



Now or Never: Exploring Factors Influencing Online Impulsive Buying Behavior on Fashion Brand Websites among Generation Z Consumers

Thi-Bich-Ngoc Nguyen^{1,2}, Thi Mai Le^{1*}, Thi-Thanh-Thao Nguyen^{1,3}, Duc Anh Dang¹, Thi-Hong-Ngoc Tran¹

¹International School, Vietnam National University, Hanoi, Vietnam, ²London College for Design and Fashion, Hanoi, Vietnam,

³Coc Coc Company Limited, Hanoi, Vietnam. *Email. mailt@vnuis.edu.vn/lethimai@vnu.edu.vn

Received: 24 February 2025

Accepted: 18 July 2025

DOI: <https://doi.org/10.32479/irmm.19210>

ABSTRACT

Recently, online shopping has become increasingly popular, and one of the most favored product categories is fashion. This study investigates the factors influencing impulsive purchasing on fashion brand websites among Generation Z in Hanoi, Vietnam. Using the Stimulus-Organism-Response (S-O-R) framework, this study analyzed how atmospheric variables on fashion brand websites such as content variety, visual design and navigation, promotions, and customer feedback affect browsing activity and, subsequently, the urge to buy. The research also assessed the influence of individual traits, such as shopping enjoyment and impulsive buying tendencies, on purchasing behavior. Data collection was conducted through a quantitative survey, gathering 225 responses from participants aged 18–30. The findings reveal that among individual traits, Shopping Enjoyment (SE) has a significant impact on the Urge to Buy, while among atmospheric variables, Promotions on Websites (PW) strongly influence Browsing Activity. These results highlight the critical role of experience-oriented and promotion-driven strategies for fashion brands targeting impulsive behaviors in Gen Z consumers. Accordingly, the study suggests that fashion brands and marketers design tailored marketing strategies to effectively engage this customer group and capitalize on their unique shopping behaviors.

Keywords: Impulsive Buying Behavior, Fashion Brand Websites, Gen Z Consumers, SOR Model

JEL Classifications: M30, M31, M37

1. INTRODUCTION

The fast development of e-commerce, in which trading activities are carried out online, has drastically changed the market and given consumers quick access to a large range of goods and services (Srikant et al., 2023). Particularly in the fashion sector, which has seen a significant increase in online sales particularly during the COVID-19 epidemic, this change is particularly clear-cut (Bilińska-Reformat and Dewalska-Omitek, 2021).

Generation Z (Gen Z), people born between 1995 and 2012, who have been surrounded with digital technology from an early age and show different shopping behaviors compared to

other generations, is among the main drivers of this e-commerce development (Williams and Page, 2011). Studies all around show that Gen Z's continual interaction with digital technology and social media shapes their buying patterns significantly (Chang and Chang, 2023; Djafarova and Foots, 2022). With this cohort more impulsive than past generations, one of the most common shopping habits among Generation Z is impulsive purchase. With 41% of Gen Z consumers making impulsive purchases vs 34% of Millennials and 32% of Generation X, Djafarova and Bowes (2021) underline their larger inclination for quick online expenditure.

According to Mohan et al. (2013), impulsive buying is a spontaneous and unplanned purchase habit mostly driven by

immediate desire rather than logical choice. Impulsive purchases, defined by Rook and Fisher (1995) as instantaneous, emotionally motivated decisions impacted by psychological variables and contextual inputs, 54% of American consumers said they had made impulsive purchases totaling more than \$100 (Saleh, 2020). With 47% of Generation Z members engaging in impulse buys while on the road, Zhou et al. (2020) found that China's Generation Z shows the highest degree of spontaneity in purchase behaviors.

With estimates that the e-commerce market in Vietnam would reach \$32 billion by 2025, it is showing notable expansion (Savills, 2024). Rising discretionary incomes and the growing internet environment are driving major changes in Vietnam's fashion sector. With a projected yearly growth rate of 15–20%, Vũ (2023) indicated that international fashion companies now hold over 60% of the local market share, therefore highlighting their great attraction to Vietnamese consumers.

Researchers have examined online purchasing and impulsive fashion purchases in Vietnam, including Ho Chi Minh City impulse buying (Nguyen and Giang, 2020) and Millennial fast-fashion impulse buying (Nguyen and Ha, 2021). Not much research has been done on Generation Z's impulsive fashion buying behavior in Hanoi or the complicated relationship between internal and external elements influencing their online purchase choices. International impulsive fashion purchase is influenced by social media, website design, and promotional offers (Close and Kukar-Kinney, 2010; Verplanken and Herabadi, 2001). However, research remains limited on how businesses can strategically utilize these factors through website design, marketing campaigns, and online sales platforms to enhance impulsive purchasing. This study fills in knowledge by looking at Generation Z consumers' online impulse fashion brand buying behavior in Hanoi using the Stimulus-Organism-Response (SOR) paradigm. Consumer behavior all around has been investigated using this model (Kim et al., 2020; Ngo and Le, 2025).

This research aims to investigate the factors influencing online impulsive buying behavior on fashion brand websites among generation Z consumers in Hanoi by applying the SOR model. The following questions are following:

- Q1: What are the key factors influencing impulsive purchasing behavior on fashion brand websites among Generation Z in Hanoi?
- Q2: How do these factors affect the impulsive buying behavior of Generation Z on fashion brand websites?

2. THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

2.1. Theory of Stimulus-Organism-Response (SOR)

First proposed by Mehrabian and Russell (1974), the Stimulus-Organism-Response (SOR) model is a basic framework for examining consumer behavior in many situations. This model suggests that external stimuli (S) affect an individual's internal state (O), which in turn leads to a behavioral response (R).

Online retail environments can influence browsing and purchasing with content diversity, website design, promotional offers, and

customer feedback (Lo et al., 2017; Wu et al., 2020). When exposed to a stimulus, the consumer's emotional and attitudinal state - referred to as their emotional condition (organism) upon encountering. At this level, the customer develops ideas and assessments of the retailer (Brakus et al., 2009). This study characterizes browsing behavior as the phase of contemplative feelings for each individual. Spending more time on the online store makes one more want to buy (Wadera and Sharma, 2018). Beatty and Ferrell (1998) claim that urge to buy occurs spontaneously and suddenly then eventually leads to the actual impulsive buying behavior.

2.2. Urge to Buy

According to Rook (1987), the "urge to buy" is a natural, motivated demand to buy that is often triggered by emotional input throughout the buying process. The study found that emotional arousal causes customers to feel excited, pleasurable, or desirous, leading them to make unplanned purchases. Studies have revealed that the demand to buy is exactly linked with emotional arousal, which can be boosted by visual characteristics, limited-time incentives, and social proof (Dawson and Kim, 2009). These inputs alter the affective state of the customer, which raises their demand usually by way of passing rational decision-making processes (Youn and Faber, 2000).

In an online environment, aesthetically pleasing layouts or simple of navigation can strengthen the emotional connection to the product, hence increasing the likelihood of an impulsive buy (Lin and Lo, 2016; Liu et al., 2013). Moreover, discovered to be somewhat linked with the need to buy are hedonic browsing habits, characterized by the search of pleasure and fulfillment during the buying process (Kukar-Kinney et al., 2009).

Many research show that impulsive buying and buying desire are linked. Beatty and Ferrell (1998) defined impulsive buying as a sudden, strong need to buy, spanning the gap between looking and buying. This requirement is linked to impulsive buying, according to recent studies by Utama et al. (2021) and Mohan et al. (2013). Therefore, the urge to buy can be viewed as a behavioral response in this study, signaling the potential for impulsive buying behavior.

2.3. Browsing Activity

Browsing activity can be defined as the act of shopping without a specific intent to purchase (MacInnis and Price, 1990). This marks a turning point in the customer path that results in purchases (Moe, 2003; Richard and Chebat, 2016).

Studies separated users of websites into hedonic and utilitarian categories. Utility browsing, according to Wadera and Sharma (2018), is goal-driven activity in which a person actively searches pertinent information to lower purchase risk by using short cuts in decision-making. But hedonic shopping is for pleasure, excitement, and other positive feelings (Arnold and Reynolds, 2003). Bellenger and Korgoankar (1980) suggested that hedonic browsers are engaged in learning about goods, including pricing and quality, only because they love the experience, not with the intent of making a future purchase.

Longer browsing times have shown in past studies to increase customers' urge to purchase. This is because prolonged browsing

increases their exposure to various environmental stimuli that can influence their behavior (Beatty and Ferrell, 1998). Therefore, the following hypothesis is proposed:

H₁: The browsing activity positively affects customers' urge to buy.

2.4. Website Content and Variety

According to Montoya-Weiss et al. (2003), the content of an e-commerce online site includes communicative elements such as pricing, product details, return policies, etc. that are presented to viewers on the purpose of facilitating informed decision-making. Nielsen (1999) defined website content as the digital material available on a website that is designed to be consumed by users, which includes textual, visual, and multimedia content. Lehman and Dufrene (2010) expanded on this definition by emphasizing the strategic role of website content in communicating a brand's message, values, and offerings to its target audience. Smith (2002) proposed that website design and content are crucial for customer retention. Other studies also indicate that having high quality, clear, comprehensive and relevant content on e-stores significantly boosts chances of consumer retention, enhanced customer satisfaction, loyalty, and the overall use of online platforms (Rice, 1997; Montoya-Weiss et al., 2003). A wide product selection is another factor that can enhance impulsive browsing by providing enjoyment and stimulation (Moe, 2003). Verhagen and Van Dolen (2011) emphasized variety as key to merchandise attractiveness, as it evokes positive emotions and improves the shopping experience. Website variety also reduces irritation, enhances efficiency, and helps consumers make informed decisions (Roehm and Roehm, 2005; Sharma et al., 2010). Based on discussion, the following research hypothesis is proposed:

H₂: The website content and variety on fashion brand websites positively affect customers' browsing activity.

2.5. Website Navigation and Visual Design

To make a website seem attractive, visual design includes for images, colors, fonts, forms, animations, and layout (Cyr and Bonanni, 2005; Li and Yeh, 2010). According to Koufaris (2022), online buying experiences including customer service and competitive pricing do in traditional retail depend on the architecture of websites. According to Mithas et al. (2006), a well-organized website increases user involvement and purchase possibility while surfing. Consumers' first impressions, purchase behavior, and product and vendor information also depend on website design (Wells et al., 2011). Kivistö (2021) highlighted that via building credibility, website design shapes consumer buying intention.

Navigating and visual design define website usefulness and aesthetics (Wolfenbarger and Gilly, 2003). According to Vance et al. (2008), page and content organization of websites influences user effort via means of navigation. According to Montoya-Weiss et al. 2003 and McKnight et al. 2002, a good website design enables users to browse with least effort, therefore changing their online experience.

Consumers with poor navigation search more but are less likely to purchase than those with good navigation, according to Bhatnagar et al. (2019). Wadera (2018) claims that easy navigation shapes online buying experience. Thus, the study proposed the following hypothesis:

H₃: The visual design and navigation on fashion brand websites positively influences the customers' browsing activity.

2.6. Promotion

Discounts, flash sales, and limited-time offers provide urgency and value that could inspire impulsive purchases even in cases where the buyer has no intention of purchasing, claims Haugh (1983). Scarcity promotions such as low-stock alerts or limited-time discounts, according to Guo et al. (2017), inspire FOMO, which drives consumers to move fast to grab a deal, hence fostering impulsive purchase intents. Sales promotions and online impulsive purchase showed a favorable correlation according past studies by Hasim et al. (2018) and Longdong and Pangemanan (2015). Based on these studies, offers of financial incentives can help to lower consumers' impulse buying opposition. Clearly displaying promotional offers on websites helps information to be more easily available, according to Bressolles et al. (2014), which stimulates impulsive purchases. Chen and Yao (2018) claim that free delivery and gifts are among the economic incentives that raise consumer arousal and inspire impulse purchase. The hypothesis H₄ is as follows:

H₄: The promotional offer on fashion brand websites positively influences the customers' browsing activity.

2.7. Feedback from Other Customers

In online shopping, customer feedback encompasses evaluations, opinions, and experiences shared through reviews, ratings, testimonials, comments, and other user-generated content across websites, social media, and e-commerce platforms (Filieri, 2016). With prospective consumers, social proof from other customers' fosters credibility and confidence (Cheung et al., 2008). Because consumers value peer knowledge, thorough and consistent feedback boosts involvement (Mudambi and Schuff, 2010). Hilal and Astuti (2022) discovered that trust shapes impulsive buying choices; consumers are more likely to purchase a good the more trust they have for it. As customers study product sites and reviews to validate their purchases, positive feedback raises consumer confidence, purchase likelihood, and browsing time (Park and Lee, 2009; Filieri, 2016). Negative remarks might alert consumers and stop purchases. This can make consumers search for other goods or rapidly exit the website (Park and Lee, 2009). So, the study proposed the hypothesis:

H₅: The feedback from other customers on fashion brand websites positively influences the customers' browsing activity.

2.8. Impulsive Buying Tendency

Rook and Fisher (1995) put forward that the tendency toward impulsive buying is considered an innate trait within the human population, as originally conceptualized. Personality traits like spontaneity and limited planning have been recognized as key factors influencing impulsive purchasing behavior (Iyer et al., 2020). Verplanken and Sato (2011) discovered that, regardless of whether they already own identical items, impulsive purchasers purchase depending on what grabs their eye. This behavior is underpinned by weaker self-control mechanisms, which are more prominent in consumers with high impulsivity traits compared to those with relatively lower impulsivity (Dawson and Kim, 2009; Foroughi et al., 2013; Herabadi et al., 2009; Youn and Faber, 2000). Impulsive shoppers, according to Chein et al. (2020), often buy

depending on their emotions and find shopping to be calming; they are influenced by various elements. Drawing on discussion, the following hypothesis is proposed:

H₆: The impulsive buying tendency positively influences the customers' the urge to buy.

2.9. Shopping Enjoyment

Beatty and Ferrel (1998) defined shopping enjoyment as the delight consumers experience during shopping. This definition underlines that shopping can be fun without acquiring or possessing anything. Other studies, including Westbrook and Black (2002), revealed that consumers who go shopping for enjoyment rather than necessity are happier with the shopping experience than with the items. Internet shopping pleasure and impulse buying have been the subject of several studies. According to Goyal (2007), a buyer's readiness to purchase items that enhance their shopping experience shows their level of satisfaction of shopping. According to Sharma et al. (2010), consumers who like shopping feel delighted and joyful, which motivates them to deviate from habit and make repeated purchases. Furthermore, Ruby Evangelin and Vasantha (2022) highlighted that shopping enjoyment stimulates impulsive buying tendencies, leading consumers to make unplanned online purchases. So, the hypothesis H7 is proposed:

H₇: The shopping enjoyment positively influences the customers' the urge to buy.

Figure 1 illustrates the research framework in this study.

3. RESEARCH METHODOLOGY

3.1. Measurement Items

The measurement items were derived from previously validated scales in the literature, with adjustments made to tailor them to the

context of this study. All items were assessed using a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree). The constructs and items are presented in Table 1.

3.2. Data Collection and Sample

Following Hair et al. (2014), the minimum sample size for this study was calculated as 5-10 times the number of observed variables, with 28 variables requiring at least 140 respondents for robust statistical analysis. Data was collected through a digital survey distributed on social media platforms targeting Generation Z consumers in Hanoi. Between September 14 and October 20, 2024, 225 responses were received, and after data cleaning, 202 valid responses were retained for analysis.

3.3. Data Analysis

Quantitative data was analyzed using SPSS 27 for demographic summaries and descriptive statistics, and SmartPLS 4.0 for structural equation modeling (SEM). SEM was applied to examine relationships between stimulus inputs, organism processes, and online impulsive buying behavior. Additional metrics, including indicator reliability, item collinearity, path coefficients, R-square, and F-square, were calculated to validate hypotheses and the structural model. These methods ensure rigorous testing and provide meaningful insights into the factors driving impulsive buying behavior.

4. RESULTS

4.1. Demographic Profile of the Respondents

The research sample comprised 202 respondents, with a higher representation of females (71.8%) compared to males (28.2%). The majority (65.3%) were aged 18–24, while 34.7% were 25–30,

Figure 1: Research model

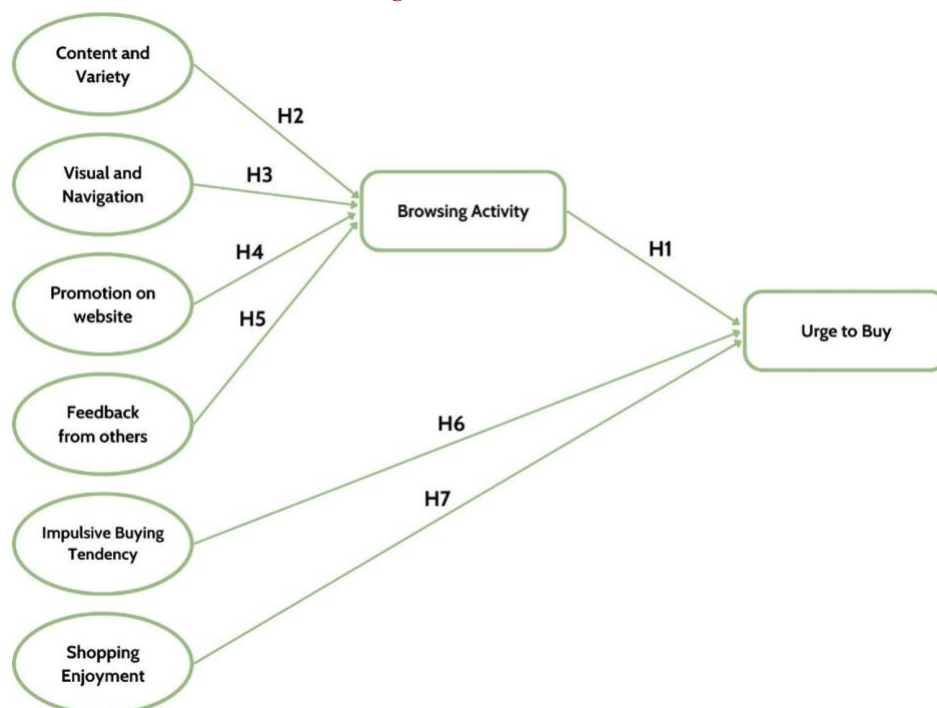


Table 1: Measurements table

Variables	Item code	Items	Source
Content and Variety (CV)	CV1	The appealing content on the website increases my desire to explore more products, even if I don't plan to buy anything.	Moe (2003); Faber and O'Guinn (1992); Montoya-Weiss et al. (2003)
	CV2	I find the detailed product descriptions are informative and help me to decide whether to buy the product.	
	CV3	The variety of products available on site encourages me to spend more time browsing and shopping even if I don't intend to buy.	
	CV4	I prefer browsing websites with up-to-date products.	
Visual and Navigation (VN)	VN1	I find it useful when the website content is easy to navigate.	Montoya-Weiss et al. (2003); Mithas et al. (2006); Wells et al., (2011)
	VN2	Navigating the website is quick and intuitive, requiring minimal effort to determine how to move through it.	
	VN3	The screen design on this website (i.e., colors, images, layout, etc.) is attractive.	
	VN4	A visually appealing website conveys positive perceptions to consumers regarding both product quality and the credibility of the vendor.	
Promotion on website (PW)	PW1	Promotions on websites create a sense of urgency and influence impulsive buying.	Haugh (1983); Guo et al. (2017); Chen and Yao (2018)
	PW2	Limited-time offers and discount coupons often lead to spontaneous purchases.	
	PW3	Buy-one-get-one-free promotions tempt consumers to buy more than intended.	
	PW4	Promotions enhance the impulse to buy by offering other benefits such as free delivery, and additional gifts according to the order value, etc.,	
Feedback from other customers (FB)	FB1	I consider it useful to read online feedback from other customers on websites.	Mudambi and Schuff, (2010); Filieri (2016); Park and Lee (2009); Cheung et al. (2008)
	FB2	I find other customers' feedback on websites trustworthy and credible.	
	FB3	The feedback from other customers affects my decision on whether to continue browsing on the websites.	
	FB4	I feel more confident when the feedback on the website is regularly updated.	
Impulsive buying tendency (IT)	IT1	I often act on the spur of the moment and without planning in advance.	Iyer et al. (2020); Rook and Fisher (1995)
	IT2	I have difficulty controlling my urge to buy things.	
	IT3	I frequently buy products spontaneously.	
Shopping enjoyment (SE)	SE1	Shopping is my favorite activity.	Beatty and Ferrell (1998); Westbrook and Black (2002)
	SE2	Shopping entertains me and makes me happy.	
	SE3	I enjoy the shopping process more than actually owning the items I purchase.	
Browsing activity (BA)	BA1	I tend to spend a significant amount of time browsing through websites without a specific purchase intent.	MacInnis and Price (1990); Bellenger and Korgoankar (1980); Wadera and Sharma (2018)
	BA2	I browse websites for the enjoyment of the experience, not necessarily to buy something.	
	BA3	I often browse the website with the intention of gathering information to make an informed purchasing decision.	
Urge to buy (UB)	UB1	While browsing the website, I have often experienced the urge to purchase something.	Rook (1987); Youn and Faber (2000)
	UB2	While browsing the website, I have purchased some products that were not part of my initial shopping plan.	
	UB3	I feel a sudden urge to purchase while browsing the website.	

reflecting a younger demographic highly engaged in online shopping and digital marketing. Regarding fashion spending, most respondents had a mid-range budget, with 36.6% spending every month from \$30-\$50 and 35.6% spending \$20-\$30, indicating a concentration of moderate spenders, likely influenced by financial constraints. Occupationally, students formed the largest group (43.6%), followed by office workers (39.1%) and freelancers (17.3%). Students tend to be price-sensitive, office workers have more stable purchasing power, and freelancers may display cautious yet flexible spending habits. These findings offer insights into the sample's shopping behaviors and spending tendencies.

4.2. Compare Means

This analysis examines the influence of age and gender on two key variables: Impulsive Tendency and The Urge to Buy, using T-tests to identify significant differences in behaviors based on these demographic characteristics.

The results in Table 2 indicate that gender significantly impacts impulsive tendency with a $P = 0.007 < 0.05$, suggesting that buying behaviors may vary between males and females. These findings highlight that impulsive buying behavior is more closely tied to gender differences, with females having a higher impulsive tendency than males.

4.3. Measurement Model Evaluation

4.3.1. Reflective measurement model

Table 3 presents the outer loadings for the observed variables about their respective latent constructs: Browsing Activity (BA) and Urge to Buy (UB). All outer loadings are ranging from 0.706 to 0.886, exceeding the acceptable threshold 0.7 (Hair et al., 2013), confirming their strong representation of the respective constructs.

The results in Table 4 indicate that all constructs demonstrate good scale reliability, as both Cronbach's alpha and Composite

Table 2: Means comparison - Gender and Impulsive tendency

Group	N	Mean	SD	df	t	Sig. t
Males	57	2.9064	1.12468	85.517	-2.779	0.007
Females	145	3.3724	0.927755			

Table 3: Outer loadings for indicators

Items	Browsing activity	Urge to buy
BA1	0.884	
BA2	0.862	
BA3	0.706	
UB1		0.886
UB2		0.83
UB3		0.876

Table 4: Construct reliability and validity measures

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BA	0.753	0.77	0.86	0.674
UB	0.831	0.837	0.898	0.747

reliability (rho_c) are >0.7. In summary, the high values for Cronbach's alpha, composite reliability, and AVE confirm that both constructs (BA and UB) demonstrate good construct reliability and convergent validity (Hair et al., 2014).

Table 5 presents the discriminant validity assessment using the Fornell-Larcker Criterion. The diagonal values represent the square roots of AVE for each construct (0.821 for Browsing Activity and 0.864 for Urge to Buy), while the off-diagonal value (0.593) indicates the correlation between the two constructs (Fornell and Larcker, 1981).

4.3.2. Formative measurement model

The formative measurement model captures various aspects of each construct, meaning there is no inherent correlation between its indicators. This distinguishes it from the reflective measurement approach. As a result, reliability assessment methods based on internal consistency, such as Cronbach's alpha and composite reliability, are not appropriate for evaluating formative models. Instead, following the recommendations of Hair et al. (2013), assessing multicollinearity and testing the significance of weight coefficients are necessary to validate a formative measurement model. It can be seen from Table 6 The variance inflation factor (VIF) for all manifest variables, representing the four perceived value dimensions, is below the stringent threshold of 5, indicating the absence of multicollinearity. Additionally, the weight coefficients of some observed variables are statistically significant, with p-value less than 0.05 (Hair et al., 2013).

On the other hand, some variables CV4, FB1, FB3, IT1, PW4, SE3, VN3, and VN4 have $P > 0.05$. However, based on the outer loading data, these variables all have outer loadings above 0.7, which justifies their retention as observed variables. Except CV3 is be deleted because p-value (0.997) greater than 0.05 and outer loading is 0.643 less than 0.7. (Hair et al, 2013).

Table 5: Discriminant Validity (Fornell-Larcker Criterion)

Variables	Browsing activity	Urge to buy
Browsing activity	0.821	
Urge to buy	0.593	0.864

Table 6: Outer weights, loadings, and statistical significance for indicators

Paths	Original sample (O)	T statistics (O/STDEV)	Out loadings	P values	VIF
CV1 -> CV	0.626	4.189		0	1.666
CV2 -> CV	0.36	2.299		0.022	1.632
CV3 -> CV	-0.001	0.004	0.643	0.997	1.731
CV4 -> CV	0.217	1.586	0.701	0.113	1.520
FB1 -> FB	0.054	0.297	0.75	0.766	2.263
FB2 -> FB	0.33	2.062		0.039	2.085
FB3 -> FB	0.246	1.26	0.864	0.208	3.002
FB4 -> FB	0.522	3.347		0.001	2.039
IT1 -> IT	0.318	1.93	0.873	0.054	2.367
IT2 -> IT	0.388	2.822		0.005	2.459
IT3 -> IT	0.4	2.685		0.007	3.126
PW1 -> PW	0.287	2.204		0.028	1.779
PW2 -> PW	0.357	2.828		0.005	1.550
PW3 -> PW	0.509	4.697		0	2.048
PW4 -> PW	0.056	0.429	0.769	0.668	2.269
SE1 -> SE	0.692	6.679		0	2.522
SE2 -> SE	0.281	2.32		0.021	2.510
SE3 -> SE	0.11	0.983	0.75	0.326	1.983
VN1 -> VN	0.004	0.022		0.982	1.503
VN2 -> VN	0.61	3.736	0.838	0	1.385
VN3 -> VN	0.331	1.69		0.091	1.779
VN4 -> VN	0.322	1.933		0.054	1.753

4.3.3. Structural model equation

The results of the hypotheses indicate the level of influence each factor has on browsing activity and the urge to buy among Generation Z consumers in Hanoi, which are summarized in Table 7. The P-value indicates the probability that the observed relationship between two variables occurred by chance. $AP < 0.05$ suggests that the relationship is statistically significant and unlikely to be due to random variation (Cohen, 1988; Hair et al., 2010).

The structural model results indicate that Browsing Activity significantly influences Urge to Buy ($\beta = 0.182$, $P = 0.009$), supporting H1. Among the predictors of Browsing Activity, Promotion on Website ($\beta = 0.454$, $P < 0.001$) and Feedback from Others ($\beta = 0.215$, $P = 0.001$) have significant positive effects, providing support for H4 and H5, respectively.

Conversely, Content and Variety ($\beta = 0.101$, $p = 0.249$) and Visual and Navigation ($\beta = 0.031$, $p = 0.691$) do not significantly impact Browsing Activity, leading to the rejection of H2 and H3.

Regarding Urge to Buy, both Impulsive Buying Tendency ($\beta = 0.254$, $p = 0.001$) and Shopping Enjoyment ($\beta = 0.464$, $P < 0.001$) exhibit strong positive relationships, supporting H6 and H7. Notably, Shopping Enjoyment has the highest effect on Urge to Buy, while Promotion on Website is the most influential factor driving Browsing Activity.

Table 7: Path coefficient table

Paths	Original sample (O)	T statistics (O/STDEV)	P values	Hypothesis	Result
Browsing Activity -> Urge to Buy	0.182	2.606	0.009	H1	Supported
Content and Variety -> Browsing Activity	0.101	1.153	0.249	H2	Rejected
Visual and Navigation -> Browsing Activity	0.031	0.398	0.691	H3	Rejected
Promotion on website -> Browsing Activity	0.454	6.121	0.000	H4	Supported
Feedback from others -> Browsing Activity	0.215	3.324	0.001	H5	Supported
Impulsive buying tendency -> Urge to Buy	0.254	3.27	0.001	H6	Supported
Shopping Enjoyment -> Urge to Buy	0.464	7.423	0.000	H7	Supported

Table 8: R-square values

Variables	R-square	R-square adjusted
BA	0.474	0.463
UB	0.590	0.584

4.2.4. R-square and F-square

Table 8 explains 46.3% of the variance in browsing activity (BA) and 58.4% in urge to buy (UB), indicating strong predictive power. BA is influenced by content variety, feedback, and promotions, while UB is shaped by factors driving impulsive buying. The higher R-square for UB suggests the model effectively captures key drivers of purchasing urges in online shopping (Hair et al., 2010; Cohen, 1988).

The evaluation of F-square follows specific threshold values: A value of 0.35 signifies a strong effect, 0.15 represents a moderate effect, and 0.02 indicates a minor impact of the exogenous construct. If the value falls below 0.02, it suggests no effect (Cohen, 1988). The results show that Shopping Enjoyment (SE) has the strongest effect on UB (0.332), while Promotion on Website (PW) has the most significant impact on BA (0.210). Feedback from Others (FB) (0.052) and Impulsive Buying Tendency (IT) (0.091) show moderate effects, whereas Content and Variety (CV) (0.009) and Visual and Navigation (VN) (0.001) have no influence. Browsing Activity (BA) itself has a small but measurable effect on Urge to Buy (UB) (0.045) (Cohen, 1988; Hair et al., 2014).

5. DISCUSSION AND CONCLUSION

5.1. Theoretical Implications

This research expanded on the existing literature by highlighting the unique factors that drive impulsive buying behavior among Gen Z consumers, who differ significantly from previous generations in their digital behaviors and purchasing motivations in the context of online fashion shopping on websites in Vietnam. This study expands the theoretical scope of the SOR model by concentrating on Vietnamese Gen Z consumers, implying that while the fundamental structure of stimulus-organism-response applies across cultures, the particular stimuli that drive impulsive behavior can vary depending on regional and market-specific situations. This regionally contextualized application of the SOR model helps to create a more complex theoretical framework and opens the path for more research on digital consumer behavior across various cultural and regional settings, so increasing the relevance of the model inside various worldwide markets. This study has important theoretical and practical implications.

First, this study demonstrates that gender strongly affects impulsive purchase behavior, with female consumers exhibiting greater impulsive buying tendencies than male customers. This study corroborates research by Lin and Chen (2012), Zia et al. (2018), and Tifferet and Herstein (2012), indicating that women may exhibit heightened emotional engagement in shopping situations, making them more likely to make impulsive purchasing.

Secondly, concerning individual personality traits, the results demonstrate that Shopping Enjoyment significantly impacts the Urge to Buy. This indicates that consumers who see shopping as enjoyable and exciting are more likely to feel a strong urge to buy. This corresponds with prior research by Wadera and Sharma (2018), which similarly showed a substantial correlation between the impulse to purchase and the pleasure obtained from shopping.

Third, among the elements on websites, Promotion on Website exerts the most substantial influence on Browsing Activity (BA). Feedback from others show moderate effects on their respective dependent variables, reflecting the roles of social proof and individual impulsivity in shaping browsing and buying urges. These findings align with previous studies by Hasim et al. (2018), Ruby Evangelin and Vasantha (2022), and Iyer et al. (2020).

On the other hand, the weakest effects are observed with Visual and Navigation, Content and Variety (CV) on Browsing Activity, indicating that website design and content diversity contribute minimally to users' browsing engagement in this context. There is inconsistency between this study's findings and previous research, such as Montoya-Weiss et al. (2003), and Wells et al. (2011), which may arise from demographic and temporal differences. This study focuses on Generation Z in Hanoi, a group that may prioritize promotional strategies and social proof over website design and content variety. Additionally, the evolving nature of online shopping, driven by technological advances and changing consumer habits, likely reduces the relative importance of website aesthetics.

5.2. Practical Implications

The results of this study provide insightful analysis of the elements motivating Generation Z consumers in Hanoi to engage in impulsive online fashion purchase. These realizations will enable fashion companies to customize their approaches to properly interact with this expanding and very powerful customer base.

Regarding demographic, fashion stores should take gender-specific techniques into account while developing their marketing and website plans based on the results of their study. To inspire impulsive purchases among female consumers, emotional appeal and customized experiences must first take front stage. Especially, providing customized product recommendations, well-chosen collections, and a shopping experience fit for emotional and lifestyle goals can help to target female consumers. Moreover, as women are usually more sensitive to emotional stimuli, including narrative components stressing how things could improve their life and emotions would help to raise their probability of accidental purchases.

To improve shopping enjoyment, which the most important personal quality influences the need to buy. Companies should concentrate on designing a more interesting and fun browsing environment. To improve the buying experience, fashion brands could include interactive components including virtual try-ons, fashion quizzes, and “outfit styling” tools together with user-friendly interfaces. Furthermore, a clear and aesthetically appealing interface will guarantee that consumers have a flawless browsing to check out experience, therefore raising the possibility of impulsive purchases. Brands can also implement a loyalty program or gamified elements, such as earning points for every purchase or offering limited-time rewards, can increase the emotional satisfaction derived from shopping, thus encouraging more impulsive behavior.

Promotions encouraged browsing and impulsive purchase. Fashion companies should thus establish urgency and exclusivity on their websites by using limited-time promotions, discounts, and special offers. Since Generation Z consumers are quite sensitive to digital marketing, marketers can use email, social media, or customized alerts to inspire impulsive buys. Fashion companies can draw attention and encourage impulse buying by using FOMO campaigns. Limited-time discounts and influencer relationships help to increase marketing appeal and encourage impromptu purchases.

The moderate impact of Feedback from Others on Urge to Buy highlights the importance of social proof in impulsive buying. Customer reviews, ratings, and user-generated material should all be included into e-commerce systems to foster confidence and inspire purchases. Influencer endorsements and peer recommendations help to build credibility and a feeling of community, therefore empowering consumers in their purchasing choices.

Although Visual and Navigation and Content and Variety have weaker effects on Browsing Activity, they still shape the overall user experience. Fashion brands should balance aesthetic appeal with functionality to maintain engagement without overwhelming users. A well-structured, visually appealing website with high-quality images, clear product descriptions, and seamless navigation improves user experience and facilitates purchases.

5.3. Limitations and Future Research

This study offers insights into the impulsive purchasing behavior of Generation Z on fashion brand websites in Hanoi. However, there

are several limitations to consider, along with recommendations for future research to address these areas.

The first key limitation is that the sample is heavily skewed toward female respondents, representing only a specific age range within Generation Z. Expanding the sample to achieve gender balance could help future research capture a broader spectrum of impulsive purchasing tendencies.

The second limitation is the reliance on self-reported data, which may lead to biases and subjective perceptions rather than actual behavior. This is especially relevant as most respondents are women and students, who may misreport their impulsive buying due to financial or social factors. Since impulsive buying is often unconscious, responses may not fully reflect reality. Future research could use behavioral tracking or transaction data for more objective insights.

The third limitation relates to the scope of website content examined in the study. While the findings suggest that website navigation and general content don't strongly influence browsing behavior, other features that have not been mentioned in the research, such as personalized recommendations might also have significant impacts. Addressing these unexplored factors would help develop a more comprehensive understanding of how website design influences impulsive buying behavior.

REFERENCES

- Arnold, M.J., Reynolds, K.E. (2003), Hedonic shopping motivations. *Journal of Retailing*, 79(2), 77-95.
- Beatty, S.E., Ferrell, M.E. (1998), Impulse buying: Modeling its precursors. *Journal of Retailing*, 74(2), 169-191.
- Bellenger, D.N., Korgoankar, P. (1980), Profiling the recreational shopper. *Journal of Retailing*, 56(3), 77-92.
- Bhatnagar, A., Sinha, A.P., Sen, A. (2019), Role of navigational ability in website visit duration. *European Journal of Marketing*, 53(5), 972-988.
- Bilińska-Reformat, K., Dewalska-Opitek, A. (2021), E-commerce as the predominant business model of fast fashion retailers in the era of global COVID-19 pandemics. *Procedia Computer Science*, 192, 2479-2490.
- Brakus, J.J., Schmitt, B.H., Zarantonello, L. (2009), Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52-68.
- Bressolles, G., Durrieu, F., Senecal, S. (2014), A consumer typology based on e-service quality and e-satisfaction. *Journal of Retailing and Consumer Services*, 21(6), 889-896.
- Chang, C.W., Chang, S.H. (2023), The impact of digital disruption: Influences of digital media and social networks on forming digital natives' attitude. *Sage Open*, 13(3), 1-10.
- Chein, T.S., Hui, O.T., Lee, C.J. (2020), Factors affecting impulsive buying behavior-evidence from Malaysia. *Global Business and Management Research*, 12(2), 1-14.
- Chen, C.C., Yao, J.Y. (2018), What drives impulse buying behaviors in a mobile auction? The perspective of the stimulus-organism-response model. *Telematics and Informatics*, 35(5), 1249-1262.
- Cheung, C.M., Lee, M.K., Rabjohn, N. (2008), The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities. *Internet Research*, 18(3), 229-247.

- Close, A.G., Kukar-Kinney, M. (2010), Beyond buying: Motivations behind consumers' online shopping cart use. *Journal of Business Research*, 63(9-10), 986-992.
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cyr, D., Bonanni, C. (2005), Gender and website design in e-business. *International Journal of Electronic Business*, 3(6), 565-582.
- Dawson, S., Kim, M. (2009), External and internal trigger cues of impulse buying online. *Direct Marketing an International Journal*, 3(1), 20-34.
- Djafarova, E., Bowes, T. (2021), Instagram made me buy it: Generation Z impulse purchases in fashion industry. *Journal of Retailing and Consumer Services*, 59, 102345.
- Djafarova, E., Fouts, S. (2022), Exploring ethical consumption of generation Z: Theory of planned behavior. *Young Consumers*, 23(3), 413-431.
- Faber, R.J., O'Guinn, T.C. (1992), A clinical screener for compulsive buying. *Journal of Consumer Research*, 19, 459-469.
- Filieri, R. (2016), What makes an online consumer review trustworthy? *Annals of Tourism Research*, 58, 46-64.
- Fornell, C., Larcker, D.F. (1981), Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Foroughi, A., Buang, N.A., Senik, Z.C., Hajmisadeghi, R.S. (2013), Impulse buying behavior and moderating role of gender among Iranian shoppers. *Journal of Basic and Applied Scientific Research*, 3(4), 760-769.
- Goyal, B.B., Mittal, A. (2007), Gender influence on shopping enjoyment-an empirical study. *Indian Management Studies Journal*, 11(2), 103-116.
- Guo, J., Xin, L., Wu, Y. (2017), Arousal or not? The Effects of Scarcity Messages on Online Impulsive Purchase. In: *HCI in Business, Government and Organizations. Supporting Business: 4th International Conference, HCIBGO 2017, Held as Part of HCI International 2017, Vancouver, BC, Canada, Proceedings, Part II 4*, 29-40. Springer International Publishing.
- Hair, J.F Jr., Black, W.C., Babin, B.J., Anderson, R.E. (2010), *Multivariate data analysis*. In: *Multivariate Data Analysis*. United States: Prentice Hall, p785.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M. (2014), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. London: SAGE Publications.
- Hair, J.F., Ringle, C.M., Sarstedt, M. (2013), Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1-2), 1-12.
- Hasim, M.A., Shamsudin, M.F., Ali, A.M., Shabi, S. (2018), The relationship between sales promotions and online impulse buying in Malaysia. *Opcion*, 34(16), 295-308.
- Haugh, L.J. (1983), Defining and redefining. *Advertising Age*, 14(2), 44.
- Herabadi, A.G., Verplanken, B., Van Knippenberg, A. (2009), Consumption experience of impulse buying in Indonesia: Emotional arousal and hedonistic considerations. *Asian Journal of Social Psychology*, 12(1), 20-31.
- Hilal, A.K., Astuti, S.P. (2022), The role of online customer reviews in increasing impulsive purchase of fashion products online with customer trust as a mediator. *Journal of Management and Islamic Finance*, 2(2), 310-323.
- Iyer, G.R., Blut, M., Xiao, S.H., Grewal, D. (2020), Impulse buying: A meta-analytic review. *Journal of the Academy of Marketing Science*, 48, 384-404.
- Kim, M.J., Lee, C.K., Jung, T. (2020), Exploring consumer behavior in virtual reality tourism using an extended stimulus-organism-response model. *Journal of Travel Research*, 59(1), 69-89.
- Kivistö, M.S. (2021), The Impact of Website Design Features on the Consumer's Purchase Decision. Finland: LUT University.
- Koufaris, M. (2002), Applying the technology acceptance model and flow theory to online consumer behavior. *Information Systems Research*, 13(2), 205-223.
- Kukar-Kinney, M., Ridgway, N.M., Monroe, K.B. (2009), The relationship between consumers' tendencies to buy compulsively and their motivations to shop and buy on the Internet. *Journal of Retailing*, 85(3), 298-307.
- Lehman, C.M., Dufrene, D.D. (2010), *Business Communication*. United States: Cengage Learning.
- Li, Y.M., Yeh, Y.S. (2010), Increasing trust in mobile commerce through design aesthetics. *Computers in Human Behavior*, 26(4), 673-684.
- Lin, S.W., Lo, L.Y.S. (2016), Evoking online consumer impulse buying through virtual layout schemes. *Behaviour and Information Technology*, 35(1), 38-56.
- Lin, Y.H., Chen, C.Y. (2012), Adolescents' impulse buying: Susceptibility to interpersonal influence and fear of negative evaluation. *Social Behavior and Personality an International Journal*, 40(3), 353-358.
- Liu, Y., Li, H., Hu, F. (2013), Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions. *Decision Support Systems*, 55(3), 829-837.
- Lo, L.Y.S., Lin, S.W., Hsu, L.Y. (2016), Motivation for online impulse buying: A two-factor theory perspective. *International Journal of Information Management*, 36(5), 759-772.
- Longdong, E.Y.E., Pangemanan, S.S. (2015), Analyzing the effect of virtual atmospheric cues, sales promotions, and situational factors on online impulse buying in MANADO. *Jurnal EMBA Jurnal Riset Ekonomi Manajemen, Bisnis dan Akuntansi*, 3(3), 119-240.
- McKnight, D.H., Choudhury, V., Kacmar, C. (2002), The impact of initial consumer trust on intentions to transact with a web site: A trust-building model. *The Journal of Strategic Information Systems*, 11(3-4), 297-323.
- Mehrabian, A., Russell, J.A. (1974), *An Approach to Environmental Psychology*. United States: MIT Press.
- Mithas, S., Ramasubbu, N., Krishnan, M.S., Fornell, C. (2006), Designing web sites for customer loyalty across business domains: A multilevel analysis. *Journal of Management Information Systems*, 23(3), 97-127.
- Moe, W.W. (2003), Buying, searching, or browsing: Differentiating between online shoppers using in-store navigational clickstream. *Journal of Consumer Psychology*, 13(1-2), 29-39.
- Mohan, G., Sivakumaran, B., Sharma, P. (2013), Impact of store environment on impulse buying behavior. *European Journal of Marketing*, 47(10), 1711-1732.
- Montoya-Weiss, M.M., Voss, G.B., Grewal, D. (2003), Determinants of online channel use and overall satisfaction with a relational, multichannel service provider. *Journal of the Academy of Marketing Science*, 31(4), 448-458.
- Mudambi, S.M., Schuff, D. (2010), Research note: What makes a helpful online review? A study of customer reviews on Amazon.com. *MIS Quarterly*, 34, 185-200.
- Ngo, M.T., Le, M.T. (2025), Factors affecting Vietnamese young people's impulsive purchasing intention on live-streaming commerce. *International Journal of Management Finance and Accounting*, 6(1), 308-349.
- Nguyen, S., Ha, T. (2021), Predictors of fast-fashion-oriented impulse buying: The case of Vietnamese millennials. *Management Science Letters*, 11(7), 2021-2032.
- Nguyen, T.Q.N., Giang, B.Q.N. (2020), An empirical study on factors influencing consumer impulsive purchase behavior: A case of Ho Chi Minh City in the 4.0 era. *Journal of International Economics and Management*, 20(3), 17-41.
- Nielsen, J. (1999), *Designing Web Usability: The Practice of Simplicity*. United States: New Riders Publishing.

- Park, C., Lee, T.M. (2009), Information direction, website reputation, and eWOM effect: A moderating role of product type. *Journal of Business Research*, 62(1), 61-67.
- Rice, M. (1997), What makes users revisit a website? *Marketing News*, 31, 12-13.
- Richard, M.O., Chebat, J.C. (2016), Modeling online consumer behavior: Preeminence of emotions and moderating influences of need for cognition and optimal stimulation level. *Journal of Business Research*, 69(2), 541-553.
- Roehm, H.A Jr., Roehm, M.L. (2005), Revisiting the effect of positive mood on variety seeking. *Journal of Consumer Research*, 32(2), 330-336.
- Rook, D.W. (1987), The buying impulse. *Journal of Consumer Research*, 14(2), 189-199.
- Rook, D.W., Fisher, R.J. (1995), Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305-313.
- Ruby Evangelin, M., Vasantha, S. (2022), Mediating Effect of Impulsive Buying Tendency between Shopping Enjoyment and Online Impulsive Buying Behavior. In: *Ambient Communications and Computer Systems: Proceedings of RACCCS 2021*. Singapore: Springer Nature, p467-473.
- Saleh, K. (2020), The State of Impulse Buying Persona-Statistics and Trends. *Invesp*. Available from: <https://cutt.ly/8xszofz> [Last accessed on 2024 Oct 15].
- Savills. (2024), The Development of E-Commerce in Vietnam. Available from: <https://industrial.savills.com.vn/2024/03/development-of-e-commerce-in-vietnam> [Last accessed on 2024 Oct 20].
- Sharma, P., Sivakumaran, B., Marshall, R. (2004), Investigating impulse buying and variety seeking: Towards a general theory of hedonic purchase behaviors. *Developments in Marketing Science*, 27, 61.
- Sharma, P., Sivakumaran, B., Marshall, R. (2010), Impulse buying and variety seeking: A trait-correlates perspective. *Journal of Business Research*, 63(3), 276-283.
- Smith, A.D. (2002), Loyalty and e-marketing issues. *Quarterly Journal of Electronic Commerce*, 3(2), 149-162.
- Srikant, G., Kushwaha, P.S., Badhera, U., Chatterjee, P., Antibanez Gonzalez, E.D.R. (2023), Identification of benefits, challenges, and pathways in e-commerce industries: An integrated two-phase decision-making model. *Sustainable Operations and Computers*, 4, 200-218.
- Tifferet, S., Herstein, R. (2012), Gender differences in brand commitment, impulse buying, and hedonic consumption. *Journal of Product and Brand Management*, 21(3), 176-182.
- Utama, A., Sawitri, H.S.R., Haryanto, B., Wahyudi, L. (2021), Impulse buying: The influence of impulse buying tendency, urge to buy, and gender on impulse buying of retail customers. *Journal of Distribution Science*, 19(7), 101-111.
- Vance, A., Elie-Dit-Cosaque, C., Straub, D.W. (2008), Examining trust in information technology artifacts: The effects of system quality and culture. *Journal of Management Information Systems*, 24(4), 73-100.
- Verhagen, T., Van Dolen, W. (2011), The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information and Management*, 48(8), 320-327.
- Verplanken, B., Herabadi, A. (2001), Individual differences in impulse buying tendency: Feeling and no thinking. *European Journal of Personality*, 15(S1), S71-S83.
- Verplanken, B., Sato, A. (2011), The psychology of impulse buying: An integrative self-regulation approach. *Journal of Consumer Policy*, 34(2), 197-210.
- Vũ, X. (2023), Vietnamese Fashion Brands are Restructuring to Survive in the Domestic Market. *Vietdata Research*. Available from: <https://www.vietdata.vn/post/vietnamese/fashion/brands/are/restructuring-to-survive> [Last accessed on 2024 Oct 19].
- Wadera, D., Sharma, V. (2018), Impulsive buying behavior in online fashion apparel shopping: An investigation of the influence of internal and external factors among Indian shoppers. *South Asian Journal of Management*, 25(3), 55-77.
- Wells, J.D., Valacich, J.S., Hess, T.J. (2011), What signal are you sending? How website quality influences perceptions of product quality and purchase intentions. *MIS Quarterly*, 35(2), 373-396.
- Westbrook, R.A., Black, W.C. (2002), A motivation-based shopper typology. *Retailing Critical Concepts*, 2, 82.
- Williams, K.C., Page, R.A. (2011), Marketing to the generations. *Journal of Behavioral Studies in Business*, 3(1), 37-53.
- Wolfenbarger, M., Gilly, M.C. (2003), eTailQ: Dimensionalizing, measuring, and predicting e-tail quality. *Journal of Retailing*, 79(3), 183-198.
- Wu, L., Chiu, M.L., Chen, K.W. (2020), Defining the determinants of online impulse buying through a shopping process of integrating perceived risk, expectation-confirmation model, and flow theory issues. *International Journal of Information Management*, 52, 102099.
- Youn, S., Faber, R.J. (2000), Impulse buying: Its relation to personality traits and cues. *Advances in Consumer Research*, 27(1), 179-185.
- Zhou, J., Poh, F., Zhang, C., Zipser, D. (2020), China's gen Z are coming of age: Here's what marketers need to know. *McKinsey and Company*. Available from: <https://www.mckinsey.com/cn/our/insights/ourinsights/chinas/gen/z/are/coming/of/age/heres/what-marketers-need-to-know> [Last accessed on 2024 Oct 19].
- Zia, M.H., Shafique, S., Rajput, A. (2018), The influence of gender-based emotional intelligence on impulsive buying. *NUML International Journal of Business and Management*, 13(2), 65-75.