

Visual Merchandising, Hedonic Shopping Motivation, and Lack of Self-Control as Determinants of Impulsive Buying among Generation Z Consumers: Evidence from OH!Some Retail Stores in Medan

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Abstract

The rapid expansion of modern lifestyle retail in Indonesia and the growing purchasing power of Generation Z have intensified the occurrence of impulsive buying behavior in offline retail settings, yet integrated empirical evidence that combines external store stimuli and internal psychological drivers in a single explanatory model for this generational segment remains limited. This study therefore aims to examine the effect of visual merchandising, hedonic shopping motivation, and lack of self-control on impulsive buying behavior among Generation Z consumers at the OH! Some retail store in Sun Plaza, Medan City, North Sumatra, Indonesia. A quantitative associative design with a cross-sectional approach was employed. Primary data were collected between June and September 2026 using a structured questionnaire distributed to 100 Generation Z respondents selected through non-probability accidental sampling, with inclusion criteria of (a) domicile in Medan City, (b) membership of Generation Z by year of birth, and (c) at least one in-store purchase at OH! Some Medan during the preceding six months. All constructs were measured with multi-item reflective indicators on a five-point Likert scale (10 indicators for visual merchandising, 8 for hedonic shopping motivation, 7 for lack of self-control, and 6 for impulsive buying). Data were analysed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4, following a two-stage measurement- and structural-model evaluation and bootstrapping with 5,000 sub-samples. The results indicate that visual merchandising ($\beta = 0.280$; $p = 0.010$), hedonic shopping motivation ($\beta = 0.287$; $p = 0.001$), and lack of self-control ($\beta = 0.410$; $p < 0.001$) each exert a positive and statistically significant effect on impulsive buying, with lack of self-control emerging as the strongest predictor. The three antecedents jointly explain 74.7% of the variance in impulsive buying ($R^2 = 0.747$). Theoretically, the study contributes to the consumer behavior and retail marketing literature by integrating one external stimulus and two internal psychological constructs within a single PLS-SEM model for a Generation Z lifestyle retail setting. Practically, the findings provide retail managers with guidance on how to balance visual merchandising and experiential design with responsible marketing practices that respect the self-regulatory limits of younger consumers. The findings should be interpreted in light of several limitations, including the cross-sectional design, a single-outlet sampling frame of 100 respondents, and reliance on self-reported data; future research is encouraged to extend the model with additional antecedents, multi-city and multi-format samples, and longitudinal or experimental designs.

Keywords:

Visual Merchandising; Hedonic Shopping Motivation; Lack of Self-Control; Impulsive Buying; Generation Z.

1. INTRODUCTION

The transformation of consumer lifestyles and consumption patterns has accelerated the development of the retail industry in Indonesia, particularly in major urban centres such as Medan. Shopping activities that were previously oriented towards fulfilling basic needs have gradually evolved into experiences associated with social interaction, recreation, and lifestyle expression (Victor & Yu, 2023). This shift has intensified competition among retailers, prompting business operators to design not only product assortments that meet consumer needs but also store environments and shopping experiences capable of attracting attention and generating purchase intention. In such a competitive landscape, understanding the stimuli that drive consumer buying behavior, especially unplanned purchases, has become a strategic imperative for retail managers.

Generation Z, generally defined as individuals born between 1997 and 2012, represents an increasingly important consumer segment in both offline and online retail landscapes. Recent empirical studies on Indonesian and other emerging-market contexts suggest that Generation Z consumers tend to evaluate shopping experiences through a combination of utilitarian attributes (product variety, price, and convenience) and experiential attributes (visual presentation, store atmosphere, and the opportunity for self-expression and content creation) (Deborah et al., 2022; Pranggabayu & Andjarwati, 2022). For this generation, shopping is often more than a utilitarian activity; it is also a means of trend exploration and emotional fulfilment, which may make Generation Z particularly responsive to in-store stimuli and promotional cues and therefore theoretically relevant to the study of impulsive buying in modern offline retail formats. These characterisations are, however, based on prior empirical work rather than claims of universal behaviour, and the extent to which they hold for Generation Z consumers in a specific lifestyle retail setting such as OH!Some Medan is an empirical question addressed in this study.

OH!Some is a modern lifestyle retailer that has rapidly expanded in Indonesia and operates a flagship store at Sun Plaza, Medan. Originally established in Indonesia in 2020 under the KKV brand, the store rebranded to OH!Some on 1 August 2024 following the termination of its licensing agreement with the Chinese KK Group. OH!Some positions itself as a one-stop lifestyle store offering a diverse range of beauty, accessory, snack, and household products. Its distinctive bright-yellow visual identity, playful interior design, and curated product displays are designed to deliver an exploratory shopping experience that appeals to younger consumers. Based on researcher observations at the Sun Plaza outlet, cashier counters are placed at the back of the store and are surrounded by discounted items, encouraging consumers to walk past multiple product categories before completing their purchase. These contextual features — some drawn from publicly available information about the brand, others from the authors' observations at the research site — make OH!Some a theoretically relevant empirical setting for investigating impulsive buying behavior among Generation Z, while remaining specific to this particular outlet rather than generalisable to all Indonesian lifestyle retailers.

Visual merchandising constitutes a central element of modern retail strategy. It refers to the practice of presenting and arranging merchandise within the store environment in a visually attractive manner in order to capture consumer attention, stimulate interest in products, and encourage purchase (Widyastuti, 2018). Beyond mere aesthetics, visual merchandising operates as an external stimulus that may trigger affective and cognitive responses, which can in turn culminate in unplanned purchases (Anggraini & Sulistyowati, 2020). Prior empirical studies have reported a positive and significant effect of visual merchandising on impulsive buying behavior across a variety of offline retail contexts (Nurudin, 2020; Thomas et al., 2018; Widyastuti, 2018). Although the direction of the effect is consistent across these studies, the magnitude of the standardised coefficients differs substantially — plausibly reflecting differences in retail format (department stores, specialty stores, lifestyle retailers), consumer segment, operationalisation of visual merchandising, and whether additional moderators such as store atmosphere are included in the model. These differences highlight the value of examining visual merchandising together with internal psychological drivers rather than in isolation.

In addition to external store stimuli, impulsive buying is also shaped by internal psychological factors, among which hedonic shopping motivation plays a prominent role. Hedonic shopping motivation reflects the extent to which consumers engage in shopping activities to obtain pleasure, emotional satisfaction, fantasy fulfilment, and sensory stimulation rather than purely to acquire goods (Utami, 2017; Prihatiningrum & Said, 2022). Consumers with high hedonic motivation are more likely to perceive shopping as a leisure activity and to be emotionally stimulated by novel or trendy products, which may increase their susceptibility to unplanned purchases. Previous studies have confirmed a positive and significant relationship between hedonic shopping motivation and impulsive buying behavior across diverse retail settings (Deborah et al., 2022; Febri et al., 2019; Pranggabayu & Andjarwati, 2022), although the relative strength of this effect varies when hedonic motivation is modelled alongside environmental or self-regulatory constructs — again suggesting the usefulness of an integrated framework.

A third factor relevant to impulsive buying is the consumer's capacity for self-regulation. Lack of self-control is defined as an individual's inability to restrain impulses, manage emotions, and resist short-term temptations in favour of long-term goals (Prihatiningrum & Said, 2022). Consumers with low self-control are more easily influenced by promotional cues such as discounts and limited-time offers, and are less likely to engage in deliberate cost-benefit analysis before purchasing. In the context of modern retail formats such as OH!Some — where discount items are deliberately placed near the cashier area — consumers with limited self-regulatory capacity may find it particularly difficult to resist unplanned purchases. Prihatiningrum and Said (2022) empirically demonstrated that lack of self-control significantly influences impulsive buying behavior among Indonesian consumers, while related work on consumer financial behavior reports that limited self-control also interacts with payment-mode cues such as instalment and buy-now-pay-later services (Sari, 2021).

Taken together, prior empirical research has examined each of these antecedents in isolation or in combination with other variables such as store atmosphere, shopping lifestyle, and price reduction (Febri et al., 2019; Pranggabayu & Andjarwati, 2022; Widyastuti, 2018). Impulsive buying itself has been conceptualised as an unplanned purchase that occurs when consumers experience a sudden and powerful urge to buy a product, often disregarding its necessity or long-term utility (Pranggabayu & Andjarwati, 2022; Sari, 2021).

Despite the growing literature on impulsive buying, several research gaps remain. First, most prior Indonesian studies have focused on either external stimuli (e.g., visual merchandising or store atmosphere) or internal psychological factors (e.g., hedonic shopping motivation or self-control) in separate models, with relatively few PLS-SEM models integrating both perspectives within a single framework and comparing their relative explanatory strength. Second, Generation Z consumers in the specific context of a fast-expanding Chinese-origin lifestyle retail brand have received limited empirical attention in Indonesian retailing research, even though such brands have grown rapidly in secondary cities. Third, evidence from the Indonesian offline retail sector — and particularly from secondary cities such as Medan rather than Jakarta or other Java-based metropolitan centres — remains relatively scarce. These gaps indicate the need for an integrated model that simultaneously accounts for environmental stimuli, hedonic motivation, and self-regulatory capacity, and that can empirically rank their contribution to impulsive buying in a specific lifestyle retail setting. This study does not claim to be the first in Indonesia on impulsive buying, nor to achieve absolute novelty; rather, it offers an incremental, context-specific contribution to a growing body of work.

The empirical and contextual contribution of this study lies in integrating one external stimulus (visual merchandising) and two internal consumer factors (hedonic shopping motivation and lack of self-control) within a single PLS-SEM model, applied to Generation Z consumers in a specific lifestyle retail outlet in Medan. The combined framework enables a comparison of the relative strength of environmental and psychological drivers of impulsive buying, which is relevant for retail managers seeking to allocate resources between store design and consumer-targeted marketing interventions, and for scholars seeking a more integrated account of impulsive buying among Generation Z consumers.

Accordingly, this study aims to analyse (1) the effect of visual merchandising on impulsive buying, (2) the effect of hedonic shopping motivation on impulsive buying, and (3) the effect of lack of self-control on impulsive buying among Generation Z consumers at OH!Some Medan, and to compare the relative strength of these three antecedents within a single structural model. The following hypotheses are proposed: H1: Visual merchandising has a positive and significant effect on impulsive buying; H2: Hedonic shopping motivation has a positive and significant effect on impulsive buying; and H3: Lack of self-control has a positive and significant effect on impulsive buying. In line with reviewer concerns regarding the appropriateness of reporting a conventional ordinary-least-squares F-test within a PLS-SEM framework, the originally proposed H4 regarding simultaneous effects has been removed from the hypothesis structure in this revised version. The joint explanatory power of the three antecedents is instead reported through the coefficient of determination (R^2) of the endogenous construct and the individual effect sizes (f^2), which are the appropriate statistics for assessing the combined contribution of exogenous constructs in a PLS-SEM model (Hair et al., 2022; Sarstedt et al., 2022).

2. RESEARCH METHOD

2.1. Research Design and Setting

This study adopts a quantitative associative design with a cross-sectional approach, aimed at empirically testing the hypothesised relationships between visual merchandising, hedonic shopping motivation, and lack of self-control, on the one hand, and impulsive buying, on the other. The quantitative design was selected because it allows measurement of both the strength and direction of the relationships among the latent variables and supports replicability of the model. The research was conducted at the OH!Some retail store located in Sun Plaza, Medan City, North Sumatra, between June and September 2026. The cross-sectional design captures respondents' reports at a single point in time and therefore does not support strong causal inferences; this limitation is explicitly addressed in the discussion and conclusion.

2.2. Population and Sampling

The target population of this study consists of Generation Z consumers who had made in-store purchases at OH!Some Medan at least once in the six months preceding data collection. Because the exact size of this population is unknown and essentially unbounded, it was treated as an infinite population, and the minimum sample size was calculated using the Lemeshow formula for proportion estimation with a 95% confidence level, an assumed maximum proportion of 0.5, and a margin of error of 0.1, which yielded a minimum of 96 respondents. The sample was subsequently rounded up to 100 respondents to improve data representativeness and to anticipate potentially invalid responses.

Respondents were recruited through non-probability sampling using the accidental (convenience) sampling technique at the OH!Some Sun Plaza outlet. Accidental sampling was adopted because a complete sampling frame of OH!Some Medan customers is not available and the research setting is a single, high-traffic retail outlet where probability-based recruitment was not feasible within the available time and resources. The following inclusion criteria were applied: (a) domiciled in Medan City; (b) belonging to Generation Z based on year of birth (born between 1997 and 2012); (c) having previously purchased at OH!Some Medan; and (d) having made at least one purchase at OH!Some Medan during the preceding six months. Questionnaires were distributed directly at the research site; incomplete responses and responses that failed the inclusion screening were excluded, yielding a final analytical sample of 100 valid responses.

Because the sample is drawn through non-probability sampling from a single OH!Some outlet, the findings are not statistically generalisable to all Generation Z consumers in Indonesia, in Medan, or to all OH!Some outlets; they should be interpreted as context-specific evidence relevant to this research setting.

2.3. Questionnaire Development and Operationalisation

Primary data were collected using a structured self-administered questionnaire comprising a demographic section and four construct sections. Each construct was measured using multiple reflective indicators adapted from previously validated instruments reported in the retail marketing and consumer behavior literature and operationalised on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) (Wibowo, 2025). The specific operationalisation is as follows:

Visual merchandising (X1) was measured with ten indicators (X1.1–X1.10) covering product display, window display, floor merchandising, promotional signage, and in-store atmospherics, adapted from Widyastuti (2018), Thomas et al. (2018), and Nurudin (2020). Hedonic shopping motivation (X2) was measured with eight indicators (X2.1–X2.8) covering adventure, gratification, role, value, social, and idea shopping dimensions, adapted from Utami (2017), Febri et al. (2019), and Deborah et al. (2022). Lack of self-control (X3) was measured with seven indicators (X3.1–X3.7) capturing impulsivity, difficulty in resisting temptation, and limited self-regulatory capacity, adapted from Prihatiningrum and Said (2022). Impulsive buying (Y) was measured with six indicators (Y1–Y6) reflecting spontaneity, urgency, emotional arousal, and unplanned purchase behaviour, adapted from Pranggabayu and Andjarwati (2022) and Sari (2021).

The original items were drawn from English- and Indonesian-language sources. Items originally published in English were translated into Indonesian for use in this study, and the final Indonesian version was reviewed by the research team to ensure clarity and consistency with the Indonesian retail context before field administration.

2.4. Measurement Model Evaluation

The reflective measurement model was evaluated following the guidelines of Hair et al. (2022) and Sarstedt et al. (2022). Convergent validity was assessed using the outer loadings of each indicator (≥ 0.70) and the Average Variance Extracted (AVE) of each construct (≥ 0.50). Internal consistency reliability was evaluated using Cronbach's alpha, ρ_A , and composite reliability (ρ_C), all of which were expected to exceed 0.70. Discriminant validity was examined using the Heterotrait–Monotrait (HTMT) ratio with a conservative threshold of 0.90, the Fornell–Larcker criterion (the square root of each construct's AVE should exceed its correlation with other constructs), and the pattern of cross-loadings (each indicator should load most strongly on its own parent construct).

2.5. Structural Model Evaluation

The structural model was then evaluated through the inner Variance Inflation Factor (VIF) to check for multicollinearity among the exogenous constructs; the path coefficients (β), t-statistics, and p-values obtained from a bootstrapping procedure with 5,000 sub-samples (one-tailed where theoretically justified by the directional hypotheses); the coefficient of determination (R^2) of the endogenous construct; the effect size (f^2) of each exogenous construct; and the predictive relevance (Q^2_{predict}). Hypotheses were considered empirically supported when the t-statistic exceeded 1.96 and the p-value was below 0.05 at the 5% significance level (Hair & Alamer, 2022; Sarstedt et al., 2022). Reported p-values of 0.000 in the SmartPLS output are presented in the text as $p < 0.001$ to avoid implying a literal probability of zero.

Although the originally proposed hypothesis H4 referred to a 'simultaneous' effect, PLS-SEM does not natively produce a conventional F-test in the way that an ordinary-least-squares regression does. In this revised manuscript, the combined explanatory power of the three exogenous constructs is therefore reported through

the R^2 of the endogenous construct and the F^2 and $Q^2_{predict}$ values of each predictor, in line with current PLS-SEM reporting standards (Hair et al., 2022; Sarstedt et al., 2022). The F-statistic that appeared in the previous version has been removed, and the discussion of simultaneous explanatory power is reformulated accordingly.

2.6. Ethical Considerations

Participation in the study was voluntary. Respondents were informed of the academic purpose of the research prior to completing the questionnaire, and their consent to participate was obtained verbally. Non personally identifying information was collected, and all responses were anonymised prior to analysis. The research adhered to the ethical principles of voluntary participation, informed consent, confidentiality, and data anonymity commonly applied in consumer behaviour research.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Respondent Characteristics

All 100 respondents who participated in the study met the predefined inclusion criteria, namely being Generation Z consumers domiciled in Medan City who had made at least one purchase at OH!Some Sun Plaza during the six months preceding data collection. The sample is therefore homogeneous with respect to generational cohort, domicile, and recent purchasing experience, which supports the internal comparability of the responses used in the subsequent PLS-SEM analysis.

3.1.2. Measurement Model (Outer Model) Evaluation

The measurement model was evaluated to confirm the reliability and validity of the reflective constructs. Figure 1 presents the PLS-SEM model with outer loadings and the path coefficients linking the three exogenous constructs to impulsive buying.

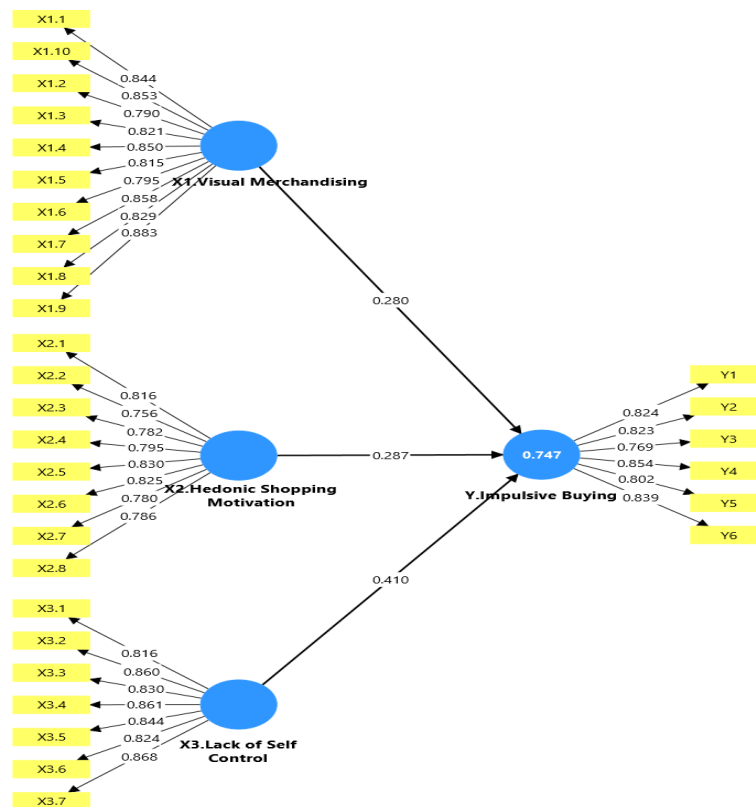


Figure 1. PLS-SEM Measurement and Structural Model Results

3.1.2.1. Convergent Validity

As shown in Table 1, all indicators of the four constructs produced outer loadings above the 0.70 threshold recommended by Hair et al. (2022), ranging from 0.756 (X2.2) to 0.883 (X1.9). In addition, the AVE values for Visual Merchandising (0.696), Hedonic Shopping Motivation (0.634), Lack of Self-Control (0.712), and Impulsive Buying (0.671) all exceed the minimum cut-off of 0.50, confirming that each construct explains more than half of the variance in its indicators. Convergent validity is therefore established for all constructs.

Table 1. Construct Measurement, Outer Loadings, and AVE

Construct / Indicator	Outer Loading	AVE	Status
Visual Merchandising (X1)		0.696	Valid
X1.1	0.844		Valid
X1.2	0.790		Valid
X1.3	0.821		Valid
X1.4	0.850		Valid
X1.5	0.815		Valid
X1.6	0.795		Valid
X1.7	0.858		Valid
X1.8	0.829		Valid
X1.9	0.883		Valid
X1.10	0.853		Valid
Hedonic Shopping Motivation (X2)		0.634	Valid
X2.1	0.816		Valid
X2.2	0.756		Valid
X2.3	0.782		Valid
X2.4	0.795		Valid
X2.5	0.830		Valid
X2.6	0.825		Valid
X2.7	0.780		Valid
X2.8	0.786		Valid
Lack of Self-Control (X3)		0.712	Valid
X3.1	0.816		Valid
X3.2	0.860		Valid
X3.3	0.830		Valid
X3.4	0.861		Valid
X3.5	0.844		Valid
X3.6	0.824		Valid
X3.7	0.868		Valid
Impulsive Buying (Y)		0.671	Valid
Y1	0.824		Valid
Y2	0.823		Valid
Y3	0.769		Valid
Y4	0.854		Valid
Y5	0.802		Valid
Y6	0.839		Valid

Source: Primary data processed using SmartPLS 4 (2026).

3.1.2.2. Internal Consistency Reliability

Table 2 reports the internal consistency reliability of the four constructs. All Cronbach's alpha values (0.902–0.951), rho_A values (0.907–0.953), and composite reliability (rho_C) values (0.924–0.958) exceed the recommended threshold of 0.70, indicating excellent internal consistency for the measurement model (Hair et al., 2022).

Table 2. Internal Consistency Reliability

Construct	Cronbach's Alpha	rho A	rho C
Visual Merchandising (X1)	0.951	0.953	0.958
Hedonic Shopping Motivation (X2)	0.918	0.921	0.933
Lack of Self-Control (X3)	0.932	0.934	0.945
Impulsive Buying (Y)	0.902	0.907	0.924

Source: Primary data processed using SmartPLS 4 (2026).

3.1.2.3. Discriminant Validity

Discriminant validity was examined using the HTMT ratio, with a conservative threshold of 0.90 (Hair & Alamer, 2022). As shown in Table 3, all HTMT values fall below this threshold, ranging from 0.680 to 0.842. These results confirm that the four constructs are empirically distinct.

Table 3. Heterotrait–Monotrait (HTMT) Ratio

Construct	X1	X2	X3	Y
Visual Merchandising (X1)	—			
Hedonic Shopping Motivation (X2)	0.767	—		
Lack of Self-Control (X3)	0.704	0.680	—	
Impulsive Buying (Y)	0.811	0.812	0.842	—

Source: Primary data processed using SmartPLS 4 (2026).

The Fornell–Larcker criterion provides additional evidence of discriminant validity. For every construct, the square root of the AVE (shown on the diagonal of Table 4) exceeds its correlation with any other construct, confirming that each latent variable shares more variance with its own indicators than with the other constructs.

Table 4. Fornell–Larcker Criterion

Construct	X1	X2	X3	Y
Visual Merchandising (X1)	0.834			
Hedonic Shopping Motivation (X2)	0.719	0.796		
Lack of Self-Control (X3)	0.668	0.634	0.844	
Impulsive Buying (Y)	0.761	0.748	0.779	0.819

Note: Diagonal values are the square root of AVE. Source: Primary data processed using SmartPLS 4 (2026).

Cross-loading analysis further supports discriminant validity. For every indicator, the loading on its parent construct is higher than its loading on any other construct, as reported in Table 5. Collectively, the three discriminant validity tests indicate that the four constructs are well-differentiated and suitable for structural model estimation.

Table 5. Cross Loadings

Indicator	X1	X2	X3	Y
X1.1	0.844	0.614	0.549	0.651
X1.2	0.790	0.625	0.566	0.637
X1.3	0.821	0.529	0.548	0.616
X1.4	0.850	0.656	0.634	0.706
X1.5	0.815	0.658	0.602	0.670
X1.6	0.795	0.646	0.473	0.531
X1.7	0.858	0.578	0.572	0.625
X1.8	0.829	0.540	0.432	0.565
X1.9	0.883	0.589	0.546	0.634
X1.10	0.853	0.559	0.613	0.675
X2.1	0.601	0.816	0.433	0.561
X2.2	0.469	0.756	0.400	0.466
X2.3	0.581	0.782	0.480	0.556
X2.4	0.586	0.795	0.540	0.625
X2.5	0.599	0.830	0.541	0.644
X2.6	0.608	0.825	0.557	0.662
X2.7	0.576	0.780	0.526	0.578
X2.8	0.546	0.786	0.532	0.636
X3.1	0.584	0.552	0.816	0.626
X3.2	0.545	0.510	0.860	0.593
X3.3	0.605	0.561	0.830	0.694
X3.4	0.572	0.532	0.861	0.697
X3.5	0.557	0.520	0.844	0.693
X3.6	0.550	0.567	0.824	0.624
X3.7	0.531	0.502	0.868	0.659
Y1	0.558	0.580	0.605	0.824
Y2	0.639	0.644	0.583	0.823
Y3	0.577	0.577	0.557	0.769
Y4	0.728	0.655	0.666	0.854
Y5	0.527	0.526	0.633	0.802
Y6	0.681	0.677	0.762	0.839

Note: For every indicator, the loading on its parent construct is the highest across the four columns. Source: Primary data processed using SmartPLS 4 (2026).

3.1.3. Structural Model (Inner Model) Evaluation

Prior to interpreting the structural relationships, multicollinearity among the exogenous constructs was examined using the inner VIF. As reported in Table 6, all inner VIF values (1.983–2.454) are substantially below the conservative threshold of 5.00 recommended by Hair et al. (2022), indicating that multicollinearity is not a concern in the structural model.

Table 6. Inner Variance Inflation Factor (VIF)

Structural Path	VIF
Visual Merchandising → Impulsive Buying	2.454
Hedonic Shopping Motivation → Impulsive Buying	2.272
Lack of Self-Control → Impulsive Buying	1.983

Source: Primary data processed using SmartPLS 4 (2026).

Hypothesis testing was conducted using the path coefficients, t-statistics, and p-values obtained from a bootstrapping procedure with 5,000 sub-samples. Table 7 summarises the results of the three direct effects. All three paths are positive and statistically significant at the 5% level, with t-statistics exceeding the critical value of 1.96 (Sarstedt et al., 2022). The p-value for H3 is reported as $p < 0.001$ to avoid implying a literal probability of zero.

Table 7. Structural Model Results and Hypothesis Testing

Hyp.	Structural Path	β (O)	STDEV	t-stat	p-value	Decision
H1	Visual Merchandising → Impulsive Buying	0.280	0.109	2.582	0.010	Supported
H2	Hedonic Shopping Motivation → Impulsive Buying	0.287	0.084	3.425	0.001	Supported
H3	Lack of Self-Control → Impulsive Buying	0.410	0.104	3.942	< 0.001	Supported

Source: Primary data processed using SmartPLS 4 (2026); bootstrapping with 5,000 sub-samples. The p-value for H3 is reported as < 0.001 instead of 0.000.

The coefficient of determination (R^2) for impulsive buying is 0.747, indicating that visual merchandising, hedonic shopping motivation, and lack of self-control jointly explain approximately 74.7% of the variance in impulsive buying among Generation Z consumers at OH!Some Medan, while the remaining 25.3% is explained by factors outside the model (Table 8). The effect size (f^2) analysis in Table 8 further indicates that lack of self-control exerts a medium-to-large effect ($f^2 = 0.336$), while hedonic shopping motivation ($f^2 = 0.143$) and visual merchandising ($f^2 = 0.127$) exert small-to-medium effects on impulsive buying (Hair et al., 2022). The predictive relevance of the model is further supported by a positive Q^2_{predict} value of 0.720 for impulsive buying, confirming that the structural model has acceptable out-of-sample predictive power.

Table 8. R^2 , Effect Size (f^2), and Predictive Relevance (Q^2_{predict})

Path / Construct	Value	Interpretation
Visual Merchandising → Impulsive Buying (f^2)	0.127	Small
Hedonic Shopping Motivation → Impulsive Buying (f^2)	0.143	Small
Lack of Self-Control → Impulsive Buying (f^2)	0.336	Medium
Impulsive Buying ($R^2 / Q^2_{\text{predict}}$)	0.747 / 0.720	Substantial

Source: Primary data processed using SmartPLS 4 (2026).

The combined explanatory power of the three exogenous variables is reflected in the R^2 value of 0.747, which is in the substantial range according to the benchmarks of Hair et al. (2022), and in the pattern of f^2 effect sizes reported in Table 8. The previously reported F-test for simultaneous effects has been removed from this revised version, because PLS-SEM does not natively generate a conventional F-statistic as part of its structural model output, and the raw inputs required to reconstruct such a statistic (residual sums of squares from an ordinary-least-squares specification) are not reported in the SmartPLS 4 output used in this study. In line with the recommendations of Hair et al. (2022) and Sarstedt et al. (2022), the overall contribution of the model is instead assessed through R^2 , f^2 , and Q^2_{predict} .

3.2. Discussion

3.2.1. Effect of Visual Merchandising on Impulsive Buying

The results support H1, confirming that visual merchandising has a positive and significant effect on impulsive buying ($\beta = 0.280$; $t = 2.582$; $p = 0.010$). This finding indicates that the more attractive and well-organised the in-store product displays, window arrangements, and promotional signage at OH!Some Medan, the greater the likelihood that Generation Z consumers in the sample report unplanned purchases. Theoretically, this result is consistent with stimulus–organism–response reasoning in retail marketing, whereby carefully designed environmental stimuli may trigger affective responses that translate into spontaneous buying

behaviour. The finding corroborates earlier evidence reported by Thomas et al. (2018), Widyastuti (2018), and Nurudin (2020), which documented a significant effect of visual merchandising on impulsive buying in various offline retail contexts, although the magnitude of the standardised coefficient in the present study ($\beta = 0.280$) is somewhat lower than in several comparable Indonesian studies; this may reflect the simultaneous inclusion of hedonic motivation and lack of self-control in the model, which absorb part of the variance previously attributed to visual merchandising. From a managerial standpoint, these results imply that OH!Some and comparable lifestyle retailers can further leverage visual merchandising elements — such as themed product zones, well-arranged window displays, coordinated colour palettes, and the prominent but non-deceptive placement of trending products — to intensify consumer engagement.

3.2.2. Effect of Hedonic Shopping Motivation on Impulsive Buying

H2 is also supported: hedonic shopping motivation has a positive and significant effect on impulsive buying ($\beta = 0.287$; $t = 3.425$; $p = 0.001$). This result suggests that Generation Z consumers who pursue shopping primarily for pleasure, novelty, and emotional fulfilment are more inclined to report unplanned purchases at OH!Some Medan. The finding is consistent with the hedonic consumption perspective, which posits that experiential and emotional motives are key drivers of impulsive consumption, and aligns with earlier evidence from Deborah et al. (2022), Febri et al. (2019), and Pranggabayu and Andjarwati (2022). Managerially, OH!Some can design experiential elements that enhance the enjoyment of in-store visits — such as photo-friendly corners, novelty product launches, limited editions, and curated sensory experiences — while avoiding tactics that explicitly encourage consumers to disregard their own budget constraints.

3.2.3. Effect of Lack of Self-Control on Impulsive Buying

H3 is strongly supported: lack of self-control has a positive and significant effect on impulsive buying ($\beta = 0.410$; $t = 3.942$; $p < 0.001$) and emerges as the strongest predictor among the three antecedents examined. This indicates that Generation Z consumers in the sample who report limited capacity to regulate spending impulses are the most likely to report unplanned purchases, particularly in environments featuring persuasive stimuli such as discounts, limited-time offers, and visually appealing displays. The result reinforces earlier findings by Prihatiningrum and Said (2022), who showed that lack of self-control is a key determinant of impulsive buying among Indonesian consumers. The relative dominance of a psychological (versus environmental) antecedent in this specific setting is a notable pattern, although the cross-sectional design of this study does not allow strong causal claims. From a managerial and policy perspective, this finding has a dual implication: while retailers can clearly benefit from understanding self-regulatory limitations in younger consumers, the ethical corollary is that responsible marketing practice and consumer-financial-literacy initiatives should also be pursued, rather than designing stores and promotions explicitly to exploit those limitations.

3.2.4. Relative Strength and Conceptual Interaction of the Three Predictors

In addressing the request for additional analysis of the interactions among the three exogenous constructs, this study distinguishes three distinct forms of 'interaction' that may be considered in a PLS-SEM framework. First, the relative strength of the predictors can be compared on the basis of their standardised path coefficients and effect sizes, which this study already reports; on these metrics, lack of self-control ($\beta = 0.410$; $f^2 = 0.336$) is the strongest antecedent, followed by hedonic shopping motivation ($\beta = 0.287$; $f^2 = 0.143$) and visual merchandising ($\beta = 0.280$; $f^2 = 0.127$). Second, the conceptual relationships among the predictors — for example, how an attractive visual merchandising environment may amplify hedonic motivation, which in turn may be more consequential for consumers with limited self-control — can be discussed theoretically on the basis of prior literature. Third, statistical interaction, moderation, or mediation would require respecifying the structural model with additional latent interaction terms or indirect effects. The structural model estimated in this study includes three direct paths to impulsive buying and is interpreted as such; the extension of the model to formal moderation or mediation specifications is identified as a direction for future research in Section 4.

On the available evidence, the ranking of the standardised path coefficients indicates that lack of self-control ($\beta = 0.410$) is the strongest predictor, followed by hedonic shopping motivation ($\beta = 0.287$) and visual merchandising ($\beta = 0.280$). This pattern suggests that, within the specific sample analysed, impulsive buying among Generation Z at OH!Some Medan is more strongly associated with internal psychological factors — particularly limited self-regulatory capacity — than with store-level stimuli alone, while the store environment still contributes meaningfully to the overall explanatory model. These associations should be interpreted within the limits of a cross-sectional, correlational design, which does not permit strong causal inference. Nonetheless, the convergence of external and internal drivers in a single explanatory model provides a more comprehensive account of impulsive buying than studies that examine either dimension in isolation.

3.2.5. Local Retail and Cultural Context

The findings should also be interpreted in the local retail and cultural context of Medan. OH!Some Sun Plaza is situated in a central mall that attracts a mixed clientele of students, young professionals, and family shoppers, and much of the Generation Z traffic occurs in peer groups or with family members. Although the

present data do not include direct measures of social context, prior literature on Indonesian retail suggests that peer group dynamics and family consumption norms can amplify the effect of experiential and promotional stimuli (Deborah et al., 2022; Pranggabayu & Andjarwati, 2022). The results reported here are consistent with such a pattern, but the present cross-sectional design does not allow a direct test of social-contextual moderators; broad statements about 'Medan culture' or 'Indonesian youth culture' as homogeneous drivers of impulsive buying are therefore avoided. Future research could incorporate variables such as peer influence, family consumption norms, and social-media exposure to examine their role more directly.

3.2.6. Practical Implications

From a managerial perspective, the findings suggest three complementary avenues for retailers of lifestyle formats such as OH!Some. First, visual merchandising can be further strengthened through clearly structured product zoning, legible promotional signage, transparent pricing information, and the deliberate placement of trending products in high-visibility areas; however, such practices should avoid misleading scarcity cues or deceptive promotional claims. Second, with respect to hedonic shopping motivation, retailers may develop experiential elements — such as new product launches, limited collaborations, photo-friendly in-store corners, and sensory in-store experiences — that enhance the enjoyment of shopping visits without actively encouraging over-consumption. Third, given the dominant role of lack of self-control, retailers and policy actors face a responsibility to pair commercial practices with transparent pricing and discount information, support for more deliberate purchase decisions (for example, through clear total-cost displays for instalment and buy-now-pay-later options), and consumer-financial-literacy initiatives aimed at younger shoppers. The practical takeaway, therefore, is not that retailers should exploit the self-regulatory limits of Generation Z consumers, but that visual-merchandising and experiential strategies should be designed in ways that balance commercial objectives with consumer welfare and responsible marketing practice.

4. CONCLUSION

This study examined the effect of visual merchandising, hedonic shopping motivation, and lack of self-control on impulsive buying behaviour among Generation Z consumers at the OH!Some retail store in Medan City. Using PLS-SEM on data collected from 100 respondents, the study found that all three antecedents exert a positive and statistically significant effect on impulsive buying. Lack of self-control is the strongest predictor ($\beta = 0.410$; $p < 0.001$), followed by hedonic shopping motivation ($\beta = 0.287$; $p = 0.001$) and visual merchandising ($\beta = 0.280$; $p = 0.010$). Together, these variables explain 74.7% of the variance in impulsive buying ($R^2 = 0.747$), with $Q^2_{\text{predict}} = 0.720$ indicating acceptable out-of-sample predictive relevance.

Theoretically, the study contributes to the consumer behaviour and retail marketing literature by integrating one external stimulus (visual merchandising) and two internal psychological constructs (hedonic shopping motivation and lack of self-control) within a single empirical framework in a Generation Z lifestyle retail setting. The relative dominance of lack of self-control in this specific sample highlights the importance of modelling self-regulatory capacity alongside environmental and motivational factors when explaining impulsive buying, complementing prior studies that have typically focused on either store-level stimuli or psychological factors in isolation.

Practically, the findings offer guidance for managers of OH!Some and comparable lifestyle retail formats targeting Generation Z. Visual merchandising investment, carefully designed hedonic experiences, and transparent promotional practices can be combined with responsible-retailing measures — such as clear total-cost displays, transparent discount information, and customer-oriented financial literacy initiatives — in order to balance commercial objectives with consumer welfare.

Several limitations should be acknowledged. First, the sample is limited to 100 respondents recruited through accidental sampling at a single OH!Some outlet in Medan, which limits the statistical generalisability of the findings to other outlets, cities, and retail formats. Second, data were collected using self-reported questionnaires and may therefore be subject to common method bias and social desirability bias; no claim is made in this revised manuscript that such bias has been empirically ruled out. Third, the cross-sectional design does not permit strong causal inference. Fourth, 25.3% of the variance in impulsive buying remains unexplained, indicating that additional antecedents outside the model are likely to be relevant.

Several directions are suggested for future research. First, the model could be extended with additional antecedents such as store atmosphere, promotional intensity, financial literacy, social media exposure, peer influence, and emotional state. Second, larger samples drawn from multiple OH!Some outlets and from different cities and lifestyle retail chains would strengthen external validity. Third, future studies could explicitly test moderation and mediation paths — for example, whether hedonic shopping motivation mediates the effect of visual merchandising on impulsive buying, or whether lack of self-control moderates the relationship between external stimuli and unplanned purchase behaviour — provided that these specifications are supported by prior theory and estimated on verifiable data. Fourth, longitudinal or experimental designs would be helpful for strengthening causal inferences regarding the direction of the observed relationships.

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