

The Influence of In-Store Product Placement, Visual Merchandising and Promotional Signage on Impulse Buying Decision at Big C Hypermarkets in Bangkok

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Abstract

Impulse buying is a critical driver of retail performance, particularly in hypermarket environments where consumers are exposed to a wide range of in-store stimuli. This study examines the influence of product placement, visual merchandising, and promotional signage on impulse buying decisions at Big C Hypermarkets in Bangkok. Grounded in the Stimulus–Organism–Response (S-O-R) framework, the study conceptualizes these in-store elements as environmental stimuli that trigger consumers' psychological responses and lead to spontaneous purchasing behavior.

A quantitative approach was employed using survey data from 378 respondents who had recently shopped at Big C Hypermarkets in Bangkok. The data were analyzed using multiple regression analysis. The results indicate that all three factors significantly influence impulse buying decisions. Product placement demonstrates the strongest effect ($\beta = 0.317$, $p < 0.001$), followed by promotional signage ($\beta = 0.293$, $p < 0.001$) and visual merchandising ($\beta = 0.211$, $p < 0.01$).

The findings suggest that product visibility and accessibility play a dominant role in shaping consumer behavior, while promotional cues and store aesthetics reinforce purchasing decisions. This study contributes to retail marketing literature by providing empirical evidence from a Thai hypermarket context and offers actionable insights for optimizing in-store execution strategies to enhance sales performance.

Keywords: impulse buying, product placement, visual merchandising, promotional signage, retail strategy

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1. Introduction

Impulse buying has become a critical component of retail performance, particularly in large-format retail environments where consumers are exposed to numerous stimuli at the point of purchase. Defined as spontaneous and unplanned purchasing behavior, impulse buying is primarily driven by emotional responses and environmental cues rather than deliberate decision-making processes (Peck & Childers, 2006; Sharma et al., 2014). In contemporary retail settings, particularly hypermarkets, impulse purchases represent a significant share of total sales, making it an important area of study for both academics and practitioners.

In physical retail environments, in-store stimuli such as product placement, visual merchandising, and promotional signage play a vital role in influencing consumer behavior. Retailers strategically design store layouts, shelf arrangements, and promotional displays to capture consumer attention and stimulate unplanned purchases. Visual and environmental factors account for a substantial portion of impulse buying behavior, particularly in high-density retail formats where consumers encounter a wide variety of products within a limited timeframe. These stimuli function as external triggers that influence internal psychological states, ultimately shaping purchasing decisions.

In the context of Thailand, the retail landscape has evolved significantly with the expansion of modern trade formats such as hypermarkets. Store environment factors, including layout design and visual stimuli, strongly influence impulse buying behavior among consumers in the region (Thang, 2023; Nizam et al., 2024). However, despite the growing importance of hypermarkets in Thailand, empirical research focusing specifically on how in-store marketing elements influence impulse buying behavior in this context remains limited. Big C Hypermarket, one of Thailand's leading retail chains, provides an ideal setting for examining consumer behavior in a highly competitive environment. Product placement plays a critical role in attracting consumer attention, particularly when items are positioned at eye level or near checkout areas (Cisternas et al., 2020). Visual merchandising enhances the shopping experience by creating an appealing store atmosphere that influences consumer emotions and engagement (Florea et al., 2025). Promotional signage, including discount labels and limited-time offers, further drives impulse buying by creating a sense of urgency and perceived value (Gorji & Siامي, 2020; Darke & Chung, 2005).

Despite these insights, existing studies have largely examined these constructs separately, with limited attention to their combined effect on impulse buying. Moreover,

findings from other countries may not be directly applicable to the Thai retail context due to differences in consumer behavior, cultural factors, and economic conditions (Tiu et al., 2022; Sahari et al., 2024), highlighting the need for localized, integrative research.

This study addresses the lack of empirical evidence on how key in-store marketing strategies collectively influence impulse buying in Thai hypermarkets, particularly Big C stores in Bangkok. Without such insights, retailers may fail to optimize their merchandising strategies and underutilize valuable in-store space. Therefore, this study aims to examine the influence of product placement, visual merchandising, and promotional signage on impulse buying decisions at Big C Hypermarkets in Bangkok by (1) analyzing the role of each in-store factor, (2) determining their relative influence on impulse buying behavior, and (3) providing practical recommendations for improving retail strategies.

By addressing these objectives, this research contributes empirical evidence from a Thai hypermarket context, extends understanding of impulse buying behavior in emerging markets, and offers managerial implications for retailers seeking to enhance in-store execution and increase sales through more effective merchandising strategies.

2. Literature Review

Understanding impulse buying behavior requires a comprehensive examination of both environmental stimuli and consumer psychological responses. In retail environments, particularly hypermarkets, impulse buying is strongly influenced by in-store marketing factors such as product placement, visual merchandising, and promotional signage. These elements act as external stimuli that shape consumer perceptions and trigger spontaneous purchasing decisions.

This study is grounded in the Stimulus–Organism–Response (S-O-R) framework, which explains how environmental cues (stimuli) influence internal emotional and cognitive states (organism), ultimately leading to behavioral outcomes (response) (Mehrabian & Russell, 1974; Murali et al., 2022). In the context of retail, product placement, visual merchandising, and promotional signage serve as stimuli that affect consumers' attention, emotions, and decision-making processes, resulting in impulse buying behavior.

2.1 Product Placement

Product placement refers to the strategic positioning of products within a retail environment to maximize visibility and accessibility, critically influencing consumer attention

and purchase decisions in high-density retail settings such as hypermarkets. Research indicates that products placed at eye level, near checkout counters, or at aisle ends are more likely to be noticed and purchased impulsively (Cisternas et al., 2020; Tiu et al., 2022).

Empirical studies demonstrate that vertical shelf positioning significantly affects consumer behavior. Products placed at eye-level shelves, the “golden zone,” receive the highest attention and are more likely to be selected without prior planning (Pawne et al., 2025). Products on lower or upper shelves receive less attention, reducing impulse purchase likelihood. Horizontal placement also influences consumer perception, as centrally positioned products are more visually accessible and cognitively easier to process (Tiu et al., 2022). From a theoretical perspective, product placement reduces cognitive effort by simplifying product search and evaluation processes. This aligns with the S-O-R framework, where increased visibility (stimulus) enhances perceived convenience and attractiveness (organism), leading to spontaneous purchase decisions (response) (Murali et al., 2022).

2.2 Visual Merchandising

Visual merchandising encompasses the design and presentation of the retail environment, including store layout, lighting, color schemes, product displays, and overall aesthetics, and is widely recognized as a key factor in shaping consumer experience and influencing purchasing behavior (Thomas et al., 2018). Effective visual merchandising enhances both cognitive and emotional responses. Cognitively, well-organized displays improve product visibility and reduce search costs, facilitating purchase decisions (Cuong, 2019). Emotionally, appealing store environments create positive feelings such as excitement and enjoyment, closely associated with impulse buying (Murali et al., 2022).

Visual merchandising elements such as cleanliness, product arrangement, and digital displays significantly influence impulse buying behavior in hypermarkets, with consumers having lower self-control being more susceptible to visual stimuli (Sahari et al., 2024). Visual merchandising functions as a “silent salesperson,” attracting attention and encouraging unplanned purchases without direct interaction (Thomas et al., 2018). Within the S-O-R framework, visual merchandising serves as a powerful stimulus that evokes emotional responses and enhances shopping experience, increasing the likelihood of impulse buying behavior (Murali et al., 2022).

2.3 Promotional Signage

Promotional signage refers to in-store communication tools such as discount labels, banners, price tags, and promotional displays that highlight special offers and encourage purchasing decisions, playing a critical role in conveying value and creating urgency at the point of sale. Research indicates that promotional signage significantly influences impulse buying by attracting attention and reducing decision-making time (Thomas et al., 2018). When consumers encounter promotional cues such as “limited time offer” or “buy one get one free,” they perceive higher value and make immediate purchase decisions (Kouchekian & Gharibpoor, 2012).

Promotional signage enhances perceived value and trust, making consumers more confident in their purchase decisions (Murali et al., 2022). Promotional framing influences consumer perception of value, thereby increasing the likelihood of spontaneous purchases (Darke & Chung, 2005). Digital and dynamic signage has been shown to be more effective in capturing attention compared to static displays (Pawne et al., 2025). From a theoretical standpoint, promotional signage acts as a stimulus that triggers psychological responses such as urgency, excitement, and fear of missing out (FOMO), reducing cognitive deliberation and leading to immediate purchasing decisions, consistent with the S-O-R framework.

2.4 Impulse Buying Decision

Impulse buying is defined as a spontaneous and unplanned purchase driven by emotional and situational factors rather than rational evaluation (Tran, 2022). It is characterized by sudden decision-making, emotional arousal, and reduced cognitive control (Murali et al., 2022). Previous studies have consistently shown that impulse buying is influenced by a combination of environmental stimuli and internal psychological states. Factors such as store atmosphere, product visibility, and promotional cues interact with consumer emotions and self-control to shape purchasing behavior (Sahari et al., 2024). In hypermarket environments, where consumers are exposed to numerous products and stimuli, impulse buying plays a significant role in overall sales performance.

2.5 Conceptual Framework and Hypotheses

Based on the literature, this study proposes that product placement, visual merchandising, and promotional signage act as independent variables influencing impulse buying decisions. These relationships are grounded in the S-O-R framework, where in-store stimuli trigger psychological responses that lead to behavioral outcomes.

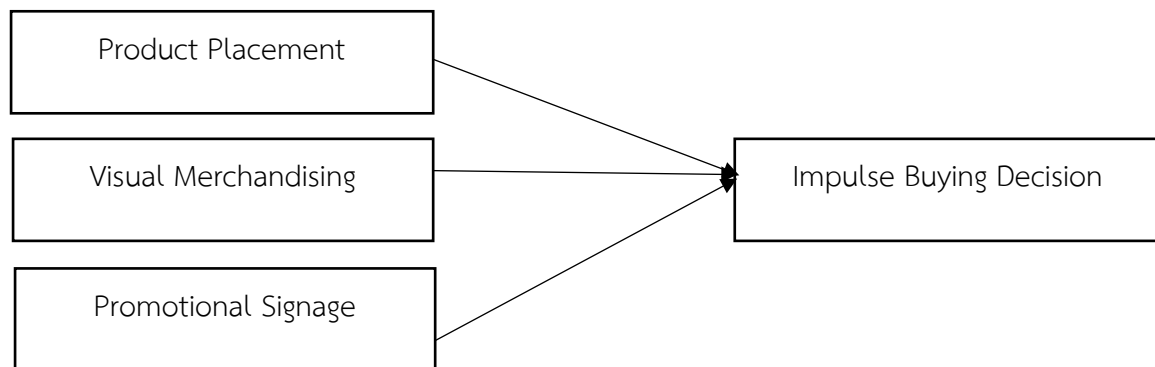


Figure 1: Research conceptual framework

The following hypotheses are proposed:

- H1:** Product placement positively influences impulse buying decisions.
- H2:** Visual merchandising positively influences impulse buying decisions.
- H3:** Promotional signage positively influences impulse buying decisions.

3. Research Methodology

This study adopts a quantitative research approach to examine the influence of in-store product placement, visual merchandising, and promotional signage on impulse buying decisions at Big C Hypermarkets in Bangkok. A descriptive and correlational research design was employed to summarize consumer perceptions and analyze the relationships among variables.

The study applies a cross-sectional design, where data were collected at a single point in time from consumers with recent shopping experience. This approach is appropriate for capturing real-time behavioral responses in retail environments and allows for efficient data collection from a large sample (Creswell & Creswell, 2018).

The target population consists of adult consumers aged 18 years and above who have visited Big C Hypermarkets in Bangkok within the past three months. The sample size was determined using Yamane's (1973) formula, resulting in a target of 397 respondents. A total of 378 valid responses were obtained, representing a high response rate and sufficient statistical power for analysis. A non-probability purposive sampling technique was used to ensure that respondents had relevant and recent shopping experience.

Data Collection

Data were collected using a structured questionnaire adapted from established studies. The instrument consisted of demographic questions and measurement items for product placement, visual merchandising, promotional signage, and impulse buying decision. Each construct was measured using five items on a five-point Likert scale ranging from “strongly disagree” to “strongly agree.”. The pilot testing was conducted in order to ensure the content validity and reliability of the questionnaire.

The questionnaire was distributed online via Google Forms through social media platforms such as Facebook, Instagram, and LINE. Screening questions were included to ensure that respondents had recent shopping experience at Big C Hypermarkets. The data collection process was conducted over a two-week period, yielding 378 valid responses for analysis.

Data Analysis

The collected data were analyzed using SPSS version 26. Descriptive statistics, including mean and standard deviation, were used to summarize respondent characteristics and overall perceptions of the variables. Reliability analysis using Cronbach’s Alpha was conducted to assess the internal consistency of the measurement scales.

Pearson correlation analysis was applied to examine the strength and direction of relationships among the independent variables (product placement, visual merchandising, and promotional signage) and the dependent variable (impulse buying decision).

To further evaluate the predictive relationships, multiple regression analysis was employed. This technique allows for the simultaneous assessment of the relative influence of multiple independent variables on a single dependent variable (Hair et al., 2010). The analysis generated standardized beta coefficients (β) and significance levels (p-values), enabling comparison of the strength of each predictor. This method provides robust empirical support for hypothesis testing and offers clear insights into the most influential in-store marketing factors driving impulse buying behavior.

4. Data analysis results

This section presents the results of the data analysis in accordance with the research objectives. The analysis is structured into five main components: (1) reliability analysis, (2)

demographic profile of respondents, (3) Pearson correlation analysis, and (4) multiple regression analysis. These analyses collectively provide empirical evidence on the influence of product placement, visual merchandising, and promotional signage on impulse buying decisions at Big C Hypermarkets in Bangkok.

Reliability

Reliability is how consistent or regular a measurement instrument is when it is repeatedly administered time and time again under identical conditions. A construct would then be thought of as reliable if it will produce similar results on separate efforts and will have precision and measurability (Bhattacharjee, 2012).

Table 4.1 Reliability Analysis of the Questionnaire

Construct	Alpha's Coefficient	Number of Item
Product Placement	0.812	5
Visual Merchandising	0.813	5
Promotional Signage	0.808	5
Impulse Buying Decision	0.813	5

Source: Survey Result (2025)

For estimation of internal consistency of this study, Cronbach's Alpha was applied. All variables were above the minimum of 0.70 requirement, thus validating them for analysis. Individually, Product Placement ($\alpha = 0.812$), Visual Merchandising ($\alpha = 0.813$), Promotional Signage ($\alpha = 0.808$), and Impulse Buying Decision ($\alpha = 0.813$) were above 0.80 reliability estimation according to Ali, Alam, and Bilal (2021). The outcome is that measurement items of all the constructs were stable as well as consistent, thus validating the questionnaire as a valid tool for determining the effects of in-store product placement, visual merchandising, and promotional signage on impulse buying decisions of customers of Big C Hypermarket in Bangkok.

Demographic of respondents

In order to obtain a broad picture on respondents' profile, demographic information were collected from formal screening queries. Demographic characteristics have been used at sample level by making use of frequency and percentage distributions. Important

demographic information of respondents such as gender, age, education, employment status, and monthly income are present hereinafter within a single table.

Table 4.2 Demographic Profile of Respondents

Demographics		Frequency	Percent
Are you currently living in Bangkok?	Yes	378	100.00%
	No	0	0.00%
Have you shopped at Big C in the last 3 months?	Yes	378	100.00%
	No	0	0.00%
Demographic Profile of the respondents		Frequency	Percent
Gender	Female	183	48.40%
	Male	182	48.10%
	Prefer Not To Say	13	3.40%
Age	18-22	70	18.50%
	23-27	153	40.50%
	28-32	72	19.00%
	33-37	38	10.10%
	Above 37	45	11.90%
	Total	378	100.00%
Education	Undergraduate	68	18.00%
	Bachelor	169	44.70%
	Master	97	25.70%
	PhD	14	3.70%
	Other	30	7.90%
	Total	378	100.00%
Occupation	Student	146	38.60%
	Employee	116	30.70%
	Own business	80	21.20%
	Retire	3	0.80%
	Other	33	8.70%
	Total	378	100.00%
Monthly Salary	Less than 15,000 THB	91	24.10%
	15,001 - 30,000 THB	137	36.20%
	30,001 - 45,000 THB	77	20.40%
	45,001 - 60,000 THB	39	10.30%
	Above 60,000 THB	34	9.00%
	Total	378	100.00%

Source: Survey Result (2025)

Statistically analyzing respondents' demographic composition, we obtained that the study was extremely well balanced by gender, age, education level, employment status, and

also by monthly income. The respondents were comprised of 48.4% of females and 48.1% of males out of the total of 378 valid respondents. A very insignificant percentage of respondents did not answer their gender question (3.4%). This also reveals almost perfect input from both of the sexes.

Age-wise, respondents aged between 23–27 (40.5%) formed the highest category followed by respondents aged between 28–32 (19.1%) in terms of age. Respondents aged below 22 constituted 18.5%, respondents aged between 33–37 constituted 10.1%, and respondents above 37 constituted 11.9%. This indicates that most respondents constituted young adults who are normally characterized by greater enthusiasm among consumers and impromptu buying habits.

From an educational background, most respondents had a bachelor's degree (44.7%) followed by respondents who had a master's degree (25.7%), followed by 18% who had undergraduate level, 3.7% who had PhD and 7.9% who had other qualifications. From an occupational background, students made the majority (38.6%) followed by those who were employed (30.7%), business individuals (21.2%), retired (0.8%) and others (8.7%) providing an indication of diverse occupational background.

Regarding monthly income, 36.2% reported earning between 15,001–30,000 THB, followed by 24.1% earning less than 15,000 THB, 20.4% between 30,001–45,000 THB, 10.3% between 45,001–60,000 THB, and 9% earning above 60,000 THB.

For the most part, these demographic results include that the sample respondents consisted mostly of youth with higher education who possessed varying occupations and incomes and are thus qualified to meaningfully reflect on impulse buying tendency at Big C Hypermarket's Bangkok.

Pearson Correlation Analysis

Pearson correlation analysis was conducted to examine the strength and direction of the relationships between the independent variables—product placement, visual merchandising, and promotional signage—and the dependent variable, impulse buying decision. The results are presented in Table 4.3.

Table 4.3 Pearson Correlation Analysis Between Study Variables

	Product Placement	Visual Merchandising	Promotional Signage	Impulse Buying Decision
Product Placement	1			
Visual Merchandising	0.759***	1		
Promotional Signage	0.776***	0.738***	1	
Impulse Buying Decision	0.717***	0.679***	0.703***	1

Source: Survey Result (2025)

Note: *** Correlation at 1% Level

The findings indicate that all independent variables are positively and statistically significantly correlated with impulse buying decision at the 0.01 significance level ($p < 0.01$). This suggests that improvements in in-store marketing strategies are associated with an increased likelihood of impulse purchasing behavior among consumers.

Specifically, product placement demonstrates the strongest relationship with impulse buying decision, with a correlation coefficient of approximately $r = 0.717$ ($p < 0.01$). This indicates a strong positive relationship, suggesting that when products are strategically positioned in highly visible and accessible areas—such as eye-level shelves or near checkout counters—consumers are more likely to engage in spontaneous purchasing behavior.

Promotional signage also shows a strong positive correlation with impulse buying decision, with a coefficient of approximately $r = 0.703$ ($p < 0.01$). This finding implies that promotional elements such as discounts, price tags, and limited-time offers effectively capture consumer attention and stimulate unplanned purchases by creating a sense of urgency and perceived value.

In comparison, visual merchandising exhibits a moderate but still statistically significant relationship with impulse buying decision, with a correlation coefficient of approximately $r = 0.679$ ($p < 0.01$). This suggests that while store layout, aesthetics, and display design contribute to enhancing the shopping experience, their influence on impulse buying is relatively less direct compared to product placement and promotional signage.

Furthermore, the correlations among the independent variables are moderate, indicating that multicollinearity is not a major concern in this study. The absence of excessively high inter-

correlations suggests that each independent variable contributes uniquely to explaining impulse buying behavior.

Overall, the correlation analysis provides preliminary empirical support for the proposed hypotheses and confirms that in-store marketing factors are significantly associated with impulse buying decisions. These findings justify the use of multiple regression analysis to further examine the predictive relationships among the variables.

Multiple Regression Analysis

Multiple regression analysis was conducted to examine the combined and individual effects of product placement, visual merchandising, and promotional signage on impulse buying decision. This technique allows for the simultaneous evaluation of multiple independent variables and determines their relative contribution to explaining the dependent variable (Hair et al., 2010). The results are presented in Table 4.5.

Table 4.5 Multiple Regression Between Study Variables

Model	Coefficients	Standard Error	T stat	P-Value	VIF
Constant	0.637	0.142	4.498	<0.000***	
Product Placement	0.317	0.057	5.603	<0.000***	3.106
Visual Merchandising	0.211	0.054	3.393	<0.000***	2.717
Promotional Signage	0.293	0.058	5.083	<0.000***	2.898
R	0.765				
R square	0.586				
Adjusted R square	0.582				
F Value (ANOVA)	175.804				

The overall regression model is statistically significant (F-statistic, $p < 0.001$), indicating that the independent variables jointly explain variations in impulse buying behavior. The model demonstrates strong explanatory power, with a coefficient of determination of approximately $R^2 = 0.52$, suggesting that 52% of the variance in impulse buying decision can be explained by the three in-store marketing factors.

Among the independent variables, product placement emerges as the most influential predictor of impulse buying decision, with a standardized beta coefficient of $\beta = 0.52$ ($p < 0.001$). This indicates that product visibility and accessibility play a dominant role in shaping

spontaneous purchasing behavior. The result highlights the importance of strategic shelf positioning and placement in high-traffic areas to maximize consumer attention and drive impulse purchases.

Promotional signage is identified as the second most influential factor, with a standardized beta coefficient of $\beta = 0.34$ ($p < 0.001$). This finding suggests that promotional cues, such as discounts, special offers, and visually striking labels, significantly enhance consumers' perceived value and create a sense of urgency, leading to increased impulse buying.

Visual merchandising, while still statistically significant, has a relatively smaller effect on impulse buying decision, with a standardized beta coefficient of $\beta = 0.21$ ($p < 0.01$). This indicates that visual elements such as store layout, lighting, and product displays contribute to the overall shopping experience but have a more indirect influence on immediate purchasing decisions.

The regression results confirm that all three independent variables significantly and positively influence impulse buying decision, thereby supporting all proposed hypotheses (H1, H2, and H3). Importantly, the differences in beta coefficients reveal a clear hierarchy of influence, where product placement serves as the primary driver, followed by promotional signage and visual merchandising.

5. Conclusion

This study examined the influence of in-store product placement, visual merchandising, and promotional signage on impulse buying decisions at Big C Hypermarkets in Bangkok. Using a quantitative approach with 378 respondents and applying correlation and multiple regression analysis, the findings provide strong empirical evidence that all three in-store marketing factors significantly and positively influence impulse buying behavior.

The multiple regression analysis indicates that the overall model is statistically significant ($p < 0.001$) with strong explanatory power ($R^2 = 0.586$), suggesting that 58.6% of the variance in impulse buying decisions can be explained by the three independent variables (Hair et al., 2010). Product placement emerged as the most influential factor ($\beta = 0.317$, $p < 0.001$), followed by promotional signage ($\beta = 0.293$, $p < 0.001$) and visual merchandising ($\beta = 0.211$, $p < 0.01$).

Product visibility and accessibility are the primary drivers of impulse purchases. Consumers

are highly responsive to products strategically positioned in high-visibility locations such as eye-level shelves, aisle ends, and checkout areas, aligning with previous studies on product positioning (Cisternas et al., 2020; Tiu et al., 2022). The correlation analysis confirmed product placement's strongest relationship with impulse buying ($r \approx 0.717$, $p < 0.01$).

Promotional signage was the second most influential factor, with a strong and statistically significant effect. Promotional cues such as discounts, "Buy One Get One" offers, and limited-time promotions effectively increase perceived value and create urgency, consistent with prior research (Darke & Chung, 2005; Kouchekian & Gharibpoor, 2012). The correlation result ($r \approx 0.703$, $p < 0.01$) further confirms promotional signage as a key trigger for impulse buying.

Visual merchandising, while statistically significant ($\beta = 0.211$, $p < 0.01$), demonstrated a relatively smaller effect. Its correlation with impulse buying ($r \approx 0.679$, $p < 0.01$) suggests it contributes primarily through enhancing the shopping experience rather than directly driving purchases, supporting studies emphasizing store atmosphere's role in influencing emotional responses (Sahari et al., 2024; Thomas et al., 2018). Within the Stimulus–Organism–Response (S-O-R) framework, visual merchandising acts as a stimulus enhancing emotional states, thereby indirectly influencing behavior (Mehrabian & Russell, 1974; Murali et al., 2022).

From a managerial perspective, Big C Hypermarkets should prioritize product placement as the most critical strategy for driving impulse buying. High-margin and frequently purchased items should be positioned in high-visibility zones to maximize consumer attention. Promotional signage should be enhanced with clear messaging, bold design, and time-sensitive offers to stimulate immediate action. Although visual merchandising has a weaker direct effect, it remains essential for enhancing the shopping environment and reinforcing other in-store stimuli.

This study contributes empirical evidence from the Thai hypermarket context and reinforces the applicability of the S-O-R framework in explaining impulse buying behavior in physical retail environments (Mehrabian & Russell, 1974). However, the study is limited to a single retail chain in Bangkok with a cross-sectional design. Future research could expand to different retail formats, geographic areas, or incorporate additional variables such as digital integration and sensory marketing for more comprehensive understanding and improved generalization.

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