ẢNH HƯỞNG CỦA QUẢNG CÁO CÁ NHÂN HÓA TRÊN MẠNG XÃ HỘI ĐẾN XU HƯỚNG MUA SẮM BỐC ĐỒNG ĐỐI VỚI CÁC SẢN PHẨM CÓ MỨC ĐỘ QUAN TÂM THẤP (LOW-INVOLVEMENT PRODUCTS) TẠI VIỆT NAM

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Tóm tắt

Trong lĩnh vực tiếp thị số, tác động của quảng cáo cá nhân hoá đối với xu hướng mua sắm bốc đồng (IBT) của người tiêu dùng vẫn là một chủ đề quan trọng nhưng chưa được nghiên cứu sâu, đặc biệt là đối với các sản phẩm có mức độ quan tâm thấp. Do đó, nghiên cứu này nhằm khám phá ảnh hưởng của cảm nhận cá nhân hóa trong quảng cáo đối với xu hướng mua sắm bốc đồng trực tuyến của người tiêu dùng Việt Nam, tập trung vào nhóm sản phẩm ít được quan tâm trên nền tảng mạng xã hội. Dựa trên mô hình Kích thích - Tổ chức - Phản ứng (Stimulus - Organism - Response, S-O-R) kết hợp với Mô hình Khả năng Thuyết phục (Elaboration Likelihood Model, ELM), nghiên cứu phân tích vai trò trung gian của cảm nhận về tính mới mẻ và mức độ liên quan trong mối quan hệ này. Dữ liệu được thu thập từ 245 phản hồi hợp lệ trong khoảng thời gian từ tháng 4 đến tháng 5 năm 2025 và được phân tích bằng phương pháp PLS-SEM thông qua phần mềm SmartPLS 4. Kết quả cho thấy quảng cáo cá nhân hoá làm gia tăng đáng kể xu hướng mua sắm bốc đồng của người tiêu dùng, cả trực tiếp và gián tiếp thông qua việc nâng cao cảm nhận về tính mới và mức độ liên quan. Dựa trên những phát hiện này, nghiên cứu đề xuất các khuyến nghị thực tiễn dành cho các nhà tiếp thị nhằm xây dựng chiến lược quảng cáo cá nhân hoá hiệu quả hơn, đặc biệt hướng tới nhóm sản phẩm có mức độ quan tâm thấp.

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THE IMPACT OF PERSONALISED SOCIAL MEDIA ADVERTISING ON IMPULSE BUYING TENDENCY FOR LOW-INVOLVEMENT PRODUCTS IN VIETNAM

Abstract

In the literature on digital marketing, the influence of personalised advertising on consumers' impulse buying tendency (IBT) has remained an underexplored yet important topic, especially for low-involvement products. This study therefore examines the impact of perceived personalised advertising on the online impulse buying tendency of Vietnamese consumers, focusing on low-involvement products within the context of social media platforms. Drawing upon the Stimulus - Organism - Response (S-O-R) framework integrated with the Elaboration Likelihood Model (ELM), this research investigates how perceived novelty and perceived relevance mediate this relationship. Data were collected from 245 valid survey responses between April and May 2025, and analysed using PLS-SEM via SmartPLS 4. The findings reveal that personalised advertising significantly increases consumers' tendency to buy on impulse, both directly and indirectly through enhancing perceptions of novelty and relevance. Based on these insights, the study offers practical recommendations for marketers aiming to design more effective personalised advertising strategies targeting low-involvement products.

Keywords: personalised advertising, impulse buying tendency, low-involvement products, social media, Vietnam.

1. Introduction

Impulse buying (IB) is a widespread consumer behaviour that significantly influences purchasing decisions across many industries. Research shows that it accounts for a large share of consumer expenditure: about 40% of online spending (Verhagen and van Dolen, 2011) and up to 60% of all purchases (Amos, Holmes, and Keneson, 2014). Recently, researchers have focused on Impulse Buying Tendency (IBT) - a psychological trait reflecting an individual's likelihood to act on impulse (Utama et al., 2021). The effect of IBT is especially pronounced with low-involvement products - items that are inexpensive, frequently purchased, and require little cognitive effort to choose, such as snacks, cosmetics, or household goods. For instance, over 80% of chocolate purchases are reportedly made on impulse (Watkins, 1984). These products are highly responsive to external stimuli such as price discounts, bonus packs, and in-store displays or advertising and promotions (Asghar, Abbasi and Zafarullah, 2015). Among the factors researched, perceived advertising personalisation (PAP) stands out as a significant driver.

Perceived advertising personalisation (PAP) has emerged as a significant factor driving IBT by making ads feel more relevant and engaging (Dodoo, 2019; Christian et al., 2022). By tailoring content based on individual preferences and behavioral data, advertisers can effectively engage consumers, triggering impulse buying tendencies (Dawson and Kim, 2010). However, the effect is nuanced as others reveal that overly personalised ads might reduce trust

and trigger privacy concerns, which can suppress purchase tendency. This underscores the importance of understanding consumer perceptions of personalised advertising.

Moreover, this study focuses on the Vietnamese market, where the rise of e-commerce and rapid digital adoption have intensified consumers' exposure to personalised advertising. Vietnam, with over 70% internet penetration and among the highest social media usage rates in Southeast Asia (Le and Tran, 2020), offers a dynamic context to explore how personalised ads affect IBT, particularly for low-involvement products.

By exploring the impact of personalised advertising and impulse buying tendency, this research seeks to shed light on the psychological mechanisms through which personalised advertising shapes consumer tendency for low-involvement products in the Vietnam context. Based on the Stimulus-Organism-Response (S-O-R) framework, the research considers personalised ads as the stimulus, consumer perceptions as the organism's psychological state, and impulse purchase tendency as the response. By integrating the Elaboration Likelihood Model (ELM), the study also emphasises how low-involvement products rely on peripheral cues to increase the impulsive tendency through social media platforms.

To the best of the author's knowledge, this study is among the first to explore how perceived personalised social media advertising influences IBT for low-involvement products in Vietnam. Existing research often overlooks three aspects: the difference between low- and high-involvement products, IBT as a distinct psychological trait, and the cognitive and emotional mediators. Therefore, the research aims to: (1) clarify key theoretical concepts, (2) examine the mediating role of perceived novelty and relevance, (3) understand psychological mechanisms linking personalised ads to IBT, and (4) provide practical recommendations for businesses to better design personalised advertising targeting low-involvement products.

2. Literature Review and proposed research model

2.1. Personalised advertisements in social media

Early definitions focused on meeting individual needs (Albert et al., 2004), whereas later views highlight data-driven, context-aware strategies (Aksoy et al., 2021). Personalised ads are crafted from user data to boost relevance and engagement (Montgomery & Smith, 2009; Baek & Morimoto, 2012). This approach is especially effective on social media due to rich digital footprints and interactive features enabling precise targeting (Dodoo & Wu, 2019). Yet, effectiveness depends more on consumers' perceived personalisation than the actual level (De Keyzer et al., 2022). For low-involvement products, emotional cues and perceived relevance strongly influence impulse buying tendency (Akbari, 2015). Therefore, this study focuses on perceived personalised advertising and its effect on impulse buying tendencies among Vietnamese social media users, especially for low-involvement products where emotional factors are influential. Recent studies suggest personalised ads increase perceived relevance and novelty, enhancing emotional and cognitive responses that lead to IBT (Christian et al., 2021; Aslam et al., 2021). Overall, personalised advertising promotes impulse buying tendency by boosting perceived relevance and novelty, which mediate the effect on IBT - a trait reflecting consumers' predisposition to buy spontaneously (Weinberg & Gottwald, 1982).

2.2. Online impulse buying tendency

Online impulse buying tendency (OIBT) refers to a psychological predisposition to make spontaneous, unreflective purchases rather than just observed behaviour (Rook & Fisher, 1995; Sun & Wu, 2011). Rooted in early work describing impulse buying as emotionally driven and unplanned (Clover, 1950; Stern, 1962; Rook, 1987), later research highlights the role of both internal traits and external stimuli (Xiao & Nicholson, 2012; Kathuria & Bakshi, 2024). Personalised social media ads act as powerful external cues by matching user interests, boosting advertising's relevance and emotional engagement (Reena & Udita; Aslam, 2021), though OIBT also depends on consumers' internal interpretations (Lim & Yazdanifard, 2015). Perceived ad relevance and novelty are key mediators; relevance aligns content with personal values, enhancing effectiveness (Celsi & Olson, 1988), while novelty increases arousal and exploratory buying (Sebayang et al., 2019; Christian et al., 2021). Thus, this study examines how these perceptions link personalised ads to OIBT to reveal the psychological processes behind spontaneous online purchases.

2.3. Proposed Research model

To develop the proposed model examining the impact of personalised social media advertising on impulse buying tendency, this study integrates two key theories: the Stimulus-Organism-Response (SOR) model (Mehrabian & Russell, 1974), Elaboration Likelihood Model (ELM), developed by Petty and Cacioppo (1986)

The Stimulus-Organism-Response (S-O-R) model (Mehrabian & Russell, 1974) explains how external stimuli shape internal states, which then drive behavioural responses. In marketing, it has been used to study how personalised ads and other cues influence purchase intentions and impulse buying (Chen & Yao, 2018; Dam, 2023). Recent studies apply S-O-R to personalised advertising, showing that stimuli like tailored social media ads trigger perceptions of novelty and relevance (organism), which then increase impulse buying behavior (response) (Aslam, 2020; Yaqub et al., 2023). While earlier research focused on observable behaviours, newer work recognises that impulse buying tendency (IBT) itself can serve as a response variable, shaped by stimuli and internal evaluations (Bansal and Goyal, 2020) especially in digital contexts. In this study, perceived personalisation acts as the stimulus reflecting consumers' interpretation of ads as tailored to them. The organism component includes perceived novelty and relevance as mediators, and the response is IBT. This framework helps explain how personalised ads on social media translate into psychological readiness to purchase, providing a clear pathway from external marketing cues to spontaneous buying tendencies.
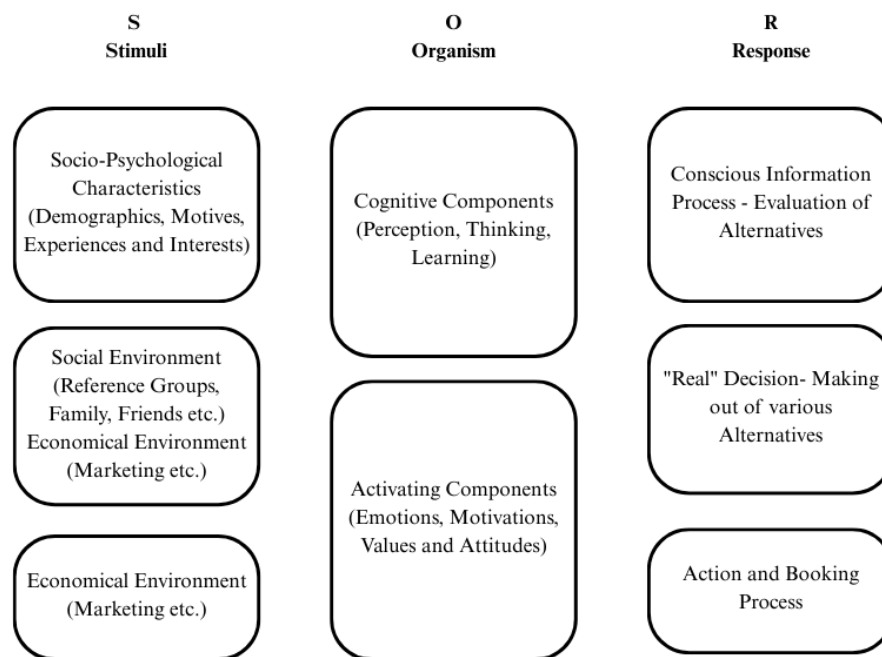
Figure 1: The Stimulus - Organism - Response model

Source: Hochreiter et al., 2023

The Elaboration Likelihood Model (ELM) by Petty & Cacioppo (1986) explains how people process persuasive messages via the central route (thoughtful analysis) or the peripheral route (surface-level cues) (Cho, 1999; Petty et al., 1997). The central route requires motivation and leads to durable attitude change (Cyr et al., 2018), whereas the peripheral route prompts quick, affective reactions with less cognitive effort (Yalch & Elmore-Yalch, 1984; Zhou, 2022). In digital marketing, recent work (Pan & Zhang, 2023) shows peripheral cues like social climate often have stronger effects on attitudes toward social media ads. Notably, Petty and Cacioppo (1983) explained that consumers with high product involvement process information via the central route, while those with low involvement are more influenced by the peripheral route. Here, perceived novelty and relevance function as peripheral cues that emotionally engage users, prompting spontaneous purchasing tendencies (Dawson and Kim, 2009; Coley and Burgess, 2003). Emotional reactions like surprise or personal resonance drive impulse buying without detailed evaluation (Fripp, 2023; Phelps, 2006). Thus, applying the ELM helps explain how personalised social media ads increase impulse buying tendency by triggering low-effort, affective responses, especially for low-involvement products.

Drawing on the theoretical framework discussed above, we propose the following hypothesis:

According to the S-R premise of S-O-R theory, advertising personalisation (Stimulus) can directly trigger impulsive buying tendency (Response) without deep cognitive processing, especially online (Aslam, 2020; Yaqub et al., 2023). While privacy concerns may cause some resistance (Christian et al., 2022; Boerman et al., 2021), other studies show personalised ads boost impulse buying by increasing relevance and engagement (Dodoo & Wu, 2019; Zafar et al., 2020; Chirtian et al., 2021). Therefore, the hypothesis posited in this study is that the

perception of advertisement personalisation positively influences online impulse buying tendency.

H1: Customer Perceived Advertisement Personalisation has a positive effect on their online impulse buying tendency.

Within the S-O-R model, personalised advertising acts as an external stimulus that increases consumers' perception of novelty (Organism) by making ads feel fresh and unexpected (Christian et al., 2021). Personalised content often breaks away from generic messaging, standing out and capturing consumer attention (Kalyanaraman & Sundar, 2006). Prior studies confirm that higher perceived personalisation enhances novelty, making ads appear more unique and interesting (Dodoo & Wu, 2019). Therefore, it is hypothesised that perceived advertisement personalisation positively affects perceived novelty.

H2: Customer Perceived Advertisement Personalisation has a positive effect on their perceived advertisement novelty.

According to the S-O-R framework, perceived novelty in advertising triggers psychological responses like curiosity and surprise that lead to IBT, especially for low-involvement products where decisions are made quickly (Sung et al., 2016; Adhikari, 2019). The ELM views novelty as a peripheral cue that boosts emotional engagement and spontaneous purchases (Dawson & Kim, 2009). Although some studies argue novelty alone may not directly cause impulse buying (Femilia & Mayasari, 2021; Dodoo & Wu, 2019), others find it increases emotional arousal and drives spontaneous buying (Yu & Bastin, 2010; Hausman, 2000). Based on this, the following hypothesis is proposed.

H3: Perceived Novelty of advertisement has a positive effect on online buying impulse tendency.

In S-O-R theory, advertising personalisation (Stimulus) boosts perceived relevance (Organism) by matching ads to consumers' interests, making them feel more meaningful (Bright & Daugherty, 2012). Research shows higher perceived personalisation leads to greater perceived relevance (Dodoo & Wu, 2019; De Keyzer et al., 2015), which then increases attention and positive cognitive responses (Odoom, 2022). Thus, this study proposes that perceived personalisation positively influences perceived ad relevance.

H4: Customer Perceived Advertisement Personalisation has a positive effect on the perceived advertisement relevance.

Perceived relevance, as a cognitive and emotional response (Organism), makes ads feel personally meaningful and speeds up decision-making (Jaiswal, 2024). Under S-O-R and ELM frameworks, relevant ads attract attention via peripheral cues, encouraging spontaneous purchases, especially for low-involvement products (Dodoo & Wu, 2019; Aslam, 2018). Studies also show perceived relevance boosts impulse buying by increasing ad noticeability and usefulness (Kalyanaraman & Sundar, 2006; Hanifah et al., 2021). Hence, the following hypothesis is proposed.

H5: Perceived Relevance of advertisement has a positive effect on online buying impulse tendency.

Recent studies show that perceived novelty and perceived relevance mediate the link between ad personalisation and online impulse buying tendency. Personalisation (Stimulus) makes ads feel fresh and unexpected (novelty as Organism), triggering emotional arousal and spontaneous purchases (Aslam et al., 2021; Christian et al., 2021). Meanwhile, perceived relevance aligns ads with consumers' interests, boosting engagement and purchase urgency (Dodoo & Wu, 2019; Aslam et al., 2021). Research also finds relevant ads enhance noticeability, trust, and perceived value, driving unplanned buying, especially for low-involvement products (Odoom, 2022; Zhu & Chang, 2016). In that context, the perception of relevance and novelty become important psychological mediators, connecting the external stimulus (Personalisation) and the final consumer's response (Impulse Buying tendency).

H6: Perceived Novelty mediates the relationship between Perceived Advertisement Personalisation and online impulse buying tendency.

H7: Perceived Relevance mediates the relationship between Perceived Advertisement Personalisation and online impulse buying tendency.
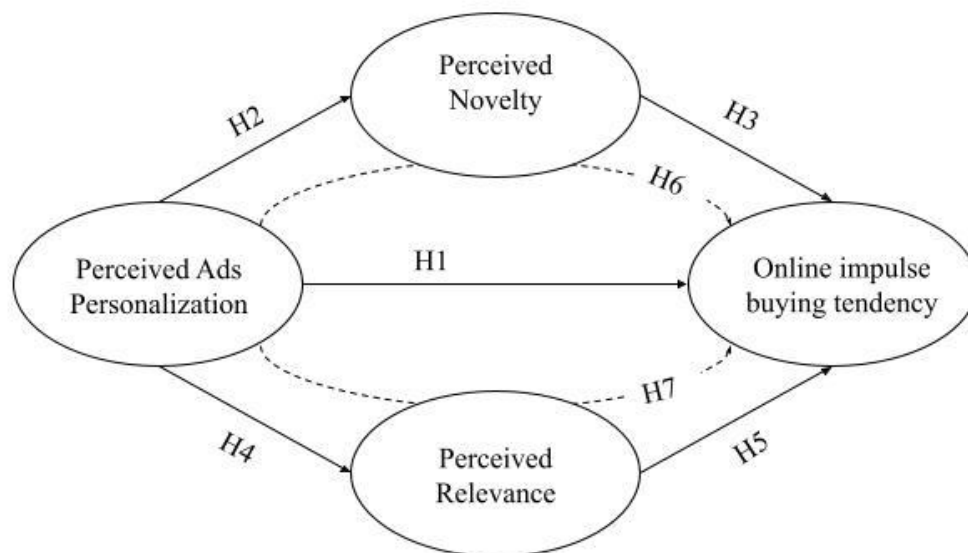

Figure 2. Proposed research model

Source: Author, 2025

3. Methodology

3.1. Measurement scale and questionnaire design

The study examines four key constructs: one independent variable (Perceived Advertisement Personalisation), two mediating variables (Perceived Novelty and Perceived Relevance), and one dependent variable (Online Impulse Buying Tendency). A structured questionnaire with 24 items was used, measured on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Specifically, Perceived Advertisement Personalisation was measured using three items from Komiak and Benbasat (2006), Perceived Novelty with three items adapted from Cox and Cox (1988), Perceived Relevance with ten items from Laczniak and Muehling (1993), and Online Impulse Buying Tendency with eight items from Sun and Wu

(2011). The questionnaire included two sections: demographic with shopping habit questions, and items capturing these four constructs.

3.2. Data collection and analysis

A quantitative research design was adopted using an online survey to examine how personalised social media ads influence impulse buying of low-involvement products in Vietnam. The survey, built on Google Forms, was distributed via Facebook, Instagram, Zalo, and email to reach digitally active Vietnamese consumers. It included demographic questions and Likert-scale items measuring key constructs. Data were analysed using PLS-SEM in SmartPLS 4, chosen for its suitability with complex models and non-normally distributed data. The model tested both direct and indirect effects of perceived ad personalisation on impulse buying tendency, mediated by perceived relevance and novelty. Reliability and validity were assessed through established criteria (e.g., outer loadings ≥ 0.7, Cronbach's Alpha ≥ 0.7, AVE ≥ 0.5, HTMT < 0.85). The structural model was evaluated via VIF and R^2 values, and mediation effects were examined using bootstrapping with 1,000 subsamples, following Zhao et al. (2010) to classify the mediation type.

4. Results

4.1. Descriptive data analysis

A total of 245 valid responses were collected through the structured survey questionnaire distributed to the target population. The demographic variables considered in the analysis included gender, age, frequency of purchasing low-involvement products, commonly used social media platforms, and types of low-involvement products frequently purchased.

The sample was slightly skewed towards female respondents (60.4%) and predominantly consisted of young adults aged 18–24 (78%). Most participants reported frequently purchasing low-involvement products: 64.1% did so more than five times per month and 12.7% weekly or more, reflecting strong relevance to the study topic. Questions about social media habits and types of low-involvement products that they frequently purchase, respondents were allowed to select multiple platform options, leading to a total frequency count exceeding the number of respondents answering these two questions. Regarding platform options primarily used, TikTok (171 mentions), Instagram (157), and Facebook (151) were the most popular platforms, while Shopee was also noted by 20 respondents, suggesting that some view it as both an e-commerce and content platform. For product categories, snacks and beverages (171), clothing and apparel (168), and personal care items (165) were the most frequently purchased, followed by fashion accessories (151), cosmetics (94), stationery (91), and home and kitchen items (80). Overall, the findings show high engagement with digital platforms and frequent low-involvement purchases, supporting the study's objectives.

Table 1. Participants' demographic statistics

Categories		Percent (%)	Frequency
Age	Under 18 years old	2.4	6
	18-24 years old	78.0	191

Categories		Percent (%)	Frequency
	25-34 years old	19.6	48
	Above 35 years old	0	0
Gender	Female	60.4	148
	Male	39.6	97
	Others	0	0
Frequency of purchasing low-involvement products	Rarely	11.4	28
	Occasionally (3-5 times/month)	11.8	29
	Frequently (More than 5 times/month)	64.1	157
	Very frequently (Weekly or more)	12.7	31
Primary social media usage	Facebook		151
	Instagram		157
	TikTok		171
	Shopee		20
Types of low-involvement products commonly purchased	Snacks and beverages		171
	Cosmetics and beauty products		94
	Personal care products (e.g: haircare, oral care)		165
	Fashion accessories (e.g: jewelry, bags, sunglasses)		151
	Clothing and apparel		168

Categories		Percent (%)	Frequency
	Home and kitchen items		80
	Stationery/School supplies		91

Source: Author (2025)

4.2. Measurement model analysis

Indicator reliability was assessed by examining outer loadings, with values ≥0.7 considered acceptable (Hair et al., 2017). Two items: PR1 ("The message of personalised social media ads say something important to me") and PR10 ("The message of personalised social media ads would give me new ideas") had outer loadings of 0.679 and 0.687 respectively and were removed to enhance the scale's measurement quality. This decision is supported by practical context: Vietnamese Gen Z consumers typically interact with social media ads quickly and emotionally rather than reflecting on deeper meanings or creativity, making these items less relevant and potentially confusing. After excluding PR1 and PR10, re-analysis showed that all remaining indicators achieved loadings above the recommended threshold (see Table 2).

To assess reliability, both Cronbach's Alpha (CA) and Composite Reliability (CR) were employed. All constructs reported CA and CR values above 0.7 (Henseler & Sarstedt, 2013), confirming good reliability. Notably, Online Impulse Buying Tendency (OIBT) had the highest CA at 0.886, while Perceived Novelty (PN) had the lowest acceptable CA at 0.706. All constructs reported CA and CR values above 0.7 (Henseler & Sarstedt, 2013), confirming good reliability. Notably, Online Impulse Buying Tendency (OIBT) had the highest CA at 0.886, while Perceived Novelty (PN) had the lowest acceptable CA at 0.706. Convergent validity was also examined using Average Variance Extracted (AVE). Following Hock and Ringle (2010), an AVE value above 0.5 is required; all constructs met this criterion, with the lowest AVE recorded at 0.520 (see Table 2). Together, these results demonstrate that the measurement model has acceptable reliability and convergent validity.

Table 2. Reliability and Validity Assessment of the Measurement Model

	Indicator	Outer Loadings	Cronbach's Alpha	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Perceived Advertising Personalisation (PAP)			0.816	0.889	0.729
	PAP1	0.919			
	PAP2	0.890			

	Indicator	Outer Loadings	Cronbach's Alpha	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
	PAP3	0.742			
Online impulse buying tendency (OIBT)			0.886	0.910	0.558
	OIBT1	0.840			
	OIBT2	0.718			
	OIBT3	0.727			
	OIBT4	0.715			
	OIBT5	0.755			
	OIBT6	0.730			
	OIBT7	0.760			
	OIBT8	0.721			
Perceived Novelty (PN)			0.706	0.835	0.628
	PN1	0.780			
	PN2	0.760			
	PN3	0.835			
			0.869	0.897	0.520
Perceived Relevance (PR)	PR2	0.737			
	PR3	0.716			
	PR4	0.719			
	PR5	0.713			
	PR6	0.722			

Indicator	Outer Loadings	Cronbach's Alpha	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
PR7	0.716			
PR8	0.721			
PR9	0.725			

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio, with all values below the recommended threshold of 0.85 (Clark & Watson, 1995), confirming that the constructs are distinct. Additionally, multicollinearity was checked using the Variance Inflation Factor (VIF). Following Kock's (2015) guideline that VIF values below 3 indicate acceptable collinearity, the analysis showed that all predictor constructs had VIF values well below this threshold. This confirms the absence of multicollinearity, ensuring that path coefficient estimates in the structural model are reliable.

Table 3. Discriminant Validity (HTMT) Ratio and VIF Values of the Higher-Order Constructs

	Heterotrait-Monotrait Ratio - HTMT				VIF			
	OIBT	PAP	PN	PR	OIBT	PAP	PN	PR
OIBT								
PAP	0.596				1.752		1.000	1.000
PN	0.524	0.496			1.189			
PR	0.571	0.682	0.335		1.591			

Note: OIBT = Online impulse buying tendency, PAP = Perceived Advertising Personalisation, PN = Perceived Novelty, PR = Perceived Relevance.

Source: Author (2025)

4.3. Structural model and hypothesis testing

4.3.1. Structural model analysis

The model's explanatory and predictive capabilities were evaluated using adjusted R^2, Q^2, and f^2 values. Adjusted R^2 results show the model explains 37.1% of the variance in Online Impulse Buying Tendency (OIBT), indicating moderate explanatory power; 36.8% in Perceived Relevance (PR); and a lower 15.4% in Perceived Novelty (PN), suggesting additional external factors may influence novelty perceptions. Predictive relevance (Q^2) values were all above zero (0.205 for OIBT, 0.182 for PR, and 0.093 for PN), meeting Ringle et al. (2018)'s criteria.

According to Cohen's framework (1988), an f² value below 0.02 indicates a very small effect, values between 0.02 and 0.15 represent a small effect, between 0.15 and 0.35 a medium effect, and values above 0.35 a large effect. Specifically, effect sizes (f²) show PAP has a small effect on OIBT (0.053), a medium effect on PN (0.188), and a large effect on PR (0.589). PN and PR each have small effects on OIBT, with 0.079 and 0.091, respectively.

Table 4: Measuring Coefficients (F², adjusted R², Q²)

Relationship	f²	R²			Q²		
		OIBT	PN	PR	OIBT	PN	PR
PAP → OIBT	0.053	0.371	0.154	0.368	0.205	0.093	0.182
PAP → PN	0.188						
PAP → PR	0.589						
PN → OIBT	0.312						
PR → OIBT	0.049						

Note: OIBT = Online impulse buying tendency, PAP = Perceived Advertising Personalisation, PN = Perceived Novelty, PR = Perceived Relevance.

Source: Author (2025)

4.3.2. Hypothesis testing

To assess the significance of the hypothesised relationships within the model, bootstrapping was conducted using 1,000 subsamples.

Table 5. Results of Structural Model

	Hypothesis	Original sample (O)	Standard deviation (STDEV)	T statistics	P values	Result
Direct relationship						
H1	PAP → OIBT	0.240	0.072	3.332	0.001	Accepted
H2	PAP → PN	0.397	0.048	8.262	0.000	Accepted
H3	PN → OIBT	0.242	0.055	4.358	0.000	Accepted
H4	PAP → PR	0.609	0.039	15.479	0.000	Accepted
H5	PR → OIBT	0.299	0.070	4.251	0.000	Accepted
Indirect relationship						
H6	PAP → PN → OIBT	0.096	0.027	3.547	0.000	Accepted, Partial mediation

	Hypothesis	Original sample (O)	Standard deviation (STDEV)	T statistics	P values	Result
H7	PAP → PR → OIBT	0.182	0.042	4.294	0.000	Accepted, Partial mediation

Note: OIBT = Online impulse buying tendency, PAP = Perceived Advertising Personalisation, PN = Perceived Novelty, PR = Perceived Relevance.

Source: Author (2025)

The hypothesis testing results confirm that Perceived Ad Personalisation (PAP) has a direct and significant effect on Online Impulse Buying Tendency (OIBT), with a coefficient of 0.240 and P-value of 0.001, supporting H1. Beyond this, PAP also positively influences Perceived Novelty (PN) ($\beta = 0.397$, $T = 8.262$) and Perceived Relevance (PR) ($T = 15.479$), which themselves significantly affect OIBT (PN: $\beta = 0.242$; PR: $\beta = 0.299$), confirming H2, H3, and H5. These findings highlight that consumers' perceptions of novelty and relevance play a key role in translating personalisation into impulsive buying tendencies.

In terms of indirect effects, the indirect effect through PN has a coefficient of 0.096 and T-statistic of 3.547, while the mediation through PR is stronger, with an indirect coefficient of 0.182 and T-statistic of 4.294, supporting H6 and H7. Altogether, the analysis supports all proposed hypotheses (H1–H7), demonstrating that personalised advertising drives impulse buying not only directly but also indirectly by enhancing perceived novelty and relevance, as summarised in Table 5.

5. Discussion

Using survey data from Vietnamese consumers and PLS-SEM analysis, all seven hypotheses were statistically supported, confirming the strong influence of personalised advertising on online impulse buying tendency (OIBT). First, H1 confirmed that perceived advertisement personalisation directly impacts OIBT, aligning with prior studies that highlight the persuasive effect of personalised content in triggering spontaneous purchases (Aslam et al., 2021). In the Vietnamese context where mobile-first behavior and high social media usage are prevalent, this effect is amplified (DataReportal, 2025). Vietnamese consumers respond strongly to ads tailored to their preferences, particularly for low-involvement products, where emotional engagement and relevance drive impulse behavior (Nguyen and Le, 2021; Mai et al., 2003).

Support for H2 and H3 shows that personalised ads increase perceived novelty, helping them stand out amid digital clutter and encouraging unplanned purchases particularly among Vietnam's younger consumers who prefer fresh, unique, and entertaining content (Dodoo, 2019; Nguyen et al., 2022; Aslam et al., 2021). These findings underline novelty as a psychological trigger that makes personalised advertising more effective in Vietnam's dynamic digital landscape. H4 and H5 validated the role of perceived relevance in driving impulsive behavior. Ads seen as relevant reduce resistance and encourage quick, emotionally-driven

decisions (Phau et al., 2004; Tam & Ho, 2006). Supporting this, Christian's study shows that perceived relevance improves attitudes toward ads, which predicts OIBT.

Lastly, H6 and H7 confirmed the mediating roles of perceived novelty and perceived relevance. These two factors work synergistically to channel the influence of perceived personalisation on impulse buying, aligning with the Stimulus-Organism-Response (S-O-R) model. PAP acts as the stimulus, perceived novelty and relevance are internal responses, and OIBT is the response. Together, they create a powerful emotional and cognitive impact that encourages spontaneous consumer actions. Thus, Vietnamese marketers should design ads that are not only personalised in appearance but also novel and contextually relevant to maximise impulsive responses.

6. Recommendation and conclusion

From the study findings, several practical recommendations have been proposed for businesses and advertisers of low-involvement products, especially in a digital-first, mobile-driven market like Vietnam.

Leveraging User Profiling. Businesses should use customer behavioural and preference data to develop personalised advertising strategies, as this directly boosts impulse buying tendency, particularly by increasing perceived novelty and relevance. Through the User Profiling Process, which collects explicit data (e.g., age, interests) and implicit data (e.g., browsing habits) (White et al., 2001), firms can build detailed profiles using methods like keyword and concept profiles (Moukas et al., 1997; Gauch et al., 2007). Integrating these profiles into advertising systems helps deliver ads that feel both novel and personally relevant, effectively triggering spontaneous buying decisions.

Optimising ad timing with Customer Journey Mapping and Touchpoint Optimization strategy. Beyond content, the timing of advertisement delivery plays a crucial role in triggering emotional responses and impulse buying. Businesses should adopt Customer Journey Mapping (CJM) to determine optimal touchpoints for delivering personalised content. This tool allows organisations to visualise and analyse each stage of the customer journey, enabling more precise decisions on when and how to deliver tailored content for maximum emotional engagement and purchasing impact. This helps identify the right moment, message, and medium for maximum impact and minimal intrusiveness (Chaffey & Ellis-Chadwick, 2016).

Applying Hawkins Stern's Impulse Buying Theory. Using Hawkins Stern's Impulse Buying Theory, which identifies four types of impulse buying: pure, reminder, suggestion, and planned, companies can tailor strategies to different consumer motivations.For reminder impulses, retargeting and personalised emails enhance perceived relevance by reconnecting consumers with previously viewed items. Suggestion impulses benefit from perceived novelty through fresh content like short videos or influencer posts. Planned impulse buying can be driven by personalised recommendations combined with flash sales to create urgency. Pure impulse buying, triggered by emotion or curiosity, responds well to creative formats like memes or interactive content. By aligning strategies this way, businesses can leverage relevance and novelty to boost spontaneous online purchases.

In conclusion, this study offers key insights into the relationship between perceived advertisement personalisation, perceived novelty, perceived relevance, and impulse buying tendency in the context of low-involvement products among Vietnamese social media users. Grounded in the Stimulus-Organism-Response (S-O-R) framework and the Elaboration Likelihood Model (ELM), the findings highlight the essential role of ad personalisation in activating consumers' perceptions of novelty and relevance - two key psychological mechanisms that, in turn, drive impulse buying tendency.

Although the study is limited by its focus on low-involvement products within a specific cultural setting and does not account for external factors such as age, social media habits, or psychological traits like self-control, it still contributes meaningfully to academic research and marketing practice. For marketers, the findings suggest that using personalised ads aligned with culturally relevant cues and social trends can increase impulse buying in Vietnam.

Future research should broaden the scope by examining different product categories, adopting cross-cultural comparisons, and incorporating additional psychological and contextual factors. These steps will help develop more effective, ethical, and culturally sensitive personalised advertising strategies in today's digital landscape.

References

Verhagen, T. and Van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information & Management*, 48(8), pp.320–327.

Amos, C., Holmes, G.R. and Keneson, W.C. (2014). A meta-analysis of consumer impulse buying. *Journal of Retailing and Consumer Services*, 21(2), pp.86–97.

Utama, A., Sawitri, H.S.R., Haryanto, B. and Wahyudi, L. (2021). Impulse Buying: The Influence of Impulse Buying Tendency, Urge to Buy and Gender on Impulse Buying of the Retail Customers. *Journal of Distribution Science*, 19(7), pp.101–111.

Watkins, T. (1984). Consumer Purchasing of Low-involvement Goods: Routine or Impulse? *Marketing Intelligence & Planning*, 2(2), pp.51–66.

Asghar, W., Abbasi, M.N. and Zafarullah, M., 2015. Impact of advertisement and sales promotion on consumer cognitive buying behaviour: a study of low involvement (FMCG) products. *Pakistan Journal of Social Sciences (PJSS)*, 35(2), pp.1–12.

Dodoo, N.A. and Wu, L. (2019). Exploring the anteceding impact of personalised social media advertising on online impulse buying tendency. *International Journal of Internet Marketing and Advertising*, 13(1), p.73.

Christian, J., Karissa, F., Handoyo, B. and Antonio, F. (2021). The Effect of Perceived Ads Personalization Toward Online Impulse Buying Tendency with Mediating and Moderating Variables, Evidence from Indonesian Millennial E-Commerce Customers. *KINERJA*, 25(1), pp.103–120.

Dawson, S. and Kim, M. (2010). Cues on apparel web sites that trigger impulse purchases. *Journal of Fashion Marketing and Management: An International Journal*, 14(2), pp.230–246.

Le, D.B. and Tran, T.P. (2020). *DIGITAL ECONOMY AND DIGITAL TRANSFORMATION IN VIETNAM A Reader Prepared for Roundtable Series on EVFTA, EVIPA and Post-COVID-19 Economic Recovery in Vietnam*.

Yousef, M., Dietrich, T. and Thiele, S.R. (2021). Social Advertising Effectiveness in Driving Action: A Study of Positive, Negative and Coactive Appeals on Social Media. *International Journal of Environmental Research and Public Health*, 18(11), p.5954.

Nguyen-Viet, B., Nguyen, Y.T.H., Le, T.H. and Do, S.B. (2022). Factors Driving Consumers' Attitudes towards Facebook Advertisements in an Emerging Market: A Case Study of Vietnam. *Asian Journal of Business and Accounting*, 15(1).

Albert, T.C., Goes, P.B. and Gupta, A. (2004). GIST: A Model for Design and Management of Content and Interactivity of Customer-Centric Web Sites. *MIS Quarterly*, 28(2), p.161.

Cavdar Aksoy, N., Tumer Kabadayi, E., Yilmaz, C. and Kocak Alan, A. (2021). A Typology of Personalisation Practices in Marketing in the Digital Age. *Journal of Marketing Management*, 37(11-12), pp.1091–1122.

Montgomery, A.L. and Smith, M.D. (2009). Prospects for Personalization on the Internet. *Journal of Interactive Marketing*, 23(2), pp.130–137.

Baek, T.H. and Morimoto, M. (2012). Stay Away From Me: Examining the Determinants of Consumer Avoidance of Personalized Advertising. *Journal of Advertising*, 41(1), pp.59–76.

Freya De Keyzer, Cristian Buzeta and Ana Isabel Lopes (2024). The role of well-being in consumer's responses to personalized advertising on social media. *Psychology & Marketing*, 41(6).

Akbari, M. (2015). Different Impacts of Advertising Appeals on Advertising Attitude for High and Low Involvement Products. *Global Business Review*, 16(3), pp.478–493.

Weinberg, P. and Gottwald, W. (1982). Impulsive Consumer Buying as a Result of Emotions. *Journal of Business Research*, 10(1), pp.43–57.

Aslam, H., Rashid, M. and Chaudhary, N. (2021). Impact of Personalized Social Media Advertising on Online Impulse Buying Behavior. *SEISENSE Business Review*, 1(3), pp.12–25.

Kelman, H. C. (1958). Compliance, identification, and internalization three processes of attitude change. Journal of Conflict Resolution, 2(1), 51-60.

Lina, L.F. and Setiyanto, A. (2021). Privacy Concerns in Personalized Advertising Effectiveness on Social Media. *SRIWIJAYA INTERNATIONAL JOURNAL OF DYNAMIC ECONOMICS AND BUSINESS*, 5(2), pp.147–156.

Rook, D.W. and Fisher, R.J. (1995). Normative Influences on Impulsive Buying Behavior. *Journal of Consumer Research*, 22(3), pp.305–313.

Sun, T. and Wu, G. (2011). Trait Predictors of Online Impulsive Buying Tendency: A Hierarchical Approach. *Journal of Marketing Theory and Practice*, 19(3), pp.337–346.

Clover, V.T. (1950). Relative Importance of Impulse-Buying in Retail Stores. *Journal of Marketing*, 15(1), pp.66–70.

Stern, H. (1962). The Significance of Impulse Buying Today. *Journal of Marketing*, 26(2), pp.59–63.

Rook, D.W. (1987). The Buying Impulse. *Journal of Consumer Research*, 14(2), pp.189–199.

Xiao, S.H. and Nicholson, M. (2012). A Multidisciplinary Cognitive Behavioural Framework of Impulse Buying: A Systematic Review of the Literature. *International Journal of Management Reviews*, 15(3), pp.333–356.

Kathuria, A. and Bakshi, A. (2024). Influence of promotional factors on online impulse buying: exploring the mediating role of impulse buying tendency. *Current Psychology*.

Youn, S. and Faber, R.J. (2000). Impulse buying: Its relation to personality traits and cues. *Advances in consumer research. Association for Consumer Research (U.S.)*, 27(1), pp.179–185.

Li, B., Hu, M., Chen, X. and Lei, Y. (2021). The Moderating Role of Anticipated Regret and Product Involvement on Online Impulsive Buying Behavior. *Frontiers in Psychology*, 12.

Lim, P.L. and Yazdanifard, R. (2015). What internal and external factors influence impulsive buying behavior in online shopping? *Global Journal of Management and Business Research*, 15(5), pp.24–32.

Wells, J., Parboteeah, V. and Valacich, J. (2011). Online Impulse Buying: Understanding the Interplay between Consumer Impulsiveness and Website Quality. *Journal of the Association for Information Systems*, 12(1), pp.32–56.

Celsi, R.L. and Olson, J.C. (1988). The Role of Involvement in Attention and Comprehension Processes. *Journal of Consumer Research*, 15(2), p.210.

Sebayang, B.A.P., Girsang, A.C. and Negoro, D.A., 2019. Analysis of hedonic shopping motivation on impulse buying effect of millennial generations in Jakarta. *International Journal of Social Relevance & Concern*, 7(4), pp.8–12.

Chen, C.-C. and 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), pp.1249–1262.

Dam Tri Cuong (2023). Online Impulsive Buying Behavior Using Partial Least Squares Algorithm. *Journal of ICT standardisation (Online)*, 11(03).

Yaqub, R., Muhammad Atif, WASEEM, F. and EHTISHAM (2023). Unveiling the dynamics: Exploring the Stimulus-Organism-Response (SOR) model in the context of social media influencer marketing, electronic word of mouth, and purchase decisions, with a focus on the mediating role of brand awareness. *Bulletin of Business and Economics (BBE)*, 12(2), pp.435–446.

Hochreiter, V., Di, A. and Loesch, M. (2023). The Stimulus-Organism-Response (S-O-R) Paradigm as a Guiding Principle in Environmental Psychology: Comparison of its Usage in Consumer Behavior and Organizational Culture and Leadership Theory. *Journal of entrepreneurship and business development*, 3(1), pp.7–16.

Cho, C.-H. (1999). How Advertising Works on the WWW: Modified Elaboration Likelihood Model. *Journal of Current Issues & Research in Advertising*, 21(1), pp.34–50.

Petty, R.E., Heesacker, M. and Hughes, J.N. (1997). The elaboration likelihood model: Implications for the practice of school psychology. *Journal of School Psychology*, 35(2), pp.107–136.

Cyr, D., Head, M., Lim, E. and Stibe, A. (2018). Using the elaboration likelihood model to examine online persuasion through website design. *Information & Management*, 55(7), pp.807–821.

Yalch, R.F. and Elmore-Yalch, R. (1984). The Effect of Numbers on the Route to Persuasion. *Journal of Consumer Research*, 11(1), p.522.

Zhou, Y. (2022). Experiment Report: Peripheral and Central Persuasion Name. *Advances in social science, education and humanities research*, 653.

Petty, R.E., Cacioppo, J.T. and Schumann, D. (1983). Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement. *Journal of Consumer Research*, 10(2), pp.135–146.

Dawson, S. and Kim, M. (2009). External and internal trigger cues of impulse buying online. *Direct Marketing: an International Journal*, 3(1), pp.20–34.

Coley, A. and Burgess, B. (2003). Gender Differences in Cognitive and Affective Impulse Buying. *Journal of Fashion Marketing and Management: an International Journal*, 7(3), pp.282–295.

Fripp, G. (2023). *Effectiveness of Peripheral Cues* -. [online] www.marketingstudyguide.com. Available at: https://www.marketingstudyguide.com/effectiveness-of-peripheral-cues/ [Accessed 24 Apr. 2024].

Komiak, S.Y.X. and Benbasat, I. (2006). The Effects of Personalization and Familiarity on Trust and Adoption of Recommendation Agents. *MIS Quarterly*, 30(4), pp.941–960.

Cox, D.S. and Cox, A.D. (1988). What Does Familiarity Breed? Complexity as a Moderator of Repetition Effects in Advertisement Evaluation. *Journal of Consumer Research*, 15(1), p.111.

Laczniak, R.N. and Muehling, D.D. (1993). The Relationship between Experimental Manipulations and Tests of Theory in an Advertising Message Involvement Context. *Journal of Advertising*, 22(3), pp.59–74.

Zhao, X., Lynch, J.G. and Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, 37(2), pp.197–206.

Hair, J.F., Matthews, L.M., Matthews, R.L. and Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), pp.107–123.

Clark, L.A., Watson, D. and Reynolds, S. (1995). Diagnosis and Classification of Psychopathology: Challenges to the Current System and Future Directions. *Annual Review of*

Psychology, 46(1), pp.121–153.

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), pp.1–10.

Kemp, S. (2025b). *Digital 2025: Vietnam*. [online] DataReportal. Available at: https://datareportal.com/reports/digital-2025-vietnam.

Mai, N.T.T., Jung, K., Lantz, G. and Loeb, S.G. (2003). An Exploratory Investigation into Impulse Buying Behavior in a Transitional Economy: A Study of Urban Consumers in Vietnam. *Journal of International Marketing*, 11(2), pp.13–35.

Phau, I. and Lo, C. (2004). Profiling fashion innovators. *Journal of Fashion Marketing and Management: An International Journal*, 8(4), pp.399–411.

Tam, K.Y. and Ho, S.Y. (2006). Understanding the Impact of Web Personalization on User Information Processing and Decision Outcomes. *MIS Quarterly*, 30(4), pp.865–890.

White, R.W., Jose, J.M. and Ruthven, I. (2002). Comparing explicit and implicit feedback techniques for web retrieval : TREC-10 interactive track report - Strathprints. *Strath.ac.uk*.

Moukas, A. (1997). Amalthaea information discovery and filtering using a multiagent evolving ecosystem. *Applied Artificial Intelligence*, 11(5), pp.437–457.

Gauch, S., Speretta, M., Chandramouli, A. and Micarelli, A. (2007). User Profiles for Personalized Information Access. *The Adaptive Web*, 4321, pp.54–89.

Stern, H. (1962). The Significance of Impulse Buying Today. *Journal of Marketing*, 26(2), pp.59–63.