The online engagement and the role of digital influencers in the product endorsement on Instagram

Abstract: The article aimed to analyze the forms of engagement generated from the endorsement of products by digital influencers on Instagram, considering the characteristics of their online posts. A qualitative approach was used to investigate digital influencers postings based on Semiotic image analysis and Critical Incidents technique.Results reinforced that digital platforms enable distinct forms of engagement, establishing new configurations that affect relationship marketing and promotion strategies. In particular, on Instagram, the development of engagement can involve four participants who play different social roles, expanding the process of value co-creation.
Keywords: engagement; product endorsement; digital influencer.

Introduction

The advent of new social media channels in recent years has changed and extended the ways individuals communicate, exchange information, and interact with others (Cheung, Lee & Jin, 2011). In a constant process of online interaction, they become more active, participating in building the perception of other users about what companies are and what they offer, influencing in favor or against products and brands to be consumed.

Many of these individuals "are gaining a large share of voice in the market" (Booth & Matic, 2011, p. 184) with their online profiles on Facebook, Instagram, Twitter or YouTube, acquiring millions of followers who are willing to adapt and be engaged daily from posts, being effectively influenced in terms of choices and behaviors. To these users of digital media with thousands of followers is given the name of digital influencers (Roth & Zawadzki, 2018).

Companies already recognize the digital influencers as opinion leaders who mediate the transmission of information, facilitating its dissemination to their online followers (Uzunoglu & Kip, 2014). Therefore, they are viewed by organizations as potential brand ambassadors who convey messages seen by consumers as more trustworthy and attractive because of their more engaged relationship among them (Lim, Radzol, Cheah &Wong, 2017). These new celebrities become role models for their followers in a constant process of communication that affects brand equity. Despite this, academic researches on social media influencers and their practical implications are relatively scarce (Almeida, Coelho, Camilo-Junior, & Godoy 2018).

Digital influencers represent new possibilities for brand endorsement, bringing different configurations about traditional communication strategies in terms of speed, reach, information flow and engagement. Therefore, in this paper, the postings of digital influencers that endorsed some brand or product were investigated, aiming to observe posting patterns and the level of engagement generated by it. Consumer engagement has received increasing attention in marketing studies and has been announced as an essential research priority (Dessart, Veloutsou & Morgan-Thomas, 2015). This term has acquired different meanings over the years, being understood in this article as a multidimensional construct that involves a cognitive, affective and behavioral commitment for an active relationship of the consumer with a brand (Hollebeek & Chen, 2014).

The concept of engagement can be expanded by engaging other actors when analyzing social networks. Therefore, we propose in this paper that in the process of online engagement between (potential) consumer and brand it is possible to have an actor that mediate this relationship, in this case, a digital influencer. By acting as an endorser of brands in their online profiles, digital influencers establish engagement with the follower and, at a secondary level, act as a bridge to the establishment of engagement between the follower and the advertised brand or product.

Thus, the article aimed to analyze the forms of engagement generated from the endorsement of products by digital influencers on Instagram, considering the characteristics of their online posts. We begin our inquiry with a look at prior research on social media and the digital influencers and then proceed to a brief discussion of online engagement in posts.

Social media and the digital influencers

Social Media is defined most simply as "a collection of websites and applications designed to build and enhance online communities for networking and sharing information" (Osborne-Gowey, 2014, p. 55). It is, therefore, a set of network communication platforms that operate thanks to the internet, having as examples Facebook, Twitter, Tumblr, Instagram, YouTube, Bloggers, among others.

These platforms are highly interactive and enable people to communicate, collaborate, and share content, having a global audience with almost immediate response times (Cvijikj & Michahelles, 2013; Power, 2014). Consequently, social media is perceived as a channel of interaction that has convenience, wide availability and low cost for those involved (Roth & Zawadzki, 2018; Uzunoglu & Kip, 2014), especially in their role as consumers. It is precisely through social networks that daily virtual interactions are carried out, giving opportunities for consumers to learn about opinions, skills, and lives of others (Vogel, Rose, Okdie, Eckles, & Franz, 2015) and to be more active in co-creating marketing content with companies and their brands (Virtanen, Björk & Sjöström, 2017).

Using more and more social media, consumers seek to research goods and services, but also feel engaged with the brands they use and with other consumers (Hanna, Rohm & Crittenden, 2011). That is why companies have recognized the impact of social media on their brands and their communication strategies. Through this tool, it is possible to create relationships and interactions in the market that guide to the consumption of products and the identification of the consumer with specific enterprises (Booth & Matic, 2011).

In this scenario, the digital influencers stand out. These people have a considerable number of online followers, being able to mobilize them by acting as opinion leaders on various topics, including consumption, mediating the transmission of information and facilitating its dissemination (Uzunoglu & Kip, 2014). They are potential endorsers of brands, mediating the relationship between the source (company) and the consumer, disseminating messages of persuasion. Digital influencers expose their daily lives from social media with photos, videos, and texts that show their consumer choices, practices, and opinions. Through regular contact with the audience, they seem more accessible and closer to people than traditional media artists; they are seen as 'people like us' and 'friends' of their followers (Meyers, 2017).

For this reason, these influencers receive offers from companies to advertise goods and services in their posts (Almeida et al., 2018). They are sponsored to indicate brands and products, crediting the quality and benefits of these spontaneously and naturally (Centeno & Wang, 2017; Jin & Phua, 2014). Thereby, their followers are more likely to follow their recommendations by understanding that the proclaimed message is more trustworthy and attractive (Lim et al., 2017). At the same time, digital influencers offer their images to the endorsed product, transferring their characteristics, identities, and meanings to that advertised good or service, bringing to the products characteristics of an extended self, term developed by Belk (1988, 2014) to treat the extension of individuals identity on goods and services owned or used by them.

Through postings, influencers seek to achieve good levels of engagement with their followers. This idea of engagement is discussed in the next section.

Online engagement in posts

The concept of engagement has been examined by different academic areas, such as education, organizations, public policies, and marketing, and there is no agreement on the definition, dimensionality, and operationalization of such term (Calder, Malthouse & Schaedel, 2009; Cheung et al., 2011, Dessart et al, 2015). In consumer behavior studies, for example, three different conceptualizations can be found, defining engagement: 1) as a psychological process that leads to loyalty (Bowden, 2009), 2) as a behavioral manifestation that goes beyond buying action (Van Doorn et al., 2010), and 3) as a psychological state characterized by the degree of dedication, vigor, absorption and consumer interaction through a brand/company (Patterson, Yu & Ruyter 2006).

This diversity of concepts guided Hollebeek and Chen (2014) to define the term engagement as a multidimensional construct that encompasses affective, cognitive and behavioral dimensions. This three-dimensional view provided the basis for further development of the concept in question and is widely accepted in consumer studies, which begin to see engagement as an affective, cognitive and behavioral commitment to an active relationship with some brand/company/endorser (Dessart et al., 2015). Therefore, when engaged, consumers will exhibit interactional and responsive dispositions that go beyond traditional behaviors, based on the logic of co-creation of value (Vargo & Lusch, 2004; Virtanen et al., 2017).

From this three-dimensional concept, the definition of consumer engagement in online social platforms was established, being described as "the level of a customer's physical, cognitive, and emotional presence in connections with a particular online social platform" (Cheung et al., 2011, p. 3). It is an active digital behavior also characterized by high personal involvement with the content, the brand/company, the individual who made the post or cause presented in the online public space (Dhanesh, 2017). For Valentini, Romenti, Murtarelli & Pizzetti (2018), this active behavior can occur in three levels:

- Consuming: type of behavior in which the individual is limited to see images, videos of the brand or its products, liking the posts, following online topics and downloading widgets;
- Contributing: type of behavior based on the active participation of the individual in the conversations involving the brand/product, commenting on social media posts, for example;
- Creating: type of behavior characterized by the highest level of engagement, portraying the action of the individual who creates, uploads and publishes content related to the brand/product, or sharing of messages and images already posted by other users.

Thus, digital engagement can be measured through various indicators that are available depending on the configurations of online platforms. It is possible to analyze the click-through rates (CTR), the number of likes of an online content, the number of comments, the number of followers, the duration of the interaction, the marking and sharing of a post, as well as its creation, as engagement metrics (Cvijikj & Michahelles, 2013; McCann & Barlow, 2015; Valentini et al., 2018; Virtanen et al., 2017).

We conclude that digital platforms enable distinct forms of engagement (Calder et al., 2009) involving brands, individuals as (potential) consumers, and other users who may even develop the role of digital influencers. In this scenario, according to Segev, Avigdor and Avigdor (2018), networks are established in which users act on nodes and establish relationships, creating unidirectional or bi-directional bridges, for example, an Instagram "follower" and "friendship" on Facebook, respectively. "These edges do not need to represent a long-lasting relationship; they can signal one-time engagement, e.g., to 'like' or 'comment' (Segev et al., 2018, p. 1009).

Method

In this section we comment on the method, describing the choice of the online platform and the digital influencers, as well as the data collection and analysis techniques.

The subjects and the research platform

In this study are investigated the postings of digital influencers who act as brand endorsers, intending to analyze the process of followers' engagement. Among the existing social networks, we opted to analyze the postings on Instagram.

> The social networking website Instagram consists of profiles which users and brands use to post photos or videos with short descriptions and often at least one hashtag (a keyword relating to the contents of the message, preceded by the symbol #). Users can also make use of built-in filters to edit a photo before they publish it (Roth & Zawadzki, 2018, p. 103).

This platform focuses primarily on the visual appeal from the photographs, highlights the increasing role of visual content in consumer and social media construction (Valentini et al., 2018), and on the number of followers that each profile has, being especially efficient in the B2C

communication (Roth & Zawadzki, 2018). It is titled as a visual content sharing online social network (Segev et al., 2018) which has grown in popularity in recent years.

Instagram has a higher level of use for interaction, co-creation, and engagement compared to other platforms (Coelho, Oliveira & Almeida., 2016) and is especially suitable for postings of hedonic content (Virtanen et al., 2017). In it, there are three social metrics of engagement: 1) the number of likes, 2) the number of comments, and 3) the number of followers. Through the likes, we can quantify the number of distinct users who appreciated the post, and through the comments, we can observe a deeper level of engagement in which the followers contribute to the post through their opinions and discussions about the content of it (Bakhshi, Shamma & Gilbert, 2014). The number of followers, in turn, represents the degree of approval of the profile, acting as a metric of engagement, recognition and reach (Virtanen et al., 2017).

To achieve the purpose of this paper, a specific profile of digital influencer was selected, following these criteria: a) has a fitness lifestyle, b) has more than 1 million of followers on Instagram, and c) advertises goods and services on his/her profile. These two last criteria are related to the idea of digital influencer, that requires a considered number of followers reaffirming her or his popularity (Veirman, Cauberghe &Hudders, 2017), and the role of this influencer as a brand endorser. Lastly, the choice for fitness style was due to the importance of the image required by this lifestyle that makes the body a constant temple of investments. The role of digital influencers in this scenario is to show muscular, good shape, and athletic bodies, capable of performing seemingly impossible physical exercises (Maguire, 2002). Their bodies are avatars of brand value to communicate products and services (Powers & Greenwell, 2016), creating an ideal body image by just posting videos and pictures in social media that reflect the efforts and body care for the achievement of beauty, health, sensuality, transformation, and success (Goellner, 2008; Scott, Cayla & Cova 2017). In this article, we emphasize the postings that contain photographs posted by these influencers, in considering such images more direct ways of communicating and experiencing human relationships, allowing for different interpretations of reality in visual terms (McCoy, 2017; Valentini et al., 2018).

In addition to these criteria, it was sought to analyze influencers who had the same nationality and gender, in order to observe possible similarities in the endorsed products, in the forms of communication and in the public that follows the influencer. Thus, three Brazilian female digital influencers considered fitness models were selected for this qualitative research; they are Juliana Salimeni, Gabriela Publiesi and Alice Matos (Figure 1).

Figure 1. Instagram Profile of Digital Fitness Influencers

Thirteen million and five hundred thousand followers (28/12/2018)	Three million nine hundred thousand followers (28/12/2018)	One million eight hundred thousand followers (28/12/2018)

Source: Instagram (2018)

These influencers meet the criteria demanded by this research. Also, they have considerable differences in terms of the number of followers. Such a difference can be significant in the development of the communication strategies that the influencers adopt and in the attractiveness of them to the companies. This diversity contributes to an in-depth analysis of the forms of postings and the online interaction generated by profiles with more than a million followers.

Steps of data collection and analysis

The posts made by Juliana, Gabriela e Alice during a month (October 1st to November 1st, 2018) that involved the announcement of brands and products were selected by the authors of this paper, a total of 60 posts. Based on a qualitative approach, in the first step of the research, we sought to identify the characteristics of the posts. So, each of them was analyzed in terms of photograph and text posted by the digital influencer, and the number of likes and comments received in it. In particular, the images and texts were analyzed using the Semiotic image analysis that aims to identify the system of signs involved in the image and its description in order to find out how they produce meaning (Penn, 2000).

Following the guidelines described by Penn (2000), a dissection of the image followed by its articulation or reconstruction was performed. The steps were identification and cataloging of material elements (denotative inventory) and analysis of higher significance levels, starting with a connotative understanding of what was described in the previous phase. In the end, a mental map was developed to summarize the connotative aspects shown in her images and texts on Instagram.

The next step of the research involved analyzing the content of comments made by followers on each post. We used the Critical Incident Technique (CIT), adapting it to an online study. CIT is a flexible method that can be used in the collection of data in interviews, observations and open end questionnaires (Fridlund, Henricson & Martensson, 2017). The critical incident is defined as a situation or event that stands out for its characteristics, which make it critical, distinct and relevant to the understanding of a given phenomenon or process (Flanagan, 1973). It was proposed in this work the use of the idea of a critical incident to select and analyze the followers' comments in the posts of these influencers, aiming to observe the emotional, behavioral and cognitive responses of these subjects (Hettlage & Steinlin, 2006) to the postings. For this reason, the comments of the posts were collected, totaling the observation of 18.789 comments in 60 posts (Table 1).

Table 1. Characteristics of posts selected for critical online incidents technique

Influencer	Collected posts	Collection period of posts	Total of likes	Total of comments
Juliana Salimeni	22	17/12/18	1.130.855	6.755
Gabriela Publiesi	23	18/12/18	958.930	4.770
Alice Matos	15	26/12/18	610.765	7.264
TOTAL	60	X	2.700.550	18.789

Source: authors (2019)

This stage is, therefore, an approach that adapts an already recognized and productive technique in science to applied it in an online environment. For this, we called it the Critical Online Incidents technique involving the following steps:

- Definition of critical incidents: Critical incidents are seen as comments that received the highest numbers of likes and responses, representing extreme perceptions (positive and negative) about the post.

- Collection of critical incidents: Comments were collected and grouped into spreadsheets that were filled with additional information related to the number of responses and likes. The positive and negative meaning of the commentary was also described.

- Categorization of the incident: in this phase a content analysis was performed on the incidents collected, coding the data into meaningful categories.

These techniques made possible the analysis and the discussion of the collected data presented in the following section.

Results

In this section are the findings of the research, divided into characteristics of Posts, and Analysis of followers' comments. A subsection was also developed with the main findings of the investigation, a summary form of central analysis.

Analysis of Posts

In the first stage of this research, we analyzed the characteristics of the postings of the digital

influencers, as well as the engagement metrics of each post. In total, 49 companies were announced through the demonstration of their product. From the endorsements made by the digital influencers, 13 initial categories of announced products were established. These categories were grouped into five broad categories; they are, in order of greater number of endorsed products, 1) clothing, 2) food, 3) Aesthetics and Cosmetics, 4) Travel, and, 5) communication.

The number of likes, as a form of engagement based on the simple consumption of the information and images announced, and the number of comments that represents a deeper engagement metric, based on the active participation of the follower (Valentini et al., 2018) were observed. These analyses provided support for the definition of posting patterns that increase the online engagement on Instagram, enabling a framework on how to successfully promote brands on social media using social influencers.

In general, the posts expose the body and its meanings through flashy photographs and spontaneous texts, transferring these symbolisms to the goods and services announced, bringing to the characteristics of the products of an extended self (Belk, 1988, 2014). For this, the posts indicate a close relationship between product and influencer. Through the posts, the influencers also seek interaction with their audience, bringing them closer to the message so that they feel active in building opinions about the post and, consequently, about the propagated product. In the mental map (Figure 2), we demonstrate these elements that form the way of products endorsement by fitness digital influencers on Instagram.

The photos are the main attraction elements of the posting of these influencers, reinforcing the idea of photography as the most attractive type of post-appealing media (Cvijikj & Michahelles, 2013). The role of the body in the process of attraction to the photo was evidenced, acting as a powerful non-verbal communication channel (Bakhshi et al., 2014), especially by having as subjects of analysis women who adopt a fitness lifestyle.

Figure 2. Mental map of posts
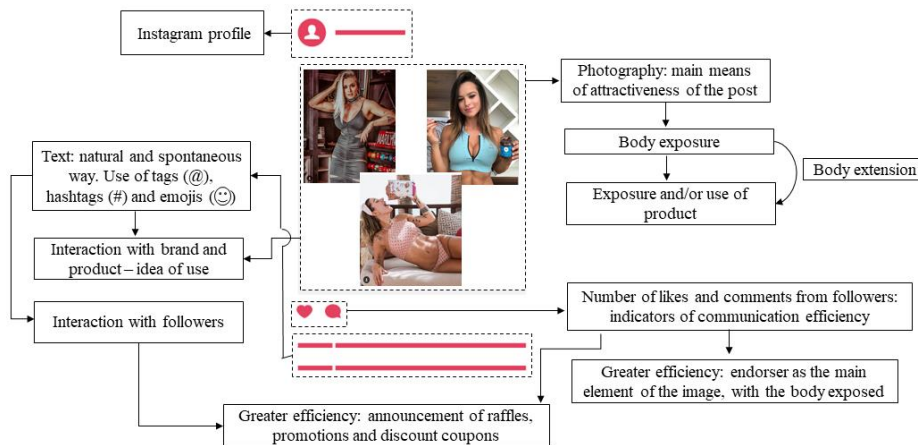
Source: Authors (2019)

The photographs posted by the influencers that obtained high levels of interaction were those in which their bodies were shown in bikinis, lingerie, and tight clothing. These women have millions of followers in their profiles on Instagram precisely because of the body they have seen as a source of inspiration for many of their audience. The posts that highlight the corporeal are, therefore, the most liked and commented to people who accompany them virtually, generating greater virtual engagement, reinforcing the need to care for the body (Maguire 2002), to strive to transform it (Scott et al., 2017), to convey from it meanings like beauty, health, sensuality and success (Goellner, 2008). Gabriela Publiesi post with the highest metric of engagement - the number of likes (127.536) and comments (834), for example, brings an endorsement to the bikini Gabriela used in photography (Figure 3a).

The way how the product is endorsed in the postings also impacted the level of engagement. Exposed goods without the presence of the influencer or exposed in photographs where the endorser

6

is not prominent are not as useful as the postings that bring the digital influencer on leading role by exposing and/or using the product, confirming the premise that the digital endorser, especially her/his body, acts as an avatar of brand value (Powers & Greenwell, 2016). Photographs that show the faces of individuals increase the chances of receiving likes and comments, significantly affecting the social engagement (Bakhshi et al., 2014; Valentini et al., 2018). In Figure 3b, for example, it contains the endorsement made by Juliana Salimeni through the posting of photographs of the product without the presence of the influencer in it. This post generated the lowest level of engagement, obtaining the lowest number of likes (7,695) and comments (132) among the 22 published by Juliana on Instagram.

Figure 3. Post photo analytics

(a)	(b)	(c)
Post09 - 15/10/2018	Post22 - 30/10/2018	Post04 - 10/10/2018
Bikini advertisement –	Tennis advertisement –	Fit Pasta advertisement –
Gabriela Publiesi Instagram	Juliana Salimeni Instagram	Alice Matos Instagram

Source: Alice Matos, Gabriela Publiesi, and Juliana Salimeni Instagram – Public (2018)

Also, many of the texts in the posts of the influencers brought some emotional element of the endorser about the announced good or service, besides the tips of how to use and acquire it, and the benefits generated by its use. This strategy can help the communicated message to be viewed with greater confidence by the followers (Lim et al., 2017), because in describing feelings such as love, happiness, desire, and dependence on products, endorsers convey the idea that they use them. These messages showed the level of engagement between influencer and brand that involves cognitive, behavioral and emotional aspects (Cheung, Lee & Jin, 2011; Hollebeek & Chen, 2014; Dessart, Veloutsou & Morgan-Thomas, 2015); this is reflected even in the photographs showing the endorser's use of the product (Figure 3c).

It is also important to consider some ways to generate interaction with followers from the posts made. All digital fitness influencers sought to use messages that led to an engagement with the audience, especially in terms of contribution with comments of followers (Valentini et al., 2018), making the post more attractive, receiving almost immediate response times (Power, 2014). Questions, motivational phrases, product instructions, invitations, promotional coupons, and sweepstakes were the strategies used. The latter, in particular, had great acceptance and interaction of the influencers for the benefits generated.

So, we identified that the more the endorsement highlights the digital endorsers, the better the acceptability and the communicative efficiency of it. Such communication should be encouraged through images (McCoy, 2017) and texts, generating the most effective follower participation in building post success.

Analysis of followers' comments

In this second phase of the research, the comments of the followers were analyzed in the 60 posts made by the digital influencers. We understand that it is not enough to investigate the number of comments without considering their content which may reveal new results in terms of the opinions, feelings and behaviors of the followers about the influencer and the advertised brand or product. Through comments, (potential) consumers exhibit behaviors and interactive and responsive dispositions, contributing to the logic of value creation (Vargo & Lusch, 2004; Virtanen et al., 2017). They can also encourage greater engagement by allowing other users to like and comment on the comment posted previously by the individual.

The critical incident technique was applied to the online context, identifying to each post the 3 or 4 positive comments that generated more interaction (likes and comments) and the 3 or 4 negative comments that generated more interaction, being disregarded those that did not address issues linked to the influencer or the product/brand endorsed and the comments of the companies themselves in the posts. A total of 18.789 comments were reviewed, and those with a higher level of interaction were copied in a spreadsheet for the later development of the categories. The results of this analysis are described in this section and the reviews of the comments are divided according to each influencer in the following sections.

Juliana Salimeni

When analyzing the positive comments in the 22 posts of Juliana Salimeni, three general categories were established; they are: beauty of the influencer, desirable body and impressions about the product. In the first category, the followers praised the digital influencer for her beauty, commenting on and interacting with the others through phrases that extolled Juliana's image (Table 2).

Table 2. Comments about the Juliana Salimeni beauty

Level of interaction	Comments
17 likes	Post08: A barbie passing by on my timeline (heart and cheeky emoji with heart eyes)
6 likes and 3 comments	Post13: Beauty and perfection have just been re-enacted by Juju Salimeni
37 likes and 3 comments	Post14: You're beautiful! I loved this look!

Source: Juju Salimeni Posts – Instagram (2018)

In this category there is no direct mention of endorsed products, but an indirect recognition of the good or service advertised as an element that assists in the image of the influencer (Belk, 1988, 2014), in the formation or enhancement of her beauty. Therefore, the central focus of these comments is the endorser, seen as the ideal person for the announcement of products related to embellishment, acting as a reference to her followers (Meyers, 2017). The comments that praised the beauty of Juliana were those that generated more engagement, that is, more likes and comments of the other followers, when compared to the comments of the other two positive categories that will be described next.

The second category also involves comments that are focused on the endorser and not directly on the advertised object. However, the focus here is more specific, because in the sentences posted by the followers the compliment is directed to the Juliana body (Table 3).

Table 3. Comments about the Juliana Salimeni body

Level of interaction	Comments
9 likes and 3 comments	Post04: Wow, you're too beautiful!!!! Give me this body because I can't focus on the gym like that! […]
6 likes and 3 comments	Post13: Look at this woman's body... @someone you want to have this woman's body, didn't you? And you @someone2?

Source: Juju Salimeni Posts – Instagram (2018)

These comments reveal, beyond the admiration for the body of the digital influencer, the desire to be equal to her, to have her body. Thus, the interactions occur, observing the two developed categories, from the element of inspiration that the endorser generates to the followers, in terms of contemplation of the image of the influencer and the desire to bring this image closer to the reality of them (Meyers, 2017). Therefore, in these two categories, the influencer acts as a bridge between the follower and the advertised brand/product in this network of relationships (Segev et al., 2018), transferring her characteristics to the endorsed good or service.

In the last category, followers commented on their impressions regarding the advertised products. These comments encompass the desire for the product, experience of use and the feelings generated from it (Table 4).

Table 4. Comments about the products endossed by Juliana Salimeni

Level of interaction	Comments

Level of interaction	Comments
2 likes	Post10: Juju salimeni here in the countryside this coffee is being a huge success. Guys are loving it (three emojis of applause) […]
11 likes and 1 comment	Post16: Moroooosil [name of the supplement] is life! I take it (emoji of applause and emoji of face with heart eyes)
1 like and 4 comments	Post16: Great, I lost enough localized fat with it #perfect (two biceps).
6 likes and 3 comments	Post20: My dream is these pants AAAAAH (emojis of two little faces with heart eyes)

Source: Juju Salimeni Posts – Instagram (2018)

The comments included in this category contribute to the exposure of the product and give credibility to the image of the brand, endorser and advertising carried out. Although the level of engagement generated is lower, these comments contribute to the establishment of a higher level of confidence of the posting from the descriptions of the experiences of individuals that corroborate with what is disclosed by Juliana, communicating the positive results that the good or service brought and the satisfaction of its users. With this possibility, consumers of the announced product feel engaged with the brand they use and with other consumers (Hanna et al., 2011). Also, there are comments describing how much the products are desired by the followers. They represent a positive response to the endorsement strategies adopted, because they reveal the desire generated for purchase and use of the advertised product, guiding the identification of the follower with this specific brand/product (Booth & Matic, 2011).

In addition to the positive comments about Juliana's beauty and body and the endorsed products, it was possible to observe negative comments in 18 of the 22 analyzed posts. They were divided into the following categories: criticism about the product, criticism about the post, and criticism about the influencer. The first category grouped comments that describe negative aspects of the advertised good or service. They question the functionality of the product, its appearance, effectiveness and the harm to the health that could be caused by it (Table 5).

Table 5. Comments about the products endorsed by Juliana Salimeni

Level of interaction	Comments
3 likes and 1 comment	Post07: I use Gold [hair dye] but why does my hair look green?
2 likes	Post02: This short is horrible, right? Good thing you're beautiful.
2 likes and 2 comments	Post16: Wow, how much trouble are you taking [supplements], and the organism?

Source: Juju Salimeni Posts – Instagram (2018)

These comments directly affect the image of the product/brand and the endorser, damaging both and their strategies of self-promotion, and can lead to discredit of the transmitted message. The degree of engagement they cause, however, has been low, indicating a disregard or disinterest among the other followers for such comments.

The second category is the criticism of the post. It involves comments that consider the information posted insufficient, the difficulty of accessing the suggested links and the excess of effects in the photographs. Such phrases reveal the failure of the endorser to expose information that is seen as essential for the product to be desired or acquired and the lack of a spontaneous and natural way to announce the product (Centeno & Wang, 2017; Jin & Phua, 2014). However, like the first category, these comments did not achieve high levels of engagement.

The third category included comments that criticized the endorser of the product, in this case, Juliana Salimeni. They, in general, reprove the muscular body presented by this digital influencer in her posts (Table 6).

Table 6. Negative comments about Juliana Salimeni body

Level of interaction	Comments
22 likes and 18 comments	Post04: Only the face that seems to be a woman, because the body is masculine. I'm sorry, but it's what I think you should be more feminine. […]
47 likes and 13 comments	Post06: This body looks like a man, very muscular.

Source: Juju Salimeni Posts – Instagram (2018)

These comments disassociated Juliana's image with the idea of femininity, by the extremely muscular aspect of the body, questioning to what extent the fit body ideal exceeds the individual's

sexual identity. By awakening this controversy, the phrases generated the greatest engagement among all categories analyzed, at both the level of agreement (likes) and level of conversation (comments). Such messages can compromise the image of the product that receives the meanings of the body exposed by Juliana criticized by some followers.

Gabriela Publiesi

Three general categories were established when the positive comments in the 23 posts of Gabriela were analyzed; they are the lifestyle of the influencer, desirable body/ beauty and impressions about the product. In the first category, the followers praised the digital influencer for her connection with nature and her spirituality expressed in the choices of food and physical activities (Table 7).

Table 7. Comments about the Gabriela Publiesi lifestyle

Level of interaction	Comments
18 likes and 1 comment	Post02: Every time I see your posts, I get a kind of energy so welcoming, so positive! I really admire this way of showing syour love, joy, and connection to the things around you. I wanted to be like you.
2 likes	Post05: And we will die and we will not learn all that nature has to teach us (emoji of the heart)! Beautiful words (applause and biceps)

Source: Gabriela Publiesi Posts – Instagram (2018)

This category is indirectly linked to the endorsed products, since the lifestyle based on natural and ecological products adopted and divulged by Gabriela imposes certain practices and forms of consumption. This influencer interacts daily with her followers, giving opportunities for them to learn about her opinions, skills and life (Vogel et al., 2015). For it, her posts seek to raise awareness among her followers about this style and also encourage them to follow it, offering product tips for this acceptance.

The second category identified is composed of comments that praise the beauty and body of the digital fitness influencer (Table 8).

Table 8. Comments about the Gabriela Publiesi beauty and body

Level of interaction	Comments
50 likes and 1 comment	Post062: This [photo] was a shot (emoji with drooling face)
12 likes and 1 comment	Post07: A Greek goddess
26 likes and 1 comment	Post09: Very prettyyyy

Source: Gabriela Publiesi Posts – Instagram (2018)

In general, the comments of this category generated the highest level of engagement among the positive phrases analyzed. They link the image of Gabriela to perfection, a deity, a facial and body beauty. As in the previous category, such comments are not product-oriented but are aimed at the endorser who transfers beauty symbols to the goods and services advertised (Belk, 1989, 2014). The comments about the products were included in the last category. In it, the phrases emphasize the quality of the products, the desire for possession, the experiences of use and the feelings generated by them (Table 9).

Table 9. Comments about the products endossed by Gabriela Publiesi

Level of interaction	Comments
12 likes	Post03: I think this idea [homemade manicure service] is awesome (emoji of face with heart eyes)
6 likes	Post10: And this popcorn is also surreal (emoji of face passing tongue in the mouth - delight)
3 comments	Post16: I've been drinking [tea] for 30 days and I'm loving it ... I'm not without it anymore. I traveled and took it with me! @desincha is life! (heart emoji)
24 likes	Post19: I want this look now!

Source: Gabriela Publiesi Posts – Instagram (2018)

These comments lend credibility to endorser and to endorsed goods because they reflect the positive aspects perceived by Gabriela's followers about the products advertised. Some comments describe the benefits of using the product and reflect consumer satisfaction. Other phrases demonstrate the admiration and desire of the followers for the products advertised, pointing out the

efficiency of the announcement made by the endorser. Therefore, the comments of this category indicate an approximation of the follower with the product or brand endorsed, in the process of interaction and identification of the person with what was announced (Booth & Matic, 2011; Hanna et al., 2011).

In addition to the positive comments, it was possible to identify in 17 posts negative phrases related to the product (1° category), the credibility of the endorser (2°) and her announcement of certain products (3°). The most disturbing category among these is precisely the latter described. For demonstrating to adopt a healthy lifestyle, Gabriela is questioned by some followers because she endorses products seen as unhealthy or unnatural by them that go against the lifestyle proposal adopted by the influencer (Table 10).

Table 10. Comments about the advertisement made by Gabriela Publiesi

Level of interaction	Comments
5 likes and 1 comment	Post22: But is [coconut water in] powder natural?
52 likes and 2 comments	Post04: This candy is made with pork skin (emoji with thumb down) [Is Gabriela vegetarian?]
8 likes and 13comments	Post20: Sis are not you vegan? Because if you are, this candy is the basis of MILK COW, just to mention (emoji of three little laughing faces)

Source: Gabriela Publiesi Posts – Instagram (2018)

In the comments above, the followers point out the incompatibility between the ideas proposed by the endorser and the products she endorses. They question whether endorsed products are indeed natural (without food preservatives, for example), but especially if they are appropriate to be purchased by people who adopt veganism. It is important to mention that Gabriela is not vegan, but through her posts, this is the image perceived by her followers. For her followers, endorsing products that contain some animal remains is incompatible with the image of the influencer, because they know about her lifestyle (Vogel et al., 2015). Through these comments, it is reflected on the choice of Gabriela as an endorser of certain goods, because for the public that accompanies her profile on Instagram, she does not symbolize this type of industry and therefore she does not bring credibility to the advertisement (Jin & Phua, 2014). This incredibility is also witnessed in the second category identified. In it are the comments that question this endorser (Table 11).

Table 11. Comments about the credibility of Gabriela Publiesi

Level of interaction	Comments
1 like	Post06: Does she have any training in nutrition or physical education? Understand well biomechanics, kinesiology, macro absorption and micro nutrients of the human body? Please spare me. The fact that she has the beautiful body does not entitle her to have wisdom of what she speaks.
12 likes and 6 comments	Post02: Were you invited to stay at the spa? Would you like to be clear if it is advertising or really a place that you would choose?

Source: Gabriela Publiesi Posts – Instagram (2018)

This category reveals that some followers doubt that the digital influencer would use certain goods or services endorsed, as well as doubt the tips described by Gabriela to acquire a body like hers. These elements reveal distrust in the image of the endorser, compromising two of the main advantages of this type of advertisement that are more confidence and attraction in the communicated message (Lim et al., 2017).

The last category includes negative comments about the product. Most of them criticize the high price of the good (Table 12).

Table 12. Comments about the credibility of Gabriela Publiesi

Level of interaction	Comments
3 likes and 5 comments	Post16: Why is this tea so expensive?
52 likes and 10 comments	Post20: They are really wonderful [fit sweet], but without need they cost almost 30 reais (emoji of sad face)
2 likes	Post 3: I've never been lucky with @singubr. I did it once and the work was horrible. The other time they cleared it. I would not recommend it.

Source: Gabriela Publiesi Posts – Instagram (2018)

Although they are products advertised as natural, unsweetened and suitable for a fitness lifestyle, followers believe their prices are higher than expected. It is important to mention that none of the posts made by Gabriela announced the prices of the goods. The public, therefore, acts as an additional source of information that reveals the price and experience with the good or service that may influence the purchase decision (Valentini et al., 2018). It is also perceived that among the digital influencers analyzed, Gabriela seems to focus on endorsing products that are aimed at a more financially selective public, announcing brands that charge a high value for the acquisition of their goods and services.

Alice Matos

Alice's posts generate more engagement in terms of comments than the postings of the other digital fitness influencers analyzed. Unlike the others, Alice often responds to the phrases posted by her followers, so this form of communication is so widely used by her audience. A total of 7,264 comments can be seen in all 15 posts of this influencer. Due to a large number of comments, there are no phrases that have been very liked and commented on. This reveals that the degree of engagement between follower and post is good, but the degree of engagement among followers is not high.

Concerning the positive comments, two categories were identified, they are: beauty and impressions about the products. In the first, the followers write about the beautiful image of the endorser that includes her body (Table 13).

Table 13. Comments about Alice Matos beauty and body

Level of interaction	Comments
9 likes and 1 comment	Post11: Powerful
8 likes and 1 comment	Post01: Beautifullll
7 likes	Post09: I cry in that belly. I will be like this in the name of Jesus @someone.

Source: Alice Matos Posts – Instagram (2018)

Then, this category turns to the characteristics of the influencer and not of the advertised product. These characteristics, however, can reflect the form of consumption of Alice, establishing the relation and transfer of meanings between product and endorser (Belk, 1988, 2014). The second category, in turn, is directed to comments from followers on the goods and services advertised. They describe the experiences with the goods, the desire to own them and the feelings acquired from the post (Table 14), bringing cognitive, emotional and behavioral elements that guided and guide the process of engagement (Cheung et al., 2011; Dessart et al., 2015; Hollebeek & Chen, 2014).

Table 14. Comments about the products endossed by Alice Matos

Level of interaction	Comments
2 likes and 2 comments	Post05: It really is impossible to eat [sweet fit] a single spoon (emoji of monkey with hands in the eyes) One of the best brands I have tasted so far!
3 likes and 2 comments	Post12: I already want to prove it [supplement], where do I find it?? (two palms)
7 likes and 2 comments	Post13: I loved this bag [...]

Source: Alice Matos Posts – Instagram (2018)

Such comments contribute to a positive image of the brand, the product and the endorser. They add information that encourages the purchase crediting the quality and benefits of the advertised product (Centeno & Wang, 2017) and demonstrate the desire of the followers to enjoy its proposed benefit.

The negative comments were found in 10 of the 15 posts made by Alice. They were encompassed in only one category called the post's criticism. Although the endorser is, among the other influencers investigated, the person who shared the most information about the products, the negative sentences are questions, doubts about the products that are not clarified with the information offered by this influencer or comments about the difficulty of finding the products in the announced links (Table 15).

Table 15. Comments about the products announced by Alice Matos

Level of interaction	Comments

3 likes and 1 comment	Post06: Are those things you wearing comfortable??
1 like and 2 comments	Post13: @alice this belt pac is from where?
1 like	Post10: @alice @labellamafia I did not find these pants on the site

Source: Alice Matos Posts – Instagram (2018)

Except for the comments of post 06, the others bring questions about products that were not being endorsed, just made up the scene in the photograph, but aroused the interest of the followers. These products diverted the focus of the product being endorsed and may have compromised the disclosure strategy. This issue should be considered by companies and endorsers for developing postings.

Discussion: what are the key considerations for online engagement in posts?

We discussed a new way for companies to seek online engagement with the consumer through a digital influencer. By adopting such a perspective, we assume that online engagement can involve other actors that will determine how committed an individual will be in cognitive, emotional, and behavioral terms to a given brand or product (Valentini et al., 2018). In analyzing the posts of digital influencers who endorsed some goods or services in their profiles on Instagram, we assume that in this advertising process such influencers act as avatars of the advertised brands (Powers & Greenwell, 2016) and as bridges for such brands to reach potential consumers (Segev et al, 2018).

Our results corroborate the premise that digital platforms enable distinct forms of engagement (Calder et al., 2009), establishing new configurations that affect relationship marketing and promotion strategies within the marketing mix. On Instagram, for example, the development of engagement can involve four participants who play different social roles, expanding the process of co-creation of value (Coelho et al., 2016; Vargo & Lusch, 2004; Virtanen et al., 2017) through a tetrad network composed by influencer, follower, brand/product and other followers.

Engagement metrics on Instagram allowed us to analyze two types of engagement, according to Valentini et al. (2018): the type of consumption behavior based on likes and follow, and the type of contribution behavior involving comments. All digital influencers have a considerable degree of approval when we observe the large number of followers, reinforcing the impact and influence of these women on the opinions, feelings and consumption behaviors of their audience. Such metrics indicate engagement, but also recognition and reach achieved by digital influencers, that is, their popularity (Veirman et al., 2017; Virtanen et al., 2017).

Concerning the number of likes and comments, we could perceive the impact of the image of the influencer to generate commitment to the posting. We emphasize the importance of photography as the main means of attraction of the post (Cvijikj & Michahelles, 2013; McCoy, 2017) and the central role of the influencer in it by announcing the product. The endorser, in this case, uses her image, especially corporal, in the posted photos as a way to generate more engagement for this post, leaving the product in a secondary attraction function. The followers are interested in the influencers first of all, so it is a wrong strategy to endorse the product in the profile of these individuals without their image being directly exposed in the endorsement photograph. The good advertised must corroborate with the image that the follower has of the influencer. In this research, the products announced are related to beauty, especially body, wealth and success of the digital fitness influencers (Goellner, 2008), reinforcing the hedonic content of the post (Virtanen et al., 2017).

Our results also point out the need for followers, through photography and post texts, to perceive the interaction between the endorser and the endorsed product. Even if they recognize that this is a form of advertising, followers expect that such a product is actually part of the influencer's daily consumption, that is, there is also an engagement between influencer and product/brand express in the post in the emotional, cognitive and behavioral terms (Cheung et al., 2011; Hollebeek & Chen, 2014; Dessart et al., 2015), generating more credibility, confidence and attractiveness to the announced message (Lim et al., 2017).

Through the analysis of the comments, we identified that the lifestyle of the influencers should be considered, analyzed by companies that want one of them as an endorser in the virtual environment, especially in that person's online profile on Instagram. By following the daily life of this influencer through postings (Vogel et al., 2015), followers construct an image of one with many characteristics beyond the physical and beauty elements. Values, beliefs, and behaviors of endorsers are known and interpreted by followers. So that any advertised product that disagrees with this perceived identity will be understood as a simple advertisement that does not fit with the modes of consumption of the influencer. Such a situation will negatively impact the credibility of the digital influencer and will not generate the expected results for the companies through a promotional strategy used.

Through the endorsement of products in the profiles of digital influencers, companies can still derive benefits from positive comments made by followers about their goods and services, aiding in the advertising carried out and the communicated message. Such followers feel more identified with the brand by being able to express their opinions about it interacting with other consumers or potential buyers (Booth & Matic, 2011; Hanna et al., 2011) creating a sense of empathy and greater participation of the follower in the interaction promoted by the post.

At the same time, organizations are more exposed to negative comments that can be directed to their products, but also to the endorser, compromising the brand image. It is a risk that can be diminished through the correct choice of the endorser. For this, the analysis of her or his profile would guide the decisions to be taken, understanding that the characteristics of body exposure and their meanings are extended to the products advertised (Belk 1988, 2014), especially in the fitness market.

Conclusions

Our investigation made possible the understanding of the engagement types generated from the endorsement of products in the profiles of digital influencers on Instagram. The two identified forms of them, that of consumption and contribution, indicate different levels of engagement that provide data to analyze the effectiveness of the post.

Specially, we realized that the engagement in the investigated posts also increased the actors involved in this form of relationship. In addition to the connection between brand/product and (potential) consumer, a third individual emerges with the ability to influence and be close to these two elements, impacting on the image of the advertised brand and the perception of the consumer about it. A triad emerges in which a digital influencer acting as an endorser will determine the form, level, and intensity of the relationship between a company and a follower by posting. We still added in this network of relationships the other followers of the digital influencer, since they also exert influence in the engagement process by liking and commenting on the posts, dialoguing with the actors already described, expressing opinions and experiences about the product and/or the digital influencer. For that reason, we described this process of engagement as a tetrad network, broadening the types of participants involved in the co-creation of value.

Finally, looking at the role of the digital influencer, we concluded that the closer the endorsement reflects the endorsers and their characteristics, the better the acceptability and the communicative efficiency of it, creating more engagement. Thus, the product must emerge as an extension of the influencers, as a means of constructing their images, making this endorsement strategy understood by the followers as demonstrations of the endorsers' usual consumer practices. In this tetrad (brand/product – digital influencer digital – follower – other followers), the likes and comments are the thermometers for gauging the relationship built and maintained from the online interaction which cannot be disregarded by marketing professionals when developing online communication and promotion strategies.

While observing digital influencers as brand endorsers in this research, we recognize the diversity of roles played by these subjects who act not only as advertisers of brands and products,

but as determining agents in the development of new forms of consumption, needs, and desires of individuals. This diversity can be analyzed in future research, also emphasizing the different digital platforms in which such influencers act.

References

Almeida, M. I. S., Coelho, R. L. F. Camilo-Junior, C. G., & Godoy, R. M. F. (2018). Who Leads Your Opinion? Opinion Leaders' Influence on Virtual Engagement. *RAC*, *22*(1), 115-137.

Bakhshi, S., Shamma, D. A., & Gilbert, E. (2014). Faces Engage Us: Photos with Faces Attract More Likes and Comments on Instagram. *CHI 2014, One of a CHInd*, Toronto, ON, Canadá.

Belk, R. W. (2014). Digital consumption and the extended self. *Journal of Marketing Management*, *30*(1/2), 1101-1118.

Belk, R. W. (1988). Possessions and the Extended Self. *Journal of Consumer Research*, *15*, 139-168.

Booth, N., & Matic, J. A. (2011). Mapping and leveraging influencers in social media to shape corporate brand perceptions. *Corporate Communications: An International Journal, 16*(3), 184-191.

Bowden, J.L.-H. (2009). The Process of Customer Engagement: A Conceptual Framework. *Journal of Marketing Theory and Practice, 17*(1), 63–74.

Calder, B. J., Malthouse, E. C., & Schaedel, U. (2009). An Experimental Study of the Relationship between Online Engagement and Advertising Effectiveness. *Journal of Interactive Marketing, 23*(4), 321–331.

Centeno, D., & Wang, J. J. (2017). Celebrities as human brands: An inquiry on stakeholder-actor co-creation of brand identities. *Journal of Business Research, 74*, 133–138.

Cheung, C. M. K., Lee, M. K. O., & Jin, X-L. (2011). Customer Engagement in An Online Social Platform: A Conceptual Model and Scale Development. *Thirty Second International Conference on Information Systems*, Shanghai 2011, 1-8.

Cvijikj, I. P., & Michahelles, F. (2013). Online engagement factors on Facebook brand pages. *Social Network Analysis and Mining, 3*(4), 843–861.

Coelho, R.L.F., Oliveira, D.S., & Almeida, M.I.S. (2016). Does social media matter for post typology? Impact of post content on Facebook and Instagram metrics. *Online Information Review, 40*(4), 458-471.

Dhanesh, G.S. (2017). Social media and the rise of visual rhetoric: implications for public relations theory and practice. In: Bridgen, E. and Vercic, D. (Eds), *Experiencing Public Relations*, Routledge, New York, NY, 137-150

Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management, 24*(1), 28-42.

Flanagan, J. C. (1973). A técnica do incidente crítico. *Arq. bras. Psic. apl., 25*(2), 99-141.

Fridlund, B., Henricson, M., & Martensson, J. (2017). Critical Incident Technique applied in nursing and healthcare sciences. *SOJ Nursing & Health Care, 3*(1), 1-5.

Goellner, S. V. (2008). Deporte y Cultura Fitness: La Generización de Los Cuerpos Contemporáneos. *Revista Digital Universitaria, 9*(7), 3 – 11.

Hanna, R., Rohm, A., & Crittenden, V. L. (2011). We're all connected: The power of the social media ecosystem. *Business Horizons, 54*, 265—273.

Hettlage, R., & Steinlin, M. (2006). *The critical incident technique in knowledge management-related contexts*. 1st Ed. Zurich: Ingenious Peoples Knowledge.

Hollebeek, L., & Chen, T. (2014). Exploring positively versus negatively-valenced brand engagement: a conceptual model. *Journal of Product & Brand Management, 23*(1), 62-74.

Jin, S.-A. A., & Phua, J. (2014). Following Celebrities' Tweets About Brands: The Impact of Twitter-Based Electronic Word-of-Mouth on Consumers' Source Credibility Perception, Buying Intention, and Social Identification with Celebrities. *Journal of Advertising, 43*(2), 181–195.

Lim, X. J., Radzol, A. F., Cheah, J., & Wong, M. W. (2017). The Impact of Social Media Influencers on Purchase Intention and the Mediation Effect of Customer Attitude. *Asian Journal of Business Research*, *7*(2), 19-36.

Maguire, J. S. (2002). Body Lessons: Fitness Publishing and the Cultural Production of the Fitness Consumer. *International Review For The Sociology Of Sport, 37*(3–4), 449–464.

McCann, M., & Barlow, A. (2015). Use and measurement of social media for SMEs. *Journal of Small Business and Enterprise Development, 22*(2), 273-287.

McCoy, E. (2017). *Visual communication is transforming marketing – are you up to speed?* Available at: www.forbes.com/sites/forbescommunicationscouncil/2017/05/12/visual-communication-is-transforming-marketing-are-you-up-to-speed/#16171f116f7c (accessed February 14, 2019).

Meyers, C. B. (2017). Social Media Influencers: A Lesson Plan for Teaching Digital Advertising Media Literacy. *Advertising & Society Quarterly, 18*(2), 1-31.

Osborne-Gowey, J. (2014). What Is Social Media? *Fisheries, 39*(2), 55.

Patterson, P., Yu, T., & Ruyter, K.d. (2006). Understanding customer engagement in services. *Proceedings of the Australian and New Zealand Marketing Academy 2006 Conference: Advancing Theory, Maintaining Relevance*, Brisbane, 2006.

Penn, G. (2000). Semiotic analysis of still images. In M.W. Bauer and G. Gaskell (Eds.). *Qualitative researching with text, image, and sound*: A practical handbook. London: Sage.

Power, A. (2014). What is social media? *British Journal of Midwifery*, 22(12), 896-897.

Powers, D., & Greenwell; D. M. (2016). Branded fitness: Exercise and promotional culture. *Journal of Consumer Culture*, *17*(3), 523–541.

Roth, A., & Zawadzki, T. (2018). Instagram as a tool for promoting superfood products. *Annals of Marketing Management & Economics - International Journal, 4*(1), 101-114.

Scott, R., Cayla, J., & Cova, B. (2017). Selling Pain to the Saturated Self. *Journal of Consumer Research, 44*(1), 22–43.

Segev, N., Avigdor, N., & Avigdor, E. (2018). Measuring Influence on Instagram: A Network-Oblivious Approach. *SIGIR'18*, July 8-12, 2018, Ann Arbor, MI, USA.

Uzunoglu, E., & Kip, S. M. (2014). Brand communication through digital influencers: Leveraging blogger engagement. *International Journal of Information Management*, *34*, 592-602.

Valentini, C., Romenti, S., Murtarelli, G., & Pizzetti, M. (2018). Digital visual engagement: influencing purchase intentions on Instagram. *Journal of Communication Management, 22*(4), 362-381.

Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer Engagement Behavior: *Theoretical Foundations and Research Directions. Journal of Service Research, 13*(3), 253–266.

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing, 68*(1), 1–17.

Veirman, M., Cauberghe, V., & Hudders, S. (2017). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising, 36*(5), 798-828.

Virtanen, H., Björk, P., & Sjöström, E. (2017). Follow for follow: marketing of a start-up company on Instagram. *Journal of Small Business and Enterprise Development, 24*(3), 468–484.

Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences, 86*, 249–256.