

# Factors Influence Vietnamese Gen Z's Impulsive Buying Behavior in the Beauty and Personal Care Field Through Livestream

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## ABSTRACT

This study sheds new light on impulsive buying behavior within the context of live-streaming e-commerce in the beauty and personal care sectors. This study investigates the relationship between four independent variables: interpersonal interaction, brand awareness, scarcity promotions, discount prices, and their impact on impulsive buying behavior, with perceived enjoyment acting as a mediating variable. Based on Stimulus-Organism-Response (SOR) theory, this study analyzes the factors influencing consumer psychology that, in turn, affect impulsive buying behavior. The study was conducted using a combination of the structured equation Modeling (PLS-SEM) technique and Bootstrapping in SMART PLS 4.0, based on 390 responses from an anonymous online survey. The results show that perceived enjoyment acts as a mediator in the relationship between brand awareness, interpersonal interaction, discount prices, and impulsive buying behavior. However, perceived enjoyment does not mediate the impact of scarcity promotion on impulsive buying decisions. Another significant finding is that scarcity promotions have a direct negative impact on impulsive buying behavior. Additionally, it will help businesses better understand Vietnamese Gen Z, an important consumer generation with unique characteristics and shopping behaviors, allowing them to craft appropriate business strategies.

**Keywords:** Impulsive Buying Behavior, Livestream, Beauty and Personal Care, Gen Z, Vietnam

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## INTRODUCTION

With the continuous development of electronic devices, in the current context, the business sector in general and e-commerce in particular have experienced revolutions, bringing unprecedented convenience and easy accessibility to both sellers and buyers (Reinartz et al., 2019). A particularly notable development in the era of online shopping is live streaming, which has created a new, exciting, and highly interactive experience for buyers. Unlike traditional shopping, in which customers receive information through images, text, and pre-recorded videos (Wongkitrungrueng & Assarut, 2020), live streaming provides sellers with a platform to interact directly with consumers in real time, offering superior benefits

compared to traditional shopping methods. Through live streaming, products are introduced to users in detail by a host that can address customer inquiries instantly, thus increasing consumers' purchase intent. This immediacy and the ability to answer questions on the spot make live-streaming a powerful tool for boosting sales (Zhang et al., 2024). This heightened interaction also creates a sense of urgency through numerous limited-time attractive offers, making livestream shopping increasingly popular and capable of reaching a large customer base. This platform holds great promise, and is expected to continue to expand in the future (Zhang & Yeap, 2023).

The rapid development of live streaming platforms has led to impulsive shopping behaviors among consumers,

particularly Gen Z, who tend to make quick decisions. Previous studies have identified factors that trigger impulsive buying behavior, such as discount promotion (Kim & Park, 2019), perceived enjoyment (Lakhan, 2021), perceived product usefulness (Lee & Chen, 2021), interaction (Syci, 2021), atmospheric clues (Gong et al., 2019) and the attributes of anchors (Xiaoyi & Zhengliang, 2020). However, the intriguing motivations of the environment affecting consumer psychology within stream platforms in the Beauty and Personal Care field in the Vietnamese market have not been fully explored.

## LITERATURE REVIEW

### The S-O-R Model

The stimulus-organism-response (S-O-R) model comes from psychology. This model accurately explains how the external environment influences human behavior (Mehrabian et al., 1974). Later, in environmental psychology, it was widely employed in retail contexts to research the influence of environmental elements on consumer behavior in both traditional and online retailers. In environmental psychology, the SOR model argues that numerous external factors can be used as stimuli (S), which in turn alters the interior state of the individual (O), and thus the behavioral reaction produced by the individual (Zhai et al., 2020; Fu et al., 2021). Additionally, Karim et al. (2021) found that website, marketing, and product variety (S) positively affect perceived enjoyment (O), which is a strong predictor of online impulse buying behavior (R). These studies have employed the S-O-R framework to investigate consumer behavior, providing support for the “mobile environment stimulation–consumer emotion–impulse purchase intention” model.

### Live Streaming

According to Chen & Yao (2018), live streaming is a medium that can record and broadcast audio and video in real-time. It is necessary to convey information using computers, mobile phones, and other network terminals to promote live streaming products. Live streamers are individuals or organizations that use live streaming platforms to share online video content with audiences in real time. They can broadcast various types of content such as gaming, knowledge sharing, event hosting, or interacting with fans (Smith, 2024). Live streaming commerce also includes shopping links to facilitate short-term transactions. According to Zhang et al. (2014), online shopping can make it easier for consumers to view products from different angles and ask relevant questions, as this makes many consumers satisfied, responds to questions immediately, and does not have to wait for a response from a message. In this study, live-streaming commerce is seen

as live streamer advertising or selling products on a certain live-streaming platform.

### Impulsive Purchase Behavior

Impulsive purchase behavior is described as sudden, unplanned, compulsive, and emotion-driven behavior (Chan et al., 2017), characterized by a lack of careful consideration of all available information and alternatives (Parboteeah et al., 2009). Pure impulse buying occurs when consumers decide to buy a product immediately after viewing the related images without prior planning. Planned impulse buying occurs when consumers browse through a wish list but end up making an impulse purchase. Emotional stimuli play a crucial role in impulse-buying behavior.

Consumers may be influenced by feelings of happiness, excitement, or even stress, leading them to purchase in the form of gratification or escape (Jain, 2023). Psychological theories, such as Emotional and Affective Theory and Cognitive Dissonance Theory, explain that emotions such as excitement, joy, or stress can lead to impulse buying, often as a way to resolve internal conflicts between desires and financial constraints (Verplanken & Herabadi, 2001). In the digital context, features such as personalized recommendations and real-time interactions with sellers during the campaign can further enhance buying tendencies (Chan et al., 2017; Yang & Kim, 2023). Some researchers have focused on impulsive buying behavior on livestream platforms (Ming et al., 2021; Evangelin & Vasantha, 2022)

### Interpersonal Interaction

Interpersonal interaction is regarded as a method of building consumer relationships, enhancing corporate image, and providing advantages for enterprise marketing (Wei & Yuan, 2019). The interaction between the livestream host and customers involves the exchange of information, opinions, and feedback in real-time (Kang et al., 2021). Streamers' communication styles, expertise, and attractiveness play crucial roles in shaping viewers' experiences and purchase intentions (Liao et al., 2022). Liao et al. (2022) also stated that the communication style, expertise, and attractiveness of the streamer play an important role in shaping the viewer experience and purchase intention. Interaction between viewers and purchasers influences impulsive purchase behavior, mediated by channel credibility, consistency, and content quality (Onofrei et al., 2022; Ferry et al., 2023)

Watching livestream sales (versus watching pre-recorded videos) makes users feel more connected to a salesperson. The reason for this is the feeling of “being there” and the presence of the live streamer as well as the increased attention of other viewers in the same real-time.

Interpersonal interactions from livestream help viewers enhance their enjoyment and increase viewing (Duani et al., 2022). Similarly, Xu et al. (2020) showed that attractiveness, interpersonal interactions, and information quality positively influence perceived emotions, which in turn influences hedonistic and impulsive consumers to make purchases. Therefore, the following research hypothesis is proposed:

*H1: Interpersonal interactions have a positive impact on impulsive buying behavior.*

*H5: Interpersonal interactions have a positive impact on perceived enjoyment.*

### **Brand Awareness**

Chen and Zhang (2020) stated that viewers with higher brand awareness can increase their liking, leading to positive associations with the product and promoting emotional purchasing behavior. Products with attractive reputable packaging and labels are factors that shape brand awareness for viewers because beautiful packaging eliminates some negative evaluations (Husnain & Akhtar, 2016). In addition, according to Ahmed et al. (2021), customers' familiarity with a brand will also be enhanced if they have used the product before, are widely advertised in the market, and are often mentioned. In impulse buying, decisions are often made quickly and with limited information. Lee and Kim (2020) argue that when consumers are familiar with a brand, they tend to associate it with positive past experiences such as high-quality products, good customer service, or smooth previous purchases. These positive associations enhance cognitive enjoyment during online shopping. A known brand often provides an optimized and easy-to-use online shopping process. Consumers do not have to worry about learning too much information as they already have trust in the brand, which increases enjoyment during the shopping process. proposed research hypotheses are as follows:

*H2: Brand awareness has a positive impact on impulse buying behavior.*

*H6: Brand awareness has a positive impact on perceived enjoyment.*

### **Scarcity Promotion**

Purchase decisions, panic buying, urgency to buy, and impulse buying behavior have all been examined with perceived scarcity as an independent variable (Gentry et al., 2019; Wu et al., 2021). According to Wu et al. (2021), scarcity promotion has a beneficial effect on panic purchasing and promotes impulsive buying. Zhang et al. (2022) also showed that the promotion of scarcity can lead to impulse purchases. When products are represented as

being in short supply or only available for a short period, customers may be motivated to buy them rapidly without giving their needs or wishes due consideration (Jain, 2023). Under the limited-time purchasing condition, respondents were more eager to buy the product and reduce their plans to search further in the future. Marketing research has found that scarcity promotion can influence the perception of goods by increasing their attractiveness and desire (Lynn, 1991). This is because scarcity promotion seems to create a sense of urgency among buyers and results in more purchases, shorter searches, greater satisfaction, and increased perceived enjoyment of purchased products (Aggarwal et al., 2011). Hence, the following hypothesis is proposed:

*H3: Scarcity promotion has a positive effect on impulsive buying behavior.*

*H7: Scarcity promotion has a positive effect on perceived enjoyment.*

### **Discount Prices**

Discount prices are an action-oriented method of advertising that marketers frequently use to highlight a particular item or service and to encourage consumers to make purchases. Moreover, discount price is a multifaceted approach that uses several tactics and plans to generate immediate interest, boost the sales of current offerings, and launch new products or services. Impulsive online purchasing behavior is significantly and positively impacted by discounts in pricing (Kim et al., 2007). Numerous studies have discovered that discounts provided by online retailers influence consumers' impulsive purchasing behavior, both directly and indirectly ways (Rachmawati, 2022; Liantifa & Haryono, 2022). Additionally, Kahneman et al. (1992) claimed that humans are more likely to make decisions based on relative comparisons rather than absolute values. Broadly, positive moods induced for various reasons (e.g., recalling a happy event) (Schwarz et al., 1983) can systematically influence subsequent related and unrelated evaluative judgments (Cohen et al., 2008). Furthermore, price promotions may dampen the "pain of payment" experienced from the transaction, thereby allowing consumers to enjoy consuming a product more (Knutson et al., 2007; Patrick et al., 2006). Thus, it can be concluded that price promotions can enhance the perceived enjoyment derived from consumption. Therefore, the following hypothesis was proposed:

*H4: Discount prices have a positive impact on impulsive buying behavior.*

*H8: Discount prices have a positive impact on perceived enjoyment.*

## Perceived Enjoyment

Perceived enjoyment as intrinsic motivation refers to the delight and pleasure experienced when engaging in a specific action. The primary determinant of customer attitudes and intentions toward an action is perceived enjoyment (Eroglu et al., 2001). Saad and Metawie (2015) highlighted the strong correlation between impulsive online purchasing behavior and perceived pleasure. Online buyers are more likely to participate in more online surfing and make more impulsive purchases if they have positive emotions toward their purchases (Beatty & Ferrell, 1998). Previous research has found that perceived enjoyment mediates impulsive online purchases (Kim et al., 2007; Parboteeah et al., 2009; Floh et al., 2013). Thus, the following hypothesis was proposed:

*H9: Perceived enjoyment has a positive impact on impulsive buying behavior.*

*H10: The mediating role of perceived enjoyment.*

The discussion above suggests that a variety of influencing variables may positively affect perceived enjoyment and that impulsive purchase behavior is significantly positively impacted by perceived enjoyment. Thus, our study suggests that influencing consumers' perceived enjoyment, price promotion, scarcity promotion, brand awareness, and interpersonal contact may indirectly influence consumers' impulsive purchasing behavior. Therefore, the following hypothesis was proposed:

*H10a: Perceived enjoyment mediates the relationship between interpersonal interactions and impulsive buying behavior.*

*H10b: Perceived enjoyment mediates the relationship between brand awareness and impulsive buying behavior.*

*H10c: Perceived enjoyment mediates the relationship between scarcity promotion and impulsive buying behavior.*

*H10d: Perceived enjoyment mediates the relationship between discount prices and impulsive buying behavior.*

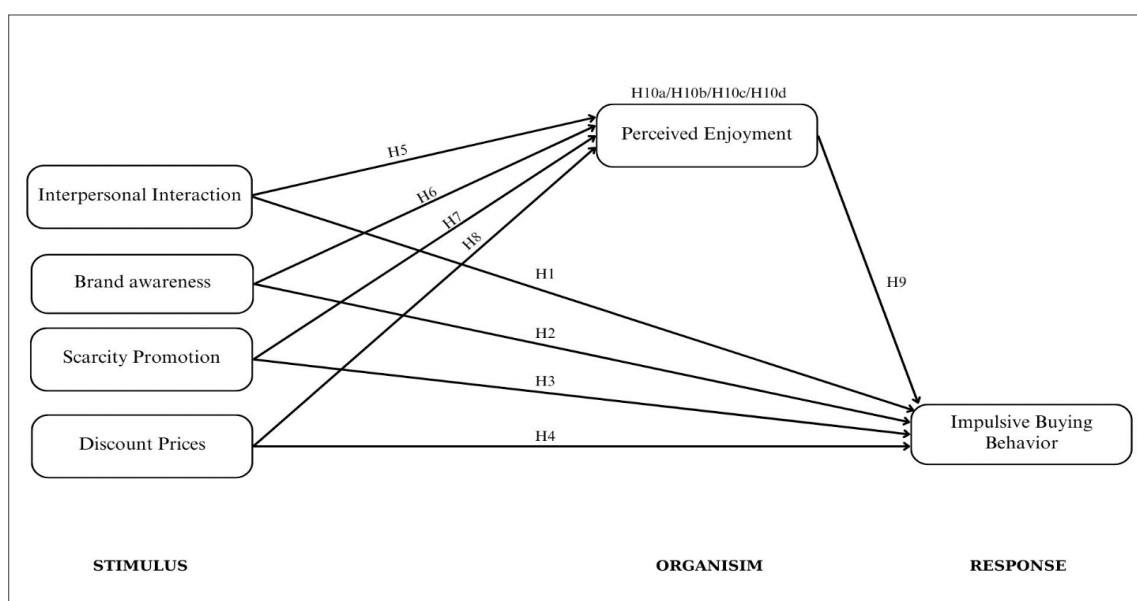


Figure 1. Research model: Source: by authors, 2024

## RESEARCH METHODS

### Sampling and Pilot Test

The target participants of this study were from Ho Chi Minh City, Vietnam. Upon completion of the questionnaire design, five target subjects were first asked to fill out the questionnaire and participate in a direct interview to assess their understanding of the questionnaire's content and to make modifications to improve readability. Before the final survey, another 25 participants were invited to participate in a pre-test to confirm the questionnaire's quality and response results. Subsequently, the authors reviewed and confirmed the pre-test results before further evaluation by the instructor. Subsequently, an example verification was performed.

### Data Collection

The questionnaire consisted of an introductory question, demographic inquiries covering age, gender, income, academic level, literacy skills, and work scope, as well as a total of twenty - four measurement items distributed across six variables. To guarantee the relevance of the responses, an initial screening question was employed to identify participants who had bought beauty and personal care through live streaming within the past 6-12 months. Data were collected via an online survey utilizing the convenience non-probability sampling method, which is based on the accessibility of convenience sampling or the object. The online survey link was active for a two-week period in mid-August, 2024. To ensure that the

requirements were met, the majority of the sample came from the author's network on Facebook as well, and the questionnaire was delivered to the group to make sure it fit with the potential users. To motivate respondents, the study provided learning material to each participant.

Because the size of the target population in this research is difficult to define, the formula (Cochran, 1997) was employed to determine the minimum sample size used in the quantitative analysis. The minimum sample size was 289 patients. Among the collected questionnaires, we obtained a sample of 599. After cleaning, the respondents' answers were 390, which meets the requirement of sample size conditions.

$$n = \frac{Z^2 \times p(1 - p)}{e^2} = \frac{1.96^2 \times 0.25(1 - 0.25)}{0.05^2} = 289$$

Where,

e: margin of error (5%)

p: population proportion (25%) (Bùi, 2023)

Z: standard Error associated with the chosen level of confidence (1.96)

n: sample size

**Table 1.** Result of construct reliability and validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BA	0.671	0.699	0.798	0.502
DP	0.791	0.796	0.864	0.615
IBB	0.761	0.772	0.860	0.673
II	0.666	0.667	0.800	0.500
PE	0.761	0.770	0.840	0.513
SP	0.725	0.744	0.846	0.648

Source: by authors, 2024

### Hypothesised Direct Relationship

**Table 2.** Result of Direct Relationship

Hypothesis	Path	Path Coefficient (β)	Standard deviation (STDEV)	T values	P values	Result
H1	II → IBB	0,013	0,057	0,224	0,823	Not supported
H2	BA → IBB	0,05	0,06	0,831	0,406	Not supported
H3	SP → IBB	-0,137	0,057	2,399	0,017	Supported
H4	DP → IBB	0,171	0,058	2,933	0,003	Supported
H5	II → PE	0,277	0,05	5,582	0	Supported
H6	BA → PE	0,291	0,051	5,684	0	Supported
H7	SP → PE	0,058	0,046	1,256	0,209	Not supported
H8	DP → PE	0,215	0,058	3,682	0	Supported
H9	PE → IBB	0,384	0,062	6,229	0	Supported

Source: by authors, 2024

## RESEARCH RESULTS

### Demographic Profile

Based on the collected demographic data, there was a significant gender disparity in the survey participants regarding impulsive buying behavior in the personal care and beauty field, with 79% being female and much higher than that of males (21%). The majority of respondents were aged 19-24 years old (Gen Z, 79.2%), 16-18 years old (19.2%), 24-27 years old (1.6%). The participants were high school or university students (97.4%). Regarding income, including allowances from their families, more than half of the respondents earned less than 200 USD per month. All survey participants had an educational level of at least high school (11.8%), with the majority either currently in or having completed university education (87.9%).

### Construct Reliability

According to Cronbach's Alpha results as shown in the table below, the research team found that the reliability values ranged from 0.666 to 0.791. With structural reliability rho\_c, the values in Table 1 are all satisfactory (above 0.7). According to Nunnally and Bernstein (1994), composite reliability from 0.7 - 0.9 is the optimal level. This is considered a good measurement scale.

Testing the direct impact relationship: Based on the indicators, hypotheses H3 and H4 were accepted with P-values < 0.05, and T-values > 1.65. That is, discount prices and scarcity motions directly impact Impulsive Buying Behavior. Brand Awareness and Interpersonal Interaction have a direct impact on Perceived Enjoyment but indirectly impact Impulsive Buying Behavior with P-values > 0.05, and T-value < 1,65. Therefore, Hypotheses H1, H2, and H7 are not accepted.

**Mediation Analysis**

Table 3 presents the results of the mediation analysis. All three hypotheses, H10a, H10b, and H10d, are supported. Perceived Enjoyment emerged as a significant mediator

in the relationship between Interpersonal Interactions/ Brand Awareness/Discount Prices and Impulsive Buying Behavior. According to Zhao (2010) and Baron (1986), H10d is a partial mediation because the P-value is significant and the direct relationship is statistically significant. Conversely, H10a and H10b were also supported as indirect relationships (P-value = 0), but a direct relationship was not confirmed. Therefore, these were full mediation relationships. Finally, the mediation relationship between Scarcity Promotion and Impulsive Buying Behavior was not significant because the P-value > 0.05 and there was a zero value within the 2.5% - 97.5% confidence interval and the direct relationship was supported in Table 2. Thus, H10c was a no-effect, non-mediation.

**Table 3.** Result of mediation effects

Hypothesis	Path	Path Coefficient (β)	Standard deviation (STDEV)	T values	P values	Bootstrapping 95% Confidence Interval		Results
						Lower	Upper	
H10b	BA → IBB	0.112	0.027	4.153	0	0.065	0.171	Full mediation
H10d	DP → IBB	0.083	0.026	3.134	0.002	0.035	0.138	Partial mediation
H10a	II → IBB	0.106	0.024	4.339	0	0.065	0.159	Full mediation
H10c	SP → IBB	0.022	0.019	1.167	0.243	-0.012	0.064	No-effect nonmediation

Source: by authors, 2024

**Table 4.** Result of total effects

Path	Path Coefficient (β)	Standard deviation (STDEV)	T values	P values	Bootstrapping 95% Confidence Interval		Results
					Lower	Upper	
BA → IBB	0.162	0.064	2.549	0.011	0.035	0.284	Supported
BA → PE	0.291	0.052	5.659	0	0.191	0.394	Supported
DP → IBB	0.254	0.06	4.236	0	0.129	0.364	Supported
DP → PE	0.215	0.058	3.703	0	0.1	0.329	Supported
II → IBB	0.119	0.057	2.084	0.037	0.005	0.229	Supported
II → PE	0.277	0.048	5.783	0	0.181	0.367	Supported
PE → IBB	0.384	0.061	6.345	0	0.255	0.495	Supported
SP → IBB	-0.115	0.058	1.982	0.048	-0.228	-0.001	Supported
SP → PE	0.058	0.047	1.238	0.216	-0.036	0.146	Not supported

Source: by authors, 2024

**Total Effects**

Table 4 summarizes the overall effects of the variables in the research model. Brand Awareness, Discount Prices and Interpersonal Interactions had a positive and strong influence on Impulsive Buying Behavior and Perceived Enjoyment ( β greater than 0.1). Among them, Discount

Prices had the strongest influence on Impulsive Buying Behavior, with β = 0.254. However, Scarcity Promotion had a negative influence on Impulsive Buying Behavior and a weak positive influence on Perceived Enjoyment (β = -0.115 and 0.058, respectively).

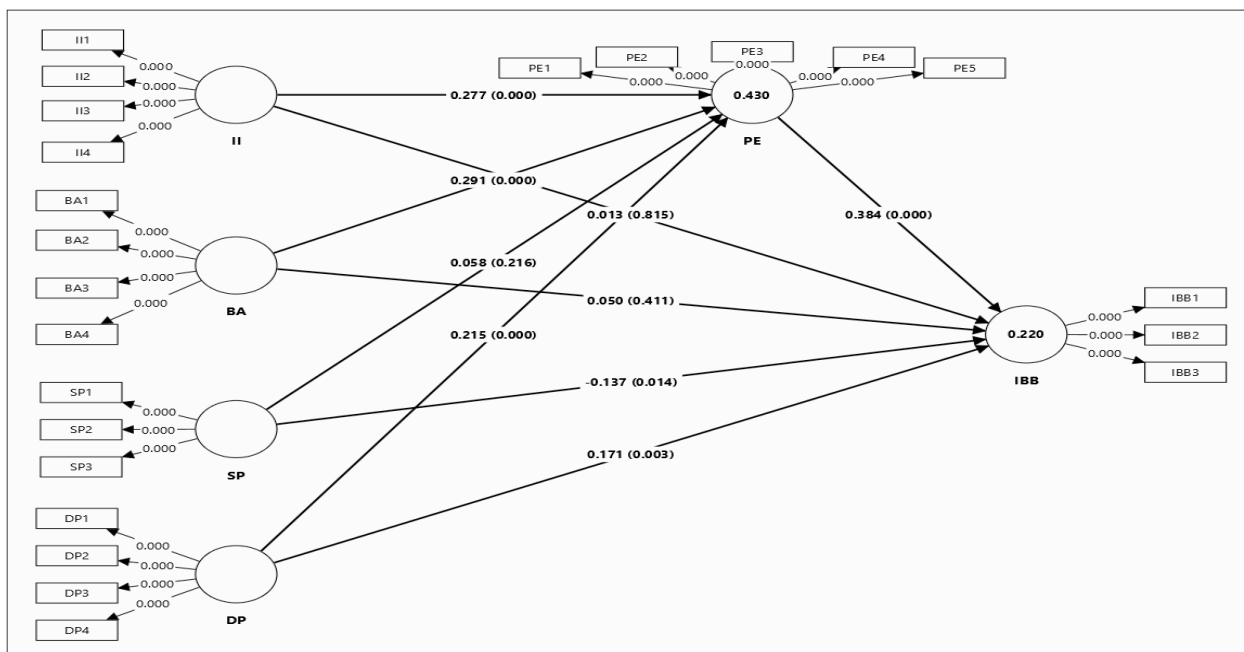


Figure 2. Model research after modified. Source: by authors, 2024

## DISCUSSION

For the interpersonal interaction construct, these findings significantly differ from prior research conducted by Huang and Suo (2021) and Ferry et al. (2023) in the literature review that interpersonal interaction, both the interaction consumers-streamers and consumers-consumers, does not directly affect consumers' impulse buying decisions (P-value = 0.823 and  $\beta = 0.013$ , respectively) (Table 2). Although our results do not support this hypothesis (H1), we found that interpersonal interaction had an indirect effect on impulse buying behaviors through perceived enjoyment (P = 0.037 and  $\beta = 0.119$  (Table 4). As proposed by Xiaolin et al. (2024), the evidence we found points to online consumers becoming more rational in decision-making, focusing on product attributes rather than external factors. However, live streaming can still affect consumer engagement and improve perceived enjoyment. This means that impulsive buying behavior can be enhanced.

Surprisingly, the results show that brand awareness did not directly affect impulsive buying behavior, with P-value = 0.823 and  $\beta = 0.013$  (Table 2) (H2 not supported). Nevertheless, brand awareness had an indirect impact on impulsive buying behavior through perceived enjoyment as a mediating factor, with P-values = 0 and  $\beta = 0.112$  (Table 4). This could be explained by the fact that, in the context of the current study, customers are unconsciously aware of brand details about beauty and personal care and may not recall the specific details, but they are more likely to include the brand in the consideration of positive attitudes when making a purchase decision (Ramesh et al., 2018).

According to the study, scarcity promotion directly affected impulsive buying behavior with P-value = 0.017

and  $\beta = -0.137$  (Table 2), but did not indirectly affect impulsive buying behavior through perceived enjoyment with P-value = 0.209 and  $\beta = 0.058$  (Table 4). Moreover, the accurate statistic of  $\beta$  is  $-0.137$  (Table 2), which means that scarcity promotion harms impulsive buying behavior. We attempted to find a similar research model in the related literature for comparison. With regard to H3, Gou et al. (2017) suggest that scarcity messages can maximize impulsive behavior when arousal is stimulated through the provision of scarcity messages (Jeong & Kwon., 2012; Coulter & Roggeveen, 2012) product scarcity indicates the high quality of a product. However, contrary to our original hypothesis, our findings about scarcity promotion influencing impulsive purchase behavior give the opposite result, that is, the smaller the scarcity promotion, the larger the impulsive buying behavior.

Discount prices have a major impact on impulsive buying for online purchases made on e-commerce platforms. According to the study results, discount prices affect impulsive buying behavior both directly, with P-values = 0.003 and  $\beta = 0.171$  (Table 2), and indirectly, through perceived enjoyment, with P-values = 0 and  $\beta = 0.215$  (Table 4). Additionally, discount prices influence impulsive buying behavior at  $\beta = 0.171$  (Table 2), the highest statistic among our four dependent variables that affected impulsive buying. When people see large discounts, they see a greater advantage, which increases their likelihood of participating in impulsive purchasing. Therefore, discount prices can lead to a desire to make impulse purchases (Saputro, 2019). Some previous studies have the same result; for example, Kim and Park (2019) suggest that customers are more inclined to make impulsive purchases on e-commerce platforms when they notice large discounts.

## CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

Motivated by the prosperity of live-streaming commerce, this study explores consumers' impulsive buying behavior. Through the literature review on live streaming, study has comprehensively organized the influence factors on consumer behavior in live streaming commerce, including scarcity promotion, discount prices, interpersonal interaction, brand awareness and perceived enjoyment by conceptualizing within the S-O-R framework. The study then conducted a survey to test the hypotheses in the Vietnamese context and received a total of 390 valid sample questionnaires on buying beauty and personal care on the live streaming platform. Subsequently, this study adopted PLS-SEM statistical analysis as an empirical research evaluation.

This study had several limitations. Most of the collected samples are from students, so the income levels and spending on online shopping through livestream in the beauty and personal care sector reflect the impulsive buying behavior. Additionally, this study was limited by its cross-sectional design. Cross-sectional studies, which are useful for collecting data at specific points in time, have certain limitations. *Firstly*, they could not determine causal relationships between variables and only reflected concurrent relationships at the time of the study. *Secondly*, the data collected may have been influenced by uncontrolled external factors, leading to biased results. *Thirdly*, as data are collected at only one point in time, this type of study cannot track changes in variables over time, resulting in conclusions that may not accurately reflect reality as the environment changes.

In the future, the scope of research should include not only Gen Z but also many other age groups (middle-aged and retirees) with an increase in the sample size. Future research should conduct a comparative analysis of the impulsive buying behavior of different groups of people. Moreover, future research can further investigate other influencing factors, such as attitude towards streaming services, personality with streaming services, or product-related factors of live-streaming e-commerce consumers with more theory that could be applied in future studies. In the future, it will be possible to apply scientific research types with longitudinal studies that will observe variables on subjects over a longer period, thereby providing more accurate results for indicators and a more sustainable understanding of theoretical significance.

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