

# What Triggers Impulse Buying Online? A Croatian Perspective

## Abstract

*Impulse buying is a spontaneous consumer behavior, so it is important to identify the factors that influence such decisions in order to increase their frequency. Given the growing importance of online shopping, the aim of this study is to determine the factors that influence impulse purchases in e-commerce. In this study, an established model of impulse buying uses to examine the effects of situational, external and internal factors on consumers' impulse buying behavior in e-commerce. Data was collected through a survey on a sample of 193 respondents. The analysis includes reliability analysis, confirmatory factor analysis and regression analysis, through structural equation modeling (SEM), to ensure the robustness of the results. The results show that internal factors play a significant role in influencing impulse buying in e-commerce. Conversely, external factors that can be manipulated by retailers and situational factors such as time and money availability were found to have no significant influence on impulse purchases. The main limitation of this research concerns the sample size, which is relatively small and may not fully represent the Croatian population. However, this limitation points to opportunities for future research with a larger and more diverse sample. The study contributes to the body of knowledge on consumer behavior by demonstrating the impact of various factors on impulse purchases in e-commerce. The findings emphasize the importance for online retailers to focus their marketing strategies on increasing impulse purchases.*

**Keywords:** impulse buying, e-commerce, e-consumers, situational and product related factors, external factors, internal factors

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## 1. INTRODUCTION

Impulse buying is a phenomenon that is often triggered by current emotional states, the need for immediate gratification or external stimuli and can lead to a purchase that is not based on a rational assessment. Neuroscientific study (Kyrious, Trotzke, Lawrence, Fassmacht, Ali, Laskowski & Müller, 2018) suggest that impulse buying is associated with the activation of certain areas of the brain that are responsible for reward and pleasure. However, in these cases are mostly buying-shopping disorder (BSD)<sup>1</sup> and compulsive buying tendencies (CBT)<sup>2</sup>, forms of buying in which unconsciously controlled spending behavior occurs. In addition, psychological factors such as impulsivity as a personality trait, social norms and marketing strategies play an important role in promoting impulse buying.

Researches on impulse buying dates back to the mid-20th century, when it was first reported that certain products or product categories are bought impulsively (Clover, 1950). Then people began to think about unplanned purchases and what triggers impulse buying. Impulse buying is something that happens in the moment where the consumer makes a relatively quick purchase decision, usually with a subjective bias where they want to acquire and have something immediately (Rook & Gardner, 1993). Gamage, Wickramasingha and Henegedara (2008) say that impulse buying occurs when consumers develop emotions for a particular product that lead them to buy that product without much thought. Consumer has no intention or knowledge about the product they are buying (Chung, Song & Lee, 2017), the decision-making process is quick and this behavior occurs in a situation where the consumer feels a strong desire for a certain product and buys it without thinking about the

consequences of the purchase (Chen & Wang, 2016), which can also be negative (O'Guinn & Faber, 1989). Consumer impulse buying can be triggered by hedonic consumption tendencies and/or emotional factors. „Hedonic consumption includes those behavioral aspects related to multi-sensory, fantasy, and emotional consumption which are driven by benefits such as fun using the product and aesthetic appeal“ (Hirschman & Holbrook, 1982 in Park, Kim & Forney 2006).

Impulse buying has become more important since the advent of various payment options and online and mobile shopping (Unsalan, 2016). It is estimated that around 4 billion dollars are spent annually on impulse purchases (Liao & Wang, 2009). Liang (2012) believes that consumers may perceive impulse buying as something negative (e.g. overspending, impractical purchases, risks related to product quality and function, but also feelings of guilt). Impulse buying is therefore seen as irrational, immature, risky, but also as buying on a whim or acting with less rational decisions (Wood, 1998). Tanveer, Kazmi and Rahman (2022) state that impulse buying should be viewed from two perspectives: (1) from the marketers' perspective, where the focus is on marketing activities that encourage customers to make impulse, unplanned purchases through enticing offers, discounts, friendly staff and easy payment methods, thus increasing profits for the company (according to Zhang, 2021), and (2) from the consumers' perspective, where people often resort to impulse buying because they relax and escape from everyday stress and worries. After a pleasurable purchase, other emotions occur later, such as regret or even depression (Ploeger-Lyons & Butler, 2022), but also loss of self-control, over-indebtedness and financial losses (due to careless spending or an overwhelming desire to buy) (Parnes, 2019).

Impulse buying first appeared in brick-and-mortar stores, but with the spread of the Internet age, impulsive behavior also appeared on the Internet (Xiang, Zheng, Lee & Zhao, 2016). There are numerous differences between the aforementioned forms of shopping: from the different shopping environment, the availability of information, the checkout process, consumer

<sup>1</sup> "Individuals are preoccupied with buying/shopping and acquire things they do not need or in senseless amounts" (McElroy, Keck, Pope, Smith & Strakowski, 1994 in Trotzke, Starcke, Pedersen & Brand, 2021)

<sup>2</sup> "Chronic, repetitive purchasing that becomes a primary response to negative events or feelings" (O'Guinn & Faber, 1989, p. 155 in Hubert, Hubert & Mariani, 2023)

behavior and other psychological factors that influence the decision to purchase a product (Aradhna, Cian & Sokolova, 2016). Every retailer, regardless of whether they sell their products via e-commerce or in a brick-and-mortar store (or both), needs to understand consumer behavior in the different shopping contexts so that they can better adapt their business to the needs of the target audience. Today, the internet is an extremely convenient place for impulse purchases, as the customer and the item are just a few clicks away. Various authors have studied impulse buying in e-commerce (Koski, 2004; Sritanakorn & Nuangjamnong, 2021; Karim, Chowdhury, Masud & Arifuzzaman, 2021; Gulfraz, Sufyan, Mustak, Salminen & Srivastava, 2022). Most of the research was conducted after the COVID-19 pandemic, when sales began to be made via the internet, which became an increasingly important communication and sales channel. The online shopping environment favours impulse purchases as customers are not constrained by store location, opening hours or pressure from staff and other customers (Chan, Cheung & Lee, 2017). The internet allows the customer to buy what they want 24/7 from the comfort of their armchair. Abratt and Goodey (1990) note that e-commerce uses cashback promotions to encourage more purchases, i.e. situations where the consumer only receives a certain discount if their purchase value reaches a certain amount.

However, on other side, Jeffrey and Hodge (2007) believe that some elements are more favourable in a brick-and-mortar store than in e-commerce. For example, the cost of transportation, delivery and other manipulative costs can be aggravating factors in e-commerce. In e-commerce, there is no staff to make impulse purchases at specific times (Madhavaram & Laverie, 2004). But, the same authors state that online marketing incentives facilitate impulse buying. The problem with e-commerce is that the customer cannot inspect the goods, which is why the way the goods are presented plays an important role in consumers' purchasing decisions (Chen & Wang, 2016).

There are also factors that favour e-commerce shopping (anonymity, ease of access, greater variety of goods on offer, marketing promo-

tions and direct marketing, and the use of credit cards) and factors that discourage e-commerce shopping (delayed refinement, ease of access, greater consumer control, low perception environment, price and product comparisons) (Koski, 2004). Furthermore, consumer culture leads customers to succumb to the temptation of the consumer's current mood (anxiety, dissatisfaction), the consumer's personality, the influence of the environment and social norms, but also prices, discounts and other psychological factors (Choudhary, 2014). All of this, of course, depends on many factors: the consumer's prior knowledge of a particular product, their purchase intentions, exposure to certain stimuli, be they rational or emotional, etc.

The aim of the paper is to find out which factors influence impulse buying in e-commerce when making a purchase decision. The objectives of the paper are as follows:

- To examine the previous research related to impulse buying in e-commerce,
- Investigate and present the factors that influence impulse buying in e-commerce.

The theoretical framework of the factors influencing impulse buying and the conceptual model used are presented below. The research methodology, the research results and the conclusions from the data analysis are then presented.

## 2. FACTORS INFLUENCING IMPULSE BUYING

After Rook (1987) identified the factors influencing the increase in impulse buying in his paper, others followed suit. Bhakat and Muruganatham (2013) developed a model for impulse buying based on previous research to better understand impulse buying and proposed it for future research. The model consists of four factors: external stimulation, internal stimulation, situational stimulation and product-related factors, as well as demographic and sociocultural factors. This paper examines three factors (situational stimulation, external stimulation and internal stimulation) and their influence on impulse buying in e-commerce. Demographic and

socio-cultural factors are not considered in this paper and are not presented theoretically.

### 2.1. Situational factors

Some authors (Mihic & Kursan, 2010; Iram & Chacharkar, 2017) consider that situational factors are part of external factors (although they are observed separately), as they come from the environment when the customer comes into contact with certain visual stimuli that influence an impulsive purchase. On the other hand, Sirhindi (2010) consider them as part of the internal factors. In addition, Dawson and Kim (2009) state that the situational factors can be observed in the space in the house, closet, shelf, etc., which affect the impulse purchase, because if the customer does not have enough space to store the purchased item, in this case he will not decide to make the impulse purchase. Stern (1962) notes that there are a variety of factors that influence shopping and thus impulse buying (e.g. the consumer's economic situation, time constraints, emotions and social visibility). In situations where the customer has little time available, they usually do not change their purchase decisions, be it a change of product or even store, and in this case, they perceive less in-store marketing activity (Salman, Khan & Gul, 2014) and are less likely to make impulse purchases. When more time is available, the customer is more receptive to marketing stimuli from the environment. Some authors have shown that time availability has a positive significant impact on impulsive buying behavior (Husnain, Rehman, Syed & Akhtar (2019) studied shoppers in small towns; Khan, Hui, Chen & Hoe (2016) studied Generation Y). When customers have more available time, they perceive this as a favorable moment for shopping (they spend more time in the store).

In addition to the time available, situational factors also include the availability of money, with money playing an important role in impulse purchases. Foroughi, Buang and Sadeghi (2012) find that consumers avoid purchases but also reduce their impulse purchases if they have no financial means. Alqutub (2023) investigated the effects of situational factors (family influence, available time, available money) on the

impulse behavior of young men in Saudi Arabia. The results showed that there is a statistically significant influence of availability of time and money on impulse buying of personal items (clothes, shoes, perfume) among males. Foroughi et al. (2012) found that consumers with more available money show stronger impulse buying, proving that more money can empower consumers. Tanveer et al. (2022) investigated how situational factors affect impulse buying by looking at the person's situation and product characteristics under situational factors. The results showed that the person's situation and product characteristics influence the impulse purchase of beauty products. Based on the above, the first hypothesis in this paper is formulated as follows:

H1: Situational factors influence impulse buying in e-commerce

### 2.2. External factors

External factors refer to external stimuli from the environment that influence consumer behavior and buying impulses. External factors mainly refer to marketing incentives from the environment that control the consumer's purchase decision or product attributes that are controlled by manufacturers or retailers to induce the customer to make an impulse purchase (Dawson & Kim, 2009). Price, short product life (Stern, 1962), but also user support, website design and functionality can be mentioned here. External factors are created by stores, retailers and marketers who want to stimulate consumers' behavior and influence their impulse purchases. Most authors have studied impulse buying in brick-and-mortar stores (Karbasivar & Yarahmadi, 2011; Kwan, 2016; Tanveer et al., 2022, Franjković, Botkuljak & Dujak, 2022), a slightly smaller number of them in e-commerce. External factors in e-commerce can be various, such as visual appeal and security displays (Wells, Parboteeah & Valacich, 2011), feedback systems (Chan et al., 2017), credit cards and window displays (Vishnu & Raheem, 2013) etc. Vishnu and Raheem (2013) showed in their research results that credit card and window displays have no statistically significant relationship with impulse purchases. Iram

and Chacharkar (2017) categorize the external factors into emotional appeal of advertising, sales offer, personal selling impact, placement of products and surprises and sales. Karbasivar and Yarahmadi (2011) showed how promotional activities such as discounts and free products have an influence on impulse buying. Taha (2024) observed the atmosphere in the store, social influences, sales staff, available resources (as part of the situational factors) and sales promotions and demonstrated how these factors affect impulsive buying.

On this basis, a further hypothesis is put forward in the study:

H2: External factors influence impulse buying in e-commerce

### 2.3. Internal factors

Internal factors refer to the individual himself and his personality, which characterizes the individual and influences potential impulse purchases (Bhakat & Muruganatham, 2013). Individuals differ in their tendency to make impulse purchases. Unsalan (2016) lists several internal factors that can influence impulse buying and refers to consumer characteristics: age, gender, mood, perceived risk, materialism, enjoyment of shopping, and tendency to impulse buy. In addition to affective states, Taha (2024) observed consumer characteristics and proved that the influence of demographic factors is not the same for all consumer segments. Dawson and Kim (2009) point out that consumer personality traits can describe a stronger or weaker desire to make impulse purchases. A person's self-control when buying a product also has a major influence. Impulse consumers can hardly resist the intense inner desire to buy frequently and spend unnecessarily. This can sometimes lead to them not being able to afford something but buying it anyway, which can interfere with normal life and lead to problems in human life as well as in life organization and time management (Tanveer et al. 2022). People who tend to make impulse purchases generally have similar characteristics and traits (Youn & Faber, 2000). Tanveer et al. (2022) investigated how internal factors affect impulse buying and observed a

consumer's hedonic motivation and mood as internal factors. They believe that the internal triggers for impulse buying are related to the customer's specific behavior and not to the context of the purchase. These factors are therefore not under the control of the retailer. Beatty and Ferrel (1998) also state in their study that internal character traits influence impulsive buying and the feeling of pleasure from this purchase, which can be connected to the previously mentioned hedonic motivation of consumers.

Based on the above, this paper proposes the following third hypothesis.

H3: Internal factors influence impulse buying in e-commerce

### 2.4. Conceptual model

Bhakat and Muruganatham (2013) developed a model of impulse buying based on previous research and proposed it for future research. Part of the model, which is presented as a conceptual model (Figure 1), is used in this paper using the example of online customers in Croatia. The aim of the paper, based on previous findings is to examine and test the model on the Croatian e-market, i.e. on Croatian respondents who shop via e-commerce, and which factors influence their impulse buying behavior.

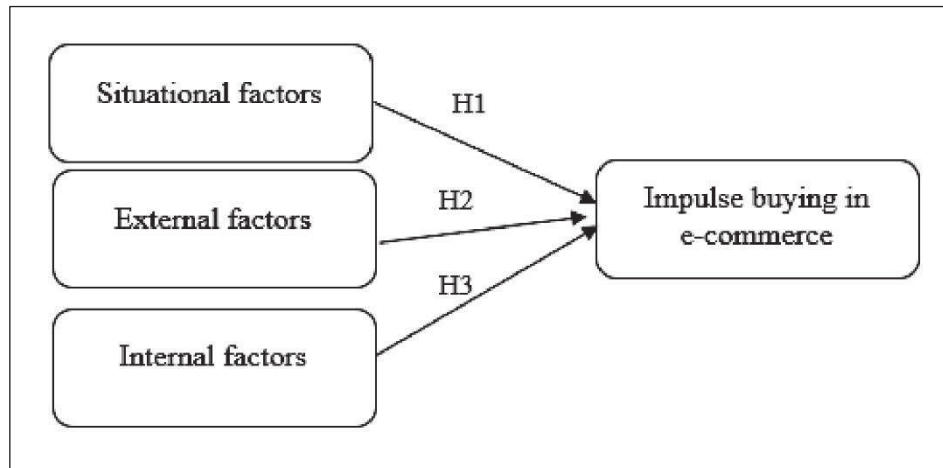
## 3. RESEARCH DESIGN

A quantitative preliminary study was carried out using a questionnaire on respondents from Croatia who shop online. Based on the previous findings, a model was used to create the questionnaire. Further details about the sample and the research instrument can be found later in the paper.

### 3.1. Sample description

The study was conducted in Croatia in spring 2024. A total of 243 questionnaires were collected, with 193 respondents ultimately included, i.e. respondents who stated that they had never shopped online were excluded. The first part of the questionnaire contained questions

**Figure 1.** Conceptual model



**Table 1.** Sample structure

		N	%
<b>Gender</b>	Male	36	18,7
	Female	157	81,3
<b>Age</b>	21 – 30	68	35,2
	31 – 40	43	22,3
	41 – 50	68	35,2
	More than 51	14	7,3
<b>Level of education</b>	Secondary school	67	34,7
	Faculty	95	49,2
	Master or doctorate	31	16,1
<b>Monthly income</b>	<400€	36	18,7
	401 – 800€	21	10,9
	801 – 1200€	37	19,2
	1201 – 1600€	36	18,7
	Over 1601€	44	22,8
	Without income	19	9,8
<b>How much they buy online per month</b>	Less than once a month	53	27,5
	Once a month	72	37,3
	2-3 times a month	47	24,4
	Once a week	9	4,7
	Several times a week	6	3,1
<b>Online shopping experience</b>	Less than a year	7	3,6
	1-2 years	14	7,3
	2-3 years	25	13
	More than 3 years	147	76,2

on the socio-demographic characteristics of the respondents (Table 1), while the second part of the questionnaire contained statements on the theoretical framework (more on this in the section on the Research instrument).

### 3.2. Research instrument

The measurement scales were taken from previous studies in this area. Situational factors were measured using six statements developed by Alqutub (2023) and Sritanakorn and Nuangjamnong (2021). The situational factors are considered from three perspectives (availability of money, availability of time and product-related factors). Availability of money and time were measured with four statements adopted and adapted from Alqutub (2023), while factors related to the product itself were measured with two statements adopted and adapted from Sritanakorn and Nuangjamnong (2021). External factors were measured with four statements developed by Karbasivar and Yarahmadi (2011) and Sritanakorn and Nuangjamnong (2021), while internal factors were measured with five statements also developed by Alqutub (2023). Impulse buying as a dependent variable was measured with four statements developed by Sritanakorn and Nuangjamnong (2021). Table 2. shows which items were used in the study.



**Table 2.** Items of each constructs

Construct		Items
Situational factors	SF1	I have enough monthly income to spend on an impulse purchase
	SF2	My financial possibilities influence my impulse purchase
	SF3	If I get a good offer, I am willing to set aside time for an impulse purchase
	SF4	I am more likely to make impulse purchases if I have a cash income (e.g. salary, pension, pocket money)
	SF5	Product characteristics influence my impulse purchase decision
	SF6	The popularity of the product influences my decision to make an impulse purchase
External factors	EF1	I tend to buy a product that I have seen in an advertisement
	EF2	Customer service influences my decision to make an impulse online purchase
	EF3	The design of the website influences my decision to make an impulse online purchase
	EF4	Functionality of the website influences my decision to make an impulse online purchase
Internal factors	IF1	I tend to make quick purchase decisions when I come across something interesting or attractive
	IF2	I make impulse purchases because I feel immediate satisfaction
	IF3	Trends influence my impulse purchases
	IF4	When shopping online, I get excited when I discover new products
	IF5	It is difficult for me to miss a good opportunity and a good offer online
Impulse buying in e-commerce	IB1	I have experience of buying products online impulse
	IB2	It's hard not to buy nice things when you see them online
	IB3	Sometimes I have a guilty conscience after buying something online
	IB4	When I see something new online, I want to buy it

Each scale comprised a series of Likert-type statements with a five-point scale to measure the extent to which respondents agreed or disagreed with the statements in the questionnaire. Mejovšek (2003) points out that in countries where grades in the education system range from 1 to 5, it is good to use a five-point measurement scale to make it easier for the respondent to evaluate a particular attitude. Accordingly, the scale was set so that 1 stands for "strongly disagree" and 5 for "strongly agree".

#### 4. RESEARCH FINDINGS

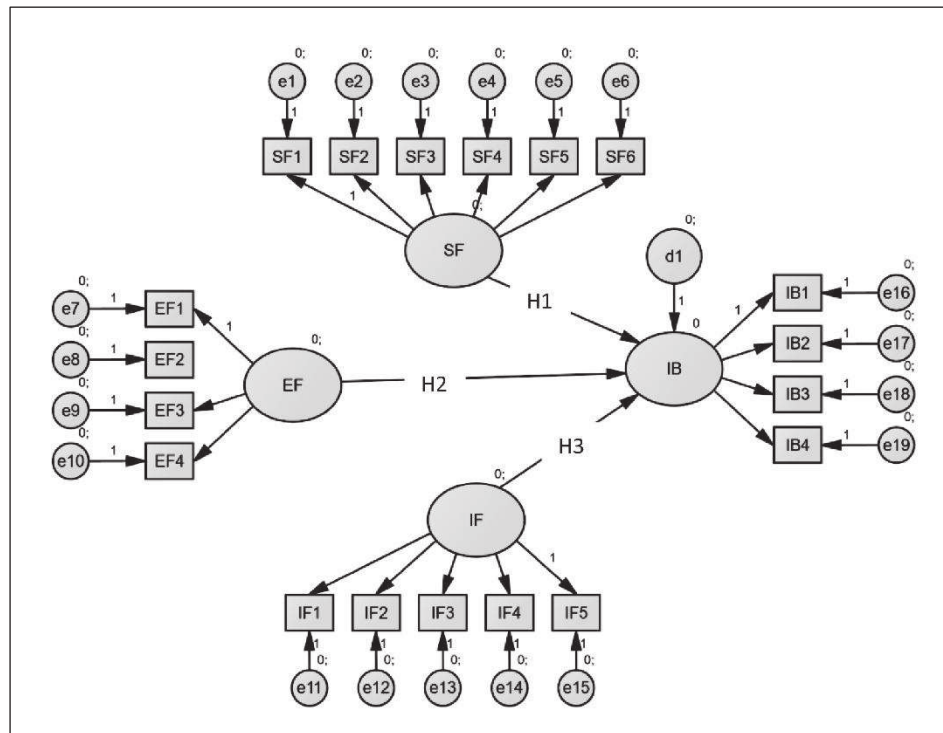
The information obtained was analyzed using the statistical software package SPSS version 24.0 and IBM SPSS AMOS 24. Statistical techniques of univariate analysis (frequency distribution, measures of central tendency) and multivariate analysis (reliability analysis, confirmatory factor analysis (CFA) and regression analysis through SEM) were used.

Before the relationship between the factors studied could be determined, it was necessary

**Table 3.** Reliability analysis of the constructs

Measurement scale	Number of items	Mean	Standard deviation	Cronbach's Alpha
Situational factors (SF)	6	3.390	4.430	0.735
External factors (EF)	4	2.819	3.469	0.819
Internal factors (IF)	5	2.910	4.317	0.824
Impulse buying (IB)	4	2.677	3.479	0.780

**Figure 2.** Structural model



Note: Situational factors (SF), External factors (EF), Internal factors (IF), Impulse buying (IB)

to conduct a reliability analysis of the constructs to identify possible critical components in a system (Table 3). According to George and Mallery (2003)<sup>3</sup>, Cronbach's alpha is acceptable for these results. Situational factors and Impulse buying have an acceptable Cronbach's alpha, while Ex-

ternal factors and Internal factors have a good Cronbach's alpha. It can be concluded that the reliability analysis confirms the good reliability and stability of the measurement instrument.

Once the satisfactory feasibility of the measurement instrument had been established, the structural model was defined. The items listed in Table 2, which were defined based on the theoretical framework, were used in the construction of the

<sup>3</sup>  $\alpha \geq 0.9$  = excellent,  $0.9 > \alpha \geq 0.8$  = good,  $0.8 > \alpha \geq 0.7$  = acceptable,  $0.7 > \alpha \geq 0.6$  = questionable,  $0.6 > \alpha \geq 0.5$  = poor,  $0.5 > \alpha$  = unacceptable



**Table 4.** Indicators of adequacy of the model used in the research

Indicators		Model	Value
$\chi^2/df$	Chi-Square/Degrees of Freedom	1.787	Between 1 and 3
CFI	Comparative Fit Index	0.927	Acceptable $\geq 0.90$ ; Recommended $\geq 0.95$
TLI	Tucker-Lewis Index	0.909	Acceptable $\geq 0.90$ ; Recommended $\geq 0.95$
RMSEA	Root Mean Square Error of Approximation	0.064	$<0.06$
SRM(S)R	Standardized Root Mean Square Residuals	0.075	$<0.08$

Source: author's work according to Hooper, Coughlan and Mullen (2008); Parry (2020)

**Table 5.** Interpretation of the hypotheses of the tested model

Hypothesis	Relation	SRW	P value	Interpretation
H1	SF $\rightarrow$ IB	0.053	0.659	Rejected
H2	EF $\rightarrow$ IB	0.044	0.602	Rejected
H3	IF $\rightarrow$ IB	0.718	***	Confirmed

Note: \*\*\*  $p < 0,001$ ; SRW - standard regression weights

structural model as part of structural equation modeling (SEM). The relationships between the constructs and the manifest variables were tested, and how the constructs interact with each other according to the research hypotheses was examined. A structural model was used to test a complex theoretical model with multiple variables and relationships and to examine causal relationships between the variables. The hypotheses put forward are shown in the Figure 2.

Standard indicators were used to assess the appropriateness of the model to ensure a comprehensive assessment of the model. The Chi-square test was used as the baseline indicator. CFI and TLI were chosen because they consider the relative complexity of the model and allow comparison with the base model. RMSEA and SRM(S)R additionally measure how well the model reproduces the observed data. The combination of these indicators provides a reliable

and comprehensive assessment of the model's fit to the data, allowing conclusions to be drawn about causal relationships between variables in accordance with theoretical predictions. Based on the values obtained, it was concluded that the tested model is good, that the model fit is acceptable and that it can be interpreted. (Table 4).

As can be seen from the table above, the model is suitable for further analysis and hypothesis testing. Table 5. show the results of the hypothesis tests. Results show that only H3 was confirmed (Internal factors influence impulse buying in e-commerce), while the other two hypotheses were not confirmed (H1 Situational factors influence impulse buying in e-commerce and H2 External factors influence impulse buying in e-commerce).

Situational factors have no significantly influence impulse buying in e-commerce. The avail-

ability of time and availability of money as well as the characteristics and popularity of the product itself have no influence on their decision to buy. External factors, such as external stimuli from the environment, were not found to be statistically significant and have no significant influence on impulse purchases in e-commerce. These results show that respondents are not inclined to buy the product figured in the ad and that customer support, website design and its functionality have no influence on their decision to make an impulse purchase in e-commerce. Internal factors are only predictor that influences impulse buying in e-commerce. Respondents tend to make quick decisions when they come across something interesting in an online store, they feel excited about buying and it is difficult for them to miss a good opportunity and a good deal online.

## 5. DISCUSSION

The aim of this study was to determine the factors that influence impulse purchases in e-commerce during the purchase decision process. The results show that only internal factors are statistically significant predictors of impulse buying in e-commerce, while situational and external factors have no significant influence.

These results contradict previous research on the influence of available time and money (Foroughi et al, 2012; Salman et al, 2014; Khan et al, 2016; Husnain et al, 2019; Alqutub, 2023) and product attributes (Sritanakorn & Nuangjamnong, 2021; Tanveer et al, 2022). The divergence in results can be attributed to the fact that online shopping is now possible around the clock and traditional time constraints no longer apply. Consumers have the flexibility to shop at any time, regardless of the time of day. In addition, e-commerce platforms make it easier to quickly search and review products, minimizing the need for additional decision time. Improved search interfaces further contribute to this efficiency, allowing users to make informed product decisions with less cognitive effort and time investment (Mushtaq, Ahmad, Rextin & Malik, 2020). In the context of cash availability, online shopping offers a range of payment options such as credit cards, PayPal and other digital wallets that help to alleviate

the perception of financial constraints. Many online platforms offer payment options such as installments or deferred payments (PayLater), which facilitates impulse purchases without the immediate concern of available funds (Keil & Burg, 2023). Although product features are still important to consumers, in modern online environments the lack of physical interaction is compensated by detailed product descriptions, customer reviews, high-resolution images and video presentations to support informed decision making (Punj, 2012).

Interestingly, the results of this study suggest that factors such as the advertised product, customer support, website design and its functionality do not have a significant impact on impulse purchases in e-commerce. This result can possibly be attributed to consumer saturation due to the large amount of marketing stimuli in the online environment, which could affect their responsiveness compared to previous times with fewer external influences. In addition, impulse purchases are primarily triggered by immediate emotional reactions rather than rational considerations. Emotions such as excitement or desire often lead consumers to make quick purchasing decisions, disregarding detailed considerations about customer support or website design (Iyer, Blut, Xiao & Dhruv, 2019). Emotional triggers, habits and past experiences drive brand credibility and usage behavior, enabling consumers to make purchases without relying on external factors. Simplified transaction processes contribute to a more efficient shopping experience, which can lead to consumers making faster purchasing decisions (Mofokeng, 2021). Existing research on the role of external factors in impulse purchases in e-commerce shows contradictory results. While some studies show a significant influence of external factors (Karbasivar & Yarahmadi, 2011), others do not (Vishnu & Raheem, 2013). For example, Sritanakorn and Nuangjamnong (2021) investigated the role of online sales promotions as an external factor and found a significant relationship, a result that contrasts with the findings of this study.

Consumers who come across something intriguing or visually appealing often exhibit unplanned buying behavior driven by a sense of excitement and the pursuit of instant grati-

fication. These internal factors are beyond the influence or control of the retailer (Tanveer et al., 2022). In this sense, the study by Alqutub (2023), which formed the basis for the adapted scale used in this study, also showed that hedonic purchase motivation positively influences impulse buying. Emotionally driven individuals often use shopping as a form of emotion regulation, leading to impulsive decisions that bring immediate gratification and relief (Anoop & Rahman, 2024). In such scenarios, self-control becomes a crucial factor. However, the online shopping environment, which is characterized by fast and frictionless transactions, can significantly affect an individual's ability to maintain self-control. The ease of transactions makes it even more difficult to resist impulse purchases.

## 6. CONCLUSION

Impulse buying is an unplanned purchase that is influenced by various factors. But even very impulse buyers do not follow every spontaneous wish to buy, because as soon as the purchase is associated with relatively high costs, it becomes less feasible. Various studies have shown that different factors influence impulse buying in e-commerce, and this paper has shown that impulse buying is mainly influenced by internal factors related to the individual himself. Most important here is hedonism, i.e. the pleasure of shopping, an activity that serves personal satisfaction and elevates mood, but also the feeling of excitement. External factors, i.e. factors solely under the influence of retailers and marketers, did not show a significant impact on impulse e-commerce shopping, possibly due to the overcrowding of various ads, dysfunctional websites and lack of personal access and relationships with retailers. Situational factors (such as availability of time, availability of money and factors related to the product itself) also had no significant impact on impulse e-commerce shopping. However, consumer presence in the online environment and e-commerce has increased significantly, especially after the COVID-19 pandemic.

The limitation of the study is related to the sample itself, which is relatively small compared to Croatia as a whole and offers potential for future research with a larger number of respondents as

well as respondents not covered by the restriction. Future research also goes in the direction of investigating impulse buying in brick-and-mortar stores and comparing it with the online environment, i.e. impulse buying in e-commerce.

The theoretical contribution of this paper is the identification of key factors that influence impulse buying in e-commerce. The analysis and research findings can help to understand how different factors influence impulse buying. The empirical contribution consists of analyzing data that can serve as concrete evidence of the influence of factors on impulse buying in e-commerce shopping. After testing the model, the results showed which factors should be focused on to increase impulse buying in e-commerce. The research findings will help all retailers operating in the online space to adapt their marketing strategies and activities to reach specific consumer groups.

Retailers can optimize external factors to increase impulse purchases by designing more attractive websites and apps that attract users' attention. In addition, it is necessary to provide intuitive navigation to make it easier for users to find the products and information they are looking for, use personalized e-mail campaigns and push notifications with special offers based on the user's purchase history, display testimonials and reviews, offer limited offers and highlight news and trends on the homepage or through banners. It is necessary to extend customer support with easy payment options, ensuring fast and secure payment methods and free delivery or special benefits for faster delivery. When it comes to situational factors, more specifically availability of time, retailers can offer a simple and quick interface (make sure the website or app is quick and easy to navigate) and offer limited time offers to create a sense of urgency. When it comes to availability of money, retailers can offer flexible payment options and offer discounts, coupons and other special offers that provide a sense of value. An attractive presentation with high-quality images and detailed product descriptions that emphasize the benefits of the product, as well as recommendations and reviews that build trust in the product, can also be created by the retailer (product features are part of the situational factors).

In addition to emphasizing situational and external factors, retailers should also think about how they can influence potential customers through internal factors and encourage impulse purchases. Internal factors related to the individual himself and his personality are a challenge for retailers in e-commerce, as it is necessary to take the individual's behavior into account. In these cases, retailers should work on personalization, i.e. using data about previous purchases and reviews to personalize product recommendations more easily. In addition to personalization, retailers can offer a simple purchase process where they reduce the number of steps in the process to make it easier and faster for the user to complete the transaction. It is also necessary to develop marketing campaigns that target emotional responses that can encourage an impulse purchase decision. Ultimately, these contributions can help understand consumer behavior and provide clues for improving marketing strategies and increasing sales.

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### Što pokreće online impulzivnu kupnju? Perspektiva Hrvatske

#### Sažetak

*Impulzivna kupnja je nešto što se događa u trenutku, stoga je nužno uvidjeti koji faktori utječu u tom trenutku na samog potrošača u cilju povećanja impulzivne kupnje. Kako online kupnja dobiva sve više na važnosti cilj rada bio je identificirati faktore koji utječu na online impulzivnu kupnju. Istraživanje je kreirano na temelju postojećeg modela impulzivne kupnje gdje se utvrđuje utjecaj situacijskih, eksternih i internih faktora na online impulzivnu kupnju. Istraživanje je provedeno putem upitnika na uzorku od 193 ispitanika, a pri obradi podataka koristile su se analiza pouzdanosti, konfirmatorna faktorska analiza i regresijska analiza, putem strukturalnog modeliranja (SEM). Rezultati pokazuju kako interni faktori značajno utječu na online impulzivnu kupnju. Nasuprot tome, eksterni faktori koje trgovci mogu kontrolirati i situacijski faktori poput raspoloživosti vremena i novca nisu imali utjecaja na online impulzivnu kupnju. Ograničenje istraživanja odnosi se na sam uzorak koji je relativno mali u usporedbi s Hrvatskom u cjelini, no ono nudi potencijal za buduća istraživanja s većim brojem ispitanika. Ovo istraživanje pridonosi razumijevanju ponašanja potrošača i utjecaja različitih poticaja na online impulzivnu kupnju. Online trgovci moraju prilagoditi svoje marketinške strategije kako bi učinkovito utjecali na povećanje impulzivne kupnje.*

**Glavne riječi:** impulzivna kupnja, e-trgovina, e-potrošači, situacijski faktori, eksterni faktori, interni faktori