Be creative, my friend! Engaging users on Instagram by promoting positive emotions

Luis V. Casaló[a], Carlos Flavián[b],[*], Sergio Ibáñez-Sánchez[b]

[a] Universidad de Zaragoza, Faculty of Business and Public Management, Plaza Constitución s/n, 22.001 Huesca, Spain
[b] Universidad de Zaragoza, Faculty of Economy and Business, Gran Vía 2, 50.005 Zaragoza, Spain

ABSTRACT

Instagram is emerging as the most influential social network; this phenomenon is especially apparent in the fashion industry. Fashion brands are launching creative campaigns on Instagram to engage their followers. The present study aims to increase the understanding of followers' engagement by analyzing the consequences of brand publications on Instagram. Taking as a basis the S-O-R framework, brand publications (*stimulus*) may generate perceptions of creativity and positive emotions in their followers (*organism*) which, in turn, may influence their affective commitment and interaction intentions (*response*). Our results, based on data collected from 808 followers of an Instagram fashion brand account, analyzed using structural equation modeling, confirmed that perceived creativity is a crucial aspect of Instagram. In addition, positive emotions and affective commitment act as partial mediators in the relationship between perceived creativity and interaction intentions. These results have interesting implications for both the fashion industry and content generation on Instagram.

1. Introduction

Image-based social networking sites have gained popularity during the last years (Choi & Sung, 2018). Instagram is the fastest growing, recently reaching 1 billion active users (Statista, 2018). From its beginnings, Instagram has allowed users to take photos, apply filters, and share the photos with followers who can "like" and comment on them (Kim, Seely, & Jung, 2017). Over time, new formats have been incorporated (e.g. "Instagram stories", live videos) to improve the user experience. This has contributed to Instagram achieving a higher rate of engagement than Facebook and Twitter and receiving more average interactions per post (Casaló, Flavián, & Ibáñez-Sánchez, 2017a; Socialbakers, 2018). Moreover, Instagram is changing the fashion industry, and fashion brands must have a strong presence on it to be successful, as its nature allows them to have more followers and interactions than other brand types, leading to higher engagement rates (Ha, Huang, & Park, 2019). These data support the importance of Instagram in the fashion world, and it is thus key to analyze users' experiences on this social network.

Fashion is regarded as one of the most important global industries and, because of its evolutionary nature, new tendencies and trends constantly appear (Kim, Ko, Xu, & Han, 2012). Consumers look for fashionable and stylish clothing to display their status and to be trendy, with styles that express their individuality (Kim et al., 2012; Kim, Lloyd, & Cervellon, 2016; Ko, Kim, Taylor, Kim, & Kang, 2007). Social networks serve as platforms through which customers can become inspired (Aragoncillo & Orús, 2018), showcase their own styles (Phua, Jin, & Kim, 2017a) and interact with others about new fashion trends (Brandão, Pinho, & Rodrigues, 2019). These platforms are, thus, playing a very important role in allowing fashion brands to publicize their products (Goldsmith & Clark, 2008). In this sense, the visual nature of Instagram elicits positive user reactions (e.g. "liking" posts, commenting, following brands) and purchase behaviors toward fashion brands, resulting in higher engagement (Socialbakers, 2018).

Despite its growing relevance, the academic research on Instagram is still scarce (Kim & Kim, 2019a). Recent research has mainly analyzed the motivations for Instagram use (Järvinen, Ohtonen, & Karjaluoto, 2016; Sheldon & Bryant, 2016), comparing it to other social networking sites (Choi & Sung, 2018; Kim & Kim, 2019a; Phua et al., 2017a, 2017b), the impact of users' personality traits (Kim & Kim, 2019b; Sheldon, Rauschnabel, Antony, & Car, 2017), the antecedents of users' interaction and participation (Casaló, Flavián & Ibáñez-Sánchez, 2017a, 2017b), the effectiveness of brand posts (Colliander & Marder, 2018) and the role of influencers (Casaló, Flavián, & Ibáñez-Sánchez, in press;

* Corresponding author at: Department of Marketing Management and Market Research, Universidad de Zaragoza, Zaragoza, Spain.
E-mail addresses: lcasalo@unizar.es (L.V. Casaló), cflavian@unizar.es (C. Flavián), sergiois@unizar.es (S. Ibáñez-Sánchez).

Djafarova & Rushworth, 2017; Erz, Marder, & Osadchaya, 2018; Phua, Lin, & Lim, 2018). However, to the best of our knowledge, no study has researched the specific role played by creativity on Instagram, regarded as one of the most important features of this visual social network (Casaló, Flavián, & Ibáñez-Sánchez, 2017b; Sheldon & Bryant, 2016; Socialbakers, 2018).

By its nature, Instagram is well suited for brands to visually display their products using pleasing and appealing content (Casaló et al., 2017b). In this sense, several formats and tools have been implemented on Instagram to foster the creativity of posts (e.g. filters, stories). As a result, content uploaded to Instagram is perceived as more creative than content uploaded onto other social networks. Brands, particularly in the fashion industry, are aware of the role played by creativity on Instagram, and they are undertaking creative actions on the network to obtain better results. For instance, Nike creatively launched the React shoe model by posting a picture of a mannequin's foot on sponges, pillows and springs to demonstrate its comfort. Due to the curiosity this generated among its engaged followers, Nike, when it revealed the name of the shoe in a later video, achieved the most views for the brand on Instagram in 2018 (Entrepreneur, 2019). Furthermore, the brand ASOS launched some creative Instagram Stories which seemed to be shot on a smartphone (native format), showing youngsters in formal-wear and sportswear undertaking casual activities (e.g. jumping into a pool, playing basketball), to show its message of focus on celebrating the individual style. This resulted in 3 million views and a 14-point increase in brand recall in the UK, and a 7-point rise in brand awareness in the US (Review, 2017). These examples underline the important role played by creativity in brands' campaigns, focused on their Instagram followers, in achieving more successful marketing results. Therefore, as previous research has noted (Burroughs, Moreau, & Mick, 2008; Wu, Wen, Dou, & Chen, 2015), there is a need to explore the consequences of creative online communications. In particular, we focus on the customer's view of these brand posts on Instagram by analyzing the role played by their perceptions of their creativity and positive emotions in driving their subsequent behaviors on the network.

Taking these points into account, this research aims to examine the process by which a brand publication on Instagram affects customer behaviors through the customers' internal responses, namely the perceived creativity and positive emotions aroused, on the basis of the S-O-R (stimulus-organism-response) framework (Donovan & Rossiter, 1982; Mehrabian & Russell, 1974) on an official fashion brand Instagram account. In this sense, brand publications can be regarded as the stimuli which users view on Instagram. Consequently, organismic perceptions of creativity and positive emotions may be triggered in users, which are crucial concepts in this context for achieving a better understanding of the affective side of Instagram. Finally, these subjective perceptions prompt users' responses, that is, affective commitment and interaction intentions. Both variables are important in this context, as higher levels of affective commitment strengthen the brand-followers' affective bonds, while brand-follower interaction is essential for the successful development of an online community, such as an Instagram brand account (Blazevic, Wiertz, Cotte, de Ruyter, & Keeling, 2014).

Therefore, taking into account the important role played by creativity on Instagram highlighted in the previous literature (e.g. Casaló et al., 2017b), this is, to the best of our knowledge, one of the first studies to analyze empirically the specific role played by creativity and positive emotions resulting from brand posts published on Instagram, considering them as important antecedents of user behaviors on the social networking site. In addition, in view of the decreasing efficacy of traditional media, marketers are striving to find new ways of connecting with their potential customers (Fransen, Verlegh, Kirmani, & Smit, 2015). To overcome this challenge our research emphasizes how perceptions of creativity and positive emotions resulting from viewing content on Instagram can generate stronger affective bonds and participation in brand communities, and we provide recommendations as to how brand managers can foster this process.

2. Theoretical framework

2.1. S-O-R theory

Stimulus-organism-response (S-O-R) has its origin in the stimulus–response theory developed by Pavlov (1902), subsequently extended by Mehrabian and Russell (1974) and Donovan and Rossiter (1982). Stimuli have been defined as the factors that cause organismic response processes in the individual (Eroglu, Machleit, & Davis, 2001). Due to the nature of the present study (the image-based social network Instagram), online stimuli are regarded as visual and auditory cues presented to the user (Eroglu et al., 2001). Stimuli are processed by an internal component, the organism, and this finally leads to the performance (or not) of certain behaviors. The organism mediates the impact of particular stimuli on the responses. This framework has been applied in both offline (e.g. Kumar & Kim, 2014; Morrison, Gan, Dubelaar, & Oppewal, 2011) and online (e.g. Eroglu et al., 2001; Richard, 2005) contexts. Previous research on social networks (e.g. Facebook) has successfully applied this framework to analyze customers' responses, taking brand publications on social networks as stimuli (Islam & Rahman, 2017; Kim & Johnson, 2016). Thus, we extend the use of the S-O-R framework to Instagram, a more visual social network; we regard brand publications on this social network as stimuli which, in turn, may activate users' perceptions of creativity and positive emotions as organismic components which may subsequently drive their responses (affective commitment and interaction intentions).

2.2. Stimulus: brand publications on Instagram

Social networks, such as Instagram, are suitable channels for brands to communicate their new products to potential customers (Belanche, Cenjor, & Pérez-Rueda, 2019). In this sense, the content published by a brand on a social network can increase potential customers' interest in the brand and encourage them to learn more about its activities, resulting in a strengthening of the bonds between the brand and potential customers (Kim & Johnson, 2016).

Instagram allows brands to post visual content (e.g. pictures, stories, short videos), which can be improved using several tools provided by the platform (e.g. picture filters). Thus, brands can visually diffuse information about their products among their potential customers (Goldsmith & Clark, 2008). The social network is especially important for fashion brands, due to the vital role of visual aspects in promoting the industry's products (Casaló et al., 2017b), which results in higher engagement rates (Socialbakers, 2018). Therefore, following previous research which also took brand publications as the stimulus in the S-O-R framework (e.g. Kim & Johnson, 2016), we consider posts published by a fashion brand on Instagram as stimuli which might drive subsequent organismic reactions and responses in followers.

2.3. Organism: perceived creativity and positive emotions

Creativity is an intriguing topic, long researched in the marketing field (Hirschman, 1980). Although the concept can be addressed from different perspectives (e.g. personal creativity, process creativity; Smith & Yang, 2004), in our study context (fashion brands on Instagram) it is more appropriate to define it from an advertising viewpoint, as brands use creativity in their publications to obtain better results in their marketing campaigns on the social network (ASOS, Review, 2017; Nike React, Entrepreneur, 2019). Creativity, in this context, is the extent to which content is original, unexpected, appropriate and relevant, conveying a great amount of meaning in a simple message. This requires the audience to modify their attitude toward what is advertised (Haberland & Dacin, 1992). Previous literature has agreed that creativity is composed of two main factors (Amabile, 1996; Smith & Yang, 2004; Sternberg & Lubart, 1999), novelty (also known as divergence, looking for what is original and unique) and appropriateness (also

referred to as relevance or meaningfulness, being useful and effective). Despite the important, recognized role played by creativity in marketing and advertising communications (Smith & Yang, 2004), few studies have explored the consequences of creative online communications (Wu et al., 2015).

The visual nature of Instagram makes it the most suitable platform for spreading creativity (Socialbakers, 2018). In fact, the creativity applied to the uploaded photos and videos on Instagram is one of the reasons for using the social network (Sheldon & Bryant, 2016). Instagram's image-based nature, simplicity and creativity, motivates its users to increase following each other's lives, brands (Casaló et al., 2017b) and influencers (Casaló et al., in press). For brands, the social network offers several content formats (e.g. filters, live videos, boomerangs) that allow them to promote their creativity and to engage followers (Socialbakers, 2018). Therefore, just as brands can apply creativity while editing and customizing the content they upload to Instagram, the social network allows them to transfer this worthwhile feature to their followers, as a form of self-presentation (Choi & Sung, 2018; Kim et al., 2017).

Emotions are regarded as mental states aroused by cognitive evaluations of events or thoughts, following a phenomenological perspective; they are usually connected to physiological or physical processes, and result in specific actions to confirm or manage these emotions, based on the contextual situation and personal characteristics of the individual (Bagozzi, Gopinath, & Nyer, 1999). In particular, the previous literature has emphasized the agreement among studies that feelings such as delight, excitement, happiness, joy, pleasure and satisfaction can be regarded as positive emotions (Laros & Steenkamp, 2005).

Positive emotions have been shown to be variables useful for achieving a better understanding of users' experiences in hedonic technology-mediated environments (Huang, Backman, Backman, & Moore, 2013). For instance, in virtual worlds, such as Second Life (Flavián, Ibáñez-Sánchez, & Orús, 2019), positive emotions have been shown to be important for the development of better experiences (Huang et al., 2013). For social networks, like Instagram, which can be also considered as hedonic technologies (Casaló et al., 2017b), aspects such as visuals and esthetics play a vital role by encouraging users and brands to share content that triggers positive emotions in followers (e.g. Lup, Trub, & Rosenthal, 2015; Sheldon & Bryant, 2016). Instagram's hedonic nature explains the essential role played by positive emotions on the network. Therefore, Instagram seems to be one of the most appropriate platforms for expressing positive emotions (Waterloo, Baumgartner, Peter, & Valkenburg, 2018), underlining the relevance of its study in this context.

2.4. Responses: affective commitment and interaction intention

Commitment has been defined as the user's desire to maintain an enduring relationship that (s)he regards as important and valuable (Moorman, Zaltman, & Deshpande, 1992); the parties believe it is worthwhile to make an effort to maintain it (Morgan & Hunt, 1994). Previous literature has distinguished between calculative and affective commitment (Brodie, Ilic, Juric, & Hollebeek, 2013; Geyskens, Steenkamp, Scheer, & Kumar, 1996; Gustafsson, Johnson, & Roos, 2005). Calculative commitment is a more rational or economic-oriented approach (Geyskens et al., 1996), while affective commitment is more emotional, arising from the feelings and closeness that develops among users (Meyer, Allen, & Smith, 1993). Affective commitment has been defined as customers' emotional attachment to brands due to their connection/identification with them (Allen & Meyer, 1990). Consumers are affectively committed to a brand due to the solid attachment generated through previous experiences that, in turn, result in the development of a positive relationship with the brand (Shukla, Banerjee, & Singh, 2016). In this sense, by publishing contents on Instagram, brands can strengthen their affective bonds with their followers, which will

lead to followers being more willing to interact with the branded content and more likely to purchase the sponsored branded products (Casaló, Flavián, & Guinalíu, 2011).

On the other hand, the theory of planned behavior (Ajzen, 1991) proposes that intentions are the main antecedents of performing real behaviors. Intentions, therefore, represent the willingness of users to behave in a particular manner, and are a strong signal about the way they will behave in reality (Casaló et al., 2011). New technologies (such as Instagram) have made it easier to interact on and obtain information from these platforms (Serra-Cantallops, Ramon-Cardona, & Salvi, 2018). In our context, we consider interaction intentions as the intention to perform certain actions, such as clicking the "like" button, or commenting on an uploaded post, on Instagram (Casaló et al., 2017a). By generating brand-based content, brands can foster the degree of interaction between the brand account and its followers, which is essential for the successful development of online communities, such as those of fashion brands on Instagram (Blazevic et al., 2014).

2.5. Formulation of hypotheses

The S-O-R framework (Donovan & Rossiter, 1982; Mehrabian & Russell, 1974) proposes that stimulation and human responses are connected by an organismic component comprising both biological and psychological elements. The publications posted by brands on Instagram represent the stimuli which trigger the generation of organismic processes and subsequent responses. Having established brand publications on Instagram as the stimuli in our model, the perceived creativity of these publications is one of the organismic factors that may become evident when followers process the information. Previous research has found that certain aspects of online content, such as creativity, can help to generate positive emotions, for example, enjoyment and pleasure (Jung, Lee, Hur, & Kim, 2018). Hampton-Sosa (2017) noted that providing users with the tools necessary to promote their creativity is related to an increase in positive emotions such as pleasure, excitement and enjoyment. In addition, visuals-based social networking sites, particularly Instagram, provide their users with tools (e.g. filters) that can be applied to the material they upload to their personal profiles to make their posts appear more creative (Sheldon & Bryant, 2016). This content may be seen by followers as more original, which can generate positive emotional outcomes, such as fun, and satisfaction with the experience (Casaló et al., 2017a). Therefore, Instagram offers brands a visual story-telling platform with tools which allow them to fulfill their creative desires in their posts, leading to positive emotions among their followers (Casaló et al., 2017a). Hence, it is proposed:

> H_1: The perceived creativity of the publications on an Instagram brand account has a positive effect on the positive emotions experienced by followers of the account.

In the same way, post content can also affect human responses toward an account. Previous studies have highlighted the key role played by creativity in online communications between brands and consumers, which can lead to positive affective outcomes, such as more favorable attitudes toward the brand (Wu et al., 2015). This creative content may generate closer ties, which might serve to develop users' affective commitment (Belanche, Casaló, & Guinalíu, 2013). Strengthening the affective bonds between brands and followers leads to greater affective commitment rates, as the followers become more emotionally connected with the brands (Evanschitzky, Iyer, Plassmann, Niessing, & Meffert, 2006). Therefore, we propose that the perceptions of creativity generated by viewing brand publications on Instagram lead to greater affective commitment toward brands. Hence:

> H_2: The perceived creativity of the publications on an Instagram brand account has a positive effect on the user's affective commitment to the account.

In addition, as creativity serves to capture users' attention (Casaló et al., 2017b), this content can motivate them to interact on the Instagram account to express their emotions or curiosity. Visuals-based social networking sites, such as Instagram, are suitable platforms that offer tools to facilitate the processes of sharing interests, creative ideas and hobbies (Zhu & Chen, 2015), by means of photos, short videos, stories, etc. Thus, users' creativity is fostered on social networking sites, such as Instagram and, therefore, it is a meaningful tool for interacting with others with similar interests and a useful channel for brands to transmit creative ideas (Zhu & Chen, 2015). In addition, Casaló et al. (2017a) highlighted the role that original content plays in creating hedonic and satisfying experiences which, in turn, motivates users to participate on fashion brand Instagram accounts and carry out real behaviors, such as commenting on or "liking" uploaded photos or videos. As a result, we propose that:

H_3: The perceived creativity of the publications on an Instagram brand account has a positive effect on the user's interaction intentions with the account.

When users process information posted on Instagram, it can arouse in them positive feelings (such as feeling happy or satisfied). Emotions play a key role in the creation of consolidated relationships in communities over time (Bagozzi et al., 1999). Specifically, positive emotions have been shown to strengthen commitment to online services (Sanchez-Franco & Rondan-Cataluña, 2010a), and have been associated with memorable experiences (Tung & Ritchie, 2011). In addition, consumers' affective commitment is usually preceded by positive experiences with the provider (Shukla et al., 2016). Affective commitment is rooted in the transmission of positive feelings in online communities (Wu, Chen, & Chung, 2010). When customers experience positive emotions through an online experience, they exhibit more positive responses in companies' virtual communities, which is reflected in an increase in their affective commitment (Claffey & Brady, 2014). Therefore, higher levels of positive feelings evoked by online experiences (e.g. satisfaction, enjoyment) with brand postings on their Instagram accounts can generate a greater sense of affective commitment (Sanchez-Franco & Rondan-Cataluña, 2010b). Hence:

H_4: Positive emotions experienced by the user due to publications on an Instagram brand account have a positive effect on the user's affective commitment to the account.

In addition, it has been found that positive emotions (such as feeling satisfied) have a direct effect on intention to interact on Instagram (Casaló et al., 2017a). Huang et al. (2013) found that a positive relationship existed between media characteristics and behavioral intentions mediated through eliciting positive emotions. Tsai and Bagozzi (2014) found that when users anticipate that positive emotions will result from their contribution to a community, their desire to participate in it is stronger. In addition, positive emotions have been shown to be an important antecedent of positive interaction behaviors (Keiningham, Rust, Lariviere, Aksoy, & Williams, 2018) Finally, positive emotional experiences have been shown to be antecedents of user interaction on social networks such as Instagram (Serra-Cantallops et al., 2018). These authors concluded that positive emotional experiences are powerful tools through which to generate interaction intentions. We therefore propose the following:

H_5: Positive emotions experienced by the user due to publications on an Instagram brand account have a positive effect on the user's interaction intentions with the account.

Finally, affective commitment has been shown to be an antecedent factor motivating users' participation in online communities (Casaló et al., 2011). Users who have developed an emotional attachment to an entity have a higher degree of personal involvement (Gustafsson et al., 2005). In this sense, social networks provide opportunities for customers with strong emotional bonds to create content by interacting with other customers, acting as value co-creators (Sashi, 2012). Evanschitzky et al. (2006) noted that there was a positive relationship between affective commitment with brands and behaviors (e.g. interacting with, or recommending, the brand). In addition, increased levels of affective commitment in virtual communities may lead to increased participation in activities that create value (Claffey & Brady, 2014). Finally, affective commitment has been revealed as the main antecedent of the creation of positive interactions with a brand (Keiningham et al., 2018). Instagram users who experience affective commitment to a brand account tend to be more involved and perform relevant activities, such as interacting on the account. Thus, we propose our last hypothesis:

H_6: A user's affective commitment to an Instagram account has a positive effect on his/her interaction intentions with the account.

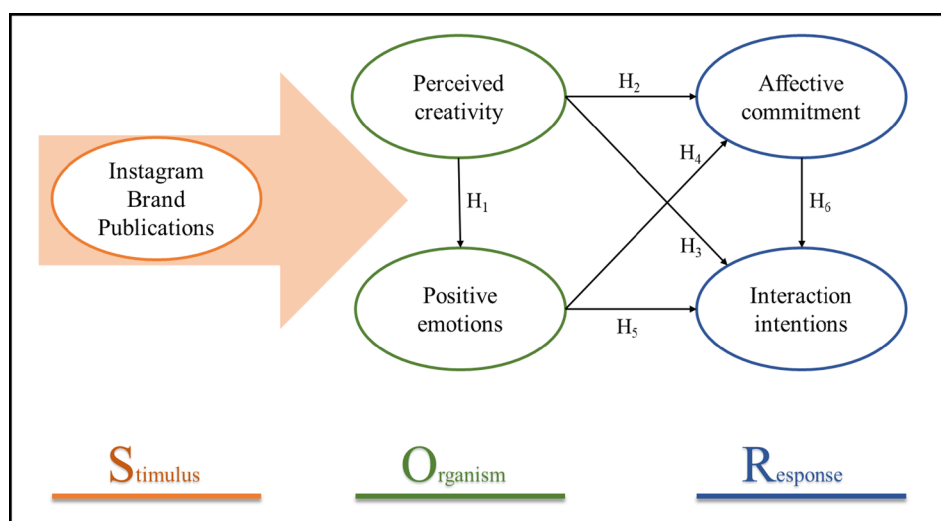The research model is displayed in Fig. 1.

Fig. 1. Research model.

Table 1
Composite reliability and convergent and discriminant validity.

Variable	Composite Reliability	AVE	(1)	(2)	(3)	(4)
Perceived Creativity (1)	0.867	0.685	**0.828**			
Positive Emotions (2)	0.963	0.814	0.258	**0.902**		
Affective Commitment (3)	0.904	0.704	0.435	0.239	**0.839**	
Interaction Intentions (4)	0.856	0.665	0.695	0.333	0.485	**0.815**

Note: Bold numbers on the diagonal show the square root of the average variance extracted; numbers below the diagonal represent construct correlations.

3. Methodology

Data to test these hypotheses was collected, working with the account manager, from an Instagram account focused on a specific female fashion brand. This context was selected due to the important role that creativity plays in the fashion industry and the increasing use of Instagram by fashion companies (e.g. Casaló et al., 2017a). This fashion account has more than 75,000 followers, most of them young females, according to the account manager, able to participate in the research. This profile is not surprising as the account focuses on female products and more than 70% of the global Instagram population is aged 34 years, or younger (Statista, 2019). Therefore, we consider that this profile of young female followers may be similar to other Instagram accounts focused on female fashion products. Specifically, for one week a link to the research questionnaire was placed on the account bio, a small area below the username, where some details (e.g. hashtags, links, information…) can be shared. We promoted honesty among the respondents by explaining that there were no right or wrong answers, and constructed the items carefully to avoid ambiguity (Casaló et al., 2011). The questionnaire included multiple-item measurement scales taken from previous literature[1], adapted to our research context, regarding perceptions of creativity (Andrews & Smith, 1996) –originally tested in the context of marketing programs for mature products, affective commitment (Belanche et al., 2013)–originally tested in a consumption context, and interaction intentions (Casaló et al., 2017a) –already developed in the Instagram context. Given their importance in previous studies on consumer behavior, 6 positive emotions –happy, pleased, joyful, excited, delighted and satisfied– were considered (Bagozzi, Belanche, Casaló, & Flavián, 2016). These scales (see Appendix A) used 7-point Likert-type response formats, which respondents rated from 1 ("strongly disagree") to 7 ("strongly agree"). We also collected socio-demographic information (e.g. gender, age, education level and country of residence) and the average experience of participants on Instagram. Last, the participants had to include their username to ensure that the they did not answer more than one questionnaire. In this respect we guaranteed that the username would neither be disclosed nor linked to the participant's answers. Because of the international character of the account, the survey was distributed in English.

A total of 808 participants responded to the questionnaire. Although this sampling procedure is based on self-selection, which may cause some bias, this method of data collection is consistent with common research practice in the online context (e.g. Bagozzi & Dholakia, 2006; Steenkamp & Geyskens, 2006). Of the sample, 96.29% were female, which is unsurprising bearing in mind that the account focuses on female fashion, as aforementioned. In terms of age, the participants were mainly below 25 years (N = 553, 68.44%), followed by those between 25 and 34 (N = 188, 23.27%), the remaining participants being older than 34 (N = 67, 5.69%). Most participants had undertaken tertiary education (N = 533, 65.97%) and 33.04% had completed secondary/high school studies (N = 267). The participants came from more than

60 countries, with the U.S. (N = 193, 23.88%) and United Kingdom (N = 147, 18.19%) being the countries most represented. Finally, in terms of average experience on Instagram, 48.89% of the participants (N = 395) had an average experience of between 1 and 3 years, 45.54% (N = 368) greater than 3 years, and 5.57% (N = 45) less than one year.

3.1. Measurement validation

First, to guarantee the content validity of the scales, that is, the degree to which the items correctly represented the theoretical content of the construct, we identified the initial set of items proposed to measure the latent constructs. This was based on an in-depth review of the relevant literature on consumer behavior, marketing communications and social networks. Some scales (i.e., perceived creativity, affective commitment and positive emotions, which had not been previously tested in the Instagram context) were then adapted to our research context with the aim of guaranteeing their face validity, that is, the degree to which the respondents judged that the items were appropriate to the targeted construct. Specifically, the aim of this adaptation was to measure consumer perceptions, feelings and reactions toward the Instagram account. The items were, thus, classified by a panel of 10 experts in marketing and social networking sites as "clearly representative", "somewhat representative" or "not representative" of the construct of interest (Zaichkowsky, 1985). Items were retained when the experts reached a high level of consensus (Lichtenstein, Netemeyer, & Burton, 1990). The final scales can be seen in Appendix A.

Second, confirmatory factor analysis and covariance-based structural equation modeling were used to confirm the dimensional structure of the scales. Specifically, using EQS 6.1 statistical software, we applied the robust maximum likelihood estimation procedure. We first verified that the factor loadings of the confirmatory model were statistically significant (at 0.01) and higher than 0.5 (Jöreskog & Sörbom, 1993). No item had to be eliminated as all the factor loadings met these requirements, and acceptable levels of convergence, R^2 values, and model fit were obtained (χ^2 = 450.43, 98 d.f., p < 0.000; Satorra-Bentler scaled χ^2 = 370.27, 98 d.f., p < 0.000; NFI = 0.95; NNFI = 0.96; CFI = 0.97; IFI = 0.97; RMSEA = 0.06; 90% confidence interval [0.05, 0.07]). Thereafter, to assess construct reliability, we examined the values of the composite reliability (CR) indicator (Jöreskog, 1971), and confirmed that they were well above the suggested minimum of 0.65 (Steenkamp & Geyskens, 2006), as can be seen in Table 1. In addition, the convergent validity of the measures was confirmed by verifying that the average variance extracted (AVE) values were greater than 0.5 (see Table 1), as suggested by Fornell and Larcker (1981). Finally, to ensure the discriminant validity of the reflective constructs, we checked that the value of the square root of the AVE was greater than the inter-construct correlations (Fornell & Larcker, 1981). In this case, each construct would share more variance with its own measures than with the other constructs in the model. All construct pairs satisfied this criterion, supporting the discriminant validity of the measures. Table 1 provides information about the reliability and convergent and discriminant validity of the constructs.

[1] The reported values (e.g. Cronbach's *alpha*, Composite Reliability, Average Variance Extracted) of the psychometric properties of the original scales were above the recommended threshold in all cases.

Table 2
Summary of nested confirmatory factor analysis tests for trait and method effects.

Model	χ^2	d.f.	p	Model Comparison	χ^2 difference	d.f.	p
Null (1)	11483.262	120	< 0.001	(1)-(2)	11032.833	22	< 0.001
Trait-only (2)	450.429	98	< 0.001	(3)-(4)	4728,125	22	< 0.001
Method-only (3)	5002.998	104	< 0.001	(1)-(3)	6480.264	16	< 0.001
Trait-method (4)	274.873	82	< 0.001	(2)-(4)	176.556	16	< 0.001

3.2. Common method variance

As the data were collected in a single survey, we tested for the existence of possible common method bias. Although we followed procedural recommendations to minimize this concern through the study design (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we also assessed possible common method variance statistically by employing confirmatory factor analyses (Bagozzi, Yi, & Phillips, 1991). Following these authors, we estimated four models using the variables in the present study to assess the amount of trait, method and error variance. Specifically, we developed: (1) a null model in which variance in measures is explained only by random error, (2) a trait-only model in which variance in measures is explained by traits plus random error; (3) a method-only model in which variance in measures is explained completely by method factor plus random error; and (4) a trait-method model in which trait factors, method factor and random error are combined to explain any variance in measures. The null model is, therefore, nested in both the method-only and trait-only models, and the method-only and trait-only models are nested in the trait-method model (Bagozzi et al., 1991). As a result, χ^2 differences can be used to test for the presence of trait and method variance. The results in Table 2 show that models 2 and 4 fit significantly better than models 1 and 3, respectively, implying that variance due to traits appears to be present (Bagozzi et al., 1991). Nevertheless, we should acknowledge that some variance is due to the method, as models 3 and 4 fit significantly better than models 1 and 2, respectively (Bagozzi et al., 1991). In any case, model fit especially improves when trait variance is taken into account. Thus, the estimation shows that the method-only model accounts for 13.94% of the variance, trait factors being the main source of variance (62.24%). In addition, this amount of method variance is in line with, or even lower, than the average variance obtained in previous research (15.8% in the marketing field, according to Cote & Buckley, 1987).

4. Results

After we had verified the reliability and validity of the measurement scales, we developed a SEM to test the proposed hypotheses. The standardized solution is shown in Table 3 and, as can be seen, all hypotheses were supported at the 0.01 level; the structural model fit also exhibited satisfactory values (χ^2 = 450.43, 98 d.f., p < 0.000; Satorra-Bentler scaled χ^2 = 370.27, 98 d.f., p < 0.000; NFI = 0.95; NNFI = 0.96; CFI = 0.97; IFI = 0.97; RMSEA = 0.06; 90% confidence interval [0.05, 0.07]).

The results of the proposed model (Table 3) revealed the important role that perceived creativity and, to a lesser extent, positive emotions have in engaging users on Instagram, all path estimates in the model being significant at 99%. Specifically, perceived creativity positively influenced positive emotions (γ = 0.258, p < 0.01), affective commitment (γ = 0.400, p < 0.01) and interaction intentions (γ = 0.572, p < 0.01), supporting hypotheses H_1, H_2 and H_3, respectively. Similarly, although its influence is lower, positive emotions also has a significant effect on both affective commitment (β = 0.136, p < 0.01) and interaction intentions (β = 0.137, p < 0.01); therefore, H_4 and H_5 are also supported. Finally, as expected, affective commitment was also shown to be positively related to interaction intentions (β = 0.203, p < 0.01).

The research model suggests that positive emotions may have an indirect effect on interaction intentions through affective commitment. Similarly, perceived creativity may indirectly influence both affective commitment (via positive emotions) and interaction intentions (via positive emotions and affective commitment). The SEM estimations indicated that positive emotions have a significant indirect influence on interaction intentions (indirect effect = 0.028; p < 0.01). Similarly, perceived creativity has a significant indirect effect on both affective commitment (indirect effect = 0.035; p < 0.01) and interaction intentions (indirect effect = 0.123; p < 0.01). As a result, taking into account the existence of these significant indirect effects and the direct effects previously reported, we can conclude that positive emotions and affective commitment act as partial mediators in the research model. In addition, since the signs of the direct and the indirect effects are positive in all cases, all possible mediations are classified as complementary mediations (Zhao, Lynch, & Chen, 2010). Table 4 displays the total, direct and indirect effects derived from the research model.

In terms of explained variance, the proposed model presents the following levels of R^2: positive emotions (R^2 = 0.067), affective commitment (R^2 = 0.206), and interaction intentions (R^2 = 0.541). Although positive emotions are barely explained, probably because there are other relevant variables, unconsidered in this research, affecting emotions, interaction intentions, the final dependent variable in the model, is explained to a great extent.

5. Discussion and conclusions

Despite the increasing number of studies analyzing participation and interaction on Instagram (Casaló et al., 2017a, 2017b), and the motivations to use it (Järvinen et al., 2016; Sheldon & Bryant, 2016),

Table 3
Summary of Results: Standardized Solution.

Antecedent Factors	DEPENDENT VARIABLES					
	Positive Emotions		Affective Commitment		Interaction Intentions	
	Coefficient	t	Coefficient	t	Coefficient	t
Creativity	0.258***	6.296	0.400***	8.681	0.572***	10.428
Positive Emotions			0.136***	3.651	0.137***	4.220
Affective Commitment					0.203***	5.834
R^2	0.067		0.206		0.541	

Note: *** Coefficients are significant at the 0.01 level.

Table 4
Total, direct and indirect effects in the research model.

Relationship	Total Effects	Direct Effects	Indirect Effects
Perceived Creativity → Positive Emotions	0.258***	0.258***	–
Perceived Creativity → Affective Commitment	0.435***	0.400***	0.035***
Perceived Creativity → Interaction Intentions	0.695***	0.572***	0.123***
Positive Emotions → Affective Commitment	0.136***	0.136***	–
Positive Emotions → Interaction Intentions	0.165***	0.137***	0.028***
Affective Commitment → Interaction Intentions	0.203***	0.203***	–

Note: *** Coefficients are significant at the 0.01 level.

this is –to the best of our knowledge– one of the first to analyze two crucial concepts in this context, namely the perceived creativity and positive emotions triggered after viewing the branded content of an Instagram account, and their subsequent influence on followers' affective commitment and interaction intentions. Due to Instagram's visual nature, perceived creativity seems to be one of its main features (Casaló et al., 2017b; Socialbakers, 2018) and, additionally, its hedonic nature can explain the key role that positive emotions may play on this social networking site. Therefore, this research tries to shed light on the importance of these relevant features for driving users' behaviors on Instagram.

First, this work confirmed the positive relationship between our two organismic variables, particularly the direct effect that followers' perceptions of the creativity of brands' Instagram postings have on the generation of positive emotions. Brands, thus, might foster their followers' perceptions of their creativity to achieve increased acceptance of their posts through positive emotions (Jung et al., 2018). Furthermore, we highlighted the essential role of perceived creativity in obtaining positive responses in the form of greater user affective commitment and interaction intentions on Instagram brand accounts. We emphasize that, on Instagram, a visuals-based social network (Casaló et al., 2017b), followers' organismic reactions to the creativity of publications is a key antecedent of the strengthening of their affective bonds with the brand (Evanschitzky et al., 2006). Crucially, we stress the essential effect of perceived creativity on interaction intentions; these perceptions of uploaded branded content are especially important for promoting followers' participation on the Instagram brand account (Zhu & Chen, 2015). It seems that on this social network, followers value highly the creative effort made by brands. By publishing content that arouses their followers' creativity, brands can promote their interaction with them on their Instagram accounts, which will result in increasing levels of interactivity in the brand profiles, which is key for the development of successful online communities (Blazevic et al., 2014).

In addition, although its influence is lower than perceived creativity, positive emotions aroused after viewing brands' publications on Instagram also contribute to engaging users in the account, both in terms of a greater affective commitment to the account and greater interaction intentions. Therefore, consistent with the findings of previous literature (e.g. Bagozzi et al., 1999; Sanchez-Franco & Rondan-Cataluña, 2010a; Tsai & Bagozzi, 2014), positive emotions help develop positive responses from customers in this context. Finally, although affective commitment and interaction intentions are considered as responses in the research model, we found a positive link between them. In accordance with previous proposals (Casaló et al., 2011; Keiningham et al., 2018), when followers are affectively committed to an online community (such as an Instagram account), they are more prone to interact on that platform. Therefore, it is important for brands to strengthen their affective bonds with followers, as this will result in more dynamic and interactive communities, this being vital for the development of sustainable and prosperous communities on social networks (Casaló et al., 2011).

5.1. Theoretical and managerial implications

This research has interesting implications for both researchers and managers. As for researchers, the results demonstrated that it is essential for brands to evoke their followers' perceptions of the creativity of their Instagram posts; this can trigger other organismic reactions in their followers (positive emotions) and, especially, promote the development of positive responses, such as a greater affective commitment of their followers to the brand community on the social networking site, and higher intentions to interact with the brand account. Therefore, as previous studies have not analyzed the role of creativity on Instagram, despite it being an important factor of this image-based social network (Casaló et al., 2017b; Socialbakers, 2018), we suggest that future research should take into account the key role played by this variable in the effective development of brand actions on the site. In addition, our results are in line with the stimulus-organism-response chain proposed in the S-O-R framework (Donovan & Rossiter, 1982; Mehrabian & Russell, 1974). In this sense, we showed that it is a valid framework for understanding how brand publications on social networks can lead to the generation of positive responses through the mediation of organismic reactions.

In addition, our findings have interesting implications for the proper management of Instagram brand accounts; they can help managers ensure that content that makes their followers perceive that a brand is creative engages them to a greater extent in the account. By triggering perceptions of creativity through the branded content uploaded, managers can strengthen their brands' affective bonds with the members of brand-focused Instagram communities. This will increase the importance that consumers give to the relationship and, in turn, lead them to be more motivated to participate in the account. Therefore, brands can encourage interaction with their followers by uploading contents that promote brands' creativity on Instagram; this will foster these followers' positive responses. Instagram, as an image-based social networking site, is focused on visuals and esthetics, so brands can take advantage of its high degree of editing capacity to create content that will increase their followers' perceptions of their creativity and strengthen the brand-followers' affective bonds and promote their interaction in the account. Some examples of this creative content might be: applying attractive filters to photos, uploading Instagram stories with contests in which followers can participate, and applying augmented reality filters to the stories. In addition, the results showed that, although its effect is small, triggering positive emotions can help brands achieve better results in their relationships with their followers. Thus, managers should strive to generate these kinds of feelings in their customers. For instance, they could upload visually-inspiring content (e.g. real-life stories, quotations) that might support their followers in their daily lives, images that reinforce their sense of affiliation with the brand, or funny pictures that might trigger positive reactions. Finally, brands can foster their followers' participation in their Instagram accounts by strengthening their bonds with them. Hence, brands might perform actions (e.g. asking followers to provide creative content promoting the brand to post on Instagram Stories) to generate greater affective commitment with their followers, which could encourage them to interact in the Instagram brand community.

5.2. Limitations and future research lines

This research has several limitations that offer possibilities for further research. First, the respondents are followers of only one official Instagram account operating in the fashion industry, and the sampling procedure relied on participant self-selection. Therefore, to generalize the results, which are undermined by the convenient nature of the sample, it would be useful to replicate the study with wider samples of accounts from different industries. In this way, it would be possible to compare the role of creativity on Instagram across industries. In addition, the followers of the account are mainly female, which is consistent with the brand's female fashion-based focus, and in line with previous literature analyzing Instagram (e.g. Colliander & Marder, 2018; Kim et al., 2017; Phua et al., 2017a, 2017b); However, as previous literature has suggested that the influence of perceptions (e.g. Jin, Line, & Goh, 2013) and emotion-related variables (e.g. Salguero, Extremera, & Fernández-Berrocal, 2012) may depend on gender, an interesting way of extending this research would be to focus on accounts balanced in terms of gender, and to analyze its possible moderating role in this context. Similarly, future studies should investigate potential differences due to age and generation (X vs. Y vs. Z), as the determinants of social media interactions may vary significantly across generations (e.g.

Bolton et al., 2013). Furthermore, although intentions have been found to be the main antecedents of real behaviors (Venkatesh & Davis, 2000), previous meta-analyses have noted that intentions can be weak predictors of behaviors (e.g. Sheeran, 2002), so future research should focus on analyzing the influence of creativity, positive emotions and affective commitment on actual behaviors on Instagram. In addition, we have focused on the positive consequences of viewing brand content on Instagram. However, it would also be interesting to analyze the role of negative emotions in this context (e.g. Bagozzi et al., 2016). Finally, we found that followers' perceived creativity was a weak predictor of the positive emotions triggered after viewing brands' publications on Instagram. Therefore, future studies should include other organismic components (e.g. perceived visual appeal), which may also affect the development of positive emotions in this context.

Acknowledgements

Appendix A

Participants were asked to indicate from 1 (strongly disagree) to 7 (strongly agree) the extent to which they agreed with the following statements:

Perceived creativity (*adapted from* Andrews & Smith, 1996)
Publications on this Instagram account are revolutionary
Publications on this Instagram account are original
Publications on this Instagram account are unconventional
Positive emotions (*adapted from* Bagozzi et al., 2016)
I feel happy when viewing the contents of this account
I feel pleased when viewing the contents of this account
I feel joyful when viewing the contents of this account
I feel excited when viewing the contents of this account
I feel delighted when viewing the contents of this account
I feel satisfied when viewing the contents of this account
Affective commitment (*adapted from* Belanche et al., 2013)
This Instagram account means a lot to me
I am emotionally attached to this Instagram account
I feel a sense of belonging to this Instagram account
My relationship with this Instagram account is very important to me
Interaction intentions (*adapted from* Casaló et al., 2017a)
I intend to interact with this Instagram account in the near future
I predict that I will interact with this Instagram account
I will probably interact with the new content published in this Instagram account

References

Ajzen, I. (1991). From intentions to actions: A theory of planned behavior. In J. K. J. Beckmann (Ed.). *Action-control: From Cognition to Behavior* (pp. 11–39). Heidelberg: Springer.

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology, 63*(1), 1–18.

Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity.* Hachette, England: Routledge.

Andrews, J., & Smith, D. C. (1996). In search of the marketing imagination: Factors affecting the creativity of marketing programs for mature products. *Journal of Marketing Research, 33*(2), 174–187.

Aragoncillo, L., & Orús, C. (2018). Impulse buying behaviour: An online-offline comparative and the impact of social media. *Spanish Journal of Marketing-ESIC, 22*(1), 42–62.

Bagozzi, R. P., Belanche, D., Casaló, L. V., & Flavián, C. (2016). The role of anticipated emotions in purchase intentions. *Psychology & Marketing, 33*(8), 629–645.

Bagozzi, R. P., & Dholakia, U. M. (2006). Open source software user communities: A study of participation in Linux user groups. *Management science, 52*(7), 1099–1115.

Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science, 27*(2), 184–206.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Construct validity in organizational research. *Administrative Science Quarterly, 36*(3), 421–458.

Belanche, D., Casaló, L. V., & Guinalíu, M. (2013). The role of consumer happiness in relationship marketing. *Journal of Relationship Marketing, 12*(2), 79–94.

Belanche, D., Cenjor, I., & Pérez-Rueda, A. (2019). Instagram Stories versus Facebook Wall: An advertising effectiveness analysis. *Spanish Journal of Marketing-ESIC, 23*(1), 69–94.

Blazevic, V., Wiertz, C., Cotte, J., de Ruyter, K., & Keeling, D. I. (2014). GOSIP in cyberspace: Conceptualization and scale development for general online social interaction propensity. *Journal of Interactive Marketing, 28*(2), 87–100.

Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., ... Solnet, D. (2013). Understanding Generation Y and their use of social media: A review and research agenda. *Journal of Service Management, 24*(3), 245–267.

Brandão, A., Pinho, E., & Rodrigues, P. (2019). Antecedents and consequences of luxury brand engagement in social media. *Spanish Journal of Marketing - ESIC, 23*(2), 163–218.

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research, 66*(1), 105–114.

Burroughs, J. E., Moreau, C. P., & Mick, D. G. (2008). Toward a psychology of consumer creativity. In C. P. Haugtvedt, P. M. Herr, & F. R. Kardes (Eds.). *Handbook of consumer psychology* (pp. 1011–1038). New York, NY: Routledge Handbooks.

Casaló, L. V., Flavián, C., & Guinalíu, M. (2011). Antecedents and consequences of consumer participation in on-line communities: The case of the travel sector. *International Journal of Electronic Commerce, 15*(2), 137–167.

Casaló, L. V., Flavián, C., & Ibáñez-Sánchez, S. (2017b). Antecedents of consumer

intention to follow and recommend an Instagram account. *Online Information Review, 41*(7), 1046–1063.

Casaló, L. V., Flavián, C., & Ibáñez-Sánchez, S. (2017a). Understanding Consumer Interaction on Instagram: The Role of Satisfaction, Hedonism, and Content Characteristics. *Cyberpsychology, Behavior, and Social Networking, 20*(6), 369–375.

Casaló, L. V., Flavián, C., & Ibáñez-Sánchez, S. (2018). Influencers on Instagram: Antecedents and consequences of opinion leadership. *Journal of Business Research.* (in press).

Choi, T. R., & Sung, Y. (2018). Instagram versus Snapchat: Self-expression and privacy concern on social media. *Telematics and Informatics, 35*(8), 2289–2298.

Claffey, E., & Brady, M. (2014). A model of consumer engagement in a virtual customer environment. *Journal of Customer Behaviour, 13*(4), 325–346.

Colliander, J., & Marder, B. (2018). 'Snap happy' brands: Increasing publicity effectiveness through a snapshot aesthetic when marketing a brand on Instagram. *Computers in Human Behavior, 78*, 34–43.

Cote, J. A., & Buckley, M. R. (1987). Estimating trait, method, and error variance: Generalizing across 70 construct validation studies. *Journal of Marketing Research, 24*(3), 315–318.

Creative Review (2017). Great Work: ASOS on Instagram Stories. Retrieved from bit.ly/2sP3WZF. Accessed 22 December 2019.

Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior, 68*, 1–7.

Donovan, R., & Rossiter, J. (1982). Store atmosphere: An environmental psychology approach. *Journal of Retailing, 58*(1), 34–57.

Entrepreneur (2019). 8 Examples of Brilliant Instagram Marketing. Retrieved from http://bit.ly/2kgPyZ5. Accessed 22 December 2019.

Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business research, 54*(2), 177–184.

Erz, A., Marder, B., & Osadchaya, E. (2018). Hashtags: Motivational drivers, their use, and differences between influencers and followers. *Computers in Human Behavior, 89*, 48–60.

Evanschitzky, H., Iyer, G. R., Plassmann, H., Niessing, J., & Meffert, H. (2006). The relative strength of affective commitment in securing loyalty in service relationships. *Journal of Business Research, 59*(12), 1207–1213.

Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). The impact of virtual, augmented and mixed reality technologies on the customer experience. *Journal of Business Research, 100*, 547–560.

Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(3), 39–50.

Fransen, M. L., Verlegh, P. W., Kirmani, A., & Smit, E. G. (2015). A typology of consumer strategies for resisting advertising, and a review of mechanisms for countering them. *International Journal of Advertising, 34*(1), 6–16.

Geyskens, I., Steenkamp, J. B. E., Scheer, L. K., & Kumar, N. (1996). The effects of trust and interdependence on relationship commitment: A trans-Atlantic study. *International Journal of Research in Marketing, 13*(4), 303–317.

Goldsmith, R. E., & Clark, R. A. (2008). An analysis of factors affecting fashion opinion leadership and fashion opinion seeking. *Journal of Fashion Marketing and Management: An International Journal, 12*(3), 308–322.

Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing, 69*(4), 210–218.

Ha, S., Huang, R., & Park, J. S. (2019). Persuasive brand messages in social media: A mental imagery processing perspective. *Journal of Retailing and Consumer Services, 48*, 41–49.

Haberland, G. S., & Dacin, P. A. (1992). The development of a measure to assess viewers' judgments of the creativity of an advertisement: A preliminary study. In J. Sherry, & B. Sternthal (Eds.). *Advances in consumer research* (pp. 817–825). Provo, UT: Association for Consumer Research.

Hampton-Sosa, W. (2017). The impact of creativity and community facilitation on music streaming adoption and digital piracy. *Computers in Human Behavior, 69*, 444–453.

Hirschman, E. C. (1980). Innovativeness, novelty seeking, and consumer creativity. *Journal of Consumer Research, 7*(3), 283–295.

Huang, Y. C., Backman, S. J., Backman, K. F., & Moore, D. (2013). Exploring user acceptance of 3D virtual worlds in travel and tourism marketing. *Tourism Management, 36*, 490–501.

Islam, J. U., & Rahman, Z. (2017). The impact of online brand community characteristics on customer engagement: An application of Stimulus-Organism-Response paradigm. *Telematics and Informatics, 34*(4), 96–109.

Järvinen, J., Ohtonen, R., & Karjaluoto, H. (2016). Consumer Acceptance and Use of Instagram. *Proceedings of the System Sciences (HICSS) 2016 49th Hawaii International Conference* (pp. 2227–2236). IEEE.

Jin, N., Line, N. D., & Goh, B. (2013). Experiential value, relationship quality, and customer loyalty in full-service restaurants: The moderating role of gender. *Journal of Hospitality Marketing & Management, 22*(7), 679–700.

Jöreskog, K. G. (1971). Statistical analysis of sets of congeneric tests. *Psychometrika, 36*(2), 109–133.

Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8 Structural Equation Modeling with the SIMPLIS Command Language.* Chicago, IL: Scientific Software International.

Jung, H., Lee, G., Hur, K., & Kim, T. T. (2018). Online travel information value and its influence on the continuance usage intention of social media. *Service Business, 12*(1),

85–120.

Keiningham, T. L., Rust, R. T., Lariviere, B., Aksoy, L., & Williams, L. (2018). A roadmap for driving customer word-of-mouth. *Journal of Service Management, 29*(1), 2–38.

Kim, A. J., & Johnson, K. K. (2016). Power of consumers using social media: Examining the influences of brand-related user-generated content on Facebook. *Computers in Human Behavior, 58*, 98–108.

Kim, J. H., & Kim, Y. (2019b). Instagram user characteristics and the color of their photos: Colorfulness, color diversity, and color harmony. *Information Processing & Management, 56*(4), 1494–1505.

Kim, B., & Kim, Y. (2019a). Facebook versus Instagram: How perceived gratifications and technological attributes are related to the change in social media usage. *The Social Science Journal, 56*(2), 156–167.

Kim, K. H., Ko, E., Xu, B., & Han, Y. (2012). Increasing customer equity of luxury fashion brands through nurturing consumer attitude. *Journal of Business Research, 65*(10), 1495–1499.

Kim, J. E., Lloyd, S., & Cervellon, M. C. (2016). Narrative-transportation storylines in luxury brand advertising: Motivating consumer engagement. *Journal of Business Research, 69*(1), 304–313.

Kim, D. H., Seely, N. K., & Jung, J. H. (2017). Do you prefer, Pinterest or Instagram? The role of image-sharing SNSs and self-monitoring in enhancing ad effectiveness. *Computers in Human Behavior, 70*, 535–543.

Ko, E., Kim, E., Taylor, C. R., Kim, K. H., & Kang, I. J. (2007). Cross-national market segmentation in the fashion industry: A study of European, Korean, and US consumers. *International Marketing Review, 24*(5), 629–651.

Kumar, A., & Kim, Y. K. (2014). The store-as-a-brand strategy: The effect of store environment on customer responses. *Journal of Retailing and Consumer services, 21*(5), 685–695.

Laros, F. J., & Steenkamp, J. B. E. (2005). Emotions in consumer behavior: A hierarchical approach. *Journal of Business Research, 58*(10), 1437–1445.

Lichtenstein, D. R., Netemeyer, R. G., & Burton, S. (1990). Distinguishing coupon proneness from value consciousness: An acquisition – transaction utility theory perspective. *Journal of Marketing, 54*, 54–67.

Lup, K., Trub, L., & Rosenthal, L. (2015). Instagram# instasad?: Exploring associations among instagram use, depressive symptoms, negative social comparison, and strangers followed. *Cyberpsychology, Behavior, and Social Networking, 18*(5), 247–252.

Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology.* Cambridge, MA: The MIT Press.

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*(4), 538.

Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust. *Journal of Marketing Research, 29*(3), 314–328.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing, 58*(3), 20–38.

Morrison, M., Gan, S., Dubelaar, C., & Oppewal, H. (2011). In-store music and aroma influences on shopper behavior and satisfaction. *Journal of Business Research, 64*(6), 558–564.

Pavlov, I. P. (1902). *The work of the digestive glands.* London: Griffin.

Phua, J., Jin, S. V., & Kim, J. J. (2017b). Uses and gratifications of social networking sites for bridging and bonding social capital: A comparison of Facebook, Twitter, Instagram, and Snapchat. *Computers in Human Behavior, 72*, 115–122.

Phua, J., Jin, S. V., & Kim, J. J. (2017a). Gratifications of using Facebook, Twitter, Instagram, or Snapchat to follow brands: The moderating effect of social comparison, trust, tie strength, and network homophily on brand identification, brand engagement, brand commitment, and membership intention. *Telematics and Informatics, 34*(1), 412–424.

Phua, J., Lin, J. S. E., & Lim, D. J. (2018). Understanding consumer engagement with celebrity-endorsed E-Cigarette advertising on Instagram. *Computers in Human Behavior, 84*, 93–102.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903.

Richard, M. O. (2005). Modeling the impact of internet atmospherics on surfer behavior. *Journal of Business Research, 58*(12), 1632–1642.

Salguero, J. M., Extremera, N., & Fernández-Berrocal, P. (2012). Emotional intelligence and depression: The moderator role of gender. *Personality and Individual Differences, 53*(1), 29–32.

Sanchez-Franco, M. J., & Rondan-Cataluña, F. J. (2010b). Virtual travel communities and customer loyalty: Customer purchase involvement and web site design. *Electronic Commerce Research and Applications, 9*(2), 171–182.

Sanchez-Franco, M., & Rondan-Cataluña, F. J. (2010a). Connection between customer emotions and relationship quality in online music services. *Behaviour & Information Technology, 29*(6), 633–651.

Sashi, C. M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management Decision, 50*(2), 253–272.

Serra-Cantallops, A., Ramon-Cardona, J., & Salvi, F. (2018). The impact of positive emotional experiences on eWOM generation and loyalty. *Spanish Journal of Marketing-ESIC, 22*(2), 142–162.

Sheeran, P. (2002). Intention—behavior relations: A conceptual and empirical review. *European Review of Social Psychology, 12*(1), 1–36.

Sheldon, P., & Bryant, K. (2016). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior, 58*, 89–97.

Sheldon, P., Rauschnabel, P. A., Antony, M. G., & Car, S. (2017). A cross-cultural comparison of Croatian and American social network sites: Exploring cultural differences in motives for Instagram use. *Computers in Human Behavior, 75*, 643–651.

Shukla, P., Banerjee, M., & Singh, J. (2016). Customer commitment to luxury brands: Antecedents and consequences. *Journal of Business Research, 69*(1), 323–331.

Smith, R. E., & Yang, X. (2004). Toward a general theory of creativity in advertising: Examining the role of divergence. *Marketing Theory, 4*(1–2), 31–58.

Socialbakers (2018). Instagram engagement: Everything you need to know. Retrieved from bit.ly/2BQJyyi. Accessed 22 December 2019.

Statista (2018). Number of monthly active Instagram users from January 2013 to June 2018 (in millions). Retrieved from bit.ly/2ea0Ahs. Accessed 22 December 2019.

Statista (2019). Distribution of Instagram users worldwide as of October 2019, by age and gender. Retrieved from bit.ly/2Qo3Pzt. Accessed 22 December 2019.

Steenkamp, J., & Geyskens, I. (2006). How country characteristics affect the perceived value of Web sites. *Journal of Marketing, 70*(3), 136–150.

Sternberg, R. J., & Lubart, T. I. (1999). The concept of creativity: Prospects and paradigms. *Handbook of Creativity, 1*, 3–15.

Tsai, H. T., & Bagozzi, R. P. (2014). Contribution behavior in virtual communities: Cognitive, emotional, and social influences. *MIS Quarterly, 38*(1), 143–164.

Tung, V. W. S., & Ritchie, J. B. (2011). Exploring the essence of memorable tourism experiences. *Annals of Tourism Research, 38*(4), 1367–1386.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science, 46*(2), 186–204.

Waterloo, S. F., Baumgartner, S. E., Peter, J., & Valkenburg, P. M. (2018). Norms of online expressions of emotion: Comparing Facebook, Twitter, Instagram, and WhatsApp. *New Media & Society, 20*(5), 1813–1831.

Wu, J. J., Chen, Y. H., & Chung, Y. S. (2010). Trust factors influencing virtual community members: A study of transaction communities. *Journal of Business Research, 63*(9–10), 1025–1032.

Wu, J., Wen, N., Dou, W., & Chen, J. (2015). Exploring the effectiveness of consumer creativity in online marketing communications. *European Journal of Marketing, 49*(1/2), 262–276.

Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research, 12*(4), 341–352.

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research, 37*(2), 197–206.

Zhu, Y. Q., & Chen, H. G. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business Horizons, 58*(3), 335–345.

Luis V. Casaló holds a PhD in Business Administration and is an Associate Professor of Marketing at the University of Zaragoza (Spain). His main research lines are focused on the analysis of online consumer behavior and social networks. His research has been published in several academic journals such as *Psychology & Marketing, Journal of Business Research, Information & Management, Cyberpsychology, Behavior, and Social Networking, Computers in Human Behavior, International Journal of Electronic Commerce, Internet Research*, etc. He is an Associate Editor of the *Spanish Journal of Marketing ESIC*.

Carlos Flavián holds a PhD in Business Administration and is a Professor of Marketing at the University of Zaragoza (Spain). His research has been published in several academic journals, specialized in marketing (*Journal of Interactive Marketing, European Journal of Marketing, Psychology & Marketing,* etc.), Tourism (*Tourism Management, International Journal of Contemporary Hospitality Management, International Journal of Hospitality Management,* etc.) and new technologies (*Information & Management, Internet Research, Computers in Human Behavior, International Journal of Electronic Commerce, Industrial Management & Data Systems*, etc.). He is the editor of the *Spanish Journal of Marketing-ESIC* and Associate Editor of the *Services Industries Journal.* Carlos Flavián is the corresponding author and can be contacted at: cflavian@unizar.es.

Sergio Ibáñez-Sánchez is a PhD student at the University of Zaragoza (Spain). His main research line focuses on analyzing the impact of new technologies and social networking sites on the customer experience and behavior. The main results of his research have been published in academic journals such as *Journal of Business Research, Cyberpsychology, Behavior, and Social Networking* and *Online Information Review.* His research has also been presented in national and international conferences such as the International Conference on Corporate and Marketing Communications where he received the Best Working Paper Award.