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To buy or not to buy, that is the question:Understanding the determinants of the urge to buy impulsively on I-Commerce

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To buy or not to buy, that is the question: Understanding the determinants of the urge to buy impulsively on Instagram Commerce

Abstract

Purpose: Throughout 2020, especially under the lockdown measures, there was a significant surge in e-commerce and social commerce (s-commerce), with numerous people all over the world adopting and using commerce platforms on social media and other websites to buy desired products and services quickly and easily. Instagram Commerce is a new, cutting-edge social commerce platform. This research aims to explore the positive influence of the measures adopted during summer 2020 on Spanish s-commerce users' urge to buy impulsively.

Design/methodology/approach: Drawing on the stimulus–organism–response (S-O-R) theoretical framework, this study postulates and tests a model to help understand the behaviour of Spanish users towards social commerce, specifically Instagram Commerce. To accomplish this purpose, an SEM analysis is performed using a sample of 251 respondents.

Findings: Generally speaking, the findings obtained in the present study serve to expand and enhance the scientific literature on one of the latest determinants affecting social networks and online commerce.

Originality/value: This research is innovative due to the research background study that is carried out to analyse the urge to buy impulsively.

Keywords: Instagram Commerce; S-O-R; urge to buy impulsively.

1. Introduction

The socio-economic implications of technology have greatly affected society in general and the business sector in particular. Since the early 2020s, numerous companies have changed the way in which they commercialize their products and services, while customers have also switched to different methods of buying them. Technology has played a key role in this transformation.

Consequently, smartphones have become an essential part of modern life. On the one hand, alongside mobile commerce, social networks have presented new business opportunities for companies willing to engage in the latest trends of interaction between retailers and customers. On the other hand, social commerce has many definitions and emerges as a new type of online platform that permits clients to share experiences, opinions and information about where, what and from whom to buy (Xu and Liu, 2019). Social commerce leads to an extension of e-commerce sites, combined with Web 2.0 and social media technology, to inspire online purchases and connections with clients before, during and after buying (Meilatinova, 2021). Social commerce is an innovative, fast-growing platform on which to buy and sell products and services online (Pandolph, 2018). Research on social commerce has often focused on the transactional variables related to the purchase intention (Molinillo et al., 2020). In this sense, social commerce adopts a relevant social dimension from the most significant social media platforms, namely Instagram, Snapchat and Facebook (Henninger et al., 2019). Social commerce is beneficial for both companies and their clients since it offers a series of advantages with regard to purchases made through social media. In this vein, social commerce enhances e-commerce websites by adding social media tools, which help to improve the overall commercial performance of brick-and-mortar retailers and their customer service (Bürklin et al., 2019).

There are two core types of social commerce websites: on the one hand, e-commerce sites based on Web 2.0 concepts and technologies (for example, www.amazon.com) and, on the other hand, e-commerce platforms based on the foundations laid by the Web 2.0 technologies that later upgraded to the most up-to-date e-commerce technologies (for example, www.facebook.com/Starbucks). The first type does not especially consider social features, such as content sharing and communication between users. However, the second type of s-commerce websites features a distinct purchasing method that leverages data from the user purchase pricing and purchase history, among other factors. Thus, the aforementioned factors are especially relevant when examining this particular type of s-commerce (Esmaeili et al., 2020). In addition, social commerce activities may establish a common identity and bonds between customers. In this sense, community identification is developed over a comprehensive range of behaviours, such as commitment to the purpose of the community, the achievement of objectives, widespread mutuality, the satisfaction of common needs, the acceptance of guidelines on participation and the welcoming of new members. Furthermore, bonds among s-commerce customers can be established through continuous interactions among those who are more active in the community as well as the less experienced users, who value the information provided by the platform connoisseurs, to whom they feel emotionally attached through gratitude (Molinillo et al., 2020). Precisely this line of research is one of the proposed future research lines of Wang (2021) in the *Journal of Interactive Marketing*.

In recent years, Instagram has shifted to a new e-commerce paradigm called social commerce (Prasertsith et al., 2015). It rapidly recognized the huge potential of social networks to advance e-commerce, and it is continuously developing and launching new social commerce features and tools (Marketing Team Magento Commerce, 2018), turning the social network into an instrumental marketing platform for brands and retailers worldwide (Copeland and Zhao, 2020).

The general objective of this investigation is to analyse the determinants of the urge to buy impulsively on Instagram Commerce following the principles of social commerce. First, this research will contribute to expanding the scientific literature on one of the most recent concepts related to social networks and online sales (Molinillo et al., 2020). Second, it focuses on the interest generated by Instagram as a social network since it has been considered by numerous authors as the main social commerce platform with regard to the promotion of products and services (Sihombing et al., 2020), surpassing competitors like Facebook and Twitter. Third, the authors propose to analyse the antecedents of impulse buying on Instagram Commerce using the stimulus–organism–response model. The aforementioned antecedents are discussed based on the purchase intention and impulse buying tendency following the recent findings of Zafar et al. (2020). Finally, considering the results obtained, the present study identifies key theoretical business policies and implications with regard to the development and implementation of sales strategies on the main social networks and specifically on Instagram.

2. Background Literature

2.1. The Stimulus–Organism–Response (S-O-R) Framework

The S-O-R model essentially posits that human behaviour (action and reaction) and stimulation are connected and affect each other through the human organism. In the early days of environmental psychology, Mehrabian and Russell (1974) proposed the stimulus–organism–response (S-O-R) model. This framework comprises three distinct dimensions: the environment or stimulus (S) that creates behaviours and responses, the organism (O) that responds and the actual response (R). In addition, the S-O-R model aims to combine individuals' responses to clarify common emotions and perceptions with regard to external stimuli along with the positive or negative behaviours that are subsequently generated. In this regard, the S-O-R model theorizes about the connections between people and the environments in which they live. In this sense, stimuli are parts of the environment felt by a person. In the context of the S-O-R model, organism refers to the processes within people's mind that drive the impact of stimuli on their probable responses or actions. Response is theorized as people's acceptance or avoidance of their environment (Mehrabian and Russell, 1974).

In addition, the relevance of the S-O-R framework can mostly be explained by its holistic approach to the emotional, cognitive and affective developments that a person experiences while considering the acceptance or avoidance of a specific behaviour. The S-O-R framework has been used by numerous researchers to describe alterations in the purchase-making processes in a variety of contexts, including tourism (Kim et al., 2020), and service encounters (Gupta et al., 2019) and online shopping environment (Animesh et al., 2011).

3. Development of the Hypotheses

3.1. Environmental Stimuli: Perceived Ease of Use, Perceived Usefulness, Perceived Enjoyment, Electronic Word of Mouth, Perceived Risk and Security

Perceived Ease of Use

Davis (1989) defined perceived ease of use as the degree to which a person believes that using a specific system might be effortless. With regard to s-commerce contexts, Martínez-López et al. (2020) posited that perceived ease of use can be defined as the degree to which a customer believes that buying through a social commerce platform might also be effortless.

Previous research has shown that perceived ease of use also plays a key role in determining the use of e-government services and mobile government services (Mensah, 2020). In this sense, the recent research by Tahar et al. (2020) found a positive impact of perceived ease of use on the intention to use e-filling. In addition, Chen and Aklikokou (2020) described the positive and significant influence of perceived ease of use on the behavioural intention to use e-government services. Besides, perceived ease of use has a positive influence on the behavioural intention to use an e-wallet (Karim et al., 2020).

On the other hand, numerous authors have already indicated the importance of both perceived ease of use and perceived usefulness, which are connected to each other. Several recent studies have found a relationship between perceived ease of use and perceived usefulness. Furthermore, Liébana-Cabanillas et al. (2020) postulated that perceived ease of use has a positive influence on the perceived usefulness of mobile payment services. The previous research by Alsaleh et al. (2019) and Hassanein and Head (2007) found that the higher the level of perceived ease of use, the more likely it is to have a positive influence on perceived usefulness with regard to online shopping websites.

In light of the aforementioned findings, the following hypotheses are put forward:

H1: Perceived ease of use has a positive effect on purchase intentions towards Instagram Commerce.

H2: Perceived ease of use has a positive effect on the perceived usefulness of Instagram Commerce.

Perceived Usefulness

Perceived usefulness is defined as the degree to which a particular system helps to enhance job performance. Hence, perceived usefulness constitutes the main reason for most people to adopt a new technology (Davis, 1989). Likewise, there is a positive relationship between perceived usefulness and purchase intention. In addition, Nkoyi et al. (2019) described perceived usefulness as the degree to which individuals believe that engaging in a particular work routine will enhance their job performance, for instance choosing a technology that will make their work easier. Instead, Rauniar et al. (2014) defined perceived usefulness as the degree to which social media users believe that the social media platforms on which they are interacting will help them to accomplish their objectives.

Perceived usefulness also positively influences the intention to use mobile payment technologies (Liébana-Cabanillas et al., 2020). Recent research on s-commerce has revealed that perceived usefulness positively influences the intention to adopt social commerce (Abed, 2020).

In light of the aforementioned findings, the following hypothesis is proposed:

H3: Perceived usefulness has a positive effect on purchase intentions towards Instagram Commerce.

Perceived Enjoyment

Perceived enjoyment refers to the emotion-related experiences acquired through the practice of a process (Groß, 2018). In this sense, a high level of perceived enjoyment associated with a particular technology encourages individuals to adopt and use it. Previous research studies have corroborated the positive influence of perceived enjoyment on purchase intention (Patel et al., 2020). In this sense, consumers who enjoy using a particular technology (Instagram Commerce in the case of the present study) are more likely to purchase products and services offered on that platform.

Shopping enjoyment is measured as a motivational factor affecting purchase intentions (Hashmi et al., 2020). Accordingly, hedonic motivation can be described as a human tendency to move towards pleasure and is frequently associated with customers whose purchases are mostly driven by entertainment, joy and self-pleasure reasons (Faisal et al., 2020). In this context, shopping value is a concept that covers the hedonic and utilitarian experiences in the purchase-making process. Therefore, shopping value is associated with customers' feelings and emotions, such as joy (hedonic), or is a way to fulfil their needs (utilitarian). Through a thorough assessment of hedonic and utilitarian shopping values, merchants can adapt their selling strategies to satisfy customers' requirements. As previously stated, customers who seek the hedonic component of shopping value experience positive emotions, such as joy, happiness and interest. Furthermore, hedonic motivation is responsible for the excitement and anticipation that customers feel while browsing for sales and discounts (Babin et al., 1994).

Based on this discussion, the present study puts forward the following hypothesis:

H4: Perceived enjoyment has a positive effect on purchase intentions towards Instagram Commerce.

Electronic Word of Mouth

Electronic word of mouth plays a significant part in defining customers' attitudes and behaviours (Brown and Reingen, 1987). Besides, electronic word of mouth can be considered as person-to-person, informal communication between business partners and parties with regard to a product, service or brand (Harrison-Walker, 2001). Electronic word of mouth is the most common communication method, which naturally happens when making a purchase while significantly affecting the purchase decision. In this context, when a close person uses word of mouth to communicate positive feedback about a company, the receivers of such information will show signs of early trust in the company, resulting in an increased intention to buy its products and services (San-Martin et al., 2015). Previous research studies have found a positive effect of

electronic word of mouth on purchase intentions in social commerce (Ikhsan and Ohliati, 2020) and especially with regard to Instagram (Adila et al., 2020).

In light of the aforementioned findings, the following hypothesis is suggested:

H5: Electronic word of mouth has a positive effect on purchase intentions towards Instagram Commerce.

Perceived Risk

The extant literature in the field of marketing and customer behaviour explains perceived risk as an insight into the adverse consequences derived from a particular behaviour and the perception of uncertainty (Rehman et al., 2020). Bauer (1960) was the first to theorize about perceived risk in the marketing literature. Perceived risk has been defined as the customer's uncertainty associated with the purchase of a product or service and the negative consequences derived from it (Dowling and Staelin, 1994).

Prior research has also highlighted the importance of perceived risk with regard to customers' acceptance of innovative technology along with its significant and negative influence on the intention to adopt it (Wu and Wang, 2005). In addition, prior research has found a significant and negative impact of perceived risk on purchase intention in mobile payment systems (Liébana-Cabanillas et al., 2020) and in online shopping in general (Han and Li, 2020), among others.

In light of these findings, the present study puts forward the following hypothesis:

H6: Perceived risk has a strong negative effect on purchase intentions towards Instagram Commerce.

Security

Security is associated with users' need to control and manage their personal data and information details that are stored remotely in an online system. Security involves dealing with threats that create conditions, circumstances or events capable of causing economic hardship to network or data resources in the form of data modification, manipulation, disclosure, breaches, denial of service attacks and/or fraud, data destruction, waste and misuse (Kalakota and Whinston, 1997).

Many authors have explored the aforementioned security issues, specifically hacking, viruses, data interception and data theft, hindering the operation of leading businesses over the Internet. Recent research (Kasuma et al., 2020) has also corroborated the significant relationship between security and customers' intention to purchase online.

Consequently, the following hypothesis is put forward:

H7: Security has a positive effect on purchase intentions towards Instagram Commerce.

3.2. Organism (O): Purchase Intention and Impulse Buying Tendency

Purchase Intention

Purchase intention is central for companies as it directly affects customers' likelihood of buying their products and services. The present study posits that users with a significant level of purchase intention are more likely to show impulse buying tendencies associated with the environment in which they are browsing. On the other hand, many research studies have taken a different approach to this subject and pondered the platform with which customers are interacting as a key factor affecting their purchase intention (Chen and Yao, 2018). However, the present study considers that prospective buyers already have a specific level of purchase intention and, consequently, the characteristics of the platforms and websites that customers use to browse products and services are responsible for their impulse purchases. In this sense, prior research (Xiang et al., 2016) has found that s-commerce platforms are designed and developed around customers' social interactions. Therefore, customers' experience in the aforementioned context is a primary driver of impulse buying behaviour.

In this light, the present study proposes the following hypothesis:

H8: Purchase intention has a positive effect on the impulse buying tendency towards Instagram Commerce.

Impulse Buying Tendency

An impulse buying tendency is easier to detect than other customer behaviours and can be used as a key determinant of impulse buying (Beatty and Ferrell, 1998). In this regard, Iyer et al. (2020) indicated that an impulse buying tendency comprises the attribute of impulsivity, which reproduces a constant disposition to act impulsively in a particular consumption context.

Compared with others, a customer showing an impulse buying tendency is more likely to develop and engage in impulse buying behaviour (Chen and Yao, 2018) as customers with a high level of impulse buying tendency have been found to adopt unreasonable purchase behaviours due to their poor impulse control. Consequently, these customers are especially likely to engage in impulse buying activities compared with individuals who do not show this tendency (Chang, 2017).

According to Chen et al. (2020), impulse buying has a positive impact on the urge to buy impulsively, showing that customers with impulsiveness as a key personal attribute have the urge to buy immediately and own a certain apparel product while browsing for clothes. Due to a strong urge to buy impulsively, customers struggle to keep their self-control, consequently leading to impulse buying. Previous research studies, such as those by Chen and Yao (2018), Xiang et al. (2016) and Zafar et al. (2020), have also agreed that the relationship between the impulse buying tendency and the urge to buy impulsively is positive.

In light of the aforementioned findings, the following hypothesis is proposed:

H9: The impulse buying tendency has a positive effect on the urge to buy impulsively through Instagram Commerce.

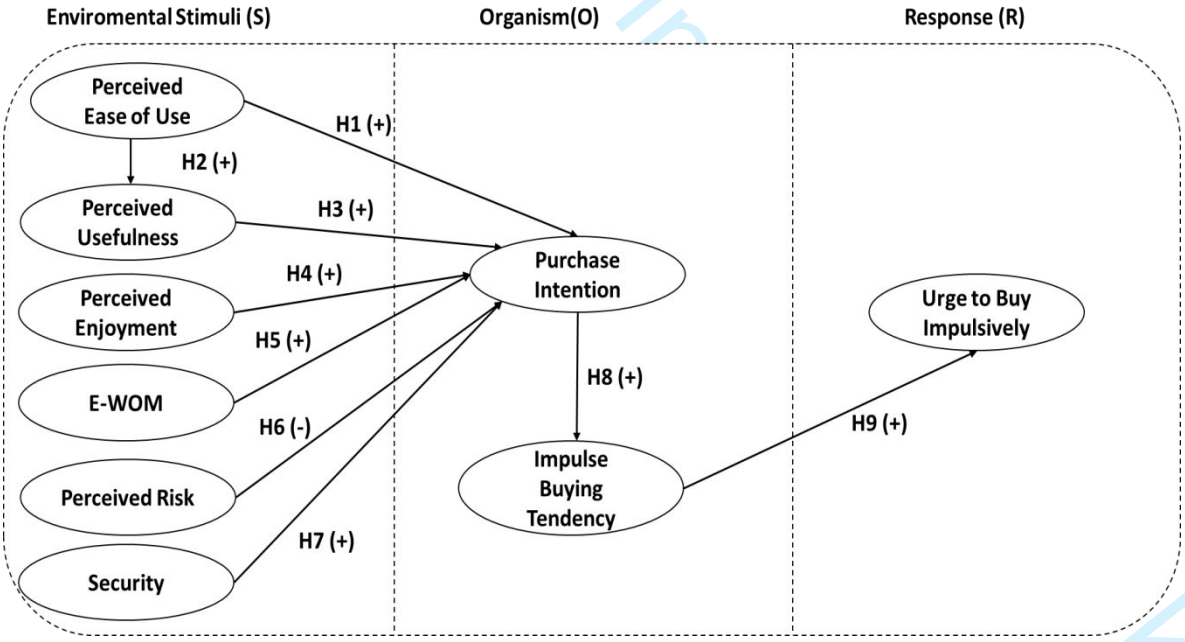
3.3. Response (R): Urge to Buy Impulsively

According to Beatty and Ferrell (1998), the urge to buy impulsively can be described as a motivational state of craving triggered after the discovery of a particular item in the environment. They found that the urge to buy impulsively reflected a significantly stronger measure of impulsivity than actual impulsive behaviour. In this sense, the UTBI ultimately leads to impulse buying and is therefore likely to be positively related to it. Previous research studies have posited that, as customers browse for their next purchase, they tend to experience an increased urge to buy, with the probability of engaging in impulsive purchase behaviour also rising (Beatty and Ferrell, 1998).

Wells et al. (2011), along with many other researchers, paid extensive attention to customers' impulsiveness or impulse buying traits, both in online shopping and in traditional retail contexts. In this regard, even though several traits affect the purchasing process in online shopping contexts, impulsiveness is the most significant factor positively affecting the intention to buy online.

In the context of impulse buying, the responses are affected by two significant factors: the urge to buy impulsively and the actual impulse buying behaviour (Rook, 1987). Precisely, the model proposed by Parboteeah et al. (2009) only incorporates the urge to buy impulsively response. Likewise, the present study focuses on the urge to buy impulsively as a response among users of Instagram Commerce.

Figure 1: Research Model



4. Research Methodology

The present study performed an experiential research analysis to examine the relationships between the proposed variables. Accordingly, a questionnaire was developed to collect the required data.

4.1. Survey and Measurement Scales

An online survey was conducted via a questionnaire constructed in Google Forms to gather data from participants in Spain. In the first place, respondents were asked to watch a video explaining three different methods to buy from Instagram Commerce; the video is still available online (https://www.youtube.com/watch?v=jVdYwCEOVeA). The link to the survey was distributed by email and published on social media platforms in summer 2020. In addition, to measure the research model's concepts, the present study employed a seven-point Likert scale with answer choices ranging from "strongly disagree" to "strongly agree" (https://bit.ly/Measurementscales). The original scales were in English, so they were translated into the language of the target population (Spanish) to obtain accurate answers. Furthermore, a group of five experts in the field was approached by the researchers to review the methodology and the measurement scales to confirm the validity of the content while ensuring that all the questions were worded properly. Subsequently, a pre-test was conducted using a sample of 10 participants who were experienced with Instagram Commerce. The finalized version of the questionnaire included three screening questions and one behavioural question (concerning the frequency of buying through Instagram Commerce).

4.2. Data Collection

The data were collected in September 2020, initially from 290 respondents. After a validation process, the final sample consisted of 251 valid users. Table 1 presents the details of these Spanish users.

Table 1: Respondents' demographic characteristics

Demographics		Frequency	Percentage
Gender	Men	68	27%
	Women	183	73%
Age	18-25	147	59%
	26-35	78	31%
	36-45	13	5%
	46-55	11	4%
	56-65	2	1%
	Over 60	0	0%
Education Level	University	134	53%
	Postgraduate	87	35%
	High School	18	7%
	Elementary	12	5%
Employment Status	Employee	75	30%
	Student	148	59%
	Unemployed	13	5%
	Self-employed/ Businessmen/women	14	6%

	Retired	1	1%
Monthly Income	Less than 1100 Euros	49	19%
	Between 1100-1800 Euros	58	23%
	Between 1800-2700 Euros	7	3%
	Over 2700 Euros	5	2%
	No Income	113	45%
	Don't Know/No answer	19	8%

5. Results

5.1. Assessing Reliability and Validity

The present study tested the collected data through the Smart PLS 3 software, aiming to measure the structural equation model. The fit of the measurement scales was evaluated through different indices of reliability and validity, such as Cronbach's alpha (α), composite reliability (CR) and average variance extracted (AVE). All the constructs proved to be reliable, with all the obtained values exceeding the recommended thresholds: 0.7 in the case of Cronbach's alpha (Nunnally, 1994), 0.8 for CR (Nunnally, 1994) and 0.5 with regard to AVE (Fornell and Larcker, 1981).

A confirmatory factor analysis (CFA) was used to verify the convergent and discriminant validity of the scales. The convergent validity was evaluated through the factorial loads of the indicators. The study found that the coefficients were significantly different from zero and that the loadings were above 0.8 in all cases. Concerning the discriminant validity, the modifications were significantly different from zero and the correlation of each pair of scales was not higher than 0.9 (Hair et al., 2014). Consequently, all the constructs had acceptable measurement properties.

Finally, three methods were used to measure the discernment validity through the PLS software package: a) according to Barclay et al. (1995), the loading coefficients must be greater than the cross-loadings; b) as suggested by Fornell and Larcker (1981), the number of inter-construct correlations should be lower than the value of the square root of the AVEs in the model; and c) Henseler et al. (2015) indicated that the heterotrait–monotrait (HTMT) ratio should be lower than 0.9. Besides, in the present research, all the obtained values were fairly close to those proposed in the scientific literature. Furthermore, this study detected an adequate amount of discriminant validity throughout the research model.

Table 2: Evaluation of the measurement model: Loadings, Cronbach's alpha, Rho_A, composite reliability (CR) and average variance extracted (AVE)

Items	**Loadings**	**Cronbach's Alpha**	**Rho_A**	**Composite Reliability (CR)**	**Average Variance Extracted (AVE)**
PE1	0.936	0.963	0.964	0.973	0.901
PE2	0.944				
PE3	0.962				
PE4	0.955				

EWOM1	0.964	0.934	0.941	0.959	0.885
EWOM2	0.971				
EWOM3	0.886				
IBT1	0.945	0.973	0.974	0.980	0.925
IBT2	0.984				
IBT3	0.970				
IBT4	0.948				
UTBI1	0.961	0.964	0.965	0.977	0.933
UTBI2	0.974				
UTBI3	0.962				
PEOU1	0.942	0.974	0.974	0.979	0.905
PEOU2	0.955				
PEOU3	0.975				
PEOU4	0.963				
PEOU5	0.921				
PU1	0.870	0.940	0.940	0.954	0.806
PU2	0.912				
PU3	0.913				
PU4	0.891				
PU5	0.902				
PI1	0.948	0.976	0.977	0.981	0.912
PI2	0.964				
PI3	0.963				
PI4	0.962				
PI5	0.936				
PU1	0.873	0.940	0.942	0.954	0.806
PU2	0.911				
PU3	0.916				
PU4	0.886				
PU5	0.900				
PR1	0.949	0.841	0.895	0.925	0.860
PR2	0.905				
SEC1	0.865	0.968	0.968	0.974	0.863
SEC2	0.936				
SEC3	0.946				
SEC4	0.933				
SEC5	0.951				
SEC6	0.939				

Table 3: Discriminant validity: Fornell–Larcker criterion (below the main diagonal) and heterotrait–monotrait ratio (HTMT) (above the main diagonal)

	EWOM	**IBT**	**PE**	**PEOU**	**PU**	**SEC**	**UTBI**	**PI**	**PR**
EWOM	**0.941**	0.694	0.686	0.617	0.788	0.817	0.648	0.826	0.398
IBT	0.663	**0.962**	0.664	0.428	0.580	0.623	0.850	0.636	0.395
PE	0.833	0.664	**0.949**	0.665	0.818	0.768	0.635	0.838	0.388
PEOU	0.617	0.428	0.665	**0.951**	0.762	0.591	0.462	0.656	0.444
PU	0.788	0.580	0.818	0.762	**0.898**	0.737	0.604	0.805	0.400

SEC	0.817	0.623	0.768	0.591	0.737	**0.929**	0.572	0.793	0.312
UTBI	0.648	0.850	0.635	0.462	0.604	0.572	**0.966**	0.604	0.396
PI	0.826	0.636	0.838	0.656	0.805	0.793	0.604	**0.955**	0.303
PR	0.398	0.395	0.388	0.444	0.400	0.312	0.396	0.303	**0.927**

The hypotheses were evaluated through structural equation modelling (SEM). In this regard, a bootstrapping procedure with 500 subsamples was employed to measure the relevance of the coefficient paths (Hair et al., 2016). In this manner, the significance of the relationships between the hypotheses and their analytical performance was measured through the assessment of the structural model. As Table 4 shows, all the hypotheses were supported except for H1.

The results obtained did not support the relationship between perceived ease of use and purchase intention (H1) ($\beta = 0.075$, $p > 0.10$), a result that is consistent with previous research (Kasilingam, 2020; Wang et al., 2020). On the other hand, Hypothesis 2 proposes a relationship between perceived ease of use and perceived usefulness. The findings from the present study strongly support this relationship ($\beta = 0.763$, $p < 0.001$), and all the values obtained were in line with recent research (Chen and Aklikokou, 2020). Besides, the results obtained supported the relationship between perceived usefulness and purchase intention that Hypothesis 3 suggests ($\beta = 0.188$, $p < 0.05$), validating other recent studies in the literature (Tcheuffa et al., 2020). With regard to the relationship between perceived enjoyment and purchase intention put forward by Hypothesis 4, the results from this study are strongly supportive ($\beta = 0.315$, $p < 0.001$), as already suggested in the literature (Patel et al., 2020; Pillai et al., 2020). Furthermore, the results obtained support the relationship between E-WOM and purchase intention (H5) ($\beta = 0.243$, $p < 0.05$), as suggested in the literature (Ikhsan and Ohliati, 2020; Wajdi et al., 2020). Moreover, in the case of H6, the results support the relationship between perceived risk and purchase intention ($\beta = -0.087$, $p < 0.05$), as a recent research study revealed (Han and Li, 2020). The relationships between security and purchase intention (H7) were also strongly supported ($\beta = 0.197$, $p < 0.05$), as reported by previous research (Kasuma et al., 2020; Othman et al., 2019). The results obtained also supported the relationship between purchase intention and impulse buying tendency (H8) ($\beta = 0.636$, $p < 0.001$). Finally, the relationship between impulse buying tendency and urge to buy impulsively proposed in Hypothesis 9 was tested, and the results also mirrored those of recent research studies (Zafar et al., 2020), supporting such a relationship ($\beta = 0.850$, $p < 0.001$).

The present research followed the procedure established by Geisser (1975) and Stone (1974) to measure the R^2 and Q^2 along with the effect size (f^2) and the standardized root mean square residual (SRMR) constants. According to Falk and Miller (1992), R^2 values should exceed the minimum threshold of 0.1. Table 4 shows that the R^2 achieved values above 0.404, meaning that the R^2 in the present study exceeds the aforementioned threshold.

In addition, the present research measured the effect of the f^2 and found that it yielded a value between 0.011 and 2.608. This indicates that the relationship between the variables has a significant effect, considering that Chin (1998) agreed that f^2 values between 0.02 and 0.15, 0.15 and 0.35, and 0.35 and higher provide evidence that an exogenous latent variable has a correspondingly significant, moderate or trivial effect.

Furthermore, the present study conducted a Q^2 test following the method suggested by Geisser (1975) and Stone (1974), who developed the blindfolding techniques applied (omission distance = 7) to obtain the value for the predictive relevance test (Q^2). The results obtained in this study were different from zero, verifying the predictive relevance of the model.

The present research also measured the value of the standardized root mean square residual (SRMR) (Henseler et al., 2015) and obtained a result of 0.039, which is less than the maximum acceptable value of 0.08, showing that the research model had adequate goodness of fit.

Table 4: Evaluation of the structural model

Hypotheses	Relationships	Paths	P -Values	Supported	f^2	R^2	Q^2	SRMR
1	PEOU→PI	0.075	0.114	NO	0.011			
2	PEOU→PU	0.763	**0.000*** **	YES	1.392			
3	PU→PI	0.188	**0.003** **	YES	0.038			
4	PE→PI	0.315	**0.000*** **	YES	0.111			
5	EWOM→PI	0.243	**0.003** **	YES	0.061			
6	PR→PI	-0.087	**0.004** **	YES	0.028			
7	SEC→PI	0.197	**0.003** **	YES	0.057			
8	PI→IBT	0.636	**0.000*** **	YES	0.679			
9	IBT→UTBI	0.850	**0.000*** **	YES	2.608			
	IBT					0.404	0.369	
	PI					0.796	0.719	
	UTBI					0.723	0.669	
	PU					0.582		
								0.039

6. Final Discussion and Conclusion

6.1 Theoretical Implications

The present study makes several contributions to social commerce research and more specifically to scientific research on Instagram Commerce. The results obtained show that determinants such as perceived ease of use, perceived usefulness, perceived enjoyment, electronic word of mouth, perceived risk, security, purchase intention, impulse buying tendency and urge to buy impulsively are entirely associated with research on social networks and the performance of online sales. The present study also revealed that all the aforementioned concepts have strong relationships that

affect each other except for the relationship between perceived ease of use and purchase intention, which can be explained by the recent emergence of s-commerce and especially Instagram Commerce in Spain. In this sense, Spanish users have not yet leveraged all the different buying options on Instagram Commerce. Instagram is continuing to add new purchasing avenues, meaning that Spanish users will shortly become familiar with the use of Instagram Commerce. In this regard, the results corroborated those Spanish users who strongly agreed with the satisfaction and security associated with the use of the platform. Spanish users stated that Instagram is especially valuable for searching for and purchasing products, improving their performance in assessing products while allowing them to discover products and gain shopping ideas rapidly.

In addition, the results from the analysis of the impact of electronic word of mouth on the research model show that it encourages Spanish customers to share highly positive feedback and recommend Instagram Commerce's products and services to their family and friends. Moreover, the aforementioned concepts significantly influence the purchase intention of Spanish users on Instagram Commerce. In this sense, first-time buyers are willing to recommend this particular s-commerce platform to others while becoming repeat customers who will undoubtedly use Instagram Commerce again to buy products and services. In this context, the present study posits that Instagram Commerce has become a significant social commerce platform in Spain. On the other hand, the results obtained with regard to the impulse buying tendency and the urge to buy impulsively reveal that they both affect Spanish users' purchase intention towards Instagram Commerce. When users are browsing Instagram Commerce, they often make unplanned purchases spontaneously, without conducting a previous assessment. Therefore, the moment they find a product they desire, they buy it directly. In this manner, Spanish users of Instagram Commerce are induced to make quick and unplanned purchases, lured by products that are different from those that they were originally seeking.

Furthermore, the present research applied the stimulus–organism–response (S-O-R) framework to the aforementioned concepts implemented in the research model. The present study used purchase intention, perceived ease of use, perceived usefulness, perceived enjoyment, electronic word of mouth, perceived risk and security as environmental stimuli. Besides, organism and consumer response are considered as mediating variables affecting purchase intention and impulse buying tendency. In this manner, the consumer response in the proposed model was explained through the urge to buy impulsively. Generally speaking, all the concepts in the S-O-R model had strong relationships.

6.2 Managerial Implications

The present research contributes to the expansion of Instagram Commerce as a leading s-commerce platform under the restrictions imposed during the COVID-19 pandemic. In this sense, it is worth nothing that marketing professionals are being held back by the scarcity of research in this field of knowledge. In the first place, the results obtained reveal that purchase intention, impulse buying tendency and urge to buy impulsively are critical determinants of the success of s-commerce companies such as Instagram Commerce. Moreover, Instagram Commerce has

established itself as one of the top s-commerce platforms during the COVID-19 pandemic in terms of marketing and sales. In this manner, in its bid to support both small and large businesses, Instagram has continued to develop multiple easy avenues for buying through its platform. Most business sectors and brands have engaged with Instagram Commerce during the COVID-19 pandemic.

The ease of use and usefulness of Instagram Commerce allow companies to sell effortlessly while offering multiple buying methods and enabling features such as sharing posts and stories in relation to their products and services and using hashtags and all the tools that Instagram has developed for businesses. Moreover, customers feel compelled to buy directly from Instagram Commerce and disregard other platforms or brand choices since Instagram keeps providing updated information about products and services through an easy-to-understand shopping interface. In addition, the sense of enjoyment is crucial in the context of social commerce and especially in Instagram Commerce. Accordingly, managers should focus on providing a pleasing shopping experience for their s-commerce customers on Instagram, on which they can upload high-quality, colourful and creative posts and stories about products and services to retain their current customers and attract new prospective buyers. Likewise, these features encourage customers to make direct purchases.

In addition, positive electronic word of mouth communication among users of Instagram Commerce helps the platform to grow in terms of new users and companies. In this manner, Instagram's electronic word of mouth helps companies by attracting new followers and customers (Belanche et al., 2020). In this sense, managers should focus on their company's profile on Instagram, reviewing the posts, shares and comments left by users of the platform to remove inappropriate contributions infringing the terms of service. In addition, s-commerce managers should concentrate on users' negative feedback about their products and services to mitigate issues and avoid customer dissatisfaction. On the other hand, positive reviews should encourage professionals to keep developing the original idea. S-commerce managers should also respond as quickly as possible to users' questions and feedback. As the present study revealed, perceived risk and security are central for companies and customers with an active Instagram Commerce profile. In this regard, Instagram Commerce can be considered to be secure, except for the occasional unknown profiles that happen to arise and are systematically reviewed and removed by the platform managers and algorithms. Managers should focus on developing a real account with actual company details, such as location, email, phone numbers, feedback ratings and selling purposes, to improve customers' confidence and allow their users to buy without the fear of risking sensitive information or engaging in shady business interactions. In this manner, companies should keep developing creative selling strategies and campaigns that are different from those of the competition to attract more customers and increase their sales. In this light, the COVID-19 pandemic has taught many businesses the impending necessity of approaching digital marketing as a key driver of sales performance. Companies with no e-commerce presence whatsoever have lost a considerable number of employees and clients and, in some cases, have been forced to cease trading. In this sense, digital marketing is fundamental for any company, independent of its size, to remain operational under the serious challenge that the world is facing nowadays.

7. Limitations and Avenues for Future Research

The present study has several limitations that can be viewed from the perspective of avenues for future research. Firstly, the sample contains data limited to Spanish users. Future studies in this field of knowledge can examine different countries to assess the generalization performance of the theoretical model. Secondly, the fact that the study took place in an online environment and involved participants aged 18 and older suggests that future research can study participants with contrasting characteristics, for example a group of users with no means to complete online surveys and another group of people under 18 years of age, and discuss the results obtained.

Future research can also advance an additional, comprehensive model by including more variables in the one proposed by the present study. With regard to the data collection method, a longitudinal approach would allow the assessment of the strength of the relationships and the evolution of the moderating variables over time (especially age, gender, employment situation and educational level). Future researchers might assess user-produced content analysis techniques, for instance text regression and sentiment analysis (e.g., lexicon-based methods, machine learning, etc.), text mining (e.g., latent semantic analysis) and focus groups, among others. Besides, this research concentrated on one social commerce platform (Instagram), but consumer behaviour can differ depending on the features of the social network. Consequently, future works could estimate the validity of the proposed model using data collected from users of other platforms and networks, for instance Pinterest, Twitter and Facebook. Furthermore, research focusing on multiple countries would allow a comparison of the different levels of purchase intention, impulse buying tendency and urge to buy impulsively through Instagram Commerce according to nationality. Finally, new research related to COVID-19's influence on social commerce platforms such as Instagram can become a significant subject with regard to e-commerce and many other fields of knowledge.

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