

# UNDERSTANDING CONSUMER INTERACTION IN INSTAGRAM: THE ROLE OF SATISFACTION, HEDONISM AND CONTENT CHARACTERISTICS

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# UNDERSTANDING CONSUMER INTERACTION IN INSTAGRAM: THE ROLE OF SATISFACTION, HEDONISM AND CONTENT CHARACTERISTICS

## Abstract

The increasing relevance of Instagram and its growing adoption among top brands suggest an effort to better understand consumers' behavior within this context. The purpose of this study is to examine the role of perceived hedonism and satisfaction in determining consumers' intention to interact and their actual interaction behaviors (the number of likes –by tapping a heart icon– and comments) in a brand's official Instagram account. As well, we investigate the effect of consumer perceptions about the characteristics of the content generated in the account (perceived originality, quantity and quality) on their perceived hedonism and satisfaction. Data was collected in two stages from 808 members of a fashion brand's official Instagram account. Firstly, participants answered an online questionnaire to evaluate their perceptions, satisfaction and interaction intention. Secondly, one month later, we measure the number of likes and comments done by each participant in the brand's official Instagram account during that month. Using Partial Least Squares (PLS) to analyse the data, perceived hedonism is found to affect both satisfaction and the intention to interact in Instagram, which in turn influences actual behavior. Besides, perceived originality is the most relevant content characteristic to develop perceived hedonism. These findings offer managers a general vision of consumers' behaviors in Instagram, highlighting the importance of hedonism in order to create a satisfactory experience.

**Keywords:** Instagram; hedonism; satisfaction; brand communities; consumer interaction behaviors; originality.

## Introduction

Consumers are increasingly using Social Networking Sites (SNS) to get information about brands and interact with fellow consumers. Among the several SNS available nowadays, Instagram is

experiencing a steady increase in the amount of active users. Therefore, its adoption is growing among top brands too<sup>1</sup>, motivating the development of brand communities in Instagram.

Previous research has focused on consumers' interactions within brand communities in more traditional SNS such as Facebook<sup>2</sup>, Twitter<sup>3</sup> or YouTube<sup>4</sup>, but the relevance of Instagram seems to be greater as the amount of interactions with brands is much higher in Instagram<sup>5</sup>. Therefore, there is both a managerial and an academic need to better understand consumers' interactions in Instagram.

To move on this topic, this study tries to identify some of the factors that influence consumer interaction intentions and actual behaviors, in terms of the number of likes and comments, in a brand's official Instagram account. We focus on likes and comments as they are two main behaviors reflecting consumer engagement in Instagram, which consists of behaviors that go beyond purchase and results from an inner motivation that a consumer feels which finally leads him or her to carry out certain actions focused on a brand or a company<sup>6</sup>.

Specifically, we consider two main antecedents of interaction intentions. First, hedonism reflects the emotional value of a given experience, representing returns received in terms of enjoyment and playfulness<sup>7,8</sup>. Due to the specific characteristics of Instagram, which provides a place for visual storytelling for everyone with a creative desire that may motivate users' experiential enjoyment, hedonism is considered a relevant factor influencing consumer interaction. Indeed, previous literature<sup>9</sup> has already noted the relevance of hedonism in other SNS (e.g. Facebook) that make the user feel experiential enjoyment. Second, satisfaction may be also a crucial variable affecting consumer interaction in Instagram, as satisfaction is the result from a global evaluation of all the aspects that exist in a relationship<sup>10</sup> and has been found to help develop successful relationships in SNS<sup>11</sup>. Besides, since previous studies suggest that content characteristics in a SNS may influence consumers' perceptions and evaluations<sup>12</sup>, we also consider that perceived originality, quantity and quality of publications may affect perceived hedonism and satisfaction. Finally, interaction intentions will be a key determinant of the subsequent number of likes and comments made by the consumer in that Instagram account.

As a result, the contribution of this work to previous literature is twofold. First, this study adds to the emerging body of literature on Instagram, which will be further detailed in the next section and is

mainly related to the type of content that is uploaded, the personal feelings of its users, or the motivations to use Instagram. Second, this study contributes to previous literature on brand communities from a marketing perspective since it helps understand consumers' interactions in Instagram and takes the specific characteristics of this social network and actual behaviors into account. Our study may thus serve to better understand consumers' interactions and help managers design an appropriate environment in brands' official Instagram accounts.

### **Previous Research on Instagram**

Although Instagram has received relatively little attention, we can distinguish some research lines focused on this SNS. First, some researchers have studied the type of content that is uploaded by users and its behavioral outcomes. Photos with friends and "selfies" (self-portraits) are found to be the most common images posted by people<sup>13</sup>. Also, uploaded photographs with the presence of a face have a greater impact; these pictures are 32% more likely to receive a comment and 38% to receive a "like"<sup>14</sup> from other users.

Secondly, the relationship between using Instagram and the personal feelings of its users has been also investigated. Specifically, it has been argued that users could improve their sense of happiness and satisfaction, as well as decrease their level of loneliness, while using image-based SNS like Instagram or Snapchat<sup>15</sup>. Besides, individuals with a high level of narcissism tend to post more "selfies" and spend more time in Instagram<sup>16</sup>. In turn, some works have also highlighted the potential negative consequences of using Instagram for users' well-being<sup>17,18</sup>.

Finally, a third research line consists of determining the main motivations<sup>19,20</sup> and gratifications<sup>21</sup> of using Instagram. In this respect, compared to other SNS, Instagram users' gratifications are greater in relation to show affection, follow fashion and demonstrate sociability<sup>21</sup>. Furthermore, these authors focused on brand communities and show that Instagram generates higher level of brand community commitment and engagement. However, the nature of their study is mainly exploratory and use self-reported measures without considering actual behaviors.

## **Formulation of Hypotheses**

### ***Effects of content characteristics on perceived hedonism and satisfaction***

Previous studies suggest that the characteristics of the content posted on a SNS affect consumers' perceptions and evaluations<sup>12</sup>. Among the characteristics of online publications made by a company, quality and quantity are of great relevance since they are cues of the company interest to initiate a conversation with the consumer<sup>22</sup>. Consequently, consumers may be more satisfied due to the effort made by the company. Quality and quantity of publications are positively associated with an enjoyable experience in a virtual brand community too<sup>23</sup>.

In addition, originality may also have a great relevance in the Instagram context because it represents the newness or the uniqueness of the content as perceived by the consumer, in relation to other alternatives<sup>24</sup>. Originality of the content posted on an Instagram account may help users have a better time and an interesting and surprising experience when visiting the account that may lead to a greater satisfaction. We thus propose that:

*H1: Perceived originality of contents posted on an Instagram account has a positive effect on: (a) perceived hedonism and (b) user satisfaction.*

*H2: Perceived quality of contents posted on an Instagram account has a positive effect on: (a) perceived hedonism and (b) user satisfaction.*

*H3: Perceived quantity of contents posted on an Instagram account has a positive effect on: (a) perceived hedonism and (b) user satisfaction.*

### ***Effects of perceived hedonism on satisfaction and interaction intentions***

Hedonism is associated with a cool, fun and exciting experience<sup>25</sup> that may result in enjoyment. Since social media serves, among others, as a way to escape from boredom, to pass time, or to relax<sup>26</sup>; hedonism may be a crucial variable in SNS. For instance, in the context of company-hosted Facebook community pages, hedonic motivations are linked to self-reported participation and membership continuance intentions<sup>27</sup>. Similarly, variables related to hedonism, such as entertainment, may serve to strengthen the relationships within the community<sup>28</sup> and are positively linked to members' satisfaction or intention to use<sup>29</sup>. In sum, hedonic experiences produce shifts in the users' affective states, creating

a positive reaction that may increase their satisfaction and intentions to follow a given account or profile. Focusing on Instagram, this work proposes that:

*H4: Perceived hedonism in an Instagram account has a positive effect on: (a) user satisfaction and (b) user intention to interact in that Instagram account.*

#### ***Effect of satisfaction on interaction intentions***

According to the expectation-confirmation theory<sup>30</sup>, satisfaction with a product/service is the fundamental motivation for the intention to continue using it as satisfaction reflects that benefits derived from use are, at least, equal to the expected ones<sup>31</sup>. In our research context, satisfaction with an Instagram account would imply the realization of the expected benefits<sup>31</sup>, increasing the user intention to follow this account in the future in order to continue obtaining these benefits. Therefore, we propose that:

*H5: Satisfaction with an Instagram account has a positive effect on user intention to interact in that Instagram account.*

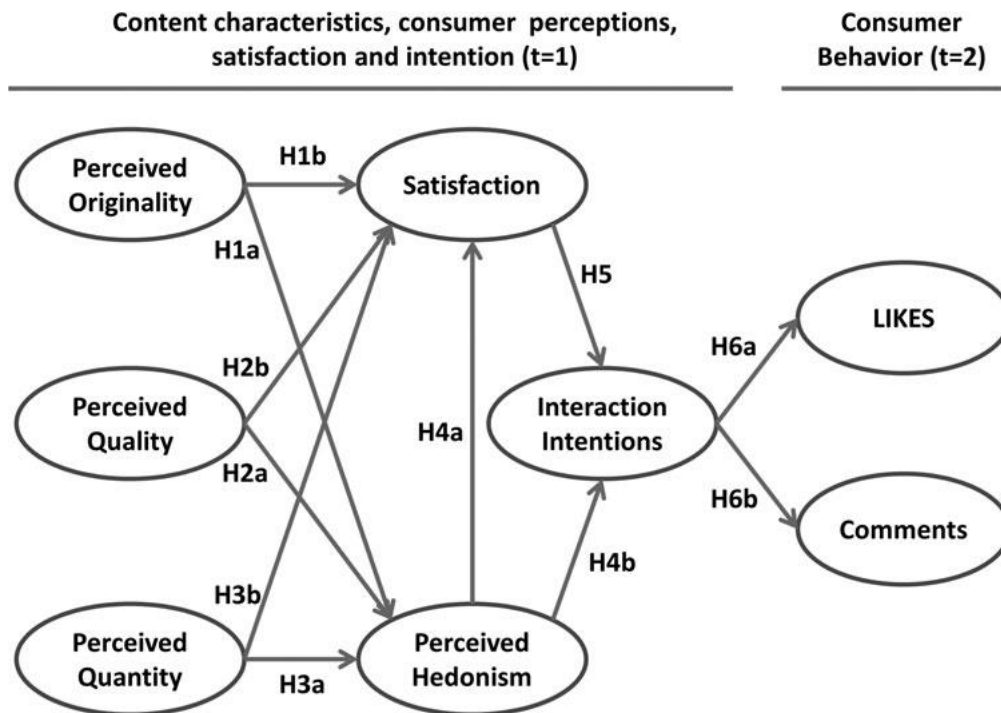
#### ***Effects of interaction intentions on interaction behaviors***

Previous research suggests that intentions are a main antecedent of behaviors<sup>32</sup>, since intentions represent a solid signal of how the consumer will behave in the future<sup>11</sup>. Therefore, previous literature has found that behavioral intentions and actual behaviors are highly correlated<sup>33</sup>. We thus propose that interaction intentions will positively affect actual interaction behavior in Instagram in terms of the number of likes and comments made by the consumer in a brand's official Instagram account:

*H6: User intention to interact in an Instagram account has a positive effect on the subsequent number of: (a) likes and (b) comments made by the user.*

The proposed model is summarized in Figure 1.

**FIGURE 1. Suggested research model.**



## Methods

### *Participants*

Data to test these hypotheses was collected from a brand's official Instagram account focused on fashion with more than 47,000 followers, who were invited to participate in the research. Specifically, we obtained data from 808 participants (96.3% female, probably because of the topic of the account). Most of them were graduate (66%), below 25 years old (68.4%), and had at least one year of experience using Instagram (94.1%). Finally, participants belonged to a total of 64 countries. There were 193 (23.9%) U.S. residents; United Kingdom (n = 147, 18.2%), Spain (n = 74, 9.2%) and Australia (n = 39, 4.8%) were the next three largest subgroups represented in the sample.

### *Procedure and materials*

First, a link to an online questionnaire was included in the brand's official Instagram account. Before answering the questionnaire, potential participants read a brief explanation about the project and we requested their Instagram username (so that it could be possible to look for their likes and comments in the account considered later, and make sure that bots or fake accounts were not part of the research). Although answers should be ideally anonymous<sup>34</sup> (and asking for the Instagram username may be a threat to this), we followed the recommendations of these authors to ensure the quality of our data set and assure respondents that: (1) data collected would be used only for research

purposes, and (2) no right or wrong answers exist, so they should answer the questions as honestly as possible. Then, individuals who voluntarily participate in the project answered the questionnaire including multiple-item measurement scales adapted to our specific research context from previous literature regarding perceived originality<sup>24</sup>, perceived hedonism<sup>35</sup>, satisfaction and interaction intentions<sup>11</sup>. This helped ensure their content validity. Additionally, two items were used to assess both the perceived quality and quantity of the publications posted on the account. Scales used seven-point Likert-type response formats, which respondents rated from 1 (“strongly disagree”) to 7 (“strongly agree”). Secondly, one month later, the number of both likes –i.e. number of times the heart icon is tapped– and comments done by each participant on the new publications in the brand’s official Instagram account during that period of time were measured. Specifically, there were four new publications on that time (approximately, one per week) and this information was provided by the manager of the brand’s official Instagram account, who downloaded the usernames of the members that liked and commented each new publication. The information was then coded in the following way: for each new publication, we assigned the value 1 if the initial respondent to the questionnaire liked the publication and 0 otherwise. The same procedure was followed with comments (1 if the user commented the publication and 0 otherwise). Afterwards, we aggregated these values and, for each individual, we obtained two variables measuring the number of likes and comments respectively that range from 0 (if the user had not liked/commented any of the new publications during that month) to 4 (if the user had liked/commented all the new publications). Our data set thus comes from two different sources (self-reported measures from participants, and the actions made by each participant in the Instagram account), and includes a combination of both subjective (perceptions, intentions...) and objective (number of likes and comments) measures, which may serve to avoid common method bias<sup>34</sup>.

Partial Least Square (PLS) was used as the estimation procedure because it is especially useful when the phenomenon under research is relatively new<sup>36</sup>, as is the case with the Instagram context. Data analyses were carried out using SmartPLS software version 2.0<sup>37</sup>. First, a confirmatory factor analysis corroborates the initial factor structure; all item loadings were above the recommended benchmark of .7<sup>38</sup> on their respective construct. Furthermore, composite reliabilities are higher than



.65<sup>39</sup> and average variance extracted (AVE) values are also above the benchmark of .5<sup>40</sup> for all reflective constructs, proving their internal consistency and convergent validity (Table 1). To confirm discriminant validity, we checked that the value of the square root of the AVE is greater than the shared variance among constructs (correlations)<sup>40</sup>. All pairs of reflective constructs satisfy this criterion (Table 1). Once measures were validated, we estimated the proposed effects and their significance using PLS with the recommended bootstrap of 500 iterations<sup>41</sup>.

**TABLE 1. Convergent and Discriminant Validity of Measures**

Variable	CR	AVE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Likes (1)	-	-	-							
Comments (2)	-	-	.612	-						
Interaction intentions (3)	.759	.513	.632	.469	<b>.716</b>					
Satisfaction (4)	.874	.701	.212	.076	.461	<b>.837</b>				
Perceived Hedonism (5)	.913	.725	.163	.116	.441	.618	<b>.851</b>			
Perceived Originality (6)	.939	.688	.160	.076	.380	.645	.604	<b>.829</b>		
Perceived Quality (7)	-	-	.120	.052	.198	.203	.199	.207	-	
Perceived Quantity (8)	-	-	.145	.031	.204	.234	.262	.275	.556	-

*Note: Diagonal elements (in bold) are the square root of the AVE (variance shared between the constructs and their measures). Off-diagonal elements are the correlations among constructs. To ensure discriminant validity, diagonal values should be greater than the off-diagonal ones.*

## Results

Results (Table 2) reveal that perceived hedonism is positively affected by perceived originality ( $\beta=.574$ ,  $p<.01$ ) and, in a lesser extent, by perceived quantity ( $\beta=.086$ ,  $p<.05$ ); but contrary to our expectations, the influence of perceived quality ( $\beta=.033$ ,  $p>.05$ ) on hedonism is non-significant. These results confirm H1a and H3a, but H2a is not supported. Satisfaction is positively affected by perceived originality ( $\beta=.421$ ,  $p<.01$ ) and hedonism ( $\beta=.356$ ,  $p<.01$ ); however, the influence of perceived quality ( $\beta=.045$ ,  $p>.05$ ) and quantity ( $\beta=-.00$ ,  $p>.05$ ) on satisfaction is non-significant. These results confirm H1b and H4a, but H2b and H3b are not supported. In turn, both perceived hedonism ( $\beta=.252$ ,  $p<.01$ ) and satisfaction ( $\beta=.305$ ,  $p<.01$ ) have a positive influence on interaction intentions, supporting H4b and H5 respectively. Finally, interaction intentions has a positive effect on the number of likes ( $\beta=.632$ ,  $p<.01$ ) and comments ( $\beta=.469$ ,  $p<.01$ ) made by the consumer in the Instagram account, confirming H6a and H6b. In terms of explained variance, the proposed model presents high levels of  $R^2$ .

TABLE 2. Summary of Results

Antecedent Factors	DEPENDENT VARIABLES									
	Perceived Hedonism		Satisfaction		Interaction Intentions		Likes		Comments	
	$\beta$	$t$	B	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
Originality	.574**	17.312	.421**	9.446						
Quality	.033	.828	.045	1.255						
Quantity	.086*	2.077	-.00	.011						
Perceived Hedonism			.356	8.107	.252**	4.891				
Satisfaction					.305**	5.543				
Interaction Intentions							.632**	21.913	.469**	14.873
<b>R<sup>2</sup></b>	.376		.500		.252		.399		.220	

Notes: \* Coefficients are significant at the .05 level. \*\* Coefficients are significant at the .01 level.

**Post-hoc analysis: interaction effects**

Previous literature suggests that characteristics of the content may interact and affect consumer’s perceptions and evaluations<sup>12</sup>. We thus include the effects of three interaction terms among perceived originality, quality and quantity of publications (i.e. “originality\*quality”, “originality\*quantity” and “quality\*quantity”) on both perceived hedonism and satisfaction. While the influence of the interaction terms on satisfaction is non-significant, two interactions have a positive and significant effect on perceived hedonism. Specifically, the interaction between quality and quantity has a positive influence on hedonism ( $\beta=.153$ ,  $p<.01$ ), but the effect of the interaction between originality and quantity is negative ( $\beta= -.163$ ,  $p<.01$ ). The inclusion of these interaction effects does not alter the influence of the remaining variables considered, and serves to increase the R<sup>2</sup> level of perceived hedonism (R<sup>2</sup>=.413).

**Discussion**

Although there has been an increasing interest in the analysis of consumer participation in brand communities within SNS<sup>2,3,4</sup>, there is still a need to better understand consumers’ interactions in Instagram. By collecting data in two-steps from a brand’s official Instagram account, this work considers not only consumer perceptions, evaluations and intentions, but also some of the main actual behaviors that could be performed in Instagram (the number of likes and comments made by the consumer in that account).

In sum, this work confirms the relevance that perceived hedonism has on Instagram, as it is a key aspect that activates a satisfaction-intention-behavior chain that may help increase the number of consumers' interactions in a brand's official Instagram account. Additionally, satisfaction is also found to influence consumer interaction intentions, which in turn has a positive effect on actual behaviors. Specifically, interaction intentions are positively associated with two behaviors that can be performed in Instagram: commenting and "liking" the photos by tapping a heart icon.

Finally, results suggest that a proper combination of the characteristics of the content posted on the brand's official Instagram account may help develop a cool, fun and exciting experience. Specifically, perceived originality of the content is the most relevant factor to guarantee an enjoyable and satisfactory experience. In a lesser extent, quantity seems to be also important to make the consumer experience hedonic. The more brand generated content posted on the Instagram account, the more new experiences and less boredom will feel the consumer. However, the negative effect of the interaction between quantity and originality on hedonism suggests that as quantity of content posted on the account increases, the effect of originality may be reduced, probably because consumers become used to new and unique content. In this situation, it may be relevant to guarantee a high quality in the brand generated content because, although it has not a direct effect on hedonism, it interacts positively with quantity. This may help compensate the negative interaction effect of originality and quantity.

### ***Limitations***

Despite the interesting results found, this research also has several limitations that should be acknowledged. First, respondents are followers of just one brand's official Instagram account that operates in the fashion industry, so we may be cautious when extrapolating our findings to other Instagram accounts or SNS. Second, although we have followed the recommendations in order to make participants answer the questions as honestly as possible<sup>34</sup>, some people who might be initially interested in the project could have refused participation since we required their Instagram username. Finally, it is important to note that we have just considered two behavioral measures of engagement in Instagram, and the number of antecedents of interaction intentions and actual behaviors could be

larger as well. The personal attributes of the consumer (e.g. online interaction propensity...), or the consumer relationship with the brand (e.g. loyalty...) could also affect consumer interactions in this context.

## **Conclusion and Future Research**

Instagram is a recently established SNS that is experiencing an increasing adoption among brands and customers. This study helps understand the main antecedents of consumers' actual behaviors in this SNS. Results show that the originality of the content is decisive in order to create a hedonic and satisfactory experience; in turn, these factors positively affect the intention to interact, which finally influences the number of "likes" and comments that a post receives in Instagram.

Future research could first try to generalize results by focusing on a wider sample of official Instagram accounts from different industries as our scope is restricted to just one account in the fashion industry. Additionally, future research could focus on developing other metrics to measure the impact of a publication in this context and analysing not only consumer interactions in Instagram, but also their influence on other relevant variables such as consumer loyalty or word-of-mouth. Finally, despite the difficulties to collect both self-reported and behavioral data, it could be interesting to evaluate the role of content characteristics, hedonism and satisfaction in motivating consumer interaction behaviors in other SNS. Although the role of satisfaction may be stable across SNS as it is the result of a global evaluation made by the user<sup>10</sup>, the role of hedonism may vary being specially relevant in SNS that provide a greater experiential enjoyment. Instead, usefulness may be of greater relevance in SNS that mainly provide informational value for consumers<sup>9</sup>. Similarly, the influence of content characteristics might also be different across SNS; for example, while originality is crucial in Instagram, it may be less relevant again in SNS focused on information rather than entertainment.

## **Author Disclosure Statement**

No competing financial interests exist.

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