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ANALYZING THE EFFECT OF STORE ATMOSPHERE, VISUAL MERCHANDISING, AND PRODUCT ASSORTMENT ON IMPULSIVE PURCHASING: THE MEDIATING ROLE OF SHOPPING ENJOYMENT.

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ABSTRACT

This study aims to analyze the effect of store atmosphere, visual merchandising, and product assortment on impulsive purchases with shopping enjoyment as an intervening variable. The study was conducted on 96 Amora Pekanbaru customers selected through purposive sampling technique. Data were collected using a questionnaire and analyzed using the Structural Equation Modeling (SEM) method using SmartPLS 4. The results showed that visual merchandising and product assortment had a significant effect on shopping enjoyment, while store atmosphere had no effect. In terms of impulsive purchases, only product assortment and shopping enjoyment were proven to have a significant effect, both directly and through mediation. In contrast, store atmosphere and visual merchandising had no direct or indirect effect on impulsive purchases. These findings confirm that product diversity and a pleasant shopping experience are key factors in driving consumer impulsive buying behavior.

INTRODUCTION

The rapid development of the retail world, particularly in urban areas like Pekanbaru, has increased the phenomenon of impulse buying—the act of spontaneously purchasing without planning (Mohan et al., 2013). These purchases are driven by emotional factors and store environmental stimuli, with research showing that 30-61% of retail transactions can be categorized as impulsive (Deutsch et al., 2016).

Impulsive buying behavior is triggered by store environmental elements, where Store Atmosphere, Visual Merchandising, and Product Assortment are believed to play important roles. A pleasant store atmosphere, attractive product displays, and a wide product variety are said to increase spontaneous purchase intentions (Mutiah et al., 2018; Kristiawan et al., 2018; Munthe, 2022). Furthermore, psychological factors such as Shopping Enjoyment have also been shown to have a positive influence and act as a mediator that strengthens the urge to buy impulsively (Xu et al., 2021; I. Agustiadi, 2023).

However, there are research gaps and contradictory views. Several studies indicate that impulsive decisions are more influenced by personal factors (self-control) and price/promotion, while store environmental elements are not always significant (Verplanken & Herabadi, 2001; Turley & Milliman, 2000; Iyengar & Lepper, 2000). Furthermore, research in specific locations is still limited. Previous research at the Amora Store in Pekanbaru by Lastari (2023) only found a 24.1% contribution from hedonic shopping and self-esteem factors to impulsive purchases, leaving 75.9% of the influence from other factors untested, particularly store environmental elements.

Therefore, this study focuses on Amora Pekanbaru Store, a shopping center that optimally implements all three elements of the store environment (store atmosphere, visual merchandising, product assortment). Based on a pre-survey of 30 respondents, it was found that 100% of respondents had made impulsive purchases, and 83.3% admitted that the shopping experience contributed to this behavior.

Based on this background, this study aims to analyze and empirically test how Store Atmosphere, Visual Merchandising, and Product Assortment influence consumer Impulse Buying at Amora Pekanbaru Store, using Shopping Enjoyment as a mediating variable. The results of this study are expected to provide theoretical and practical contributions in formulating modern retail marketing strategies.

LITERATURE REVIEW

An effective marketing strategy will involve a comprehensive market analysis, utilizing data and market research for decision-making, and developing a marketing mix tailored to the characteristics of the target market (Kotler & Armstrong, 2020). Therefore, marketing management is a crucial aspect of business success, both in the short and long term.

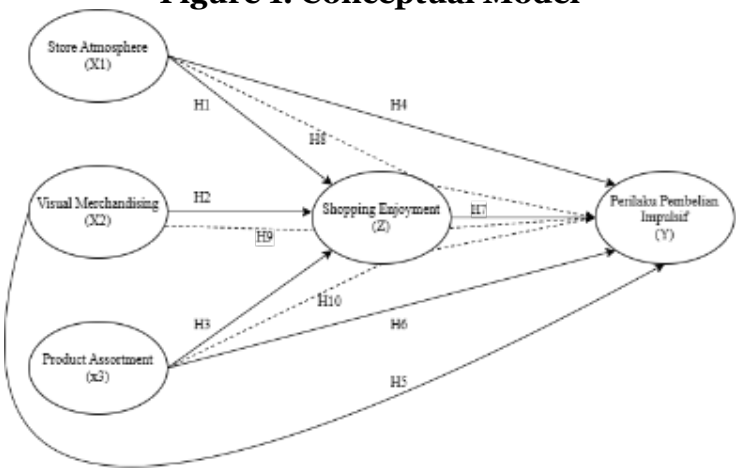
According to Salim (in Munawaroh & Simon, 2023) store atmosphere is a variety of interior and exterior displays, layouts, internal store traffic, comfort, air, service, music, uniforms, length of goods, and so on, which as a whole create consumer attraction and arouse the desire to buy. According to Utami (2017), store atmosphere

is a combination of the physical characteristics of the store, such as architecture, layout, lighting, displays, color, temperature, music, and aroma, which as a whole creates an image in the minds of consumers.

According to Jain (2012) in (Agustiadi et al., 2023), visual merchandising is the practice of strategically displaying products to attract consumers' attention. This method involves elements such as store layout, product displays, lighting, themes, and graphics to create an engaging shopping experience. Effective styling can enhance customers' positive emotions and influence purchasing decisions, including impulse buys. Simply put, visual merchandising involves presenting store or brand displays to attract customers' attention. In practice, retailers can create various stimuli in the shopping environment to encourage consumers to make purchases.

Furthermore, product assortment is defined as the number of different items offered in a single product category. This means that assortment includes the variety of choices available within a particular category. Kotler & Keller (2016) state that product assortment is “the set of all products and items a particular seller offers for sale.” Or a complete set of products offered for sale by a particular seller. Product diversity is the completeness of products that includes depth, breadth, and quality as well as product availability whenever consumers want. The arrangement of product variations and displays in stores plays an important role in managing product diversity.

Figure 1. Conceptual Model



METHODOLOGY

Population & Sample

According to Sugiyono (2013), a research population is all elements or objects with specific characteristics that are the focus of a study. A population can consist of individuals, groups, organizations, or other objects relevant to the research objectives. The population in this study was consumers who had shopped at Amora Panam Pekanbaru between 2023 and 2025.

However, because the exact population size in this study was unknown, the researcher used the Lameshow formula to determine the sample size. This formula is often used in studies with unknown or unclearly identified populations. Using the Lameshow formula, the minimum sample size obtained in this study was 96 respondents. This sample size is expected to provide accurate results and support the research analysis objectives.

Data collection

A questionnaire is a series of questions compiled based on research variable indicators. Data collection using questionnaires is considered highly efficient, as respondents only need to select answers provided by the researcher (Sahir, 2021). In this study, researchers designed a number of questions or statements related to store atmosphere, visual merchandising, and product assortment to evaluate how these factors influence shopping enjoyment and the impulsive buying behavior of Amora Pekanbaru consumers. The research instrument used a questionnaire with a Likert scale, in which respondents were asked to provide answers based on predetermined options.

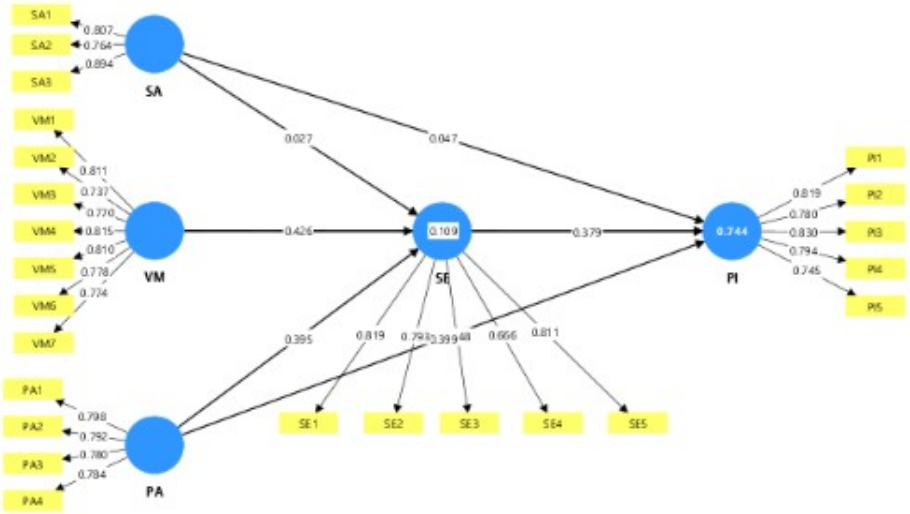
Measurement

The data measurement in this study used Partial Least Square (PLS), a variance-based Structural Equation Modeling (SEM) analysis method used to examine the relationship between latent variables in complex research models. According to Sugiyono (2017), PLS is an analysis technique that aims to predict relationships between variables and process data with small sample sizes, non-normal distributions, and models with reflective and formative indicators. PLS focuses more on data variability than hypothesis testing, so it is often used in exploratory research that requires flexibility in analyzing relationships between variables.

Another opinion was put forward by Hair et al. (2019), who stated that PLS is a regression-based SEM method that can be used to estimate the relationship between latent variables while considering prediction accuracy. Meanwhile, despite its limitations, PLS allows researchers to develop alternative, more flexible approaches to testing complex structural models, especially when the data does not meet classical assumptions (Wold, 2004).

RESULTS AND DISCUSSION

Figure 2. Full Structural Model



Source: Data Proceeded By The Author

The outer and inner measurement models are analyzed using a pre-designed path diagram. The path diagram will generate values from the outer measurement model and the

inner structural model from the estimates generated using SmartPLS 4.0. The designed path diagram can be seen in Figure 2.

Table 1. Validity Test

Construct	Indicator	Outer Loading	Information
Product Assortment (PA)	PA1	0.56	Valid
	PA2	0.55	Valid
	PA3	0.54	Valid
	PA4	0.54	Valid
Purchase Impulsive (PI)	PI1	0.57	Valid
	PI2	0.54	Valid
	PI3	0.58	Valid
	PI4	0.55	Valid
	PI5	0.52	Valid
Store Atmosphere (SA)	SA1	0.56	Valid
	SA2	0.53	Valid
	SA3	0.62	Valid
Shopping Enjoyment (SE)	SE1	0.59	Valid
	SE2	0.55	Valid
	SE3	0.53	Valid
	SE4	0.46	Valid
	SE5	0.59	Valid
Visual Merchandising (VM)	VM1	0.56	Valid
	VM2	0.51	Valid
	VM3	0.53	Valid
	VM4	0.57	Valid
	VM5	0.56	Valid
	VM6	0.54	Valid
	VM7	0.54	Valid

Source: Data Proceeded By The Author

Results processing data with use SmartPLS (Smart Partial Least Square) can concluded that all over indicator own mark outer loading in on 0.60, Which show that every indicator the own validity Which tall, indicator This Still considered Enough valid For fulfil condition convergent validity, Because according to Ghozali (2014), mark outer loading in range 0.5 until 0.6 Already considered adequate For fulfil criteria validity convergent.

Table 2. Reliability Test

Variables	Composite Reliability (CR)	Average Variance Extracted (AVE)
Product Assortment (PA)	0.60	0.43
Purchase Impulsive (PI)	0.62	0.44
Store Atmosphere (SA)	0.61	0.41
Shopping Enjoyment (SE)	0.62	0.39
Visual Merchandising (VM)	0.64	0.43

Source: Data Proceeded By The Author

All over construct own mark CR in on 0.70 And AVE in on 0.50. Matter This show that indicator on each construct own consistency internal Which Good (reliable) And capable explain variance construct in a way adequate (valid). By Because That, constructs the assessed worthy For used in testing model furthermore.

Table 3 R-Square

Construct	R-Square	R-Square Adjusted
PI (Purchase Impulsive)	0.744	0.733
SE (Shopping (Enjoyment)	0.655	0.644

Source: Data Proceeded By The Author

Based on results test R-Square, construct Purchase Impulsive (PI) own mark 0.744 And Shopping Enjoyment (SE) as big as 0.655. Matter This show that model capable explain variability PI And SE in a way strong and adequate.

Table 4 Hypothesis Testing

Hypothesis	Original Sample (O)	Sample Mean (M)	STDEV	T Statistics	P Values	Results
Store Atmosphere → Shopping Enjoyment	0.03	0.04	0.08	0.23	0.52	Rejected
Visual Merchandising → Shopping Enjoyment	0.30	0.30	0.08	3.96	0.00	Accepted
Product Assortment → Shopping Enjoyment	0.27	0.27	0.09	4.30	0.00	Accepted
Store Atmosphere → Purchase Impulsive	0.05	0.05	0.07	0.46	0.35	Rejected
Visual Merchandising → Purchase Impulsive	0.08	0.07	0.10	0.51	0.32	Rejected
Product Assortment → Purchase Impulsive	0.28	0.28	0.10	2.70	0.01	Accepted
Shopping Enjoyment → Purchase Impulsive	0.26	0.27	0.12	2.27	0.02	Accepted
Store Atmosphere → Purchase Impulsive (via Shopping (Enjoyment)	0.01	0.02	0.04	0.20	0.54	Rejected
Visual Merchandising → Purchase Impulsive (via Shopping (Enjoyment)	0.11	0.11	0.09	1.91	0.06	Rejected
Product Assortment → Purchase Impulsive (via Shopping (Enjoyment)	0.10	0.10	0.08	2.00	0.05	Accepted

Source: Data Proceeded By The Author

DISCUSSION

Based on the results of hypothesis testing on the Store Atmosphere path→Shopping Enjoyment, obtained a t-statistic value of 1.082, which is smaller than the minimum limit of 1.96, and a p-value of 0.279, which is greater than 0.05. Thus, the hypothesis is rejected. This means that statistically, the store atmosphere does not have a significant influence on the shopping enjoyment felt by consumers. These results indicate that the physical environment of the store, such as interior

design, lighting, or background music, although they may be designed to be attractive, are not strong enough to create an emotionally enjoyable shopping experience for customers.

Based on the results of hypothesis testing on the Visual Merchandising path→Shopping Enjoyment, obtained a t-statistic value of 3.960, which is greater than the minimum limit of 1.96, and a p-value of 0.000, which is less than 0.05. Thus, the hypothesis is accepted. This means that statistically, visual merchandising has a significant influence on shopping enjoyment felt by consumers.

Based on the results of hypothesis testing on the Product Assortment path→For Shopping Enjoyment, the t-statistic value was 4.296, which is greater than the minimum threshold of 1.96, and the p-value was 0.000, which is less than 0.05. Thus, the hypothesis is accepted. This means that statistically, the variety and diversity of products offered have a significant influence on the shopping enjoyment experienced by consumers.

Based on the results of hypothesis testing on the Store Atmosphere path→For Impulse Buying, the p-value was 0.510, which is greater than the significance limit of 0.05. This indicates that the effect of Store Atmosphere on impulse buying is not statistically significant. Thus, the hypothesis is rejected. This means that store atmospheric conditions, such as layout, lighting, or background music, do not directly encourage consumers to make impulse purchases.

Based on the results of hypothesis testing on the Visual Merchandising path→For Impulse Buying, the t-statistic value was 0.736, which is smaller than the minimum limit of 1.96, and the p-value was 0.462, which is greater than 0.05. Thus, the hypothesis is rejected. This means that statistically, visual merchandising does not have a significant influence on consumer impulse buying behavior.

Based on the results of hypothesis testing on the Product Assortment path→For Impulse Buying, the t-statistic value obtained was 2.699, which is greater than the minimum limit of 1.96, and the p-value was 0.007, which is less than 0.05. Thus, the hypothesis is accepted. This means that statistically, the variety and diversity of products offered have a significant influence on consumer impulse buying behavior.

Based on the results of hypothesis testing on the Shopping Enjoyment path→For Impulse Buying, the t-statistic value obtained was 2.269, which is greater than the minimum limit of 1.96, and the p-value was 0.023, which is less than 0.05. Thus, the hypothesis is accepted. This means that statistically, shopping enjoyment has a significant effect on consumer impulse buying behavior.

Based on the results of hypothesis testing on the Store Atmosphere path→For Impulse Buying, the p-value obtained was 0.771, which is greater than the significance limit of 0.05. This indicates that the indirect effect of Store Atmosphere on impulse buying through shopping enjoyment is not statistically significant. Thus, the hypothesis is rejected. This means that store atmospheric conditions, such as layout, lighting, or background music, do not indirectly encourage consumers to make impulse purchases through a pleasant shopping experience.

Based on the results of hypothesis testing on the Visual Merchandising path→For Impulse Buying, the p-value obtained was 0.057, which is slightly greater

than the significance limit of 0.05. This indicates that the indirect effect of Visual Merchandising on impulse buying through shopping enjoyment is not statistically significant, although it is close to the threshold. Thus, the hypothesis is statistically rejected, but can be considered practically.

Based on the results of hypothesis testing on the Product Assortment path→For Impulse Buying, the p-value obtained was 0.046, which is smaller than the significance limit of 0.05. This indicates that the indirect effect of Product Assortment on impulse buying through shopping enjoyment is statistically significant. Thus, the hypothesis is accepted. This means that the diversity and availability of products offered indirectly encourage consumers to make impulse purchases through feelings of pleasure while shopping.

CONCLUSION

Results study show that visual merchandising And product assortment influential significant to shopping enjoyment, whereas store atmosphere No influential. In matter purchase impulsive, only product assortment And shopping enjoyment Which proven influential in a way significant, Good in a way direct and through mediation. On the contrary, store atmosphere And visual merchandising No influential direct and No direct to purchase Impulsive. Based on the R-Square test results, the Impulsive Buying (PI) construct has a value of 0.744 and Shopping Enjoyment (SE) of 0.655. This indicates that the model is able to explain the variability of PI and SE strongly and adequately. Findings This confirm that diversity product And experience shopping Which pleasant become factor key in push behavior purchase impulsive consumer.

REFERENCES

Agustiadi, ., Wulandari, GA, Paramita, C., & Agustina, GAR (2023). The Role of Store Atmosphere and Visual Merchandising in Increasing Impulsive Buying Through Visitors' Positive Emotions in Shopping Centers. Proceedings of the National Seminar on Research and Innovation Synergy, 1(1), 79–90. https://doi.org/10.31938/psnsri.v1i1.517

Cahyani, L., & Marcelino, D. (2023). Positive Emotions as Mediation Between Hedonic Shopping Motivations on Mpulsive Buying Behavior of E-Commerce in Indonesia. Asia Pacific Management and Business Applications, 011(03), 347–362. https://doi.org/10.21776/ub.apmba.2023.011.03.7

Deutsch, R., Gawronski, B., & Hofmann, W. (2016). Reflective and impulsive determinants of human behavior. Reflective and impulsive Determinants of Human Behavior, December 2006, 1–267. https://doi.org/10.4324/9781315523095

Ghozali, . (2014). Structural Equation Modeling Alternative Method with Partial Least Squares (PLS).

Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Jain, A. & P. (2012). impact of Visual Merchandising on Consumer Behavior. Journal of Marketing and Communication, 11(2), 18-28.

Kotler, P., & Armstrong, G. (2020). Principles of Marketing, Global Edition. Pearson Deutschland. https://elibrary.pearson.de/book/99.150005/9781292341200

Kristiawan, A., Gunawan, ., & Vinsensius, V. (2018). The Effect of Discounts, Packaging Bonuses, and In-Store Displays on Impulsive Purchasing Decisions. Indonesian Journal of Management and Business, 6, 30–44. https://doi.org/10.31843/jmbi.v6i1.181

Lastari. (2023). The Effect Of Hedonic Shopping And Self-Esteem On Consumer Implusive Buying At Amora Store, Bina Wdya District, Pekanbaru. At-Tawassuth: Jurnal Ekonomi Islam, Viii(I), 1–19.

Lestari, S., & Manafe, L.A. (2023). The Nfluence Of Product Variety And Customer Experience On Customer Satisfaction. International Journal of Economics, Business and Accounting Research (IJEBAR), 7(3). https://doi.org/10.29040/ijebar.v7i3.10936

Mohan, G., Sivakumaran, B., & Sharma, P. (2013). impact of store environment on pulse buying behavior. European Journal of Marketing, 47(10), 1711–1732. https://doi.org/10.1108/EJM-03-2011-0110

Munawaroh, M., & Simon, Z. Z. (2023). The influence of Store Atmosphere, Service Quality, Product Quality, and Price on Customer Satisfaction. Research of Business and Management, 1(1), 35–44. https://doi.org/10.58777/rbm.v1i1.21

Munthe, WE (2022). The Influence of Product Diversity and Price Perception on Purchase Interest at the Atong Collection Store in Medan City.

Sahir, SH (2021). Research Methodology (T. Koryati, Ed.; 1st ed.). East Java: KBM Indonesia. Journal of Educational Sciences (Vol. 7, Issue 2).

Sugiyono. (2017). Quantitative, Qualitative, and R&D Research Methods.

Turley, L. W., & Milliman, R. E. (2000). Atmospheric Effects on Shopping Behavior: A Review of the Experimental Evidence. Journal of Business Research, 49(2), 193–211. https://doi.org/https://doi.org/10.1016/S0148-2963(99)00010-7

Utami, B., Utama, A. (2017). The Influence of Hedonic Shopping Value on Impulse Buying with Positive Emotions as an Intermediary Variable (Case Study on Consumers at Ambarukmo Plaza Yogyakarta). Indonesian Business Management Journal (JMBI), 6(1), 11–22.