Determinants of Impulsive Buying Behaviour in Social Commerce: A Stimulus–Organism–Response Framework Perspective

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ABSTRACT

Impulsive buying has been an area of interest in the marketing discipline for years. Impulsive buying behaviour has both positive and negative outcomes, in the sense that retailers usually exploit consumers' impulsiveness to increase their profits. However, these unplanned purchase decisions are problematic for consumers. Impulsive buying behaviour can disrupt consumers' financial stability and can have negative emotional effects on them. This type of buying behaviour also hinders consumers' ability to save, which may affect individuals' financial position. While impulsive buying behaviour has been extensively studied, not much research has been conducted on how it manifests in the context of social commerce in South Africa. As a result, the aim of this study is to identify and model elements that are important in understanding impulsive buying in social commerce. A quantitative method and a survey design were employed, and 297 responses were collected from South African consumers. The structural relationships in the proposed research model were tested using partial least squares structural equation modeling. The study found out that consumers' urge to buy impulsively is influenced by hedonic value, and impulsive buying behaviour is influenced by urge to buy impulsively. The findings of this study add to the body of knowledge by broadening our knowledge of how impulsive buying behaviour manifests in social commerce, especially in the setting of South Africa.

Keywords: impulsive buying behaviour; social commerce; social media usage intensity; social media browsing; urge to buy impulsively; hedonic value

INTRODUCTION

For a long time, impulsive buying has garnered considerable attention in marketing literature (Amos, Holmes & Keneson, 2014; Chang, Yan & Eckman, 2014; Chen, Su & Widjaja, 2016; Chinomona & Montso, 2019). It is considered as a purchase made without prior preparation or thought after being exposed to certain stimuli (Hashmi, Attiq & Rasheed, 2019). Since 68 percent of online purchases are made on impulse (Li & Wang, 2015, as cited in Xi et al., 2016), retailers and marketers have begun to pay greater attention to this behaviour, which generates a large amount of revenue for them (Chinomona & Montso, 2019). The use of social media tools and users' online social networks (OSNs) to enable the purchasing and selling of products and services is referred to as social commerce (s-commerce) (Wang & Xie, 2020; Wang & Zhang, 2012). Xi et al. (2016) suggest that these activities involve users' electronic word-of-mouth exchange, collaborative shopping, and social interaction. The advantage of s-commerce, according to Xi et al. (2016), is that it benefits both businesses and customers in a variety of ways. To begin with,

it assists organisations in engaging clients with their brands based on their social behaviours. Second, it gives consumers a reason to visit the organisation's website again. Third, the organisation's website gives customers a place to discuss the company's brand. Finally, it gives consumers with all the information they need to investigate, compare, and ultimately choose one brand over another (Xi et al., 2016).

Consumers have shown impulsive purchase behaviour on social media networks in recent years, prompting a new research phenomenon known as s-commerce impulsive buying. Consumers' inability to manage purchase urges when confronted with consumptive stimuli on social media is described as the s-commerce impulsive buying (Lo, Lin & Hsu, 2016). Impulsive purchasing behaviour in s-commerce differs from that in traditional retailers. To stimulate a desire to buy in a physical store, for example, stimuli can be adjusted to affect the five senses, namely vision, hearing, touch, smell, and taste. Stimuli in an s-commerce environment are limited to those that affect vision and hearing (Lo et al., 2016). As a result, it is fascinating to investigate the aspects of online store design that elicit online impulsive buying by increasing consumers' urge to buy or weakening their self-control. Existing studies have investigated how numerous aspects associated to information systems artefacts influence online impulse buying within an e-commerce context, such as system design (Shen & Khalife, 2012), website quality (Hashmi et al., 2019; Turkyilmaz, Erdem & Uslu, 2015), website attributes (Liu, Li & Hu, 2013) and website ease of navigation (Lin & Lo, 2016). However, few empirical research has explored online impulse buying in an s-commerce setting in South Africa, and as a result, little is known about how it manifests in this country. For this reason, the objective of this study is to use the stimulus–organism–response model as a theoretical lens to study the determinants of impulsive buying behaviour in s-commerce.

PROBLEM STATEMENT

It has become clear that s-commerce has created a new possibility for customers to buy impulsively since it offers them with more access to a wider choice of products and makes transactions more convenient (Strack, Werth & Deutsch, 2006). In s-commerce, impulsive buying behaviour is problematic since it makes it easier for consumers to buy products they don't need and for them to spend recklessly (Akram et al., 2016; Aragoncillo & Ors, 2018; Strack et al., 2006). This behaviour becomes extremely difficult to stop, and it eventually has negative repercussions. Financially, reckless spending prevents consumers from making good and lasting financial decisions and causes consumers to end up with a significant and unmanageable amount of debt (Chamorro-Premuzic, 2015). Other consequences of reckless spending are consumer bankruptcies, major life crises and poverty (Chamorro-Premuzic, 2015). Psychologically, impulsive buying behaviour could cause consumers to develop compulsive buying tendencies (Chamorro-Premuzic, 2015; Chow, 2019). Compulsive buying is defined as a state of chronic, repetitive purchasing that develops as a primary response to a variety of events or feelings, the majority of which are unpleasant (Chow, 2019). This could have negative repercussions like dependency and behavioural addictions. As such, the main aim of this study is to investigate the determinants of impulsive buying behaviour in s-commerce.

LITERATURE REVIEW

Overview of impulsive buying in social commerce

With the Internet developing rapidly and mobile devices, such as smartphones, tablets, laptops, and computers, constantly being improved and innovated, s-commerce has proliferated (Wang & Xie, 2020; Wu & Ye, 2013). S-commerce is the use of social media tools to support e-commerce (Xi et al., 2016). It is also a new type of e-commerce that uses social media, online media, and other communication channels in the context of social media to facilitate interpersonal relationships and business information flow interaction, as well as the purchase and sale of goods and services through social interaction and user-generated content (Wang & Xie, 2020). Both these definitions highlight using social media to conduct business transactions. Therefore, with the rise of s-commerce, researchers have identified that impulse buying is also a factor in consumers' social media activities (Chan, Cheung & Lee, 2017; Xiang et al., 2016). It is becoming evident that with the presence of retail stores in the space of s-commerce, impulse buying behaviour among consumers is becoming widespread. Consumers who shop on e-commerce

platforms are relieved from the constraints they might face in traditional stores, increasing their likelihood of making impulsive purchases (Chan et al., 2017). Many elements, according to the existing literature, influence s-commerce impulse buying, including the shopping environment, consumers' personal attributes, the product itself, and various demographic and sociocultural aspects (Aragoncillo & Ors, 2018; Muruganantham & Bhakat, 2013; Xiang et al., 2016). The theoretical perspective that underpins this study will be briefly described in the subsequent section.

Underlying theory

The Stimulus–Organism–Response (S-O-R) framework, pioneered by Mehrabian and Russell (1973) and modified by Jacoby (2002), provides a starting point for this study (2002). The S-O-R framework adds an organism to the Stimulus Response (SR) hypothesis, explaining an individual's internal reactions in response to situational inputs (s-commerce, for the purposes of this study). According to the S-O-R framework, situational cues (stimuli) create internal reactions (organism), which then affect an individual's behaviour or response (Chan et al., 2017). This theory is one of the most used theories in explaining online impulse buying behaviour (Chan et al., 2017; Chang, 2017; Hashmi et al., 2019; Lim, Lee & Kim, 2017; Luqman et al., 2017). The theory has three main components: (1) a stimulus (S), which is a trigger that arouses the consumer (Eroglu, Machleit, & Davis, 2001), (2) an organism (O), which is the consumer's internal evaluation (Loureiro & Ribeiro, 2011), and (3) a response, which is the outcome of the consumer's reactions to their internal evaluation (Donovan & Rossiter, 1982). Studies that have applied the S-O-R framework to online impulse buying include Parboteeah, Valacich and Wells (2009), Liu et al. (2013), Jiang et al. (2010) and Hsu and Tsou (2011). The S-O-R framework is considered the most appropriate theoretical lens to underpin this study, since the determinants investigated (namely, social media usage intensity, social media browsing, and hedonic value) can arguably be regarded as situational cues that cause an individual's reactions, namely, the urge to buy impulsively and, as a result, impulsive buying behaviour in s-commerce.

RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT

Social media browsing

Social media browsing is considered the initial phase of engaging in s-commerce buying, as it signifies the consumer's search for information. Consumers browse social media because they enjoy seeking information, regardless of whether they purchase anything. Browsing can also be regarded of as an exploratory search activity that is undirected, less targeted, and stimulus driven (Leong, Jaafar & Ainin, 2018; Zhang et al., 2018). Because browsing takes time, the likelihood that consumers will feel compelled to make an impulsive purchase grows as they browse (Zhang et al., 2018). The existing literature on consumer behaviour indicates that utilitarian drivers and hedonic drivers are predictors of people's browsing behaviour (Adi, Wihuda & Adawiyah, 2017). Individuals who browse for utilitarian purposes seek to get product information to make a purchasing decision (Adi et al., 2017; Hashmi et al., 2019; Zhang et al., 2018), while hedonic browsers gather product information just because they enjoy gathering information, with no future purchase in mind (Adi et al., 2017; Hashmi et al., 2019; Zhang et al., 2018). Social media browsing will therefore be considered one of the key determinants of impulsive buying behaviour in s-commerce.

Social media usage intensity

Basically, the frequency with which a consumer browses through social media platforms is referred to as social media usage intensity (Leong et al., 2018). This conceptualisation, however, is incomplete, as it does not include social media activity and engagement. A more appropriate definition suggests that social media usage intensity encompasses a user's actual activity, meaning the extent to which the user actively engages in social media activities (Wirtz, Göttel & Daiser, 2017). Users show active engagement in social networks by the number of friends they have and their average use per day (Wirtz et al., 2017). Focusing solely on the overall time a user spends browsing on social networks misses the point when attempting to find out what motivates social media usage intensity or how usage intensity leads consumers to purchase impulsively on social media (Leong et al., 2018; Smock et al., 2011). As according to previous research (Gonzales & Hancock, 2011), social media can increase a user's self-esteem, and the

greater the user's self-esteem because of social media usage intensity, the lower the individual's self-control, leading to more impulsive behaviour (Leong et al., 2018; Wilcox & Stephen, 2013). It is also suggested that the higher a user's usage intensity, the higher the possibility will be that they will develop an urge to purchase on social networks (Leong et al., 2018). Accordingly, in this study, usage intensity is theorised to be one of the determinants of impulsive buying behaviour in s-commerce.

Hedonic value

Hedonic value, according to existing research, increases impulsive buying and customer satisfaction (Hashmi et al., 2019; Xiang et al., 2016). Hedonic value, in general, refers to the pleasure consumers derive from buying (Asnawati, 2018). Hedonic value is also regarded a motivation for shopping because shopping is such a pleasurable experience that it causes the consumer to ignore the benefits of the purchased item (Asnawati, 2018; Hashmi et al., 2019). Adventure shopping, gratification/relaxation shopping, value shopping, social shopping, and idea shopping are the five key features of hedonic value (Asnawati, 2018). Hedonic value causes impulsive buying in the sense that consumers tend to behave impulsively when they experience hedonic value aspects such as self-satisfaction, enjoyment, fantasy, and social and emotional satisfaction (Wahab et al., 2018). Furthermore, because of the ease and convenience of exploring, purchasing, and paying for products in s-commerce contexts, purchase decisions driven by hedonic motive are more common (Wahab et al., 2018). As a result, hedonic value is also theorised as one of the determinants of impulsive buying behaviour in s-commerce in this study.

Urge to buy impulsively

An urge to buy impulsively is defined as a state of desire experienced when encountering a product in a certain setting (Chung, Song & Lee, 2017; Leong et al., 2018). This desire is sudden and spontaneous, and it occurs before the actual impulsive buying (Huang, 2016; Leong et al., 2018). The urge to buy impulsively has been extensively studied in the literature, with some studies suggesting that perceived enjoyment and impulse-buying tendency influence the urge to buy impulsively (Xiang et al., 2016), while others have theorised that the urge to buy impulsively influences actual impulse buying behaviour (Leong et al., 2018). The nexus of urge to buy and actual impulsive buying behaviour occurs when the consumer's own thoughts are considered to trigger an urge to buy, and once triggered, this urge becomes so powerful and persistent that it demands immediate action (Badgaiyan & Verma, 2015). The hypothesis that urges to buy impulsively has an influence on actual impulse purchasing is well documented in the literature (Huang, 2016; Leong et al., 2018). The literature indicates that the higher the urge to buy, the higher the tendency will be to engage in impulsive buying (Chung et al., 2017; Leong et al., 2018). Accordingly, based on the preceding literature, we theorise urge to buy impulsively as a proximal determinant of impulsive buying behavior in s-commerce

Impulsive buying behaviour

After being exposed to certain stimuli, impulsive buying is defined as purchasing decisions made without consideration or contemplation (Farid & Ali, 2018; Hashmi et al., 2019). Impulsive buying decisions are characterised by a subjective bias in favour of instant possession and a relatively quick decision-making process (Hejase et al., 2018). There are four categories of impulsive buying behaviour that are commonly discussed in the literature, namely pure impulse buying, reminder impulse buying, suggestion impulse buying and planned impulse buying (Park, Kim & Forney, 2017; Zhang et al., 2018). Pure impulse buying is the act of making impulsive purchases for the sake of novelty or escape. While reminder impulsive buying occurs when a customer sees an item advertised and remembers that their stock of the item at home is depleted or low, they are prompted to make an impulsive purchase. Suggestion impulse buying occurs when a customer sees a product and visualises a need for it, even if they have no prior knowledge of the product. Planned impulsive buying occurs when a customer plans a specific purchase in advance, but focuses on promotions or discounts, this is known as (Park et al., 2017; Zhang et al., 2018). In this study, impulsive buying behaviour is operationalised as an outcome variable. In line with the above discussion, the research model is presented in Figure 1, followed by the proposed hypothesis statements.

FIGURE 1
THE HYPOTHETIC RESEARCH MODEL

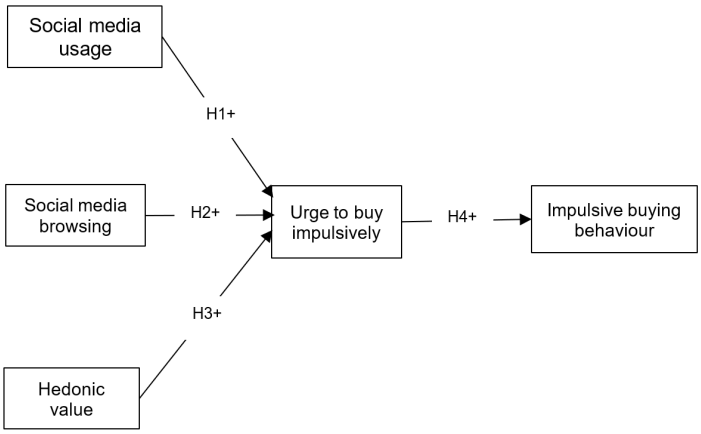

Figure 1 above represents the research model of this study. Three independent variables, namely social media usage intensity, social media browsing and hedonic value (which are situational cues), are theorised to influence impulsive buying behaviour (regarded as a response to internal reactions), through urge to buy impulsively (which is regarded as an individual's internal reactions, which affect their behaviour). The proposed hypothesis statements are as follows:

H_1: Social media usage intensity is positively related to urge to purchase impulsively.

H_2: Social media browsing is positively related to urge to purchase impulsively.

H_3: Hedonic value is positively related to urge to purchase impulsively.

H_4: Urge to purchase impulsively is positively related to impulsive buying.

RESEARCH METHODOLOGY

Target population, sampling, and the measuring instrument

The target population of this study was social media users in Matjhabeng Local Municipality who have bought products through social media. The sample size was calculated using the Raosoft sample size calculator, with the margin of error set at 5% and the confidence interval set at 90%; thus, the recommended sample size was 267. This study used convenience non-probability sampling since there was no readily available sample frame. This means that the sample was drawn from members of the population who are conveniently available to the researcher (Wiid & Diggines, 2015). Trained field workers were deployed to designated malls where the survey took place, and the respondents were selected based on their willingness to cooperate with the field workers. The data was collected using a self-administered questionnaire and a quantitative approach with a survey study design. The questionnaire was divided into two sections. The first section solicited demographic information from responders, while the second section contained five-point Likert-scale questions. In the second section of the questionnaire, respondents were asked to indicate their level of agreement or disagreement with several statement measuring the five constructs under investigation in this study. The constructs were measured using a five-point Likert scale, where the value1 corresponding to "strongly disagree" and value 5 corresponding to "strongly agree." The measuring items for the questionnaire were adapted from the existing literature (Beatty, & Ferrell,1998; Ellison, Steinfield, & Lampe, 2007; Leong et al., 2018; Wu et al.,2016). The next section explains the data analysis strategy.

Data analysis

Structural equation modelling with PLS-SEM (SmartPLS version 3.2.8) was used as the main data analysis technique in this study. PLS-SEM was selected because its algorithm follows a prediction modelling perspective, such that the method aims to maximise the amount of explained variance of the endogenous latent variables. The method therefore supports prediction-oriented goals, such as explaining or predicting the target constructs in a model, which

was the case in this study (Hair, Ringle & Sarstedt, 2011). The procedure for data analysis followed a two-step approach, namely assessment of the measurement model, and assessment of the structural model (Chin, 2010). In assessing the measurement model, we used the four sequential steps proposed by Hair et al. (2019), namely (1) confirming the item reliability, by evaluating the outer loadings of each item, (2) assessing the internal consistency reliability of the items, using the index for composite reliability and the Cronbach's alpha, (3) assessing the convergent validity of each construct measure, using the average variance extracted (AVE) criterion, and (4) assessing the discriminant validity, using the heterotrait–monotrait (HTMT) ratio of the correlations. Since PLS-SEM is the choice of analysis technique, the structural model will be evaluated by means of the coefficient of determination (R^2) and the standardised path coefficient (β). The results of the analysis are presented in the following section.

RESEARCH FINDINGS

Demographic profile of the respondents

The descriptive statistics of the respondents are presented in Table 1.

TABLE 1
DESCRIPTIVE STATISTICS OF THE RESPONDENTS

Demographic		Count	Percent
Gender	Males	123	41.41
	Females	174	58.59
	Total	297	100.00
Age	18–25	72	24.24
	25–35	133	44.78
	35–40	61	20.54
	40 and older	29	9.76
	Not answered	2	0.67
	Total	297.00	99.99
Education completed	None	3	1.01
	Primary school	1	0.34
	Secondary school	56	18.86
	College or university (graduate)	146	49.16
	Postgraduate	87	29.29
	Not answered	4	1.35
	Total	297	100.01
Marital status	Single	206	69.36
	Married	78	26.26
	Divorced	8	2.69
	Widowed	4	1.35
	Not answered	1	0.34
	Total	297	100.00
Monthly income	Under R7 500	118	39.73
	R7 501–R12 000	46	15.49
	R12 001–R18 000	45	15.15
	R18 001–R27 000	43	14.48
	R27 001 and more	38	12.79
	Not answered	7	2.36
	Total	297	100.00

Note: A total percentage exceeding or lower than 100.00% is due to rounding off.

The statistics in Table 1 show that the sample of 297 respondents comprised 41.41% males and 58.59% females. Most of the respondents, that is, 133 respondents, or 44.78% of respondents, were 25 to 35 years of age. Regarding education completed, 49.16% of respondents had obtained a graduate degree from a college or a university, while 29.29% had obtained a postgraduate degree. Thus, collectively, about 78% of respondents had completed tertiary education. Of the 297 respondents, about 70% were single, 26.26% were married, 2.69% were divorced, and four respondents were widowed. Lastly, 39.73% of respondents earned R7 500 or less per month, followed by 15.49% who earned R7 501 to R12 000 per month, and 15.15% who earned R12 001 to R18 000 per month. Collectively, 27.27% of respondents earned more than R18 000 per month.

The measurement model results

Hair et al., (2019) recommended four consecutive steps for evaluating the measurement model, which we followed (2019). Firstly, we confirmed item reliability, by evaluating the outer loadings of each item. For acceptable item reliability, the outer loading should be 0.708 or higher, and the outer loading should also be statistically significant. Secondly, we assessed the internal consistency reliability of the items, using the index for composite reliability and the Cronbach's alpha. A satisfactory value for each index is expected to be 0.7 or higher. Thirdly we step assessed the convergent validity of each construct measure, using the average variance extracted (AVE) criterion. An acceptable AVE is 0.50 or higher. Finally, we assessed the discriminant validity, using the heterotrait–monotrait (HTMT) ratio of the correlations. An HTMT value of higher than 0.85

would be an indication of a lack of discriminant validity between two constructs. The results of the measurement model are presented in Table 3 and Table 4, respectively.

TABLE 2
MEASUREMENT MODEL

Construct	Item	Outer loading	p-value (two-tailed)	Cronbach's alpha	CR	AVE
Hedonic value	HV1	0.789	0.000	0.837	0.880	0.550
	HV2	0.737	0.000			
	HV3	0.733	0.000			
	HV4	0.816	0.000			
	HV5	0.689	0.000			
	HV6	0.677	0.000			
Impulsive buying behaviour	IBB1	0.818	0.000	0.878	0.917	0.733
	IBB2	0.892	0.000			
	IBB3	0.863	0.000			
	IBB4	0.852	0.000			
Social media browsing	SMB1	0.609	0.000	0.550	0.750	0.504
	SMB2	0.695	0.000			
	SMB4	0.811	0.000			
Social media usage intensity	SUI1	0.745	0.000	0.873	0.901	0.604
	SUI2	0.786	0.000			
	SUI3	0.811	0.000			
	SUI4	0.783	0.000			
	SUI5	0.814	0.000			
	SUI6	0.722	0.000			
Urge to buy impulsively	UBI1	0.614	0.000	0.864	0.895	0.517
	UBI2	0.740	0.000			
	UBI3	0.796	0.000			
	UBI4	0.756	0.000			
	UBI5	0.780	0.000			
	UBI6	0.745	0.000			
	UBI7	0.583	0.000			
	UBI9	0.710	0.000			

The initial measurement results revealed that seven of the outer loadings did not meet the 0.708 criterion for item reliability. However, all the outer loadings were statistically significant, with a p-value of less than 0.001. Hair, Hult, Ringle and Sarstedt (2017) note that outer loadings less than 0.7 but not lower than 0.4 can be retained in a measurement model if these outer loadings do not result in the internal reliability consistency being less than the 0.7 cut-off value or an AVE of less than 0.5. The AVEs of two of the constructs, namely social media browsing and urge to buy impulsively, were less than 0.5. The items SMB3 and UBI8 were eliminated from the measurement model to increase the AVE of each construct to more than 0.5. Consequently, the results of the modified and final measurement model in Table 2 show that all the outer loadings are above 0.4 and are statistically significant. In addition, the internal consistency reliability and the AVE of each construct are above 0.7 and 0.5, respectively. The HTMT results to confirm discriminant validity are presented in Table 3.

TABLE 3
HTMT RESULTS

Construct	SMB	UBI	HV	IBB
Urge to buy impulsively (UBI)	0.525			
Hedonic value (HV)	0.690	0.702		
Impulsive buying behaviour (IBB)	0.342	0.815	0.641	
Social media usage intensity (SUI)	0.831	0.343	0.416	0.303

SMB = social media browsing, UBI = urge to buy impulsively, HV= hedonic value, IBB= impulsive buying behaviour, SUI= social media usage intensity

The results in Table 3 show that each ratio is less than 0.85. This thus provides evidence that each construct in the model is a unique construct as reported in the HTMT ratios. Consequently, the researchers can infer that the measurement model used in this study has adequate reliability and validity to allow them to proceed with the structural model and hypothesis testing.

The structural model results and the hypothesis testing

The coefficient of determination (R^2) and the standardised path coefficient (β) were used to assess the structural model. The R^2 indicates how much variance is explained in each of the endogenous constructs. As a result, it is regarded as a metric to assess the model's explanatory power. For this reason, values of 0.25, 0.50, and 0.75 represent weak, moderate, and high predictive accuracy, respectively. The standardised path coefficient represents the hypothesized relationships between the constructs, and R2. In SmartPLS, we employed bootstrapping of 5 000 samples to test the structural model. The structural model results are depicted in Figure 2, and this is elaborated through the hypothesis testing in Table 4.

FIGURE 2
THE STRUCTURAL MODEL

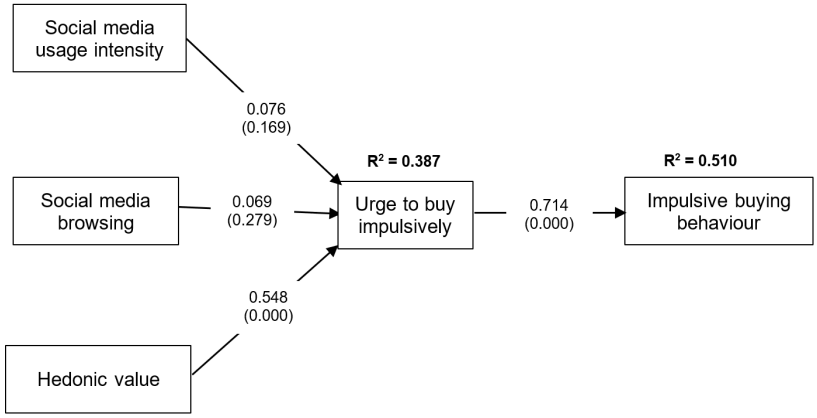

TABLE 4
STRUCTURAL RELATIONSHIPS AND HYPOTHESIS DECISIONS

	Path coefficient	p-value (two-tailed)	95% BCCI		Hypothesis decision
			2.50%	97.50%	
Social media browsing → urge to buy impulsively.	0.069	0.279	−0.055	0.194	Not Supported
Urge to buy impulsively → impulsive buying behaviour.	0.714	0.000	0.645	0.767	Supported
Hedonic value → urge to buy impulsively.	0.548	0.000	0.442	0.650	Supported
Social media usage intensity → urge to buy impulsively.	0.076	0.169	−0.041	0.178	Not Supported

The structural model results in Figure 2 and further elaborated in Table 4 show that only hedonic value influences respondents' urge to buy impulsively (β=0.548, p=0.000 [two-tailed]). The results further show that urge to buy impulsively has a significant influence on impulsive buying behaviour (β=0.714, p=0.000 [two-tailed]). Figure 2 also demonstrates that the in-sample predictive accuracy of the research model tested in this study is acceptable. The R2 of urge to buy impulsively is 0.387, which means that the predictors (social media usage intensity, social media browsing and hedonic value) explain up to 38.7% of the variance in urge to buy impulsively, while the R2 of impulsive buying behaviour is 0.510, which means that urge to buy impulsively explains up to 51% of the variance in impulsive buying behaviour.

DISCUSSION

The overarching aim of this study was to investigate the determinants of impulsive buying behaviour in s-commerce. The findings of the study show that two of the hypotheses that we initially posited have empirical support, while two unexpectedly are not supported. The first hypothesis stated that social media usage intensity is positively related to urge to purchase impulsively. Contrary to our theorisation, the results revealed that social media usage intensity

does not influence urge to buy impulsively (β=0.069, p=0.279). Therefore, HO1 is not supported. This is surprising, because our assumption is that the more time spent on a social network, i.e., the higher the usage intensity, the greater the urge to make impulsive purchases. This is premised on the belief that a higher usage intensity of social media exposes the consumer to more s-commerce activities, which may trigger their urge to buy impulsively. This finding contradicts previous research. For instance, in a Malaysian context, Leong et al. (2018) found that Facebook commerce usage intensity had a statistically significant positive effect on urge to buy impulsively. Our claim that when social media usage intensity is high, consumers' urge to buy impulsively is similarly high is supported by the literature (Leong et al., 2018).

The second hypothesis stated that social media browsing is related to the urge to buy impulsively. The result showed that, contrary to our hypothesis, social media browsing has no effect on urge to buy impulsively (=0.069, p=0.279). Therefore, HO2 is not supported. This finding likewise contradicts previous studies. For instance, research conducted by Leong et al. (2018) and Zhang et al. (2018) found that browsing had a statistically significant positive effect on urge to buy impulsively. Our theorisation on the relationship between social media browsing and urge to purchase impulsively was therefore not made arbitrarily, but rather was grounded on existing literature, which maintains that social media browsing takes time, and therefore the possibility that consumers may experience the urge to purchase impulsively in the process of browsing increases the more they browse a given social network (Zhang et al., 2018).

The third hypothesis stated that hedonic value is positively related to urge to purchase impulsively. The findings indicate that hedonic value has a positive influence on urge to buy impulsively (=0.548, p=0.000), confirming our hypothesis. Therefore, HO3 is supported. This result is consistent with previous studies. For instance, in the Korean restaurant industry, Chung et al. (2017) found that hedonic shopping value is instrumental in shaping consumers' urge to buy impulsively. Similarly, research conducted in Saudi Arabia suggests that s-commerce users find it interesting and entertaining, resulting in favourable feelings and thereby influencing online purchase intentions (Sheikh et al., 2017). While there is a paucity of studies on s-commerce in South Africa, previous research on the appeal of the online service-scape to customers, with a focus on hedonic buyers, has discovered that customers' level of hedonic shopping experience strongly influences commitment to online retailers (Mpinganjira, 2015). As a result, it is concluded that hedonic value is an important predictor of the urge to make impulsive purchases.

The fourth hypothesis stated that urge to buy impulsively is positively related to impulsive buying. The findings revealed that impulsive buying behaviour is strongly influenced by urge to buy impulsively (=0.714, p=0.000). This confirms our proposition, and HO4 is therefore supported. This suggests that our argument that the stronger the urge, the more likely one is to buy impulsively is empirically supported. This result is also consistent with existing studies. Research conducted in China and Malaysia, for example, discovered that urge to buy impulsively has a considerable impact on impulse buying behaviour (Badgaiyan & Verma, 2015; Leong et al., 2018). As a result, it is concluded for the purposes of this study that urge to buy impulsively is a key determinant of impulsive buying in s-commerce.

CONTRIBUTION AND LIMITATIONS

The determinants of impulsive buying behavior in s-commerce were investigated in this study. The findings of the study have both theoretical and practical relevance. From a theoretical standpoint, we suppose this is one of the first studies in South Africa to investigate the determinants of impulsive buying behaviour in s-commerce. Thus, the study contributes new knowledge and can serve as a baseline for future research in this emerging form of retail, that is, s-commerce. The practical contribution of this study is that its findings can be used by South African retailers who already have or are planning to have a presence in s-commerce retailing to understand how impulsive buying manifests in s-commerce. The new knowledge could be useful for retailers to frame appropriate strategies that are geared towards improving their social media sites to trigger more enjoyment for users. This is because the study found that hedonic value has a positive significant influence on urge to buy impulsively. While this work makes a considerable contribution, it is not without limitations. The major limitation is the scope of the study, as the research setting was limited to the Free State province, and that the sample was drawn using the non-probability sampling method. This limits the generalisability of the findings to the entire population of s-commerce shoppers in South Africa. As a result, it is suggested that additional research be undertaken across the country.

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