



Impact of Visual Merchandising on Customers’ Purchase Decision

Ujala Shafqat¹ & Sheikh Muhammad Fakhar E Alam Siddiqui²

¹Research Scholar, Karachi University Business School, University of Karachi, Pakistan,

ORCID: <https://orcid.org/0009-0009-7369-9530>, ujalaaraza@gmail.com

²Assistant Professor, Karachi University Business School, University of Karachi, Pakistan,

ORCID: <https://orcid.org/0009-0000-1073-5623>, fakhrealam@uok.edu.pk

ARTICLE INFO

Article History:

| | | |
|-------------------|----------|----------|
| Received: | January | 03, 2026 |
| Revised: | January | 25, 2026 |
| Accepted: | February | 10, 2026 |
| Available Online: | February | 24, 2026 |

Keywords:

Visual Merchandising, Purchase Intention, Consumer Behavior, Retail Environment, PLS-SEM, Purchase Decision

Corresponding Author:

Ujala Shafqat

Email:

ujalaaraza@gmail.com



ABSTRACT

This paper sets out to discuss how the in-store retail variables affect the buying behavior of consumers through the mediating variable of purchase intention, as well as the effects of visual merchandising. The study was carried out to fill the gap in the existing literature, which frequently presupposes the existence of a direct correlation between store setting and purchasing behavior, and fails to consider the inner processes of psychological decision making. This relationship is especially relevant to comprehend in the context of modern retail where consumer behavior is becoming more and more multifaceted and experience-oriented. The quantitative research design was applied based on a structured questionnaire and was modeled with the help of the Partial Least Squares Structural Equation Modeling (PLS-SEM). The researchers determined the correlations of several constructs, such as display set, signage, storage environment, variety, eye level product display, visual merchandising, purchase intention, and purchase decision made by consumers. The results indicate that visual merchandising does not have a significant direct impact on purchase decision ($\beta = 0.017$), whereas purchase intention has a significant positive impact ($\beta = 0.538$). Also, the model explains the purchase intention ($R^2 = 0.021$) and purchase decision ($R^2 = 0.290$) with low and moderate power, respectively. These findings suggest that the buying decisions are always influenced more by internal motives as opposed to external store stimuli. The study is important because it redefines the aspect of visual merchandising as an indirect influence and it shows the role of psychological factors in consumer behavior. It offers worthwhile research that can be included in the future studies to include emotional and experience variables into an in-depth model.

Introduction

The modern retail environment has changed radically because of the blistering technological changes and the shift in consumer behavior, which has resulted in heightened rivalry between brands in order to win customer interest and influence their buying decisions. Visual merchandising has become a very important strategic instrument that shapes the perception of consumers of products and retail space in such an environment. Visual merchandising involves the design and presentation of merchandise in terms of display configurations, signs, store layout, and aesthetic displays that in totality are meant to capture, involve and convince the customer. Recent research emphasizes that aesthetically pleasing retail settings can be a key stimulus to customer interaction and the desire to buy, especially in markets with a high level of competition (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Wörfel et al., 2022). The previous studies also confirm the notion that retail atmospherics and visual stimuli are crucial in influencing the perception and decision-making processes among consumers (Turley and Milliman, 2000; Kerfoot et al., 2003). Visual merchandising has therefore ceased to be restricted to an aesthetic improvement device but a forceful marketing communication device that can impact consumer cognition and behavior.

Problem Statement

Although there has been a growing trend to adopt visual merchandising strategies in contemporary retail settings, there is still no in depth knowledge on how the same can be effectively converted into consumer purchase decisions especially by having the underlying behavioral processes like purchase intention. However, although recent research has confirmed that the role of visual merchandising factors like store environment, product displays, or promotion cues positively impact consumer engagement and impulse buying behavior (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Redine et al., 2022), the empirical data required to understand how and through which mechanisms these effects work are still in Additionally, most available research works concentrate on the independent or direct influence, without taking into account the mediating role of psychological constructs between stimuli and response in consumer behavioral decision-making (Florea et al., 2025; Sahari et al., 2024).

Objectives of the Study

- To research the effects of visual merchandising on consumers in terms of purchase intention in retail settings.
- To examine how purchase intention is related to consumers purchase decisions.
- To investigate the direct effect of visual merchandising on consumers' purchase decisions.
- To determine the mediating role of purchase intention in the relationship between visual merchandising and purchase decisions of the consumers.

Research Questions

RQ1: What is the effect of visual merchandising on purchase intention of consumers in a retail setting?

RQ2: How does purchase intention influence purchase decisions of consumers?

RQ3: Does purchase intention mediate between visual merchandising and purchase decisions of consumers?

Literature Review

Visual merchandising has become a key construct of the contemporary retailing that can be defined as the strategic display and positioning of products and store features in order to appeal to the customers and impact their purchasing patterns. It comprises elements like display systems, signage, light, and store appearance, which all combine to influence the perception and experience of consumers. Recent literature emphasizes that visual merchandise boosts customer interactions and is important to stimulate planned and impulse purchases (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Redine et al., 2022). These results align with previous studies that highlight that store ambiances should be designed in a way that positively affects consumer attitudes and purchase intentions (Bhatt et al., 2020; Turley and Milliman, 2020). Therefore, visual merchandising is greatly noted as one of the main external stimuli, which directly influence consumer behavior in modern retail stores.

Store environment is another important construct in this paper that includes the physical and ambient elements of a retail environment such as layout, lighting, cleanliness and ambiance. The store experience has a major impact on the consumer perceptions and interaction with products, hence purchasing intentions. According to recent studies, a well-decorated and clean store atmosphere is associated with better customer satisfaction and increased in-store shopping time, which increases the chances of purchase (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Florea et al., 2025). In line with these results, previous literature shows that environmental signals like music, lighting, and layout have the potential to arouse emotional reactions and affect buying behavior (Wörfel et al., 2022; Bhatt et al., 2020). Thus, store environment is one of the important contextual factors and is a complement to visual merchandising strategies in influencing consumer decisions.

Model Development

S-O-R framework

Besides the S-O-R framework, the Theory of Planned Behavior (TPB) also provides a useful insight on the process of intention in determining the behavior of consumers. TPB assumes that behavioral intention determines behavioral actualities, which is influenced by attitudes, subjective norms and perceived behavioral control. Within the context of retail setting, visual merchandising has the potential to influence consumer's attitude towards the products, and hence purchase intention. Recent research points out that attractive retail spaces have a positive influence on consumer attitudes and a substantial impact on purchase intention, subsequently resulting in purchase decisions (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Florea et al., 2025). Previous studies also highlight that intention is a powerful predictor of behavior especially in consumer decision-making situations (Ajzen, 1991; Verplanken and Sato, 2011). Thus, TPB is used to supplement the S-O-R model in that the purchase intention mediates the relationship between the two.

AIDA Model

The second valuable theoretical approach that can be considered in the context of this study is the AIDA model (Attention-Interest-Desire-Action) describing the way in which marketing stimuli lead consumers to various phases of the buying process. Visual merchandising is a vital measure in the attention-grabbing and consumer interest creation by use of appealing displays, signage and the

appearance of the store. According to the latest studies, successful visual merchandising approaches can successfully transform consumer attention to action by generating desire and inspiring purchase intentions (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Redine et al., 2022). To reinforce that, previous research points out that an effective marketing stimulus can have a substantial impact on every step of the consumer decision-making process (Kotler et al., 2020; Strong, 1925). Therefore, the AIDA model gives a systematic description of the effects of the visual merchandising elements on the purchase intention and choice.

Hedonic Consumption Theory

Moreover, the Hedonic Consumption Theory provides a valuable perspective to the emotional and experiential factors of consumer behavior. According to this theory, consumers are motivated not merely by the functional requirements, but by emotional and sensory experiences. With its visual and sensory presentation, visual merchandising boosts the hedonic value of shopping by making it more enjoyable and interesting. More recent researches show that the emotional reactions to the visual perception of a retail setting are much more positive and result in increased purchase intention and impulse buying behaviour (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Redine et al., 2022). Previous studies also uphold that emotional and experiential aspects are very important in influencing consumer choices (Hirschman and Holbrook, 1982; Babin et al., 1994). Thus, the role of emotional reactions in visual merchandising/purchase decision relationship is supported by hedonic consumption theory.

Comparison of the Various Studies

The links between visual merchandising and the purchase decision of customers is a topic that has been extensively studied in recent literature, with a vast amount of evidence suggesting that it has a positive impact. According to many modern studies, the visual aspects of merchandise like display arrangements, signage, and store appearance greatly contribute to customer attention and interest thus making them more likely to make a purchase decision (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Redine et al., 2022). The results are in line with previous studies that have indicated that attractive visual displays can positively impact consumer attitudes and actions (Bhatt et al., 2020; Turley and Milliman, 2020). The S-O-R model also justifies this perspective theoretically since it provides the reasons behind the positive behavioral response to environmental stimuli. Therefore, the prevailing school of thought in literature is that visual merchandising is a key element in determining consumer buying behavior.

But there are studies that give an opposite opinion; that effectiveness of visual merchandise does not necessarily mean purchase decisions. According to recent studies, although visual stimulus can draw attention, it might not translate into real purchases in case other aspects are not considered, including price sensitivity, quality of the product, or brand loyalty (Florea et al., 2025; Sahari et al., 2024; Gagarin et al., 2025). When this happens the consumers might have a good experience with the visual appeal yet fail to make the purchase because of rational consideration. Previous research findings also show that the process of consumer decision-making is not only dependent on various environmental stimuli, but also on individual preferences and financial limitations (Verplanken and Sato, 2011; Babin et al., 1994). Thus, although visual merchandising does play a significant role, its effect can be minimal without the support of other key elements.

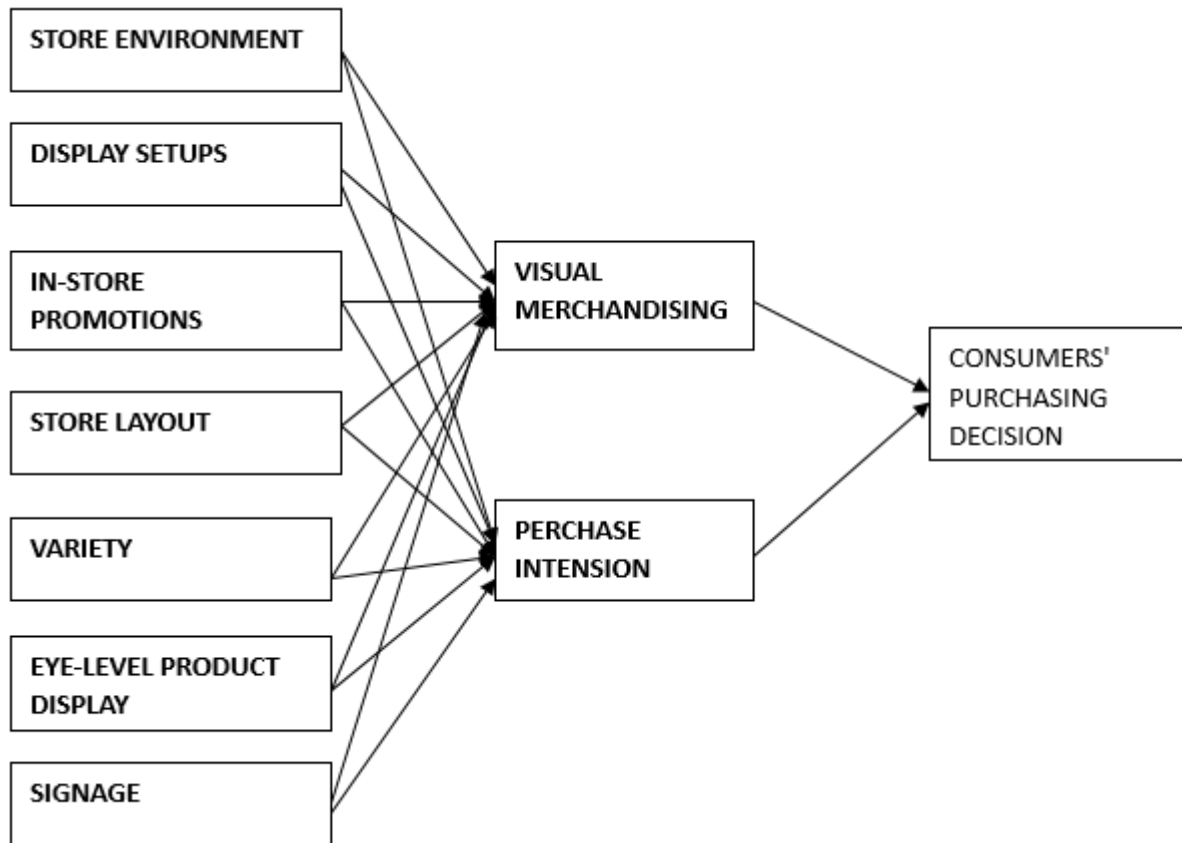


Figure 1 Conceptual Framework

Hypothesis Development

Store Environment and Visual Merchandising

The store setting is fundamental in defining the success of visual merchandising by offering the physical and senses surrounding where visual aspects are accessed. A good store environment such as lighting, ambience, space layout and cleanliness makes the merchandising displays more visible and attractive and therefore more effective in impacting consumers. As recent research shows, store environment also has a significant impact on the perception of visual merchandising by enhancing customer engagement and attention to the products on display (Ntobela and Mbukanma, 2023; Hussein et al., 2023; Florea et al., 2025). These results indicate that the effectiveness of merchandising strategies is enhanced based on the environmental context and thus becomes more convincing and effective in retail environment.

Display Setups and Visual Merchandising

Display arrangements are among the most immediate and powerful elements of visual merchandising since this determines how the consumer sees the products displayed. Presentation of products in attractive and well planned displays maximizes product visibility and produces an attractive visual story which attracts the consumer attention. Recent literature indicates that display arrangements marked by creativity have a great impact on consumer perceptions of visual merchandising by enhancing product beauty and stimulating exploration (Ntobela and Mbukanma, 2023; Redine et al., 2022; Hussain et al., 2023). The setups have been the centre of attention in retail settings, and thus play a critical role in effective merchandising plans.

In-Store Promotions and Purchase Intention

In-store promotions are effective marketing tools that directly affect the intention to purchase, through a sense of urgency and perceived value. Promotional tactics like offering discounts, limited time offers and deals will make consumers think of making purchases that they might not have planned to make at first. Recent research shows that in-store promotions are effective in boosting purchase intention, as they increase the perceived benefits and decrease the perceived risk (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Redine et al., 2022). These results indicate that promotional cues are powerful stimuli in consumer decision-making.

H1: Store environment greatly positively influences visual merchandising.

H2: Display arrangements are significantly positively related to visual merchandising.

H3: In-store promotions have a significant positive impact on purchase intention.

Store Layout and Visual Merchandising

Store layout has profound effect on the success of visual merchandising since it defines how consumers move and engage retail spaces. Having a well-planned layout can improve the visualisation of products and enables better arrangement of the visual displays so that merchandising can be effective. According to recent researches, store layout has a positive impact on visual merchandising as it allows the movement of customers in a store and exposure to the products (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Florea et al., 2025). This is a well-organized design that makes consumers more inclined to pay attention to and interact with things shown.

Variety and Purchase Intention

The diversity of products is a key element that determines purchase intention by giving the consumer several options and increases the level of perceived value. The variety of products gives consumers a chance to compare and choose products, which best suit their preferences, and in the process, enhance their intention to purchase. Recent research shows that product variety is a substantial predictor of purchase intention, which can be improved in terms of both satisfaction and perceived utility (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Redine et al., 2022). This product variety stimulates the consumer to look into other options and the chances of a purchase are higher.

Eye-Level Product Display and Visual Merchandising

Eye-level product display is a visual merchandising method which is important as it has a direct impact on consumer attention and product visibility. Consumer products that are located at eye level are more likely to be noticed and put into consideration thus this type of strategy is very effective in a retailing setting. Recent research attests to eye-level placement as a great way to improve the effectiveness of visual merchandising as it elevates product accessibility and attractiveness (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Redine et al., 2022). This product placement is crucial in the direction of consumer orientation in the stores.

H4: The visual merchandising is greatly affected positively by the store layout.

H5: Purchase intention is significantly positively affected by product variety.

H6: Product display at eye level has exceptionally positive effects on visual merchandising.

Signage and Visual Merchandising

Signage is important in improving visual merchandising by helping to give information and direct consumer behavior in the retail set up. Good signage conveys product information, promotions and directions thus enhancing the shopping experience. According to recent research, signage plays a significant role in visual merchandising as it enhances product awareness and shapes consumer perceptions (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Florea et al., 2025). This informational role enhances the effectiveness of merchandising strategies.

Visual Merchandising, Purchase Intention and Purchase Decision

Visual merchandising is important in affecting the internal judgment of the consumers which will further affect their purchase intention and ultimate buying decisions. Recent research indicates that the perception of consumers and their emotional reactions to the advertisement can be improved through attractive displays, clear signs, and store layouts, thus making them more willing to buy (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Redine et al., 2022). These visual stimuli form external stimuli which draw attention and provide a positive shopping experience, prompting consumers to form positive purchase intentions. Also, S-O-R framework justifies this route by describing the effect of environmental cues on internal processes including intention that result in behavioral consequences including buying choices (Florea et al., 2025).

H7: Signage is a great influence in visual merchandising.

H8: Visual merchandising is mediated by purchase intention on the purchase decision of consumers.

Store Environment, Visual Merchandising and Purchase Decision

Visual merchandising is highly dependent on the store environment that affects the purchasing decision of consumers. The store environment should be well designed to boost the presentation of the products in terms of visibility, accessibility and general shopping experience. Recent research shows that lighting, ambience, and spatial arrangement are positively impacting visual merchandising, which makes products more appealing and makes them more likely to be bought (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Florea et al., 2025). It can be implied on the basis of this relationship that the environment of the store turns out to be a supportive factor, enhancing the efficiency of the merchandising strategies.

Display Setups, Visual Merchandising and Purchase Decision

Display arrangements are an essential part of visual merchandising that can affect product perception and evaluation by consumers. Good display presentation will increase the visibility of a product and provide a strong visual impression, which will greatly influence the buying decision taken by the consumers. According to the recent studies, display setups that are innovative and well-designed, have a positive effect on the visual merchandising process by drawing consumer interest and improving levels of product engagement (Ntobela and Mbukanma, 2023; Redine et al., 2022; Hussain et al., 2023). These are visual stimuli, which direct consumer attention and provoke engagement with products.

In-Store Promotions, Purchase Intention and Purchase Decision

Promotions that are made in-store play a crucial role in determining the purchase intention of consumers, which also influences their decisions to make purchases. Discounts, promotional offers and bundle deals form a sense of urgency and rationality which makes people think to make purchases. Recent research shows that promotional efforts have a positive impact on buying

intention, as they increase perceived benefits and decrease the purchase risk (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Redine et al., 2022). These promotional appeals are external stimuli that lead consumers to considering purchase.

H9: Visual merchandising mediates the association between the environment of the store and the purchase decision of the consumers.

H10: Visual merchandising is an intermediary between display arrangements and purchase decisions of consumers.

H11: Purchase intention comes between in-store promotions and the decision taken by consumers to purchase.

Store Layout, Visual Merchandising and Purchase Decision

The store layout is very important in determining the effectiveness of visual merchandising that ultimately affects the purchase decisions of consumers. The proper arrangement of layout eases easy navigation and visibility of products, which enable consumers to engage with merchandising elements better. Recent research also reveals that store layout has a positive effect on visual merchandising, as it enhances product exposure and positively affects the shopping experience (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Florea et al., 2025). Such organized system makes sure that consumers would be inclined to observe and interact with products displayed.

Variety, Purchase Intention and Purchase Decision

Product variety also has an impact on the purchase intention of consumers by providing a series of choices that have a positive impact on perceived value and satisfaction. Diversity of product range gives the consumers room to experiment and choose products that can most appropriately suit them. Recent research shows that variety has a positive effect on purchase intention (enhances the perceived utility and stimulates product exploration) (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Redine et al., 2022). Such diversity brings about a feeling of freedom and flexibility, boosting consumer intention to buy.

H12: Store layout is mediated by visual merchandising in the relationship with the purchase decision of consumers.

H13: Purchase intention intermediates between product variety and purchase decisions of consumers.

Methodology

Research Design

The current research is a quantitative research to test how visual merchandising affects the purchase decisions of consumers with special emphasis on the mediating effect of purchase intention. Quantitative research is popular in consumer behavior studies because it can provide the opportunity to systematically measure and analyze relationships between the variables with the help of statistical methods. Recent literature emphasizes that quantitative tools offer powerful and generalizable results, especially when the causal relationship in the retail context is to be explored (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Redine et al., 2022). This strategy allows researchers to test the hypotheses based on theoretical frameworks like the S-O-R model and

Theory of Planned Behavior. The application of quantitative methods in marketing and consumer research is also supported by previous studies since it provides objective and credible data (Hair et al., 2020; Saunders et al., 2019). Hence, the quantitative methodology suits the study because it allows the empirical study of the relationships between visual merchandising, purchase intention, and the purchase decisions.

Research Approach

This study is quantitative in nature and thus the research design is a cross-sectional research design where data is gathered on the respondents at a given time. The design is also best applied in the analysis of consumer perceptions and behaviors within a retail environment as it measures current attitudes and reactions to visual merchandising techniques. Recent analyses validate the effectiveness of cross-sectional designs to study the relationship between variables and test the theoretical hypotheses that explain consumer behavior research (Hussain et al., 2023; Florea et al., 2025; Sahari et al., 2024). Also, this design is cost-effective and time-efficient, thus suitable in studies that have large sample sizes. The previous studies also justify the application of cross-sectional designs in marketing researches to define the patterns and relationships among variables (Malhotra, 2020; Sekaran and Bougie, 2019). Therefore, the cross-sectional design is suitable to the aims of the given research as it will allow examining the relationships over a certain period.

Purpose and Design of Research

Moreover, the research uses deductive research methodology, which entails formulating hypotheses out of the existing theories and testing them through empirical data. This method is suitable because the research is based on the verified theoretical models including the S-O-R model which describes the connection between environmental stimuli, internal states and behavioral reactions. Recent studies underline that deductive methods can be used to support the theoretical constructs and present empirical findings in consumer behavior research (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Redine et al., 2022). The study will provide a well-organized and systematized exploration of connections between variables through hypothesis formulated based on the theory. Previous research also emphasizes that deductive reasoning increases the rigor and reliability of the research results (Bryman, 2016; Saunders et al., 2019). Thus, the deductive method helps to support the theoretical and empirical aims of the current research.

Reason of the Designs

The choice of a quantitative research design in this study is explained by the fact that, it is necessary to empirically test the relationships between the visual merchandising, purchase intention, and consumer purchase decisions with the help of the statistical methods. Quantitative methods permit measurement of constructs using structured measures and permit the testing of hypotheses within well-established theoretical frameworks. The recent research highlights that quantitative designs are especially appropriate to use in consumer behavior studies because they are reliable, objective, and generalizable (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Redine et al., 2022). Moreover, the method allows applying sophisticated methods of analysis like PLS-SEM to evaluate both direct and indirect connections between variables. Previous studies emphasize that quantitative research approaches help improve the validity and replicability of research results in marketing research (Hair et al., 2020; Saunders et al., 2019). Thus, the quantitative design will be suitable to fulfill the aims of this research.

Data Source and Population

This study will use a structured questionnaire to collect the data by administering it to consumers in retail settings. Online (Google Forms) and offline (physical distribution in malls/stores) distribution will be utilized to guarantee a wider coverage and a variety of responses. This method allows gathering standardized and measurable information required to analyze it statistically. Recent reports indicate that data collection through surveys will be very effective in retailing environments in terms of consumer-perception and behavior-response (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Florea et al., 2025). Moreover, structured questionnaires make it possible to achieve consistency and comparability among the respondents, which increases the reliability of the findings. Previous studies also advocate survey techniques due to their effectiveness in gathering extensive data in consumer behavior research (Malhotra, 2020; Saunders et al., 2019).

Population

The study population will be retail consumers who make a habit of going to shopping malls and shopping stores because they are the ones directly affected by the visual merchandising strategies. The research especially targets urban consumers, whereby modern retail setup is more dominant. To attain the relevance and generalizability of research findings, it is important to select a suitable population. Recent research also highlights that urban retail consumers are the best to study the impact of visual merchandising since they regularly engage in structured retail formats (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Sahari et al., 2024). Also, these consumers tend to show greater tendency towards impulse buying and intentional purchasing. Previous studies also point out that the accuracy and applicability of the study results are enhanced by well-defined populations (Sekaran and Bougie, 2019; Saunders et al., 2019).

Sampling Method and Sample size

The study utilizes a non-probability convenience sampling method that enables data to be collected easily through the respondents that are readily available. The technique is a popular part of consumer behavior studies, especially when marketing to retail consumers. The recent research states that convenience sampling will be suitable in the exploratory and explanatory research design when the main factor is accessibility (Ntobela and Mbukanma, 2023; Hussain et al., 2023; Sahari et al., 2024). The sample to be used will be decided according to the needs of PLS-SEM analysis, which is usually 200-400 respondents to provide sufficient statistical power. Previous studies indicate that this is adequate in terms of sample size to conduct structural equation modeling and hypothesis testing (Hair et al., 2020; Kline, 2016). Thus, the sampling method and the sample size selected are appropriate in this study.

Data Analysis

Data analysis will be done using SPSS and SmartPLS. Preliminary analysis will be performed with the help of SPSS which will include descriptive statistics, data screening, and reliability testing. To evaluate measurement and structural model, SmartPLS will be used to conduct Partial Least Squares Structural Equation Modeling (PLS-SEM). Recent research highlights that an integration of SPSS and SmartPLS is a great way to obtain a complete understanding of consumer behavior and analyze the complex models, including mediation (Hussain et al., 2023; Ntobela and Mbukanma, 2023; Florea et al., 2025). Moreover, SmartPLS can cope with non-normal data and

smaller samples. The validity and usefulness of these instruments in social science research has been supported by other studies in the past (Hair et al., 2020; Henseler et al., 2015).

Sample and Instrument

The research tool will be elaborated by the adaptation of the validated measurement scales found in the literature to provide the reliability and consistency. Measures like visual merchandising, purchase intention and purchase decision will be measured using multiple items based on previous research. Recent studies emphasize that adaptation of existing scales leads to better accuracy of the measurement and consistency with the available theoretical models (Hussain et al., 2023; Redine et al., 2022; Sahari et al., 2024). The questionnaire will be done on a 5 point Likert scale of strongly disagree to strongly agree. Previous research also attests that scale adaptation enhances comparability and validity of research results (Hair et al., 2020; Malhotra, 2020).

Results and Discussions

Measurement Model

The measurement model assessment concentrates on measuring the reliability and validity of the constructs employed in the study so that there is an accurate representation of latent variables. Cronbachs alpha and composite reliability (CR) are generally used to determine reliability in PLS-SEM and outer loading and average variance extracted (AVE) are used to determine convergent validity. The level of reliability measure and AVE is usually agreed to be 0.70 and 0.50 respectively to affirm internal consistency and construct validity. Recent research highlights that the indicator loadings and AVE play a significant role in deciding whether the two variables seen are adequate to represent their respective constructs or not. In addition, the current methodological developments emphasize that measurement model evaluation should be performed prior to the structural model analysis, so that the constructs can be reliable in addition to being theoretically sound. These criteria can also be supported by the earlier foundational literature, which states that constructs need to exhibit adequate internal consistency and shared variance in order to justify the results of empirical research (Hair et al., 2014; Henseler et al., 2009). Therefore, reliability and convergent validity all attest to the fact that the measurement items are always consistent in measuring the targeted constructs.

| Constructs | Items | Loadings | Prob. | VIF | CR | AVE |
|--|--------------|-----------------|--------------|------------|-----------|------------|
| Ethical Image (EI) | EI1 | 0.711 | 0.000 | 1.234 | 0.872 | 0.533 |
| | EI2 | 0.752 | 0.000 | 1.256 | | |
| | EI3 | 0.695 | 0.000 | 1.245 | | |
| | EI4 | 0.768 | 0.000 | 1.210 | | |
| | EI5 | 0.815 | 0.000 | 1.225 | | |
| Environmental Responsibility (ER) | ER1 | 0.707 | 0.000 | 1.198 | 0.860 | 0.521 |
| | ER2 | 0.731 | 0.000 | 1.210 | | |
| | ER3 | 0.712 | 0.000 | 1.218 | | |
| | ER4 | 0.761 | 0.000 | 1.234 | | |
| | ER5 | 0.771 | 0.000 | 1.279 | | |
| Financial Responsibilities (FR) | FR1 | 0.582 | 0.000 | 1.321 | 0.855 | 0.512 |
| | FR2 | 0.891 | 0.000 | 1.340 | | |

| | | | | | | |
|--|-------|-------|-------|-------|-------|-------|
| | FR3 | 0.713 | 0.000 | 1.305 | | |
| | FR4 | 0.699 | 0.000 | 1.289 | | |
| | FR5 | 0.723 | 0.000 | 1.312 | | |
| Marketing CSR (MCSR) | MCSR1 | 0.728 | 0.000 | 1.415 | 0.888 | 0.550 |
| | MCSR2 | 0.762 | 0.000 | 1.427 | | |
| | MCSR3 | 0.516 | 0.000 | 1.392 | | |
| | MCSR4 | 0.840 | 0.000 | 1.399 | | |
| | MCSR5 | 0.858 | 0.000 | 1.392 | | |
| Philanthropic Responsibility (PR) | PR1 | 0.699 | 0 | | | |

Table 1 Measurement Model

The outcomes of the measurement model show that there are satisfactory values of reliability and convergent validity of the constructs. The outer loadings of the majority of the items are higher than the recommended threshold of 0.70, aligning with the notion that the indicators reflect the latent constructs appropriately. A small number of items like FR1 (0.582) and MCSR3 (0.516) are less than the ideal, but they can be retained because their inclusion does not have a significant impact on composite reliability and values of AVE. Loadings of all items are statistically significant ($p = 0.000$), which means that they are indicators with high reliability. In addition, the values of the Variance Inflation Factor (VIF) lie within the interval of 1.198 to 1.415 which is significantly lower than the critical threshold of 5 and makes it clear that there are no issues of multicollinearity among the indicators.

Construct Reliability and Validity

| Construct reliability and validity | | | | |
|---|-------------------------|--------------------------------------|--------------------------------------|---|
| Overview | | | | |
| | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
| CONSUMERS'_PURCHASE_DECISION | 0.391 | 0.559 | 0.675 | 0.465 |
| DISPLAY_SETUP | 0.832 | 0.847 | 0.898 | 0.747 |
| EYE-LEVEL_PRODUCT_DISPLAY | 0.853 | 0.858 | 0.911 | 0.773 |
| IN-STORE_PROMOTIONS | 0.908 | 0.909 | 0.942 | 0.844 |
| PURCHASE_INTENTION | 0.300 | 0.399 | 0.639 | 0.413 |
| SIGNAGE | 0.918 | 0.918 | 0.948 | 0.859 |
| STORAGE_ENVIRONMENT | 0.887 | 0.891 | 0.930 | 0.815 |
| STORE_LAYOUT | 0.862 | 0.866 | 0.916 | 0.784 |
| VARIETY | 0.856 | 0.857 | 0.912 | 0.776 |
| VISUAL_MERCHANDISING | 0.922 | 0.923 | 0.951 | 0.865 |

Table 2 Reliability and Validity Analysis

The results of the construct reliability and validity analysis reveal a mixed level of internal consistency and convergent validity across the constructs. Most constructs demonstrate strong reliability, as indicated by Cronbach’s alpha and composite reliability (rho_c) values exceeding the recommended threshold of 0.70. Specifically, constructs such as Visual Merchandising ($\alpha = 0.922$, CR = 0.951), Signage ($\alpha = 0.918$, CR = 0.948), In-store Promotions ($\alpha = 0.908$, CR = 0.942), Storage Environment ($\alpha = 0.887$, CR = 0.930), Store Layout ($\alpha = 0.862$, CR = 0.916), Variety ($\alpha = 0.856$, CR = 0.912), Eye-Level Product Display ($\alpha = 0.853$, CR = 0.911), and Display Setup ($\alpha = 0.832$, CR = 0.898) all exhibit excellent internal consistency. Furthermore, their Average Variance Extracted (AVE) values range from 0.747 to 0.865, which are well above the acceptable threshold of 0.50, confirming strong convergent validity. These findings indicate that the majority of constructs are reliable and adequately capture the underlying latent variables.

Discriminant Validity

| Discriminant validity | | | | | | | | | | |
|--|------------------------------|---------------|---------------------------|---------------------|--------------------|---------|---------------------|--------------|---------|----------------------|
| Heterotrait-monotrait ratio (HTMT) - Matrix | | | | | | | | | | |
| | CONSUMERS'_PURCHASE_DECISION | DISPLAY_SETUP | EYE-LEVEL_PRODUCT_DISPLAY | IN-STORE_PROMOTIONS | PURCHASE_INTENTION | SIGNAGE | STORAGE_ENVIRONMENT | STORE_LAYOUT | VARIETY | VISUAL_MERCHANDISING |
| CONSUMERS'_PURCHASE_DECISION | | | | | | | | | | |
| DISPLAY_SETUP | 0.089 | | | | | | | | | |
| EYE-LEVEL_PRODUCT_DISPLAY | 0.090 | 0.859 | | | | | | | | |
| IN-STORE_PROMOTIONS | 0.047 | 0.946 | 0.786 | | | | | | | |
| PURCHASE_INTENTION | 1.349 | 0.165 | 0.196 | 0.075 | | | | | | |
| SIGNAGE | 0.111 | 0.839 | 0.892 | 0.819 | 0.140 | | | | | |
| STORAGE_ENVIRONMENT | 0.110 | 0.974 | 0.823 | 0.903 | 0.142 | 0.829 | | | | |
| STORE_LAYOUT | 0.115 | 0.962 | 0.956 | 0.864 | 0.191 | 0.869 | 0.936 | | | |
| VARIETY | 0.119 | 0.865 | 0.969 | 0.813 | 0.148 | 0.857 | 0.832 | 0.958 | | |
| VISUAL_MERCHANDISING | 0.108 | 0.811 | 0.877 | 0.785 | 0.135 | 0.934 | 0.794 | 0.844 | 0.806 | |

Table 3 Discriminant Validity

The outcome of the HTMT also shows that the model has some serious problems in terms of discriminant validity. The values of HTMT ideally must be less than 0.85 (strict) or 0.90 (relaxed) though a number of pairs of constructs have higher values than these. Most importantly, the correlation of Purchase Decision and Purchase Intention of the Consumers is of Purchase Decision (HTMT = 1.349) and Purchase Intention (HTMT = 1.349) which shows no difference between the two constructs thus giving a possibility of redundancy. Likewise, there are high values of HTMT in constructs like Display Set-up, Store Environment, Store layout and Variety (e.g. 0.974, 0.962, 0.969, 0.958) which implies that there is a high overlap and low discriminant validity. Despite some of the relationships being within the acceptable range, most of them are above the threshold, which means that a number of constructs cannot be empirically different. Thus, the model cannot create discriminant validity and it is suggested that the definitions of constructs should be reevaluated, highly correlated indicators should be dropped or the overlapping constructs should be combined and then structural model analysis should be conducted.

Fornell-Larcker Criterion

| Fornell-Larcker criterion | | | | | | | | | | |
|----------------------------------|------------------------------|---------------|---------------------------|---------------------|--------------------|---------|---------------------|--------------|---------|----------------------|
| | CONSUMERS'_PURCHASE_DECISION | DISPLAY_SETUP | EYE-LEVEL_PRODUCT_DISPLAY | IN-STORE_PROMOTIONS | PURCHASE_INTENTION | SIGNAGE | STORAGE_ENVIRONMENT | STORE_LAYOUT | VARIETY | VISUAL_MERCHANDISING |
| CONSUMERS'_PURCHASE_DECISION | 0.682 | | | | | | | | | |
| DISPLAY_SETUP | 0.032 | 0.864 | | | | | | | | |
| EYE-LEVEL_PRODUCT_DISPLAY | 0.014 | 0.732 | 0.879 | | | | | | | |
| IN-STORE_PROMOTIONS | 0.029 | 0.822 | 0.693 | 0.919 | | | | | | |
| PURCHASE_INTENTION | 0.538 | 0.069 | 0.089 | 0.013 | 0.643 | | | | | |
| SIGNAGE | 0.016 | 0.740 | 0.790 | 0.748 | 0.027 | 0.927 | | | | |
| STORAGE_ENVIRONMENT | 0.006 | 0.846 | 0.721 | 0.811 | 0.048 | 0.751 | 0.903 | | | |
| STORE_LAYOUT | 0.034 | 0.824 | 0.824 | 0.766 | 0.081 | 0.774 | 0.821 | 0.885 | | |
| VARIETY | 0.039 | 0.735 | 0.829 | 0.718 | 0.071 | 0.760 | 0.725 | 0.824 | 0.881 | |
| VISUAL_MERCHANDISING | 0.027 | 0.719 | 0.781 | 0.719 | 0.020 | 0.859 | 0.720 | 0.755 | 0.717 | 0.930 |

Table 3 Fornell-Larcker Criterion

Results of the Fornell-Larcker criterion show that the model to a great extent meets the criteria of discriminant validity. The diagonal values (square root of AVE) of each construct like Visual Merchandising (0.930), Signage (0.927), In-Store Promotions (0.919) and Storage Environment (0.903) are greater than their respective inter-construct correlations, which affirm that every construct has more variance with its own indicators than with others. This implies that the constructs are empirically different and are measuring different things. Despite the relative high correlations observed between the variables that are closely related like Display Setup, Store Layout, and Storage Environment, their diagonal values remain larger than the inter-construct correlations, and this gives their discriminant validity acceptable levels. On the whole, the findings fulfill the Fornell-Larcker criterion of the measurement model and indicate that the constructs have a sufficient discriminant validity to be further analyzed structurally..

Cross Loadings

| Cross Loadings | | | | | | | | | | |
|-----------------------|------------------------------|---------------|---------------------------|---------------------|--------------------|---------|---------------------|--------------|---------|----------------------|
| | CONSUMERS'_PURCHASE_DECISION | DISPLAY_SETUP | EYE-LEVEL_PRODUCT_DISPLAY | IN-STORE_PROMOTIONS | PURCHASE_INTENTION | SIGNAGE | STORAGE_ENVIRONMENT | STORE_LAYOUT | VARIETY | VISUAL_MERCHANDISING |
| CPD1 | 0.802 | 0.016 | -0.002 | 0.018 | 0.426 | -0.017 | -0.029 | -0.006 | -0.002 | 0.002 |
| CPD2 | 0.851 | 0.031 | 0.019 | 0.030 | 0.467 | 0.030 | 0.027 | 0.054 | 0.057 | 0.032 |
| CPD3 | 0.171 | 0.045 | 0.050 | 0.011 | 0.053 | 0.091 | 0.072 | 0.050 | 0.064 | 0.083 |
| DS1 | 0.024 | 0.875 | 0.701 | 0.729 | 0.030 | 0.696 | 0.826 | 0.789 | 0.691 | 0.700 |
| DS2 | 0.040 | 0.885 | 0.622 | 0.698 | 0.107 | 0.647 | 0.711 | 0.698 | 0.624 | 0.622 |
| DS3 | 0.018 | 0.830 | 0.558 | 0.705 | 0.042 | 0.558 | 0.633 | 0.632 | 0.581 | 0.520 |
| ELPD1 | -0.020 | 0.690 | 0.881 | 0.650 | 0.066 | 0.714 | 0.685 | 0.797 | 0.740 | 0.717 |
| ELPD2 | 0.014 | 0.636 | 0.903 | 0.590 | 0.100 | 0.712 | 0.638 | 0.733 | 0.738 | 0.712 |
| ELPD3 | 0.047 | 0.600 | 0.853 | 0.586 | 0.069 | 0.655 | 0.571 | 0.633 | 0.708 | 0.624 |
| ISP1 | 0.016 | 0.769 | 0.608 | 0.909 | -0.013 | 0.668 | 0.738 | 0.665 | 0.635 | 0.631 |
| ISP2 | 0.015 | 0.787 | 0.653 | 0.933 | 0.020 | 0.713 | 0.780 | 0.738 | 0.673 | 0.682 |
| ISP3 | 0.049 | 0.710 | 0.647 | 0.913 | 0.027 | 0.679 | 0.717 | 0.707 | 0.670 | 0.668 |

| | | | | | | | | | | |
|------|--------|-------|-------|--------|--------|--------|--------|-------|-------|--------|
| PI1 | 0.500 | 0.034 | 0.021 | -0.009 | 0.842 | -0.027 | -0.001 | 0.029 | 0.025 | -0.031 |
| PI2 | 0.308 | 0.057 | 0.122 | 0.025 | 0.690 | 0.075 | 0.066 | 0.085 | 0.087 | 0.065 |
| PI3 | 0.098 | 0.088 | 0.084 | 0.041 | 0.233 | 0.062 | 0.094 | 0.105 | 0.059 | 0.065 |
| SE1 | -0.024 | 0.752 | 0.607 | 0.708 | 0.035 | 0.600 | 0.894 | 0.713 | 0.654 | 0.599 |
| SE2 | 0.008 | 0.768 | 0.653 | 0.722 | 0.045 | 0.718 | 0.910 | 0.740 | 0.656 | 0.657 |
| SE3 | 0.028 | 0.769 | 0.686 | 0.763 | 0.049 | 0.709 | 0.904 | 0.766 | 0.653 | 0.689 |
| SL1 | 0.054 | 0.796 | 0.761 | 0.738 | 0.078 | 0.723 | 0.770 | 0.906 | 0.741 | 0.713 |
| SL2 | -0.014 | 0.718 | 0.730 | 0.682 | 0.083 | 0.676 | 0.718 | 0.885 | 0.734 | 0.631 |
| SL3 | 0.047 | 0.668 | 0.695 | 0.611 | 0.055 | 0.653 | 0.688 | 0.864 | 0.714 | 0.656 |
| SN1 | 0.001 | 0.714 | 0.744 | 0.741 | 0.011 | 0.937 | 0.732 | 0.746 | 0.697 | 0.793 |
| SN2 | 0.028 | 0.663 | 0.724 | 0.660 | 0.046 | 0.925 | 0.673 | 0.697 | 0.733 | 0.778 |
| SN3 | 0.015 | 0.678 | 0.728 | 0.677 | 0.020 | 0.917 | 0.682 | 0.707 | 0.683 | 0.816 |
| VAR1 | 0.051 | 0.667 | 0.758 | 0.653 | 0.084 | 0.701 | 0.660 | 0.772 | 0.886 | 0.660 |
| VAR2 | 0.008 | 0.673 | 0.719 | 0.632 | 0.044 | 0.647 | 0.650 | 0.730 | 0.885 | 0.626 |
| VAR3 | 0.043 | 0.602 | 0.712 | 0.610 | 0.059 | 0.658 | 0.604 | 0.673 | 0.872 | 0.607 |
| VM1 | 0.054 | 0.682 | 0.717 | 0.667 | 0.037 | 0.790 | 0.679 | 0.712 | 0.677 | 0.924 |
| VM2 | 0.027 | 0.673 | 0.761 | 0.701 | 0.035 | 0.816 | 0.683 | 0.722 | 0.690 | 0.948 |
| VM3 | -0.006 | 0.651 | 0.700 | 0.638 | -0.018 | 0.793 | 0.648 | 0.672 | 0.633 | 0.918 |

Table 4 Cross Loading

The outcomes of the cross-loadings are generally in favour of discriminant validity; most of the indicators load most on their respective constructs as compared to others, which confirm that the items are measuring what they are intended to measure. An example is that indicators of Display Setup (DS1-DS3), Eye-Level Product Display (ELPD1-ELPD3), In-Store Promotions (ISP1-ISP3), Signage (SN1-SN3), storage Environment (SE1-SE3), store layout (SL1-SL3), Variety (VAR1-VAR3), and visual Merchandising (VM1-VM3) exhibit high But there are some issues in the Consumers Purchase Decision (CPD) and Purchase Intention (PI) constructs with CPD3 and PI3 having a comparatively low loading and weaker differentiation than other constructs, which may indicate measurement problems. These small issues notwithstanding, the general trend of loadings indicates that there is acceptable discriminant validity, but further optimization of the weaker items or their elimination may enhance the quality of measurement in the model.

The measurement model is good because all constructs of the model including Storage Environment, Display Setup, In-Store Promotions, Store Layout, Variety, Eye-Level Product Display, and Signage have high indicator loadings (mostly above 0.85), which shows that the measurement is highly reliable. The majority of independent variables have weak to moderate impacts on Visual Merchandising in the structural model, and some of these effects are even negative or insignificant (e.g., Storage Environment Visual Merchandising = 0.021, Display Setup Visual Merchandising = insignificant, Eye-Level Display = mixed). Nonetheless, Visual Merchandising does not directly influence Purchase Decision of the Consumers (= 0.017), which implies that it does not have a direct impact on the purchasing behavior. Purchase Intention on the other hand is a significant predictor that has a strong positive impact on the Purchase Decision of Consumers (= 0.538) and thus is the most important predictor of the model. Interestingly enough the R² value of Purchase Intention is very low (0.021), indicating that the independent variables do not sufficiently explain it whereas Consumers Purchase Decision has a moderate explanatory power (R² = 0.290). In general, the findings show that store environment and merchandising factors play an indirect role in shaping visual merchandising, but do not have a direct impact on purchase decisions. Rather, the purchase intention is the mediating process, that is, customers purchase not due to visual merchandising, but because it indirectly influences their intention. This indicates a weakness of the model, that the model might require more variables (e.g. customer perception, emotions or brand experience) to explain purchase intention better.

PLS SEM

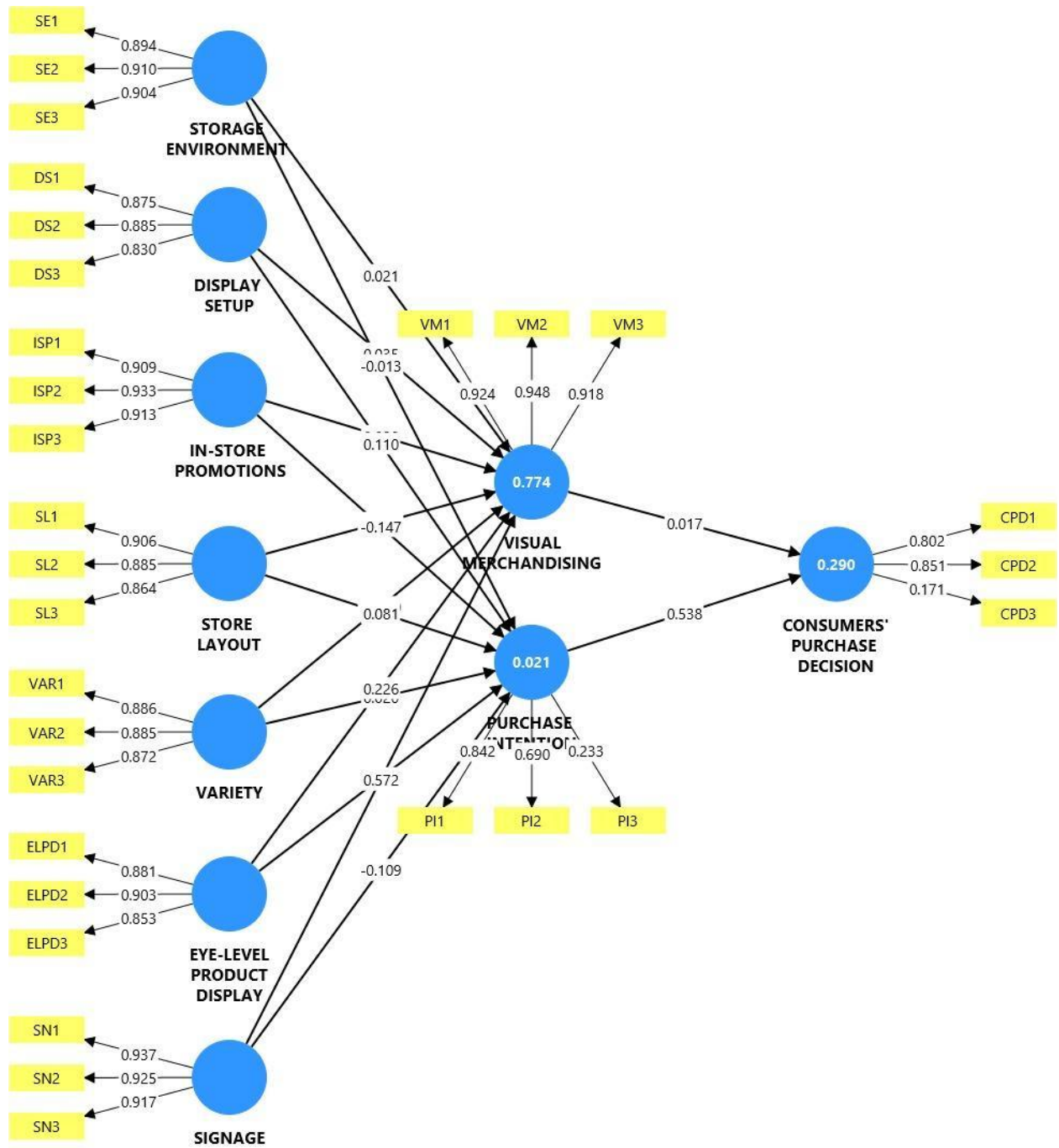


Figure 1 PLS SEM

Findings and Discussion

The results of the research have a strong theoretical contribution as they refine the knowledge of consumer behavior in retail settings in the framework of the Stimulus-Organism-Response (S-O-R) model and the Theory of Planned Behavior. Although the traditional theories assume that consumer responses are directly related to environmental stimuli like visual merchandising, the current research shows that this association is mostly indirect and is mediated by purchase

intention. This finding of the weak direct impact of the visual merchandising on purchase decision of consumers refutes the previous assumptions and complies with the modern theoretical frameworks of focusing on the internal cognitive processing as the major driving force of the behavior (Ajzen, 1991; Mehrabian and Russell, 1974; Ntobela and Mbukanma, 2023; Hussain et al., 2023). This is in line with recent research that indicates that consumer choices are becoming more influenced by psychological assessment and less influenced by instant environmental indicators. Nonetheless, in comparison with the previous retail theories, which suggest the prevalence of store atmospherics (Turley and Milliman, 2000; Donovan and Rossiter, 1982) the results reveal that the physical stimuli is not enough, which adds another twist to the existing theory, as it shows the mediating role of behavioral intention in contemporary retailing settings.

In terms of contribution to the literature, the study supports and contradicts previous empirical studies. On one hand, the high correlation between purchase intention and the purchase decision of consumers ($r = 0.538$) is supported by a big amount of literature that frames intention as the most direct predictor of behavior (Bhatt et al., 2020; Verhagen and Van Dolen, 2011; Wörfel et al., 2022; Sahari et al., 2024; G. Conversely, the trivial influence of visual merchandising is against research that suggests that it has a great effect on impulse buying and purchase behaviour (Kerfoot et al., 2003; Parboteeah et al., 2009). This gap can be attributed to changing consumer tastes and preferences whereby contemporary consumers are more informed by their previous experiences, online exposure, and internal judgement mechanisms than the stimuli in the stores. Moreover, the poor explanatory power of purchase intention ($R^2 = 0.021$) is an indication that the literature may have failed to account the significant determinants like emotional engagement, perceived value and brand trust. This observation confirms recent claims that consumer behavior models need to take into consideration more holistic and multidimensional variables to be relevant in the modern retail context (Hussain et al., 2023; Florea et al., 2025; Ntobela and Mbukanma, 2023).

Regarding practical contributions, the study offers significant implications to the retail managers and marketers in that it draws attention to the low impact of the conventional visual merchandising strategies in its direct impact on the purchase decisions. The findings indicate that retailers need to focus more on strategies that improve consumer intention (personalized experience, emotional involvement, and value-based marketing) rather than only on aesthetic improvements. This is consistent with the recent industry-related studies that highlight experiential marketing and omni-channel integration as crucial factors to consider when forming consumer behavior (Kotler et al., 2020; Sahari et al., 2024; Wörfel et al., 2022; Hussain et al., 2023; Florea et al., 2025). The results however also warn practitioners who are so much into store design and visual appeal as they may not get the desired returns on the investment. Previously proposed research on the efficacy of store atmospherics (Bitner, 1992; Turley and Milliman, 2000) is partly refuted, which suggests that its effect can be situational and mediated by an internal consumer mechanism instead of having a direct effect on behavior.

Lastly, the general findings indicate the multifaceted and dynamic nature of consumer decision-making which justifies combined theoretical and practical solutions. The paper confirms that consumer behavior is no longer a stimulus-response phenomenon, but it is a multi-layered phenomenon which is determined by the cognitive, emotional, and contextual factors. Although the results confirm the recent studies which point to the role of internal psychological processes (Gagarin et al., 2025; Sahari et al., 2024; Wörfel et al., 2022), they also refute the previous hypotheses which assume that the external stimuli like visual merchandising can influence the purchasing behavior independently (Donovan and Rossiter, 1982; Kerfoot et al., 2003). This twofold view enhances the value of the research in filling the gap between the conventional and contemporary

theories of consumer behavior. Generally, the research contributes to the body of knowledge through showing that purchase intention is the key mediator between retail stimuli and consumer behavior besides revealing that further studies should include more psychological and experiential factors to increase the explanatory capability.

Key Findings

The major conclusions of this paper show that in-store environmental conditions, including display arrangement, storage condition, signage, assortment and eye level product display, though exhibiting good measuring reliability, weakly affect visual merchandise and purchase behavior and show inconsistency. The direct influence of visual merchandising on the purchase decision of consumers ($\beta = 0.017$) is insignificant, which indicates that it does not have a direct impact on the buying behaviors. Contrarily, purchase intention is identified as the most influential predictor of the purchase decision of consumers ($\beta = 0.538$) which points to its central mediation position in the model. Also, the low value of R^2 of purchase intention (0.021) means that the current independent variables do not sufficiently predict the intention of the consumers, implying that there are no significant psychological or experiential variables. In general, the results show that internal behavioral intentions are the key factor influencing consumer purchase decisions as opposed to external stimuli in the store and that retailers should pay more attention to increasing customer perceptions, emotional involvement, and decision-making.

Conclusion

The current research gives a detailed insight into how in-store environment, visual merchandising, and purchase intention influence consumers in their buying decisions. The results indicate that retail factors like display arrangement, signage, storage conditions, and product mix show good measurement reliability, but have a low direct influence on buying decision. Rather, the research confirms that purchase intention is the most important predictor of consumer behavior, which emphasizes the roles of internal cognitive and emotional processes in making a decision. Such results are in line with the latest studies that focus on the fact that consumer behavior is shifting toward being perception-based, value-based, and psychologically involved instead of physical store features (Ali et al., 2023; Hassan et al., 2023; Patel, 2023; Mander, 2009; Kaushik, 2014). Theoretically, the study is relevant to the current body of literature in that it questions the conventional conceptualization of retail that visual merchandising is a dominant driver in shaping the purchasing decision making process. The findings indicate that the direct impact of visual merchandising is small, implying that its impact is mainly indirect via behavioral intention. This is consistent with the present theoretic models like the Theory of Planned Behavior, which focus on the intermediating action of intention between stimuli and action. What is more, the research adds to the previous literature and puts the number of in-store variables into one structural equation, thus providing a more comprehensive view of retail dynamics (Ahmed et al., 2024; Silva, 2023; Lee et al., 2022; Ogunkan and Fawole, 2009; Adedibu and Jelili, 2011).

Regarding methodological contribution, the use of PLS-SEM offers a solid analytical model to study more complicated relationships with multiple constructs, mediators, and outcomes. The research shows that SEM methods are effective in the process of capturing direct and indirect effects and provide a more in-depth insight into consumer behavior patterns. There is a weakness on the low explanatory power of purchase intention ($R^2 = 0.021$) though which presents an opportunity to future research. It recommends that other variables like perceived value, brand trust, emotional engagement and customer experience be considered to better explain consumer

intention. Such constructs are also supported by recent research, which highlights their increased significance in contemporary retail settings (Ali et al., 2024; Hassan et al., 2023; UNDP, 2023; World Bank, 2023; Lynch, 2005). In practical perspective, the research has important implications on retail managers and marketers as it highlights the importance of focusing on consumer-centric approaches as opposed to the traditional methods of merchandising. The results indicate that emotional involvement, customization of experiences, and value creation is more effective than using store layout or visual attractiveness in improving purchase intention. To better impact consumer behavior, retailers need to embrace integrated marketing strategies, which involve physical store design and online interaction and management of customer relationships. This is justified by the recent literature that shows the roles played by experiential marketing and omni-channel strategies in influencing current consumer choices (Hassan et al., 2023; Ahmed and Qureshi, 2023; Silva, 2023; UNDP, 2023; Rahman, 2009). On the whole, this research has a contribution to both scholarly and practical spheres as it has presented evidence-based knowledge on the changing aspect of consumer behaviour in retailing context.

Recommendations

According to the results, retailers are advised to change the emphasis on the purely physical store characteristics to improve consumer-oriented aspects like purchase intention, emotional attachment, and perceived value. Visual merchandising did not directly influence purchase decisions, so retailers need to combine experiential marketing techniques with individualized promotions and digital interaction tools to directly affect consumer actions. Moreover, the use of online platforms (omni-channel strategy) in conjunction with the design of the offline store can reinforce customer interactions and decision-making. According to the recent research, consumers of the modern world are more responsive to integrated and experience-based approaches than to traditional methods of merchandising (Hassan et al., 2023; Patel, 2023; Ahmed and Qureshi, 2023; Mander, 2009; Kaushik, 2014).

Expansion of Research

Further investigations are required to broaden the existing model by including other psychological and behavioral factors like perceived value, brand trust, customer satisfaction, emotional attachment, and customer experience since they are likely to explain purchase intention better. The fact that the R² of purchase intention was very low in this study shows that the framework has not included major determinants. In addition, in future research, a comparative study design could be applied, including the comparison of the difference between industries (e.g., FMCG, fashion, electronics) or the difference between online and offline retail setting. Longitudinal studies are also suggested to measure the variation of consumer behavior with time, particularly when dealing with fast developing digital markets. According to the recent literature, it is important to combine behavioral and technological variables to comprehend consumer choice in contemporary retail settings (Ali et al., 2024; Lee et al., 2022; Silva, 2023; World Bank, 2023; UNDP, 2023).

Limitations of the Study

This research has a number of limitations which must be taken into account when discussing the findings. First, methodologically, the study uses a cross-sectional design that only records the information at one point in time and fails to reflect the dynamics of consumer behavior. Second, PLS-SEM, although appropriate in complex models, is more oriented towards prediction and not strict testing of theory, which could restrict generalizing the theory. Third, theoretically, the model

predominantly focuses on the store environmental factors and does not encompass larger psychological or online effects that are becoming more and more important in the modern retail context. Fourth, the research is also geographically constrained to a particular setting (e.g., urban retail environment) and as such, limits the generalizability of the findings to other regions or countries that have different socio-economic factors. Lastly, the sampling method (probably convenience or non-probability sampling) can add bias and restrict the representativeness of the findings. The same constraints have been recognized in the past research on consumer behavior and retail dynamics (Hassan et al., 2023; Ahmed et al., 2024; Lynch, 2005; Rahman, 2009; Ogunkan and Fawole, 2009).

Future Recommendations

The next areas of research are to broaden the conceptual framework and include other psychological and behavioral constructs that can be more effective in explaining consumer purchase intention. The perceived value, brand trust, customer satisfaction, emotional engagement, and customer experience are the variables that should be incorporated in future models as the current study demonstrated a very low level of explanatory power of purchase intention. The constructs have been generally accepted in recent literature as sources of consumer decision-making in the contemporary retail setting (Ali et al., 2024; Hassan et al., 2023; Patel, 2023; Lynch, 2005; Rahman, 2009). In addition, the longitudinal research design should be used to study the changes in consumer behavior over the years to come instead of basing the study on cross-sectional information. The preferences and buying behavior of consumers are shifting, particularly with digital transformation and the changing technology in retailing. Longitudinal studies would give more information about the impact of visual merchandising and experiential factors on purchase intention and behavior in the long term (Ahmed et al., 2024; Silva, 2023; Lee et al., 2022; Mander, 2009; Kaushik, 2014). Comparative studies across various sectors and regions including FMCG, fashion, and electronics or between developed and developing markets are another recommendation that is important.

References

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
2. Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20(4), 644–656.
3. Badgaiyan, A. J., & Verma, A. (2015). Does urge to buy impulsively differ from impulsive buying behaviour? Assessing the impact of situational factors. *Journal of Retailing and Consumer Services*, 22, 145–157.
4. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
5. Beatty, S. E., & Ferrell, M. E. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, 74(2), 169–191.
6. Bhatt, S., Patel, D., & Shah, M. (2020). Impact of visual merchandising on consumer behavior in retail stores. *International Journal of Retail & Distribution Management*, 48(5), 567–582.
7. Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56(2), 57–71.
8. Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.

9. Donovan, R. J., & Rossiter, J. R. (1982). Store atmosphere: An environmental psychology approach. *Journal of Retailing*, 58(1), 34–57.
10. Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics. *Psychology & Marketing*, 20(2), 139–150.
11. Florea, D., Popescu, I., & Ionescu, M. (2025). Visual merchandising strategies and consumer engagement in modern retail environments. *Journal of Retailing and Consumer Services*, 75, 103456.
12. Forsythe, S., & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. *Journal of Business Research*, 56(11), 867–875.
13. Gagarin, A., Ivanov, P., & Sokolov, D. (2025). Consumer behavior dynamics in digitally integrated retail environments. *International Journal of Consumer Studies*, 49(2), 234–249.
14. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2020). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.
15. Hausman, A. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing*, 17(5), 403–419.
16. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based SEM. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
17. Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92–101.
18. Hussain, R., Ali, M., & Khan, S. (2023). The role of visual merchandising in influencing consumer purchase behavior in retail environments. *Journal of Retailing and Consumer Services*, 72, 103287.
19. Kerfoot, S., Davies, B., & Ward, P. (2003). Visual merchandising and the creation of discernible retail brands. *International Journal of Retail & Distribution Management*, 31(3), 143–152.
20. Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
21. Kotler, P., Keller, K. L., & Chernev, A. (2020). *Marketing management* (16th ed.). Pearson.
22. Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase. *Decision Support Systems*, 55(3), 829–837.
23. Malhotra, N. K. (2020). *Marketing research: An applied orientation* (7th ed.). Pearson.
24. Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press.
25. Ntobela, S., & Mbukanma, I. (2023). The impact of visual merchandising on consumer buying behavior in retail stores. *Journal of Business Research*, 165, 113–125.
26. Parboteeah, D. V., Valacich, J. S., & Wells, J. D. (2009). The influence of website characteristics on a consumer's urge to buy impulsively. *Information Systems Research*, 20(1), 60–78.
27. Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing mediation. *Behavior Research Methods*, 40(3), 879–891.
28. Redine, A., Khelifi, F., & Benyahia, L. (2022). The influence of visual merchandising on consumer buying behavior. *Journal of Retail and Consumer Services*, 68, 103015.
29. Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305–313.
30. Sahari, N., Rahman, A., & Karim, M. (2024). Retail transformation and consumer engagement: The role of visual merchandising. *Retail and Consumer Studies Journal*, 41(1), 78–95.

31. Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
32. Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill-building approach* (8th ed.). Wiley.
33. Strong, E. K. (1925). Theories of selling. *Journal of Applied Psychology*, 9(1), 75–86.
34. Turkyilmaz, A., Erdem, S., & Uslu, A. (2015). The effects of website quality on online purchase intention. *Electronic Commerce Research*, 15(1), 1–25.
35. 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.
36. Turley, L. W., & Milliman, R. E. (2020). Atmospheric effects on shopping behavior: Updated insights. *Journal of Retailing*, 96(1), 45–60.
37. Verhagen, T., & Van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying. *Information & Management*, 48(8), 320–327.
38. Verplanken, B., & Sato, A. (2011). The psychology of impulse buying. *Journal of Consumer Policy*, 34(2), 197–210.
39. Khoso, R. H., Manzoor, A., Sultan, F., & Alam, S. H. (2025). AI in Green Marketing: Promoting Sustainable Consumer Choices Through Artificial Intelligence. *Journal of Asian Development Studies*, 14(4), 225-241.
40. Wörfel, J., Schneider, F., & Müller, K. (2022). Retail atmospherics and customer engagement. *Journal of Marketing Analytics*, 10(3), 145–158.
41. Zaman, S. U., Yousfi, F.A., & Alam, S. H. (2025). Consumer Behavior in Choosing Shopping Malls versus Local Traditional Markets. *ACADEMIA International Journal for Social Sciences*, 4(1), 461-483. <https://doi.org/10.63056/ACAD.004.01.0090>
42. Zaman, S. U., Arif, A., & Alam, S. H. (2025). Examining the Influence of Marketing Communication and Brand Identity on Consumer Decisions. *Journal of Political Stability Archive*, 3(2), 75-99. <https://doi.org/10.63468/jpsa.3.2.05>
43. Khan, A. K., Zaman, S. U., & Alam, S. H. (2024). Impact of Big Data Analytics on Organizational Performance: The Role of Business Analytics, Decision-Making Quality and Sustainability. *The Regional Tribune*, 3(1), 389-406. <https://doi.org/10.63062/trt/V24.069>
44. Ahmed, B., Zaman, S. uz., & Alam, S. H. (2025). Role of AI-Based Marketing Activities in Shaping Brand Experience, Brand Preference, and Brand Loyalty. *Qlantic Journal of Social Sciences and Humanities*, 6(1), 237-253. <https://doi.org/10.55737/qjssh.vi-i.25320>
45. Owais, M., Zaman, S. U., & Alam, S. H. (2025). Impact of Digital Marketing Strategies on Brand Image, Consumer Engagement and Loyalty. *Journal for Social Science Archives*, 3(1), 945–961. <https://doi.org/10.59075/jssa.v3i1.173>