin valt.

Geef voor de volgende emoties aan in hoeverre ze op het gezicht voorkomen:

1. Woede
2. Minachting
3. Walging
4. Angst
5. Blijdschap
6. Verdriet
7. Verbazing

Bedankt voor je deelname. Dit is het einde van het onderzoek.

Appendix B: Survey

Heel fijn dat je mee wilt doen! Met dit onderzoek van de Universiteit van Tilburg, willen wij inzicht krijgen in hoe mensen denken over merk-gerelateerde Instagram posts. Je krijgt daarom straks een aantal Instagram posts te zien. We zullen je steeds vragen om daar je mening over te geven, door enkele vragen te beantwoorden.

Alle dataverzameling gaat conform de nieuwe AVG (Algemene Verordening Gegevensbescherming) regels en de Ethische commissie van de Universiteit van Tilburg 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.

Deelname aan dit onderzoek zal ongeveer 20 minuten in beslag nemen. Je deelname is geheel vrijwillig. Er zijn geen risico's aan deelname met het onderzoek verbonden.

Tijdens het onderzoek heb je het recht om je te allen tijde terug te trekken, om welke reden dan ook en zonder dat dit nadelige gevolgen heeft. 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 je te allen tijde en zonder het opgeven van een reden terug mag trekken.

Demographic data

Ik ben een:

- o Man
- o Vrouw

Hoe oud ben je? (open field)

Personal relevance of products and brands

Wat vind je van sportartikelen in het algemeen?

Positief	0	0	0	0	0	0	0	Negatief (r)
Leuk	0	0	0	0	0	0	0	Niet Leuk (r)
Slecht	0	0	0	0	0	0	0	Goed
Interessant	0	0	0	0	0	0	0	Niet interessant (r)
Onaangenaam	0	0	0	0	0	0	0	Aangenaam
Relevant	0	0	0	0	0	0	0	Niet relevant (r)

Wat vind je van het merk ‘Nike’?:

Positief	0	0	0	0	0	0	0	Negatief (r)
Leuk	0	0	0	0	0	0	0	Niet Leuk (r)
Slecht	0	0	0	0	0	0	0	Goed
Interessant	0	0	0	0	0	0	0	Niet interessant (r)
Onaangenaam	0	0	0	0	0	0	0	Aangenaam
Relevant	0	0	0	0	0	0	0	Niet relevant (r)

Stel dat geld geen rol speelt. Zou je dan producten van het merk ‘Nike’ kopen?

Ik ga dit merk nooit kopen	0	0	0	0	0	0	0	Ik ga dit merk binnenkort kopen
Ik ben absoluut niet van plan om dit merk te kopen	0	0	0	0	0	0	0	Ik ben zeker wel van plan om dit merk te kopen
Ik heb weinig interesse om dit product te kopen	0	0	0	0	0	0	0	Ik heb veel interesse om dit product te kopen
Ik ga dit merk waarschijnlijk niet kopen	0	0	0	0	0	0	0	Ik ga dit merk waarschijnlijk wel kopen

Wat vind je van auto’s in het algemeen?

Positief	0	0	0	0	0	0	0	Negatief (r)
Leuk	0	0	0	0	0	0	0	Niet Leuk (r)
Slecht	0	0	0	0	0	0	0	Goed
Interessant	0	0	0	0	0	0	0	Niet interessant (r)
Onaangenaam	0	0	0	0	0	0	0	Aangenaam
Relevant	0	0	0	0	0	0	0	Niet relevant (r)

Wat vind je van het merk ‘BMW’ ?:

Positief	0	0	0	0	0	0	0	Negatief (r)
Leuk	0	0	0	0	0	0	0	Niet Leuk (r)
Slecht	0	0	0	0	0	0	0	Goed
Interessant	0	0	0	0	0	0	0	Niet interessant (r)
Onaangenaam	0	0	0	0	0	0	0	Aangenaam
Relevant	0	0	0	0	0	0	0	Niet relevant (r)

Stel dat geld geen rol speelt. Zou je dan producten van het merk 'BMW' kopen?

Ik ga dit merk nooit kopen	0	0	0	0	0	0	0	Ik ga dit merk binnenkort kopen
Ik ben absoluut niet van plan om dit merk te kopen	0	0	0	0	0	0	0	Ik ben zeker wel van plan om dit merk te kopen
Ik heb weinig interesse om dit product te kopen	0	0	0	0	0	0	0	Ik heb veel interesse om dit product te kopen
Ik ga dit merk waarschijnlijk niet kopen	0	0	0	0	0	0	0	Ik ga dit merk waarschijnlijk wel kopen

Instagram use

Heb je een Instagram-account?

- Ja
- Nee

Hoe vaak maak je gebruik van je Instagram-account?

- Nooit
- Minder dan één keer per maand
- Maandelijks
- Wekelijks
- Dagelijks
- Meerdere keren per dag

Je krijgt straks 6 Instagram posts te zien. We vragen je om elke post goed te bekijken, en daarna de stellingen te beantwoorden onder de post.

Bekijk onderstaande post zorgvuldig:

<Instagram post>

Post attitude

Geef aan hoe goed de volgende woorden deze post omschrijven:

Positief	0	0	0	0	0	0	0	Negatief (r)
Leuk	0	0	0	0	0	0	0	Niet Leuk (r)
Slecht	0	0	0	0	0	0	0	Goed
Interessant	0	0	0	0	0	0	0	Niet interessant (r)
Niet prettig	0	0	0	0	0	0	0	Prettig
Onaangenaam	0	0	0	0	0	0	0	Aangenaam
Ongunstig	0	0	0	0	0	0	0	Gunstig

Social media engagement

Hoe waarschijnlijk is het… (seven point Likert Scale: 1 = zeer onwaarschijnlijk, 7 = zeer waarschijnlijk)

…dat je deze post zou liken?

Zeer onwaarschijnlijk	0	0	0	0	0	0	0	Zeer waarschijnlijk

…dat je een comment zou plaatsen onder deze post?

Zeer onwaarschijnlijk	0	0	0	0	0	0	0	Zeer waarschijnlijk

Wat voor comment zou je plaatsen? (open field)

Dit was het einde van de survey.

Heb je vragen naar aanleiding van het onderzoek of ben je benieuwd naar de resultaten? Neem dan gerust contact op via _____

Bedankt voor het meedoen!

Appendix C: Stimuli

Condition 1: Highly relevant/ No person

1

2

3

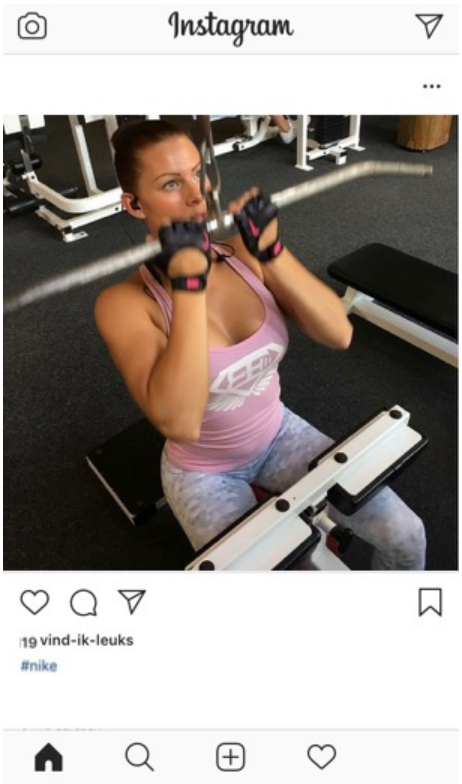
4

5

Condition 2: Highly relevant/ Neutral face

1

2


Instagram
19 vind-ik-leuks
#nike

3


Instagram
19 vind-ik-leuks
#nike

4


Instagram
19 vind-ik-leuks
#nike

5

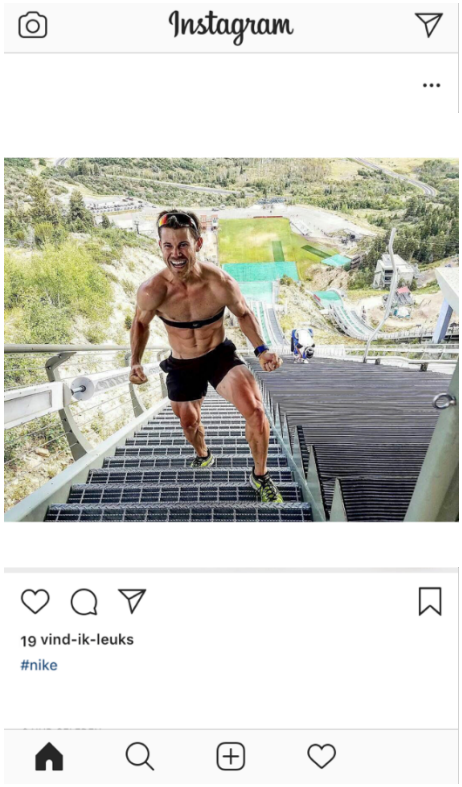
Condition 3: Highly relevant/ Happy face

1

2

3

4



5

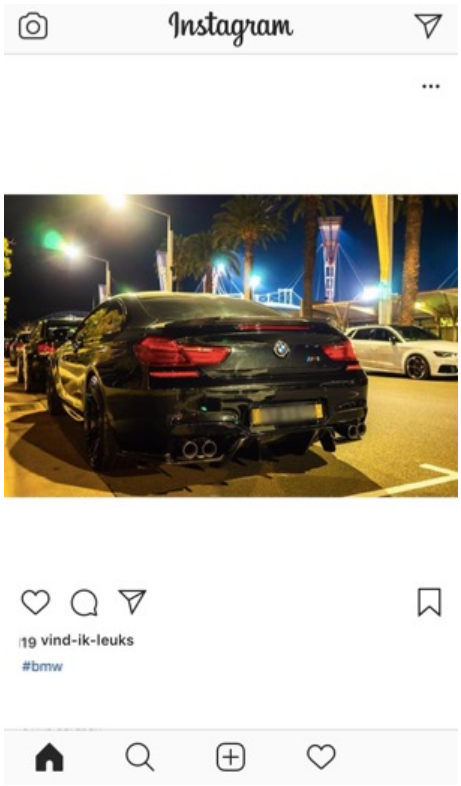
Condition 4: Less relevant/ No person

1

2


Instagram
19 vind-ik-leuks
#bmw

3


Instagram
19 vind-ik-leuks
#bmw

4


Instagram
19 vind-ik-leuks
#bmw

5

Condition 5: Less relevant/ Neutral face

1

2

3

4

5

Condition 6: Less relevant/ Happy face

1

2


Instagram
19 vind-ik-leuks
#bmw

3


Instagram
19 vind-ik-leuks
#bmw

4


Instagram
19 vind-ik-leuks
#bmw

5

Appendix D: Normality Tables

Table 4

Normality Scores for the Difference Variables.

	Z-score Skewness	Z-score Kurtosis	Kolmogorov-Smirnov test
Attitude Towards Product Types	2.67*	3.23*	.200
Attitude Towards Brands	0.04	-0.13	<.001*
Purchase Intention	0.94	0.11	<.001*

Note. The asterisks indicate a significance level of p <.05 or significant z-scores.

Table 5

Normality Scores for the Difference Variables.

Dependent Variable	Independent Variable Category	Z-score Skewness	Z-score Kurtosis	Kolmogorov - Smirnov test
Social Media Engagement (Liking)	Person with Happy Facial Expression	2.08	-5.44	<.001*
	Person with Neutral Facial Expression	3.69	-4.78	<.001*
	Absent Person	6.02	-3.39	<.001*
Social Media Engagement (Commenting)	Person with Happy Facial Expression	19.34	22.65	<.001*
	Person with Neutral Facial Expression	8.24	-2.07	<.001*
	Absent Person	11.43	2.47	<.001*

Note. The asterisks indicate a significance level of p <.05 or significant z-scores.

Table 6

Normality Scores for the Difference Variables.

	Z-score Skewness	Z-score Kurtosis	Kolmogorov-Smirnov test
Intention to Like	0.04	1.84	<.001*
Intention to Comment	-0.81	20.26*	<.001*

Note. The asterisks indicate a significance level of p <.05 or significant z-scores.