A CONTENT ANALYSIS OF INSTAGRAM INFLUENCERS' POSTS:

The Relationship Between Nonverbal Visuals Features and Engagement Rate

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Abstract

In the digital era that we live, more and more customers search for online peer recommendations through social media platforms. Influencers are an important source of information for product recommendations online. Nevertheless, it is still unclear which visual elements of influencers' posts are crucial in affecting audience reactions. Along these lines, the present study aims to explore the relationship between the post type in terms of facial expression (smiling vs. neutral), subject's gaze direction (direct eye contact vs. no eye contact) and camera distance (full body vs. close-up) and the engagement rate of social media influencers. A second goal is to investigate whether this relationship differs between male and female influencers. To investigate this, we conducted a content analysis of 1599 Instagram posts by 173 influencers. The results showed that facial expression has a significant relationship with the engagement rate of likes, and particularly that the posts of smiling influencers lead to higher engagement than those of neutral influencers. Close-up posts result in higher engagement of likes than posts of photos displaying the full body of the influencer from head to toe. The subject's gaze direction did not seem to be related to the engagement rate of likes. Gender had a relationship with the engagement rate of likes as such that male influencers' posts lead to higher engagement rates than female's posts. However, no interaction effect between gender and the selected visual aspects was observed. The engagement rate of comments did not vary with the examined factors. The present results reveal the connection between the above features with the engagement rate, thus implying that future research should focus on the visual features of social media influencers' posts.

Keywords: social media influencers, Instagram, engagement rate, facial expression, subject's gaze direction, camera distance, gender

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Introduction

In recent years, brands have discovered the potential of social media as a key advertising platform for reaching consumers online. According to a 2019 Hootsuite survey, 3.48 billion people (45% of the total world population) use social media, with more than 40% employing social networks to interact with brands (Newberry, 2019). This is achieved through different ways, such as brand pages, paid ads, or sponsored posts, as well as through electronic word of mouth (eWOM). Positive eWOM is the most desired approach because it displays higher authenticity and credibility than brand-generated platforms or paid advertising (De Vries, Gensler, & Leeflang, 2012). To accomplish the goal of generating authentic and credible content, brands pursue paid eWOM to enhance brand messages through social media influencers, who are people followed by a sizeable number of users in social networks (Scott, 2015). Social media influencers are used by brands to endorse products or services by sharing brand-related content on their personal accounts. Moreover, social media influencers are more effective than other types of endorsers since they are seen as credible and trustworthy sources (De Veirman, Cauberghe, & Hudders, 2017).

The collaboration between brands and social media influencers is a form of social media marketing, known as influencer marketing (Scott, 2015). In influencer marketing, the collaboration is achieved by the influencer creating and/or promoting a post of the brand's product or service in exchange for money or products (Lou & Yuan, 2019). These posts are targeted to both the influencer's and the brand's audience (Lou & Yuan, 2019). Influencers' posts about a brand are regarded as more genuine and direct to potential customers compared to brand-generated ads since endorsement could potentially increase guarantee for the quality of the product or service (Sassenberg, Ellemers, & Scheepers, 2012; Lou & Yuan, 2019). The most effective social media platforms that influencers use to engage customers are blogs, Facebook, YouTube, Instagram, and Twitter (Markethub, 2016).

In contrast to Facebook or Twitter, Instagram is based on visual storytelling (Djafarova & Rushworth, 2017). Due to its visual aesthetics, Instagram is the primary platform for influencer marketing (Syrdal & Briggs, 2018). Through this platform, influencers communicate with their audience by sharing images. Gathering followers, linking with different brands, and simplifying communication with consumers are some of the major features of Instagram (Blight, Ruppel, & Schoenbauer, 2017). The platform itself provides much space for creativity, which is vital for influencers to attract their target audience (Djafarova & Rushworth, 2017). Furthermore, Instagram influencers are regarded as more

credible, trustworthy, and knowledgeable than celebrities due to the intimacy developed between them and consumers (Lim, Radzol, Cheah, & Wong, 2017).

An important metric for evaluating the level of success in social media platforms is the users' engagement. Social media provide users with in-platform analytics. By using these analytics, social media users are able to track the performance of their content. In contrast to traditional marketing where ROI calculation required hours, social media marketing makes available statistics in real-time for each new post (Knoll, 2016). In social media, consumer engagement is a way of determining if the audience finds a post attractive by reacting with likes, comments, or even by following the related social media account. The engagement has shown to be closely related to positive attitudes towards a brand by creating brand awareness, positive brand image, and loyal consumers (Zailskaite-Jakste & Kuvykaite, 2012).

Consumers' engagement can be associated with the way influencers pose. Ellison, Heino, and Gibbs (2006) revealed that people carefully select the specific poses taken on the photos they post online. Despite the increasing interest in influencer marketing, scientific knowledge on the way influencers pose in posts is limited. Previous research has shown that a person's nonverbal behavior on a picture affects people's perception of that person. For example, Schouten, Heerkens, Veringa, and Antheunis (2014) found that both facial expression (smiling) and camera distance (full-body) had an impact on attractiveness, while this was not observed with the camera angle. Another study on image-based features on Instagram demonstrated that direct eye-contact photos compared to those that the person depicted looks elsewhere also increased engagement (Valentini, Romenti, Murtarelli, & Pizzetti, 2018).

However, the aforementioned research concerned the effects of how "ordinary" people pose on other's perceptions of attractiveness. If the way influencers pose affects engagement with these influencers has not been investigated before. Therefore, this study investigates the relationship between the nonverbal behavior of influencers and people's engagement towards that post. We focus on three different aspects. First, the facial expression of the influencer in the photo. Here we compare a post in which the influencer has a neutral expression with one in which they are smiling. The second aspect studied is the subject's gaze direction, i.e., whether the influencer looks at the camera or somewhere else. The third aspect is the camera distance, that is, whether the photo is a full body shot or a face only picture (i.e., a close-up). Therefore, the goal of this study is to answer our research question and investigate:

RQ1: *Is nonverbal behavior in Instagram posts related to followers' engagement?*

Instagram is rather stereotypical in terms of gender representation. Not only are there more women Instagram users compared to men (Statista, 2019), but also women spend more time on Instagram, and report a higher frequency of use of filters and apps to improve their photos (Seligson, 2016). Additionally, the number of female influencers is much higher than that of male. According to Guttmann (2020), 84% of sponsored posts were created by women influencers in 2019. Therefore, engagement on Instagram could differ based on influencer gender. For instance, users could engage more with male influencers as they are less common on Instagram and therefore may be more noticeable.

Besides gender effects on engagement, gender and non-verbal behavior could also interact. According to LaFrance, Hecht, and Paluck (2003), differences in smiling have been observed between men and women, where particularly women were found to smile more often than men in photographs. Therefore, although smiling may be positively related to engagement, the relationship may be more pronounced in women because of previous expectations. Additionally, Ragan (1982) observed gender variations in the way men and women look at the camera. Specifically, men more often looked directly at the camera than women. Campbell, Wallace, and Benson (1996) demonstrated that men looking away on photos were judged as less masculine than those gazing directly. Therefore, the relationship between gaze and engagement may differ between genders as well.

Therefore, the second aim was to investigate whether the relationship between nonverbal behavior and engagement rate on Instagram posts varies between male and female influencers:

RQ2: *To what extent does the relationship between the nonverbal behavior and engagement rate differ between male and female influencers?*

Theoretical Framework

Influencer Marketing

A considerable amount of literature has been published on marketing and consumer behavior underlining that eWOM has a larger effect on consumer decision-making than traditional forms of advertising (Goldsmith & Clark, 2008; Chu & Kim, 2011; Coulter & Roggeveen, 2012). Generally, consumers perceive messages from a fellow consumer as more credible and authentic compared to those from a commercial advertisement. Although consumers have always sought and appreciated the opinions of others, social media have amplified the impact of peer recommendations (De Veirman et al., 2017). Through social media, consumers create, share and spread opinions and experiences related to their brand preferences (Boyd & Ellison, 2007; Jansen, Zhang, Sobel, & Chowdury, 2009; Knoll, 2016). Recently, brands have started to use social media as a strategic resource for advertising products and services to build robust relationships with users (Shiau, Dwivedi, & Lai, 2018). Social media simplify brand-related eWOM through a range of social media marketing activities such as influencer marketing, online brand communities, blogging, and microblogging (Childers, Lemon, & Hoy, 2018).

Influencer marketing has emerged as an essential element in advertising as it is regarded as a way to spread brand information via eWOM. According to "The State of Influencer Marketing 2017 Report" (Augure, 2017), 62% of the companies participated in the survey have implemented influencers in their marketing strategy. The survey questioned 600 Marketing, Communication, and PR brand or agency professionals. The majority of these participants worked in Europe (51%) and North America (39%), and 88% of the professionals claimed that brand awareness was increased through influencer marketing.

With the use of influencer marketing in social media, a large portion of consumers can be easily reached by companies requiring less time and without spending great budgets compared to traditional marketing. The main difference between influencer and traditional marketing lies in the fact that the former connects influencers with their targeted audience (Evans, Phua, Lim, & Jun, 2017) while the latter is more mass-oriented (Ledbetter, 2016). Because of the aforementioned, influencer marketing is gaining more and more attention from marketers as a marketing tool for engaging with consumers (Evans et al., 2017).

Influencer marketing is a strategy that benefits from the influence of key individuals and uses them to guide consumers' opinions and purchase decisions (Brown & Hayes 2008; Scott, 2015). Social media influencers are opinion leaders and experts in their specific field or

niche. Consumers trust their opinion and follow their recommendations about brands when they match their area of expertise (Brown & Hayes 2008). According to a report on social media, influencer marketing campaigns have been found effective by 94% of marketers (Lou & Yuan, 2019). They also stated that influencer marketing was by far more effective than traditional advertising, yielding eleven times higher ROI. In a study conducted by Nielsen Catalina Solutions (NCS) and Tapinfluence (2016), it was found that consumers exposed to influencer content significantly purchased more products compared to the control group exposed to traditional digital advertising. Lastly, influencer marketing is considered as more credible, trustworthy, and knowledgeable compared to celebrity endorsement promotion strategy. Consumers see influencers as authenticate and intimate, which are crucial traits for building a meaningful and impactful relationship (Lim et al., 2017).

Engagement

Due to the effectiveness of influencer marketing, followers may be more engaged with the products that social media influencers endorse. Consumer engagement is determined as the interaction between consumers and the influencers by different motivational behaviors such as liking or commenting on their posts or following the brand's social media accounts (De Vries et al., 2012; Syrdal & Briggs, 2018). These online behaviors are considered as digital engagement (Eigenraam, Eelen, Van Lin, & Verlegh, 2018). All involved parties – brands, marketers, and social media influencers – define consumer engagement based on the number of likes and comments their content results in. The number of likes indicates that users are interested in and approve the content while the number of comments shows that users discuss it (Bakhshi, Shamma, & Gilbert, 2014).

Engagement activities on Instagram can be observed by one's followers, and that is why they are referred to as eWOM (Erkan, 2015). Brands and influencers' aim is to gain more visibility in order to increase awareness about the promoted products or services, and thus, eWOM. More visibility means higher engagement, and this, in turn, means greater success in digital marketers' work. Therefore, it is important for the stakeholders to be aware of the amount of visibility each content has gained. To determine the success of a post, marketers investigate several engagement metrics. The number of followers, likes, comments, and shares are among the metrics that they use to measure the success of a post. These metrics allow the marketers to investigate the interactivity level between users and content, which may signify the popularity of the post (Lego Muñoz & Towner, 2017). This is the reason why Instagram seems to be a suitable platform for engaging with consumers since the

posts contain creative content of inspirational photos or videos with catchy captions, which are vital for influencers to attract their target audience (Bakhshi et al., 2014; Djafarova & Rushworth, 2017). On Instagram, the main metrics used to measure engagement are the number of likes and comments. Liking is seen as a more passive form of engagement than commenting on posts, as it requires less effort and time than writing a comment (Li, 2010). In this study, both types of engagement will be taken into account to measure engagement.

Influencers characteristics that affect engagement

The purpose of this study is to investigate whether specific post's characteristics result in higher engagement. Jaakonmäki et al. (2017) divided the features that may have an impact on engagement into three categories - creator, context, and content. Regarding the creator, influencer's gender is one of the most significant factors that affects user engagement on social media (Jaakonmäki et al., 2017). They concluded that women are more engaging compared to men as content creators. On the other hand, a study on Pinterest discovered that while women get more repins than men, they have fewer followers (Gilbert, Bakhshi, Chang, & Terveen, 2013). Second, as far as the contextual features are concerned, Gilbert et al. (2013) found that posting on certain days and hours could affect the engagement. Third, content features can be classified into three subcategories, being text, visual, and audio content. Concerning text, they found that persuasive or simple (short but relevant) messages increase the engagement. Regarding the visual content, posts with human faces and posts with specific filters (lighting, shades, and saturation) lead to higher engagement. As Instagram is mostly a photo-sharing application, the visual content is most likely to be associated with people's engagement. Specific characteristics of how an influencer poses on a picture are thus likely to affect people's engagement.

In this study, aspects of the visual content that are likely to be related with engagement are investigated: the nonverbal behavior of the influencer in a visual post. Specifically, we focus on the facial expression in a photo, the subject's gaze direction, and the way the photo is taken impact to a great extent people's impression of the depicted person (Schouten et al., 2014; Valentini et al., 2018). For instance, whether someone smiles or is neutral in a photo and the distance at which a photo is taken both affect attractiveness and how people are seen by others (Bruno & Bertamimi, 2013; Schouten et al., 2014). According to Meier, Robinson, Carter, and Hinsz (2010), there is a link between attractiveness and engagement; characteristics that make people appear more attractive, increase the engagement received from others. Moreover, direct eye-contact photos increase the

engagement compared to those in which the person depicted looks elsewhere (Valentini et al., 2018). The three ways influencers pose and might be related to the engagement rate are investigated and analyzed below.

Facial Expression. The first feature investigated is facial expression. Past research has demonstrated that consumers' engagement is increased when there is emotional content. Gilbert et al. (2013) found that the content that evokes extreme emotions (e.g., awe, anger, anxiety) increases engagement most. For instance, highly arousing positive (e.g., awe) or negative (e.g., anger) emotional content in newspaper articles tend to go viral (Berger & Milkman, 2012). In the same vein, it has been observed that the use of positive emojis (e.g., smiley face; heart, star) on Instagram posts increase engagement (Jaakonmäki et al., 2017). According to Suler (2008), images that evoke powerful emotional effects lead to positive human reactions. It is confirmed that brain regions involved in emotional reactions are activated by clicking "like" on Instagram posts (Sherman, Hernandez, Greenfield & Dapretto, 2018). Since smiling evokes more emotional arousal than neutral expressions, we hypothesize that it is more likely for users to react emotionally to smiling posts, resulting in more likes and comments for smiling than neutral photos.

Smiling is linked to positive impressions, as Lau (1982) found, but its impact on Instagram and influencers' posts has not been studied in detail. Lau's assumption was also confirmed by Schouten et al. (2014), who stated that profile pictures of smiling models were perceived as more socially attractive than profile pictures of those who had a neutral expression. Photos with smiling people are perceived more positively compared to ones with a neutral expression in a social or physical context (Otta, Abrosio, & Hoshino, 1996; Reis et al., 1990). Therefore, the following hypothesis was posed:

H1 – Posts with smiling influencers will result in a higher engagement rate than those with a neutral expression.

Subject's gaze direction. The second feature investigated is the subject's gaze direction. Past research has demonstrated that where people gaze at photos has an impact on others' perceptions about the depicted person (Mason, Tatkow, & Macrae, 2005; Bayliss & Tipper, 2006; Valentini et al., 2018). Mason and colleagues (2005) found that direct eye contact is perceived as a mark of trustworthiness and attractiveness. Moreover, Bayliss and Tipper (2006) amplified the previous statement by demonstrating that people have a preference for photos depicting people looking at the camera directly. On the other hand, individuals who look somewhere else at photos are considered as deceptive, and people judge

them negatively (Bayliss & Tipper, 2006). Additionally, it is observed that direct eye contact increases the engagement between the subject of the photo and the viewer more than an indirect one (Kress & Van Leeuwen, 1996; Jewitt & Oyama, 2001; Harrison, 2003; Valentini et al., 2018).

However, the aforementioned findings have not been tested yet for Instagram influencers' posts. It could be hypothesized that the same relationship occurs in influencer marketing, and thus, the influencer's gaze is associated with engagement. More specifically, the direct look of influencers at the camera results in higher engagement compared to those who look indirectly at the viewer.

H2 – Posts in which the influencer gaze at the camera directly result in a higher engagement rate compared to ones where the influencer gaze away (indirectly).

Camera distance. The third feature examined is the distance between the camera and the influencer. Generally, full-body photos are considered as a better indicator of someone's whole image since they have more warranting value compared to those taken at a closer distance (Schouten et al., 2014). This value is based on cues displayed on the image which are not manipulated. According to warranting theory, people rely on these cues when they want to judge someone online (Walter & Parks, 2002). For instance, when people date online, they prefer to see full-body photos in order to verify that the interactant has no faults, which they try to hide (Ellison et al., 2006). Furthermore, close-up photos disclose facial features that are not easily identified from a further camera distance such as a large nose, scars, or wrinkles, which may be related to attraction, and in turn, engagement (Bryan, Perona, & Adolphs, 2012). According to Schouten et al. (2014), full-body pictures were considered more attractive compared to close-up pictures. As previously mentioned, attractiveness leads to engagement (Meier et al., 2010), so we hypothesize that a similar pattern is present in the case of influencers' photos.

H3 – Influencers' full-body posts result in a higher engagement rate than close-up ones.

Gender differences in engagement rates

In marketing research, it is widely accepted that the gender and models' attractiveness in an ad can impact people's impressions about the advertised product (Baker & Churchill, 1977). Jaakonmäki et al. (2017) proved that these findings were applicable in influencer marketing as well. They found that influencer's gender is one of the most significant factors

influencing user engagement, with women's posts resulting in higher engagement compared to those of men's. Thus, we hypothesize that:

H4 – People are more engaged with female influencers than with male influencers.

Past research has also found that the way that men and women pose differs. Regarding smiling, differences are observed between gender, with women smiling more often (LaFrance et al., 2003). Instagram is a visual medium identical to a digital photo album, and it can be expected that women influencers smile more than men. Overall, smiling leads to higher engagement, but the effect of smiling depends on the sender's gender and may be more beneficial for women (Mehu et al., 2008). Based on this, a fifth hypothesis has been established:

H5 – Gender will moderate the relationship between facial expression and engagement. Specifically, the relationship between smiling and engagement will be stronger for female influencers than for male influencers.

Moreover, Ragan (1982) investigated high school portrait photos, where he identified gender differences in the way men and women look at the camera. Men looked at the camera directly more often than women. This statement was also confirmed by Reichart Smith and Sanderson (2015), who examined the self-presentation of athletes on Instagram. According to them, women were found to be significantly more likely to look away than men. Furthermore, Campbell et al. (1996) demonstrated that men looking away on photos were judged to be less masculine than those gazing directly. We assume that when a man is perceived as less masculine, he engaged less with his audience. Based on this, a sixth hypothesis has been established:

H6 – Gender will moderate the relationship between gazing direction and engagement. Specifically, the relationship between gazing at the camera directly, and engagement will be stronger for female influencers than for male influencers.

Finally, Reichart Smith and Cooley (2012) found that men post more close-up photos (facial prominence) compared to women, suggesting that there are social gender stereotypes influencing an individual's choice of photograph. Although we do expect that full-body pictures lead to more engagement than close-up pictures, there is no research that argues this relationship will lead to different engagement levels between men and women. Therefore, no interaction is expected, and consequently, no hypothesis is posed.

Method

To test the hypotheses and examine whether specific facial expressions, gaze direction, camera distance, and gender result in higher engagement rate, a content analysis was conducted. Content analysis is a quantitative method for assessing media content (Treadwell, 2017). For this method, influencers' Instagram posts were collected and coded for facial expressions, gaze direction, and camera distance. Moreover, we measured the engagement rate with the post in terms of likes and comments on the post. The selected data were Instagram posts from a list of top Instagram influencers in different industries, namely fashion & style, travel, lifestyle, beauty, and sport & fitness (Forsey, 2019). Data collection lasted from 31 October 2019 to 18 November 2019.

Instagram account selection

The influencer accounts were selected by taking into account the following criteria. First, to evaluate the engagement rate, only social media influencers with at least 50k followers were chosen. As the focus of this study was to investigate social media influencers' engagement, celebrity accounts were left out of the analysis. All influencers studied were people who became famous or started their careers through Instagram. Forsey (2019) was used to identify the top Instagram influencers in different industries. From that list, three industries were excluded, because the focus of the posts in those industries is not the influencers themselves but other people or things. The three industries excluded were food, photography, and design. Most specifically, food influencers mainly post recipes or foods, photography influencers post pictures of models or landscapes they photograph while design influencers post images of interior design or spaces. Second, only individual influencers were selected, whereas accounts of multiple people were averted. For this reason, some accounts from the travel industry were excluded since they do not belong to one individual. These accounts' posts present multiple different people or models, whereas influencers usually post pictures displaying themselves. Since the aim of this study is to investigate how specific visual features influence engagement rate, the analysis of single-user accounts is more appropriate.

The first list included 52 influencers from fashion & style, travel, lifestyle, beauty, and sport & fitness industries. Of those, 36 were females, and 16 were males. Additionally, in order to balance the male-female ratio, extra searches were conducted. We sought additional male influencers by separately searching top male influencers to follow, fashion accounts on Instagram, as well as, top male fitness Instagram influencers. From a list with "Instagram

male influencers that someone should follow in 2019", seven male accounts were added; @eugeneleeyang (lifestyle), @iamgalla (lifestyle), @justinliv (lifestyle), @briankelly (travel), @ryanstylesnyc (lifestyle), @nickwooster (fashion) and @bradleysimmonds (sport & fitness) (Influencer Marketing Hub, 2019). Whereas form a list with top male fitness influencers of 2019, five male accounts were added; specifically, @elliotbfit, @davidlaid, @mario_schafzahl, @zacperna, and @christianguzmanfitness (Hyprbrands, 2019). Lastly, from a list of top male fashion accounts on Instagram, four male accounts were added, namely @davidgandy_official, @princepelayo, @johanneshuebl, and @matthewzorpas (Eaton, 2019). The initial lists of influencers were extended with the use of suggested accounts. In this way, other influencers were randomly chosen for the analysis. In conclusion, the final list of influencers selected consists of five women and four men in the beauty niche, ten women and ten men in fashion & style, eight women and 11 men in sport & fitness, eight women and six men in lifestyle, and five women and four men in travel. The full lists of the influencers can be found in the Appendix.

Instagram post selection

The 60 most recent posts of each influencer were examined. From these posts, the posts appropriate to be coded were selected based on the following selection criteria. First, only posts displaying the actual influencer were chosen. Moreover, they should be the only individual visible on the photo. Second, photos that were posted more than 24 hours before the data collection time were used because they had the required time to obtain enough likes and comments. Third, only photos showing influencers with clothes were taken into account to avoid increased engagement due to nudity. Finally, only photographs that clearly indicate whether the person was smiling or not, was looking at the camera or not, and whether the photo was a full body or close-up were selected for the analysis. Examples of posts from the dataset can be found in Figures 1 and 2.

Figure 1. Examples of male influencers' posts which could be coded.

Figure 2. Examples of female influencers' posts which could be coded.

Posts that could not be coded were images depicting more than one person (or one face, whether human, animal or inanimate). Also, photographs displaying influencers wearing sunglasses were excluded since the gaze direction was not easy to identify. Photos showing influencers in swimsuits or underwear were not coded in order to avoid higher engagement due to nudity. Carousel images (multiple photos in one post) were excluded since it was not clear with which image the user is engaged. Videos were also excluded since the displayed

person could either change expression or the direction of gaze or their distance from the camera multiple times. Finally, posts displaying products or landscapes without human presence were also not coded. See examples of posts that could not be coded in Figure 3.

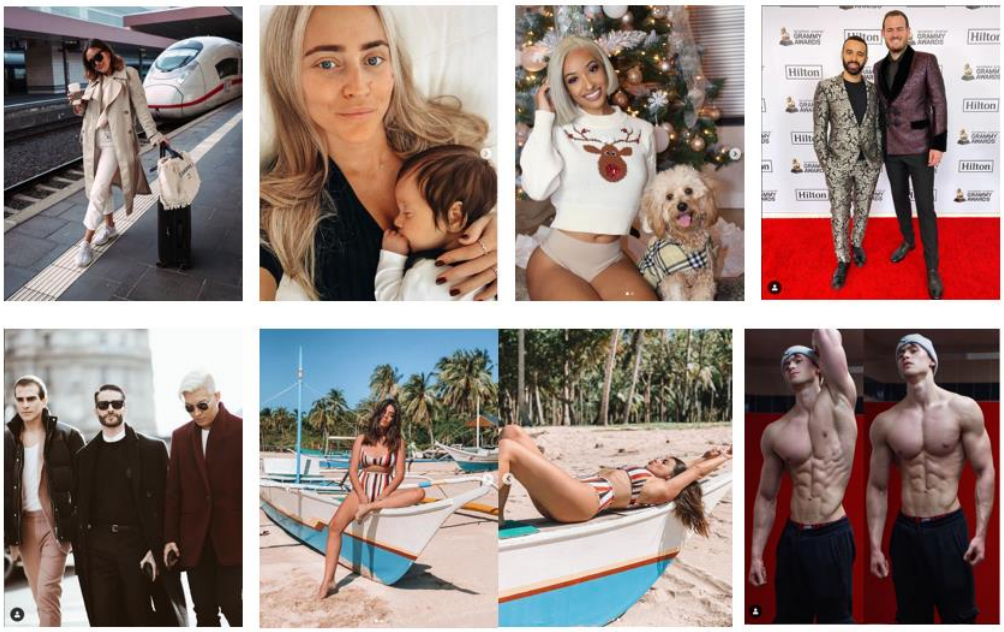

Figure 3. Examples of posts that could not be coded.

Coding of the posts

For this study, the following coding scheme was used: for facial expression (1) when the influencer smiles with bare teeth, (0) when the influencer's muscles were relaxed, and the mouth was closed; for subject's gaze direction (1) the influencer made eye contact with the camera and the entire face was depicted in the picture, (0) the influencer looked somewhere else, and the entire face was not presented to the viewer (i.e., not full frontal); for camera distance (1) full-body, i.e., the influencer was displayed from head to toes, (0) close-up photo, the influencer's face was depicted, including the shoulder and the breast.

To increase the reliability of the coder, a second coder coded a subset of the dataset. According to Syed and Nelson (2015), 20% of the total dataset is a sufficient proportion to be coded by a second coder. This offers the possibility to calculate the intercoder reliability. Hence, 20% of the total dataset (n = 320) was coded by a second coder. Intercoder reliability was high for all the variables (facial expression: a = .94, subject's gaze direction: a = .93, camera distance: a = .98), meaning that the coding scheme was clear since there were almost no discrepancies between coder 1 and 2.

Moreover, all posts were coded to measure consumer engagement. To measure influencer's level of engagement, the total number of followers, the total number of likes, and

the total number of comments were collected for each post. Typically, the formula for the engagement rate developed by Instagram developers and used in most of the research conducted on this topic, is dividing the total number of likes and comments by the follower count, and then multiply by 100 (Morse, 2016; Jaakonmäki et al., 2017; Roach, 2019) Nonetheless, the comments have been characterized as a deeper engagement metric, indicating a more active behavior of the follower than likes which constitute a simple consumption of information (Valentini et al., 2018; Silva, de Farias, Grigg, & de Azevedo Barbosa, 2019). Hence, in the current study, two measures of engagement were calculated by recording (i) the number of likes divided by the number of followers multiplied by 100, and (ii) the number of comments divided by the number of followers multiplied by 100. It should be mentioned that we are not in the position to know whether Instagram users who engage with social media influencers by liking or commenting their posts are following them; influencers' profiles are public, thus anyone can like or comment without following that account.

Finally, we also coded the gender of the influencer, and we coded the influencer's age and the industry as background variables.

Results

For the analysis, posts from 173 (87 male) influencers were collected. The total number of gathered posts was 1599, of which 844 were posts by females, while 755 were of male influencers. The data consist of 228 posts from beauty influencers, 415 from fashion, 354 from fitness, 443 from lifestyle, 116 from travel, and 44 from other niches. An average of 9.34 posts was coded per influencer, with a minimum of 1 and a maximum of 43.

To examine the results, multivariate analysis of variance (MANOVA) was conducted with facial expression, subject's gaze, camera distance, and gender as factors. The engagement rate of likes and comments were the two dependent variables. In the first approach, the analysis included all possible interactions, but because the 3/4/5-way interactions were not significant, an analysis with only the 2-way interactions was performed. The engagement rate of comments was not significant neither for main nor for interaction effects in all the analyses carried out, all *F's* < 1.67 and all *p's* > .196; thus, only the engagement rate of likes will be reported below. Because our unit of analysis is based on Instagram posts, but multiple posts may come from the same influencer, our observations are not independent. This may influence our analysis to a certain extent, so our results should be interpreted with care.

Main effects

The first hypothesis posed that posts with smiling influencers will result in a higher engagement rate than those with a neutral expression. The assumption of homogeneity of variances was not met, because the Levene's test for equality of error variances was significant, $F(15, 1583) = 2.48$, $p = .001$. It should be noted that since the MANOVA is less robust against the violation of the assumption of homogeneity of variances, the p-value may be somewhat biased. The MANOVA depicted a significant main effect of facial expression, $F(1, 1583) = 5.55$, $p = .019$, $\eta^2 = .003$. The engagement rate of likes for posts in which influencers were smiling ($M = 4.59$, $SD = 4.23$) was higher than those displaying neutrality ($M = 4.22$, $SD = 3.76$).

Hypothesis 2 posed that posts in which the influencer gaze at the camera directly result in a higher engagement rate compared to ones where the influencer gaze away (indirectly). The assumption of homogeneity of variances was not met, because the Levene's test of equality of error variances was significant, $F(15, 1583) = 2.48$, $p = .001$. It should be noted that since the MANOVA is less robust against the violation of the assumption of

homogeneity of variances, the p-value may be somewhat biased. We found no main effect of subject's gaze, $F(1, 1583) = 0.01$, $p = .919$, $\eta^2 = .000$.

Hypothesis 3 posed that influencers' full-body posts result in higher engagement rates than close-up ones. The assumption of homogeneity of variances was not met, either, because the Levene's test of equality of error variances was significant, $F(15, 1583) = 2.48$, $p = .001$. Since the MANOVA is less robust against the violation of the assumption of homogeneity of variances, it should be noted that the p-value may be somewhat biased. We found a significant main effect of camera distance, $F(1, 1583) = 9.01$, $p = .003$, $\eta^2 = .006$. Contrary to our hypothesis, the engagement rate of likes for close-up posts ($M = 4.64$, $SD = 4.04$) was higher than full-body posts ($M = 4.15$, $SD = 3.86$).

Gender effects

To test how comparable the posts were in terms of influencers' age and the number of followers, two independent t-tests were performed. An independent t-test was conducted in order to test whether women's age differs from that of men's. The average age of male influencers was 29.94 ($SD = 4.20$), and 29.06 ($SD = 5.38$) for the female influencers. This difference was not significant ($Mdif = 0.88$, $t(1500) = 3.51$, $p = .307$). A second independent t-test was conducted in order to test whether women's number of followers differ from that of men's. The average number of followers for female influencers is 4,187,162.68 (SD = 1,913,396.28) and for males 1,083,610.92 (SD = 2,608,253.97). This difference was significant ($Mdif$ = -3,103,551.76, $t(1597) = -4.42$, $p < .001$). Since this difference is significant, the results should be interpreted with some caution.

The second research question asks if there would be gender differences in the engagement rate scores. The assumption of homogeneity of variances was not met, either, because the Levene's test of equality of error variances was significant, $F(15, 1583) = 2.48$, $p = .001$. Since the MANOVA is less robust against the violation of the assumption of homogeneity of variances, it should be noted that the p-value may be somewhat biased. We found a significant main effect of gender, $F(1, 1583) = 35.52$, $p < .001$, $\eta^2 = .022$. Contrary to our hypothesis, the engagement rate of likes for men ($M = 4.94$, $SD = 3.82$) was higher than that of women ($M = 3.84$, $SD = 3.98$). See Table 1 for means and standard deviations.

Finally, we found no significant two-way interaction effect, all F's < 2.6 and all p's > .11. Therefore, the fifth and sixth hypotheses regarding an interaction effect between gender - facial expression and gender - subject's gaze, respectively, were not supported.

Table 1

Means and standard deviations of engagement rate of likes for facial expression, subject's gaze, camera distance, and gender

	Engagement rate of likes *M (SD)*	Engagement rate of comments *M (SD)*
Facial expression		
Smiling	4.59 (4.23)	0.08 (0.14)
Neutral	4.22 (3.76)	0.08 (0.52)
Subject's gaze		
Looking at the camera	4.37 (3.82)	0.09 (0.54)
Looking somewhere else	4.34 (4.11)	0.07 (0.16)
Camera distance		
Full body	4.15 (3.86)	0.09 (0.54)
Close-up	4.64 (4.04)	0.07 (0.12)
Gender		
Male	4.94 (3.82)	0.07 (0.09)
Female	3.84 (3.98)	0.08 (0.57)

Exploratory analyses

The above results could have been affected by the selected industries. Therefore, an additional analysis was conducted in which we checked for differences in engagement between the different industries. In this way, we wanted to check whether the relationship between the examined features and the engagement rate alter among the different industry types. Each post was coded for the industry that each influencer is, namely beauty, fashion, fitness, lifestyle, travel, YouTube, and unknown. For this analysis, we removed 44 cases. Posts from YouTubers (n =7) as well as posts from influencers belonging to an unknown industry (n = 37) were left out of the analysis. To examine whether the industry impacts the engagement rate scores, a second MANOVA was conducted with industry as an extra factor. For the engagement rate of likes, a significant main effect of industry was found, $F(4, 1531) = 28.54$, $p < .001$, $\eta^2 = .069$. Tukey's B post-hoc analysis revealed that travel influencers' posts score significantly lower than fashion and beauty influencers' posts in which score similarly. Beauty and fitness influencers' posts also score similar, but fitness posts score higher than fashion posts. Lifestyle influencers' posts score highest. See Table 2 for means and standard deviations.

Table 2

Means of engagement rate of likes for the different types of industries

Industry	Engagement rate of likes *M (SD)*
Travel	2.66[a] (1.56)
Fashion	3.38[ab] (2.44)
Beauty	3.73[bc] (2.96)
Fitness	4.24[c] (3.13)
Lifestyle	5.41 (4.72)

Note. Means with the same superscript are not significantly different at p < .05

Moreover, a significant interaction effect between the type of industry and the gender of the influencer was observed $F(4, 1525) = 5.691$, $p < .001$, $\eta^2 = .015$. This indicates that the engagement rate of likes for posts of different industries differed in men and women. For men, beauty industry posts differed significantly from fashion, $p < .001$, fitness, $p = .040$ and travel, $p < .001$. Lifestyle industry posts differed significantly from fashion, $p < .001$, fitness, $p = .010$, and travel, $p < .001$. Fashion and fitness posts did not differ significantly, $p = .128$. Lastly, travel posts differ significantly from fitness, $p = .044$. For women, lifestyle industry posts differed significantly from beauty, fashion, fitness, and travel, all *p's* < .001. No differences were observed between the other industries, all *p's* > .235. See Table 3 for means and standards errors.

Table 3

Means of engagement rate of likes for the different types of industries and gender

Industry	Engagement rate of likes for men *M (SE)*	Engagement rate of likes for women *M (SE)*
Travel	3.59 (.48)	1.93[b] (.52)
Fashion	4.23[a] (.27)	3.11[b] (.23)
Beauty	6.91 (.59)	3.36[b] (.37)
Fitness	5.09[a] (.23)	2.35[b] (.36)
Lifestyle	6.17 (.24)	5.12 (.22)

Note. Means with the same superscript within each column are not significantly different at p < .05

The interaction graph reveals that men' s posts of beauty and fitness lead to an even higher engagement rate of likes compared to women's posts of those industries. Both male's and female's engagement rates are affected by the type of industry, but this impact is more pronounced for males, suggesting men's engagement rate is more influenced by the type of industry they belong to than it is for women. Figure 4 shows the interaction effect between the type of industry and gender.

Finally, there was a significant interaction effect between industry and camera distance, $F(4, 1525) = 3.400$, $p = .009$, $\eta^2 = .010$. This indicates that the engagement rate of likes for posts of different industries differed in close-up and full body photos. For close-up, lifestyle industry posts differed significantly from beauty, $p = .018$, fashion, $p < .001$, fitness, $p < .001$ and travel, $p < .001$. No differences were observed between the other industries, all *p's* > .075. For full body photos, lifestyle industry posts differed significantly from fashion, $p < .001$, fitness, $p = .001$ and travel, $p < .001$. Beauty industry posts differed significantly from fashion, $p = .003$, fitness, $p = .034$ and travel, $p < .001$. No differences were observed between fashion, fitness and travel, all *p's* > .217.

Table 4

Means of engagement rate of likes for the different types of industries and camera distance

Industry	Engagement rate of likes for close-up posts *M (SE)*	Engagement rate of likes for close-up posts
Travel	2.88^{a} (.37)	2.64^{c} (.37)
Fashion	4.04^{a} (.27)	3.30^{c} (.29)
Beauty	4.91^{a} (.39)	5.36^{b} (.53)
Fitness	3.78^{a} (.33)	3.66^{c} (.25)
Lifestyle	6.38 (.25)	4.91 (.20)

Note. Means with the same superscript within each column are not significantly different at $p < .05$

The interaction graph reveals that close-up posts of beauty and lifestyle lead to an even higher engagement rate of likes compared to full body posts of those industries. Figure 5 shows the interaction effect between the type of industry and the camera distance.

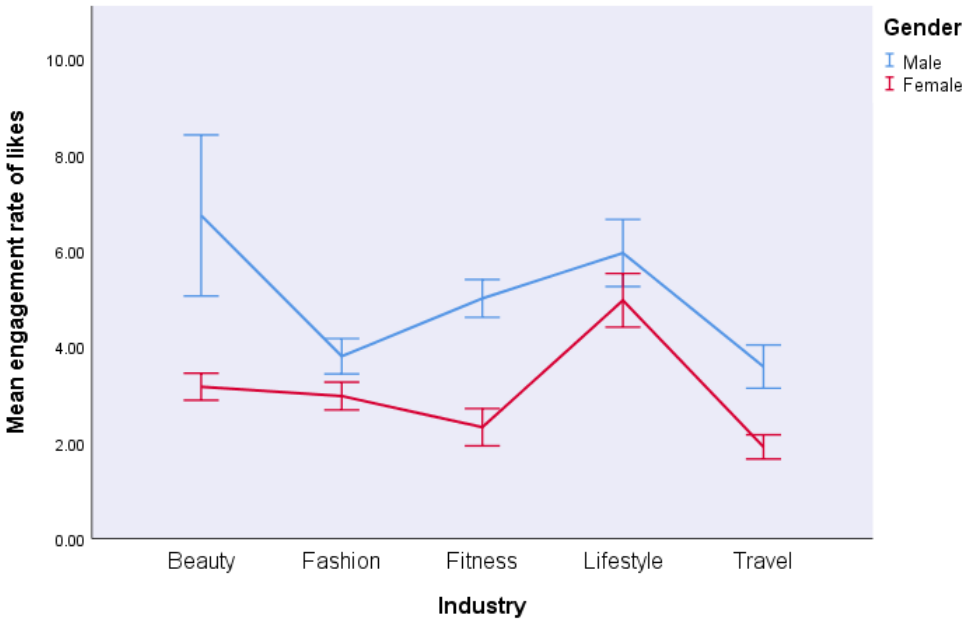

Figure 4. The interaction effect between the type of industry and gender on engagement rate of likes. The error bars represent the 95% confidence interval.

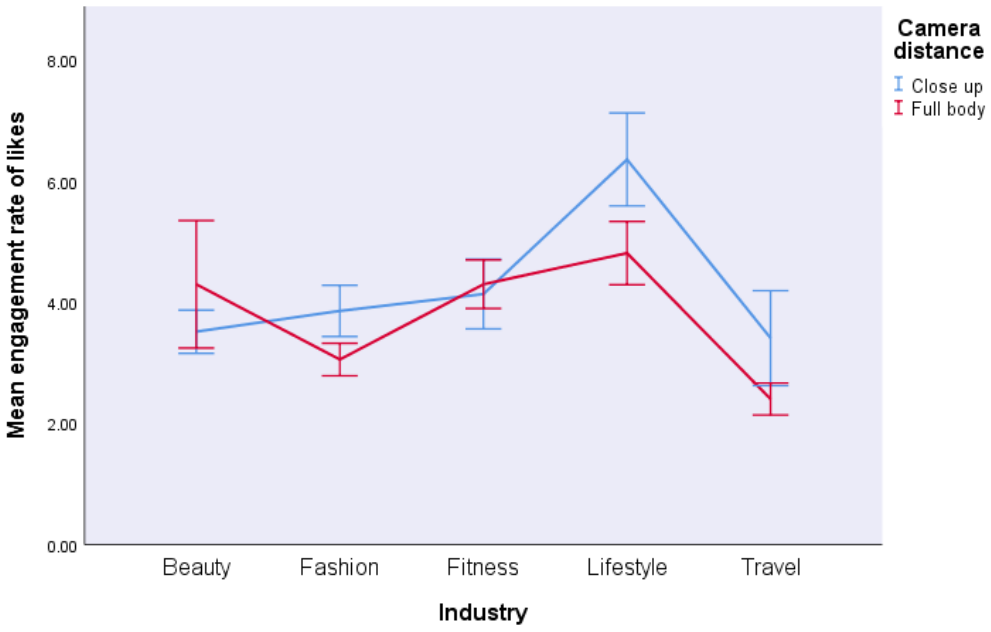

Figure 5. The interaction effect between the type of industry and camera distance on the engagement rate of likes. The error bars represent the 95% confidence interval.

Discussion

The present study explores whether and how the type of post in terms of facial expression, the subject's gaze, and camera distance is related to engagement rates. Additionally, whether the post type moderates the relationship between engagement rate and influencer gender was examined. The primary goal was to seek whether the nonverbal behavior in Instagram posts is associated with followers' engagement.

First, hypothesis 1 posed that posts with smiling influencers will result in a higher engagement rate than those with a neutral expression. The obtained results support this hypothesis. We found that facial expression had a significant relationship with the engagement rate as such that posts in which the influencer smiles result indeed in higher engagement rates than posts displaying a neutral expression. This is in line with earlier research on facial expression (Lau, 1982; Reis et al., 1990; Otta et al., 1996; Suler, 2008; Schouten et al., 2014; Jaakonmäki et al., 2017). According to the literature, smiling is linked to positive impressions, and thus people are strongly engaged with influencers who smile in their posts. This is because smiling evokes emotional reactions in brain regions, which are activated by clicking "like" (Sherman et al., 2018).

Second, hypothesis 2 stated that posts in which the influencer made eye contact with the camera lead to a higher engagement rate compared to those where the influencer gazes away. Contrary to our expectations, no relationship between influencer's gaze direction and the engagement rate was found. This contradicts previous findings stating that subject's gaze direction affects the engagement between the depicted person and the viewer, and that there is a tendency to engage more with people who directly gaze at the camera compared to those who gaze away (indirectly) (Kress & Van Leeuwen, 1996; Jewitt & Oyama, 2001; Harrison, 2003; Valentini et al., 2018). This could be explained by the Instagram trend according to which the person depicted in the photo seems to be unaware when the photo is being taken. More and more Instagrammers follow this trend by posting photos in which they are looking away from the camera while they are still posing. This trend is called "plandid", a portmanteau word from the words "planned" and "candid" (Thompson, 2017). Another possible explanation for this divergent result is that Instagram influencers act like models. According to the professional photographer Ronald Timehin, this relatively new trend of Instagram is something that models and photographers were doing years before (Thompson, 2017). Photographers direct models on how to pose or move to be natural and captivate them in spontaneous moments. Nowadays, many Instagram influencers use professional

photographers in order to have as professional result as possible for their posts. Thus, all Instagram users are very used to see posts of people looking at the ground or gazing away.

Third, the relationship between the camera distance and the engagement rate was examined. Based on Schouten et al. (2014), it was hypothesized that full-body pictures would result in a higher engagement rate compared to close-up pictures. Contrary to the expectations, close-up posts lead to a higher engagement rate than full-body posts. A possible explanation for this opposite relationship could be that people tend to attribute specific personality traits to facial features. Therefore, close-up pictures are more engaged since they provide more "clues" for someone's character (Hassin & Trope, 2000). Another reason could be that the face is a stronger predictor of attractiveness compared to the body (Peters, Rhodes & Simmons, 2007). Hence, close-up pictures lead to higher attractiveness, and this, in turn, brings higher engagement.

Fourth, it was investigated with whom people are more engaged; women or men influencers. We found that male influencers' posts lead to higher engagement than female's posts. This finding is in contrast to the study of Jaakonmäki and coworkers (2017) that states that women's posts induce higher engagement compared to those of men's. A possible explanation is that we tend to be attracted more to people from the opposite sex, and since there are more women Instagram users (56.3% women versus 43.7% men users worldwide (Omnicore, 2020)), this could explain the higher rates of men. Another Statista survey conducted in the US revealed a higher percentage of female users (43% of females versus 31% of males used Instagram in 2019), corroborating to the above observation (Pew Research Center, 2019). Please note that that women were found to have more followers than men. Therefore, although female influencer posts may have more likes and comments overall, the engagement rate for men was higher in this study.

Moreover, women tend to exhibit jealousy toward other women. According to Cretti (2015), female users of social media have increased feelings of envy and dissatisfaction with their lives. Thus, female influencers' posts probably evoke emotional stages (i.e., envy), and this, in turn, repels women to engage with female posts. Women audience compares themselves or their lifestyles with the female influencers, and this comparison elicits envy since most of the times influencers present an ideal life with many amenities. This was also visible for the interaction effect between gender and industry where for categories that are mostly revolved around the showing off, i.e., fitness and beauty, in which the highest difference between men and women was observed.

Finally, although not hypothesized, we found a significant relationship between industry and the engagement rate, with lifestyle influencers' posts getting the highest rates. Interestingly, there was an interaction effect between industry and camera distance. It is possible that people might engage more with posts that differ from what they are used to see by a specific influencer. A beauty influencer mainly posts close-up photos to focus on the details of the make-up and the advertised products. On the other hand, a fashion influencer primarily posts full-body photos to present their outfit and highlight the brands of the clothes. Therefore, when beauty influencers (fashion) post full body (close-up) images draw the attention of their followers who are engaged more with these posts.

Theoretical implications

To distinguish between the active and passive engagement of users, we used two measures of engagement rate; the first for likes and the second for comments. While our findings revealed that the engagement rate of likes is indeed related to on the type of post in terms of facial expression, influencer's gaze, camera distance, and gender, the engagement rate of comments was not associated with any of these factors. Commenting on a post is considered a more active behavior compared to just liking, which is, in fact, a click of a button (passive behavior). A possible explanation for this difference in our results could be that as commenting includes more effort, more factors might play a role in motivating the audience to engage in this way, reducing possible effects of type of post. For instance, a catchy caption or the choice of popular hashtags could motivate a user to leave a comment. In other words, as an active behavior, commenting might be more associated with the complete message an influencer conveys instead of the visuals. Therefore, the results of the current work provide insight on which engagement rate metric is more useful during the investigation of visual features of influencers' posts.

Overall, facial expression and camera distance are related with the engagement rate of likes. To the best of our knowledge, these visual aspects have not been investigated before as factors that are associated with the engagement rate of influencers' posts. In earlier studies, these visual features had been examined for "ordinary" people posts and not for influencers (Schouten et al., 2014), depicting a gap in the field of social media influencers. Regarding facial expression, the results were similar to previous studies. Nevertheless, the findings of this work extend the existing literature by confirming the relationship between facial expression and the engagement rate of influencers' posts. On the other hand, camera distance does not work the same for social media influencers. Contrary to Schouten et al. (2014),

close-up influencers' posts get a higher engagement rate of likes compared to full body. Thus, this work contributes to the literature by providing insight for which type of influencers' posts in terms of camera distance Instagram users are more engaged.

Furthermore, contrary to previous studies on the subject's gaze direction, looking at the camera directly does not increase the engagement rate of influencers' posts. This outcome contributes significantly to the literature, as it contradicts previous studies. Valentini et al. (2018) found that the engagement was increased when there was direct eye-contact in photos compared to photos in which the person depicted looks elsewhere. The difference with our study is that we examined Instagram influencers' posts and not, in general, the social media users' posts. Our results are in contrast with Valentini et al. (2018), showing that influencer's gaze is not an aspect that should be taken into account.

Similar to the subject's gaze, we had divergent results for gender. Although earlier studies suggested that women influencers get a higher engagement rate than men (Jaakonmäki et al., 2017), this was not the case in our study. The content analysis revealed that male influencers' posts result in a higher engagement rate than female influencers' posts. This finding can serve as a starting point for further research on the impact of the influencer's gender on engagement. Even though gender emerged as a significant factor, there was no interaction effect between gender and the investigated visual features. Therefore, the answer to our second research question, i.e., if the relationship between the nonverbal behavior and the engagement rate on Instagram posts differs between male and female influencers, is negative.

Another important contribution is the relationship between industry and engagement rate of likes. The higher engagement rates for lifestyle posts demonstrate that Instagram users are more interested in this industry compared to the other industries examined. In research on the effectiveness of Instagram endorsements, the type of influencer and the type of niche they represent has not often been taken into account as a factor in explaining the effects of Instagram endorsements. Our results show that the effectiveness of Instagram posts varies according to the niche these posts are in. More research would be needed into which types of posts are most effective in terms of engagement within different niches, and which types of advertisements would be most successful.

Finally, most of the previous work on similar topics were experimental. This study is among the first ones to measure engagement in terms of actual behavior on Instagram. There are both advantages and drawbacks when measuring engagement in that way. An advantage is that it is actual usage behavior instead of perceptions or attitudes measures after an

experiment. A disadvantage is that there are more definitions of engagement. For instance, engagement could be measured in terms of sales, that is, whether Instagram users buy the products or services that influencers endorse, or the nature of the comments, that is, whether the users are commenting on a post in favor or against. Although the engagement rate as a metric used here is a relatively easy method to observe real-life engagement, other important information such as attitudes about a post or the content of messages may be lost.

Practical implications

From a practical point of view, our results imply that specific visual aspects can lead to higher engagement. Influencers and influencer marketing professionals could use this information to succeed in higher engagement with their target audience. For instance, the results suggest that smiling or close-up influencers' posts increase engagement.

Lastly, the significant effect of industry is particularly important for influencers belong to more than one niche to know with which one Instagram users engage more. Additionally, the interaction effect between industry and camera distance is an essential indicator for both influencers and influencer marketing professionals to distinguish the type of post that leads to a higher engagement rate of likes and at which niche. For instance, the close-up posts result in higher engagement rates in fashion while the full body in beauty.

Limitations and suggestions for further research

In addition to the insights that this study provides, there are also several limitations. One limitation is that the multilevel effect was not controlled for. The number of posts per influencer was unequal, which caused significant differences in the number of followers between women and men. In future research equal number of posts per influencer should be taken in order to control easier the multilevel effect.

The coding scheme for the posts only included the three examined variables, i.e., facial expression, influencer's gaze direction, and camera distance. However, the way influencers are posing, image characteristics (e.g., colors and filters) and influencers' actions during the capturing, among others, were not taken into consideration. Thus, it is possible that people were engaged with the post because of another factor which is not included in the examined features. In future research, possible confounding variables could be taken into account.

One limitation, as in all studies, including Instagram followers and likes, is the possibility of fake followers. It is very common for influencers to buy followers or likes in

order to be in a more advantageous position when negotiating prices with brands. Hence, no one can be sure that the followers' count is true. The possibility of fake followers constitutes a restraint in cases (as in this study) where the engagement rate is measured based on the followers' number (Hoffman & Fodor, 2010).

Moreover, one more limitation was an experimental modification occurred in the Instagram platform on the 14th of November. In this context, the number of likes has been removed from some devices. If this experiment is successful, the number of likes will be permanently removed from all users globally. This change constitutes future studies similar to the present one practically impossible since only the Instagram profile owner will have access to the number of likes per post.

In the current study, the three aspects of an Instagram post were examined. These specific aspects were selected because the differences in the posts were observed among them, and it was assumed that they might affect the engagement rate. Nevertheless, other factors may also alter the engagement rate of influencers' posts, such as the position of legs and hands (e.g., barbie feet, armpit air-out, man spread, one foot forward, artful squat) could be investigated in future research (Chong, 2018). By examining these factors, we could measure the success of some established influencers' poses that are commonly used.

Regarding facial expression, previous research has established that photos in which people smile lead to positive impressions (Schouten et al., 2014). The present study confirms that this is also the case for influencers. It would be interesting to examine whether this success, in terms of user engagement, also translates to more clicks to a brand's website and money spent on influencer marketing. Therefore, future research could explore the relationship between facial expression, click-through rate, and money spent.

Further, this study revealed that close-up photos get higher engagement rates compared to the full-body, which was opposite to the hypothesis. It would be interesting to examine why this divergent result emerged. Most likely, the background of the post has an impact. In close-up photos, the visible background is limited compared to the full body in which we can observe more things of the scenery. Thus, it would be interesting to examine whether the background of the post (e.g., indoor, outdoor, dominant colors) affects the engagement rate of influencers' posts.

Finally, the challenge of performing a content analysis is that we cannot experimentally manipulate nonverbal behavior. This means that there could be other factors that could justify the obtained results. In experimental studies, where the researcher manipulates, for instance, the subject's gaze direction, they can directly ask the participants

whether they observed this specific characteristic of the post at the end of the experiment. In that way, a cause and effect relationship between the variables can be easily determined. Thus, researchers are sure what participants think about the posts instead of measuring engagement in terms of likes and comments. On the other hand, in content analysis, real posts and real data are used to measure the engagement, and therefore there is more external validity. Taking into account the limitations of a content analysis, future research could also investigate the effect of these visual aspects in an experimental setting. Hence, we could verify whether the examined variables are perceived as the way we think. Real Instagram posts could be used and asked questions about what people believe for each post and how attractive they find them. This could decipher people's opinions since open-ended questions can be asked about their observations in each post. Nevertheless, the current study can be valuable because it is the first to demonstrate that the type of influencer post in terms of facial expression, camera distance, gender, and industry has an impact on the engagement rate of likes.

Conclusions

This study focused on the relationship between nonverbal visual features and the engagement rate of social media influencers' posts. Even though the engagement rate of comments did not vary between the examined aspects, we found differences in the engagement rate of likes. In general, our results reveal that facial expression significantly influences the engagement rate of likes, since posts in which the influencer is smiling lead to higher engagement compared to posts that the influencer displays neutrality. Close-up posts result in higher engagement compared to photos taken from a further distance. The subject's gaze direction did not seem to moderate the engagement rate. Gender has an impact on the engagement rate as such that male influencers' posts lead to higher engagement rates than female's posts. However, no relationship between gender and the selected visual aspects was identified. The differences mentioned above between the expected and our results exemplify that Instagram influencers should not be treated as common social media users.

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Appendix

Table 1

Ranking	Instagram Account Name	User	Gender	Number of followers	Industry
1	@chiaraferragni	Chiara Ferragni	Female	17,582,956	Fashion & Style
2	@jamescharles	James Charles	Male	15,945,989	Beauty
3	@jeffreestar	Jeffree Star	Male	14,691,623	Beauty
4	@jenselter	Jen Selter	Female	12,756,027	Sport & Fitness
5	@kayla_itsines	Kayla Itsines	Female	11,875,657	Sport & Fitness
6	@lilly	Lilly Singh	Female	9,129,407	Lifestyle
7	@marianodivaio	Mariano Di Vaio	Male	6,107,569	Fashion & Style
8	@simeonpanda	Simeon Panda	Male	5,515,236	Sport & Fitness
9	@rosannapansino	Rosanna Pansino	Female	4,583,628	Lifestyle
10	@mannymua733	Manny Gutierrez	Male	4,412,619	Beauty
11	@muradosmann	Murad Osmann	Male	4,138,534	Travel
12	@alexachung	Alexa Chung	Female	3,478,059	Fashion & Style
13	@makeupshayla	Shayla Mitchell	Female	2,823,428	Beauty
14	@doyoutravel	Jack Morris	Male	2,776,642	Travel
15	@massy.arias	Massy Arias	Female	2,609,916	Sport & Fitness
16	@weworewhat	Danielle Bernstein	Female	2,228,178	Fashion & Style

17	@gypsea_lust	Lauren Bullen	Female	2,181,835	Travel
18	@ssssamanthaa	Samantha Ravndahl	Female	2,168,032	Beauty
19	@michellephan	Michelle Phan	Female	2,017,133	Beauty
20	@kandeejohnson	Kandee Johnson	Female	1,851,868	Beauty
21	@imjennim	Jenn Im	Female	1,738,254	Fashion & Style
22	@huda	Huda Kattan	Female	1,693,546	Beauty
23	@sjanaelise	Sjana Elise Earp	Female	1,688,171	Sport & Fitness
24	@eddiehallwsm	Eddie Hall	Male	1,645,089	Sport & Fitness
25	@blogilates	Cassey Ho	Female	1,586,270	Sport & Fitness
26	@simplykennedy_	Kennedy Cymone	Female	1,440,699	Lifestyle
27	@jannid	Janni Olsson Delér	Female	1,400,607	Lifestyle
28	@taramilktea	Tara Milk Tea	Female	1,332,071	Travel
29	@garancedore	Garance Doré	Female	740,359	Fashion & Style
30	@gabifresh	Gabrielle Gregg	Female	716,991	Fashion & Style
31	@proudlock	Oliver Proudlock	Male	716,899	Lifestyle
32	@gossmakeupartist	Wayne Goss	Male	695,124	Beauty
33	@hinddeer	Hind Deer	Female	605,196	Lifestyle
34	@emmahill	Emma Hill	Female	574,383	Fashion & Style

35	@theblondeabroad	Kiki | The Blonde Abroad	Female	566,499	Travel
36	@hannahbronfman	Hannah Bronfman	Female	560,961	Sport & Fitness
37	@progressive_calisthenics	Kenneth Gallarzo	Male	392,335	Sport & Fitness
38	@jaylifeandstyle	Jay Caesar	Male	384,979	Lifestyle
39	@inesdelafressangeofficial	Ines de la Fressange	Female	325,250	Fashion & Style
40	@jessiekass	Jessie Chanes	Female	302,018	Lifestyle
41	@designdschungel	Laura Noltemeyer	Female	241,156	Lifestyle
42	@nicolettemason	Nicolette Mason	Female	180,347	Fashion & Style
43	@gregoryvelvet	Gregory DelliCarpini Jr	Male	154,014	Fashion & Style
44	@expertvagabond	Matthew Karsten	Male	151,630	Travel
45	@eakinwale	Elisabeth Akinwale	Female	109,200	Sport & Fitness
46	@atacadas	Gloria Morales	Female	103,264	Lifestyle
47	@bucketlistjourney	Annette White	Female	100,468	Travel
48	@adventurouskate	Kate McCulley	Female	98,871	Travel
49	@omniyogagirl	Laura Large	Female	87,647	Sport & Fitness
50	@ty_haney	Ty Haney	Female	75,990	Sport & Fitness

51	@ada_oguntodu	Ada Oguntodu	Female	68,881	Fashion & Style
52	@akiniko	Akin Akman	Male	49,546	Sport & Fitness

Table 2

Ranking	**Instagram Account Name**	**User**	**Gender**	**Number of followers**	**Industry**
1	@eugeneleeyang	Eugene Lee Yang	Male	2,104,791	Lifestyle
2	@iamgalla	Adam Gallagher	Male	2,006,978	Lifestyle
3	@davidlaid	David Laid	Male	1,337,433	Sport & Fitness
4	@christianguzmanfitness	Christian Guzman	Male	1,206,129	Sport & Fitness
5	@princepelayo	Pelayo Díaz	Male	1,070,050	Fashion & Style
6	@johanneshuebl	Johannes Huebl	Male	1,026,225	Fashion & Style
7	@davidgandy_official	David Gandy	Male	976,005	Fashion & Style
8	@nickwooster	Nickelson Wooster	Male	778,329	Fashion & Style
9	@elliotbfit	Elliot Burton	Male	480,851	Sport & Fitness
10	@zacperna	Zac Perna	Male	457,851	Sport & Fitness
11	@justinliv	Justin Livingston	Male	335,226	Lifestyle
12	@bradleysimmonds	Bradley Simmonds	Male	330,827	Sport & Fitness
13	@briankelly	Brian Kelly	Male	223,542	Travel

14	@matthewzorpas	Matthew Zorpas	Male	187,808	Fashion & Style
15	@ryanstylesnyc	Ryan Clark	Male	174,367	Lifestyle
16	@mario_schafzahl	Mario Schafzahl	Male	116,277	Sport & Fitness