

Designing for Mind: The Role of Psychology in Retail Interior

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Abstract

This research paper investigates the critical role of psychology in retail interior design and its influence on consumer behavior and experience. Through an analysis of psychological principles such as store layout, color psychology, lighting, and sound, this study aims to uncover how these elements can be strategically applied to create engaging and effective retail environments. Two case studies, Westside and Shopper's Stop at Phoenix Palassio, are examined to demonstrate the practical application of these principles. The findings reveal that thoughtfully designed store layouts significantly impact consumer movement and engagement, with free-flow layouts promoting exploration and racetrack layouts ensuring comprehensive product exposure. The strategic use of different colors creates an impact on consumer purchasing power. Proper lighting enhances product appeal and creates a welcoming atmosphere, while carefully selected music and controlled ambient noise contribute to a positive shopping experience. The study aligns with existing research, highlighting the importance of psychological principles in retail design. However, it also identifies areas for further investigation, including cultural variations, technological integration, long-term impacts, and sustainability. Practical recommendations for retail designers and managers are provided, emphasizing the optimization of store layouts, strategic use of colors, effective lighting design, and incorporation of sound and music to enhance consumer experience. This research underscores the significance of integrating psychological insights into retail interior design to create environments that attract customers, foster positive shopping behaviors, and drive business success. Future research tends to explore new trends and technologies to create an engaging retail design.

Keywords: Color psychology, lighting, sound and music, scent marketing, store layout, visual merchandising

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INTRODUCTION

Retail design is crucial for several reasons, as it directly impacts a consumer's shopping experience, influences purchasing behavior, and plays a significant role in the overall success of a retail business. Here, we provide an overview of its importance.

First Impressions

- *Visual appeal:* The design of a retail space is often the first point of contact between the store and the consumer. Color is the most important, as it helps create a great impact on consumers' minds (Figure 1).
- *Brand identity:* Retail design helps convey a store's brand identity and value. Consistent and cohesive design elements reinforce brand recognition and loyalty [1].



Figure 1. Phoenix Plassio, Westside.



Figure 2. (a, b) Westside, all the elements of retail psychology.

Customer Experience

- *Navigation and layout:* An intuitive and logical store layout helps customers find products easily, reduces frustration, and improves the shopping experience.
- *Comfort and ambiance:* Good and comfortable ambiance and light create an engaging and amazing atmosphere for customers.

Influencing Purchasing Behavior

- *Product visibility:* Strategic placement of products can highlight bestsellers, new arrivals, and promotional items, thereby increasing the likelihood of purchase.
- *Impulse buys:* Effective retail design includes areas that encourage impulse purchases, such as checkout counters with small appealing items (Figure 2).

Competitive Advantage

- *Differentiation:* A unique retail design can create an outstanding store for competitors.
- *Memorability:* Good ambiance and atmosphere can have a significant impact on consumer memory, which can be collected while shopping.
- *Sales and Revenue.*
- *Sales conversion:* A well-designed store can lead to higher sales conversion rates by making its products more accessible and appealing.
- *Customer flow:* Good navigation in the store layout can manage customer flow, leading to a smoother shopping experience and potentially higher sales.

Psychology that Influences Consumer Behavior

Psychology plays a significant role in retail design. This helps us to understand and influence consumer behavior.

Color Psychology

- *Emotional responses:* Every color has its impact on consumers. For example, red resembled danger and excitement, while blue resembled calmness and trust (Figure 3).
- *Brand perception:* Colors also influence consumers' brand identification. For instance, luxury brands often use black and gold to convey sophistication and exclusivity [2].

Lighting

- *Mood and atmosphere:* Warm lights create a cozy and inviting atmosphere, while bright lights make a space feel energetic and clean.
- *Product focus:* Accent lighting can draw attention to specific products or areas, making them more prominent and appealing (Figure 4).

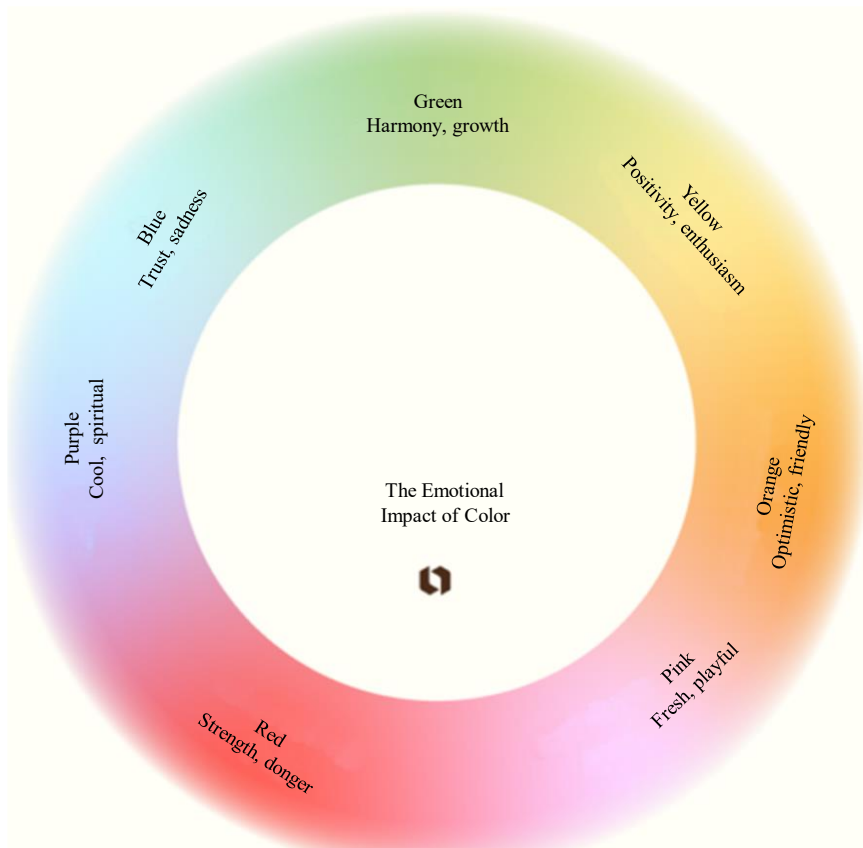
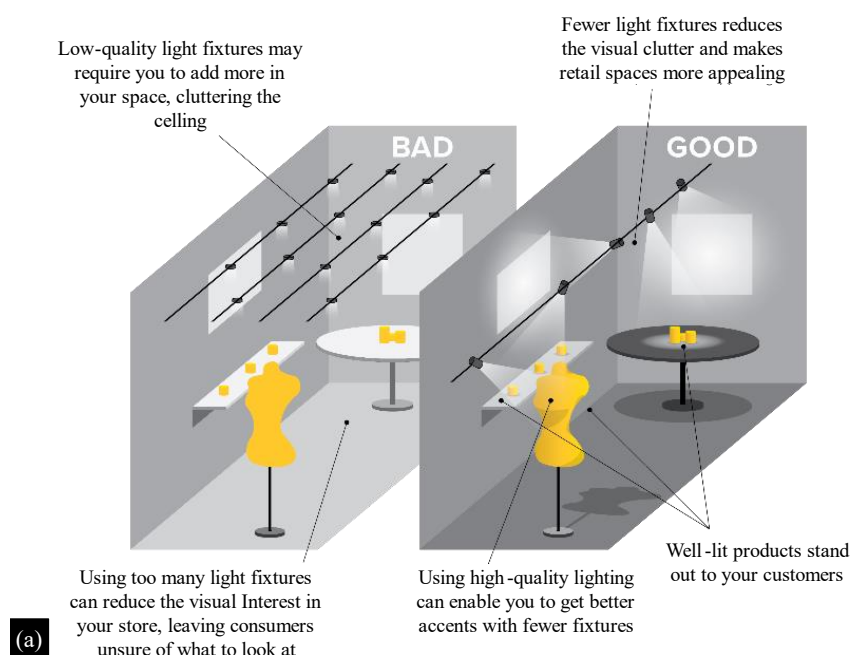


Figure 3. Impact on colors.



(a)

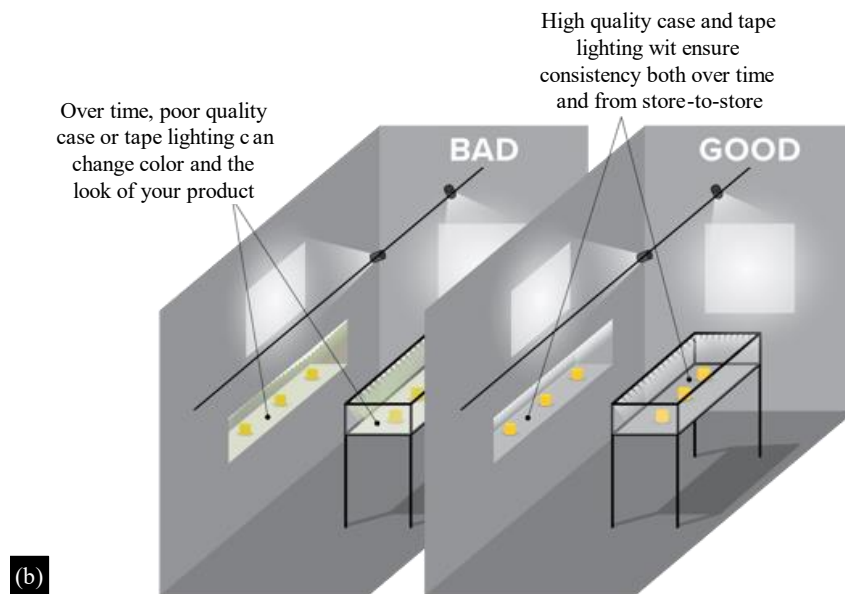


Figure 4. Effects of lights in a store.

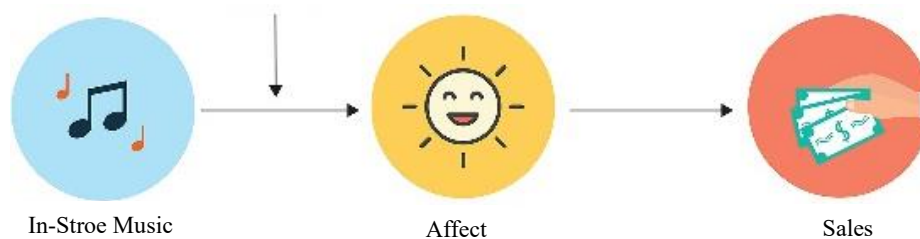


Figure 5. Impact of sound & music.

Sound and Music

- *Shopping pace:* Fast-tempo music can increase the pace at which customers shop, while slow-tempo music can encourage them to spend more time browsing.
- *Brand alignment:* The genre and style of music should align with brand identity and target demographics, enhancing the overall shopping experience (Figure 5).

Scent Marketing

- *Emotional connection:* Pleasant scents can enhance mood and create a positive association with a store.
- *Memory and recall:* Scents can trigger memories and emotions, thus making the shopping experience more memorable.

Store Layout and Navigation

- *Ease of navigation:* A well-designed layout enables easy navigation, making it easier for customers to find what they need [3].
- *Exploration and discovery:* Layouts that encourage exploration can lead to serendipitous discoveries, increasing the likelihood of impulse purchase behavior (Figure 6).

Visual Merchandising

- *Attention and focus:* Eye-catching displays and strategic product placement can capture customer attention and highlight key products.
- *Storytelling:* Visual merchandising can tell a story or create a theme, making the shopping experience more engaging and immersive (Figure 7).

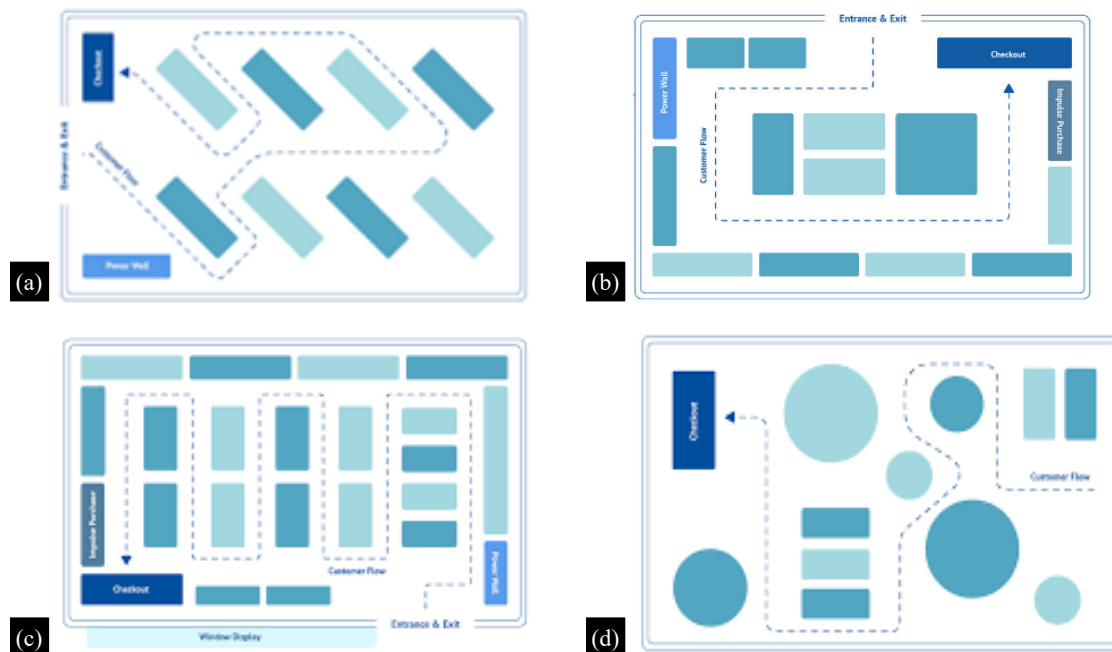


Figure 6. Flow layout plan, (a) Diagonal flow plan, (b) Racetrack flow plan, (c) Grid flow plan, (d) Free-flow plan.

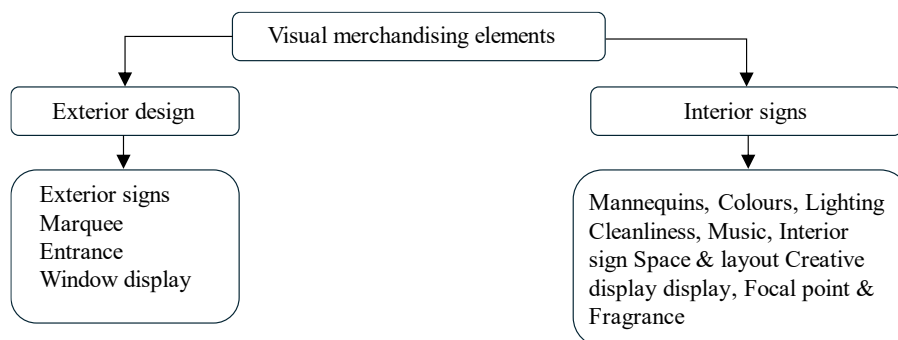


Figure 7. Elements of visual merchandising.

Behavioral Economics

- *Scarcity and urgency:* Sales for a limited time and exclusive products encourage quicker purchasing decisions.
- *Anchoring:* Display strategy plays a major role in the placement of products.

Research Objectives

To Explore How Psychological Principles Can Be Applied to Retail Interior Design

- *Objective description:* This study focuses on identifying and understanding various psychological principles that can be integrated into retail interior design.
- *Key areas of exploration:* color psychology, lighting, sound and music, scent marketing, store layout, visual merchandising, comfort, and convenience.

To Examine the Impact of These Design Elements on Consumer Behavior and Experience

Key Areas of Examination

- *Emotional engagement:* Assessing how design elements such as colors, lighting, and scents influence emotional states and their impact on shopping satisfaction and loyalty.
- *Behavioral responses:* Measuring changes in consumer behaviors, such as time spent in-store, movement patterns, and purchasing decisions, in response to different design elements.

- *Cognitive ease*: Evaluating how intuitive layouts and clear signage reduce cognitive load and enhance shopping experience [4].
- *Sensory experience*: Studying the combined effect of multi-sensory engagement (visual, auditory, olfactory, tactile) on the overall perception of the retail environment.
- *Social interaction*: Investigating the role of design in facilitating or hindering social interactions within the store, such as customer-staff interactions and communal spaces.
- *Perceived value and satisfaction*: Analyzing how design elements affect consumers' perceived value of products and their overall satisfaction with the shopping experience.
- *Sales and revenue impact*: Examine the direct correlation between design improvements and sales performance, including metrics such as sales per square foot, average transaction value, and conversion rates.

SIGNIFICANCE OF THE STUDY

Importance for Retailers, Designers, and Marketers

Retailers

- *Enhanced customer experience*: By understanding and applying psychological principles, retailers can create more engaging and enjoyable shopping environments that can lead to higher customer satisfaction and loyalty.
- *Competitive advantage*: Creating a different design can enhance the user experience and repeat customers.
- *Informed decision-making*: Knowledge of consumer psychology helps retailers make informed decisions about store layout, product placement, and ambiance, thereby optimizing the overall retail strategy [5].

Designers

- *Design innovation*: Designers can leverage psychological insights to create innovative and effective retail spaces that cater to consumers' emotional and behavioral needs.
- *Holistic approach*: Incorporating psychological principles into design leads to a more holistic approach that considers aesthetics, functionality, and consumer well-being.
- *Client satisfaction*: Providing the exact design that consumers need to create a great impact on the marketplace and brand identity [6].

Marketers

- *Targeted marketing strategies*: Understanding how design influences consumer behavior enables marketers to develop more targeted and effective marketing strategies that align with the store's environment.
- *Brand consistency*: Marketers can ensure that retail design reflects the brand's identity and values, creating a cohesive brand experience across all touchpoints.

POTENTIAL TO IMPROVE CONSUMER SATISFACTION AND INCREASE SALES

Consumer Satisfaction

- *Positive emotional responses*: Retail environments designed with psychological principles in mind can evoke positive emotions, making shopping a pleasurable experience. This leads to higher customer satisfaction and loyalty.
- *Ease of navigation*: A well-designed layout creates easy navigation, making it easier for customers to find what they need for an overall shopping experience.
- *Multi-sensory engagement*: Engaging multiple senses through color, lighting, sound, and scent can create a memorable and immersive shopping experience, further increasing customer satisfaction.

Sales and Revenue Increase

- *Increased dwell time*: A well-designed store can lead to higher sales conversion rates by making products more accessible and appealing.

- *Impulse purchases*: Strategic placement of products and appealing visual merchandising can drive impulse purchases and boost sales.
- *Repeat business*: Satisfied customers repeat, which increases store sales.

Practical Implementation

- *Case studies and real-world applications*: By examining successful case studies (e.g., Westside and Shopper's Stop), this study provides practical examples of how psychological principles can be effectively implemented in retail design.
- *Actionable recommendations*: This study offers actionable recommendations that retailers, designers, and marketers can apply to enhance retail spaces and marketing strategies [7].

LITERATURE REVIEW

Psychological Theories Relevant to Retail Design

Understanding and applying psychological theories to retail design is essential for creating environments that positively influence consumer behavior and enhance the shopping experience. Two key psychological theories relevant to retail design are environmental and behavioral economics.

Environmental Psychology

Overview: Environmental psychology views how the environment impacts consumer behavior. In the context of retail design, this study explores how store layouts, lighting, colors, scents, and sounds impact consumer behavior and emotions.

Behavioral Economics

Overview: Behavioral economics combines psychological and economic insights to understand how individuals make decisions.

Application in Retail Design

- *Product placement*: Strategic placement of products can increase demand. For example, placing a premium product next to a standard option can influence the perceptions of value.
- *Pricing strategies*: The use of psychological pricing (e.g., \$9.99 instead of \$10) and the display of original prices alongside discounted prices can create perceptions of savings and value.
- *Promotions and offers*: Sales for limited time and exclusive products encourage quicker purchasing decisions.
- *Interactive displays*: Allowing customers to interact with products (e.g., trying on clothes and testing gadgets) can enhance their perceived value through the endowment effect.
- *Store layout and navigation*: Designing paths that guide customers through high-margin areas or creating focal points with attractive displays can influence shopping behavior and increase sales [8].

METHODOLOGY

Research Design

Mixed-method approach: To provide a comprehensive understanding of how psychological principles can be applied to retail interior design and their impact on consumer behavior and experience.

- **Qualitative Research**:
 - To gain in-depth knowledge of the experiences and perceptions of consumers and retail designers.
 - Methods include observational studies.
- **Quantitative Research**:
 - To measure and analyze the effects of specific design elements on consumer behavior and experiences.
 - Methods include surveys and experiments with measurable outcomes.

Data Collection Methods

Observational Studies

- *Purpose:* To observe and document consumer behavior in different retail environments.
- *Setting:* Westside and Shoppers stop environment.
- *Focus:* Consumer navigation patterns, time spent in different sections, interactions with products, and overall engagement.
- *Format:* Systematic observations conducted by researchers.

Experiments

- *Purpose:* To test the impact of specific design elements (e.g., lighting, music, and scent) on consumer behavior in a controlled setting.
- *Setting:* Simulated retail environments or modified sections of actual retail stores.
- *Variables:* Independent variables (design elements) and dependent variables (consumer behaviors such as time spent, purchase decisions, and emotional responses).

PSYCHOLOGICAL PRINCIPLES IN RETAIL INTERIOR DESIGN

Store Layout and Navigation (Figure 8)

- **Grid Layout:**
 - *Description:* Structured layout with parallel aisles, commonly used in grocery stores and large retail environments.
 - *Impact:* Facilitates efficient navigation and easy product location. However, it may limit exploration and impulse purchases, owing to its predictable path.
- **Free-Flow Layout:**
 - *Description:* An open, flexible layout with minimal constraints, encouraging free movement.
 - *Impact:* Promotes exploration and browsing, increasing the likelihood of impulse purchase behavior. However, this can lead to disorientation and difficulty in finding specific products.
- **Racetrack Layout:**
 - *Description:* A looped layout guiding customers along an easy path through the store.
 - *Impact:* Ensures exposure to a wide range of products, and encourages impulse buying, and thorough exploration [9]. This can also create a sense of discovery and adventure in the shopping experience.

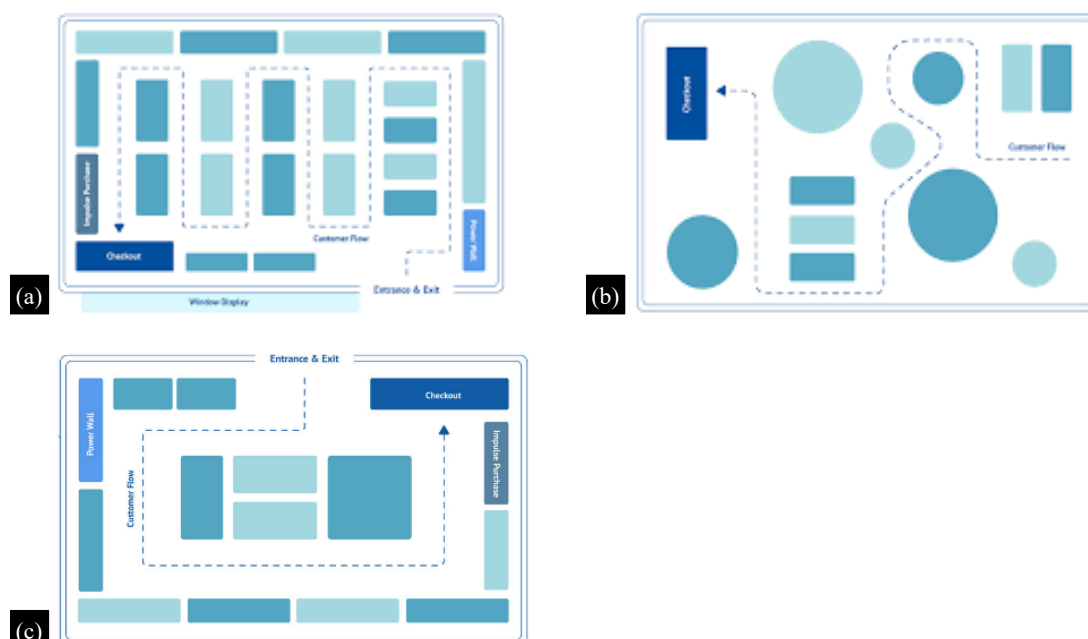


Figure 8. Layout flow, (a) Grid flow Plan, (b) Free-flow plan, (c) Racetrack flow plan.

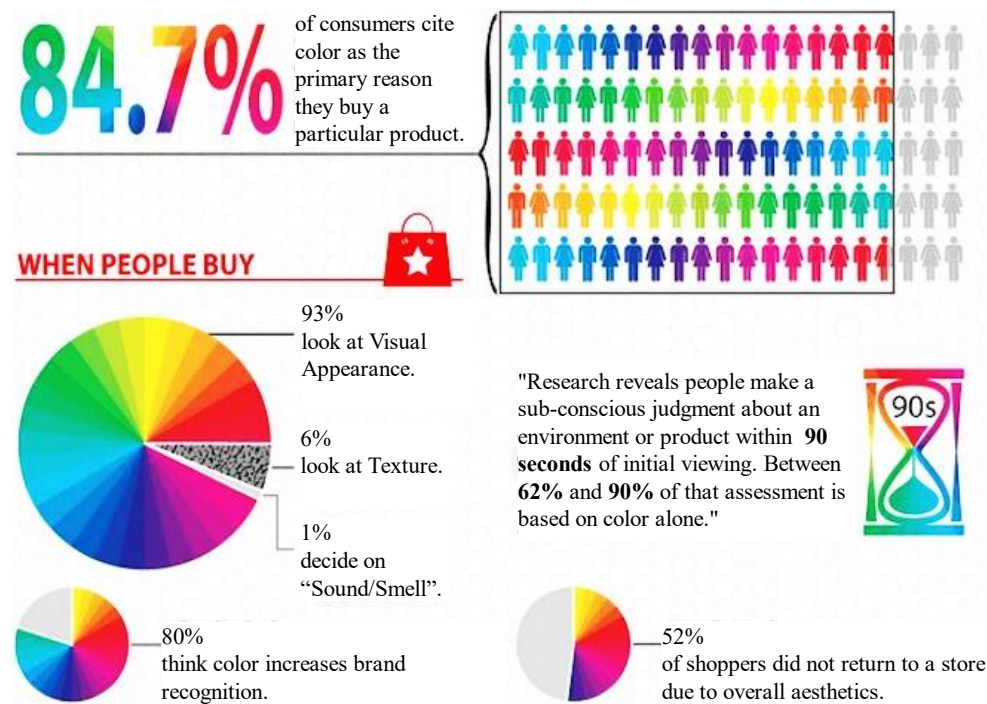


Figure 9. Color theory.

Color Psychology

Effects of Different Colors on Emotions and Behavior

Application in Various Retail Settings (Figure 9)

- **Red:** Evokes excitement, energy, and urgency. It can stimulate appetite and is often used in sales and clearance.
- **Blue:** Conveys trust, calmness, and security. It is commonly used in banks and healthcare settings to evoke a sense of reliability and tranquility.
- **Green:** Resemble nature and health. They are often used in eco-friendly and health-related stores to promote relaxation and well-being.
- **Yellow:** Stimulates happiness, optimism, and warmth.
- **Black:** Luxury and elegance are used in high-end retail to create a sense of exclusivity and quality.
- **Fashion stores:** Use a combination of black, white, and accent colors to convey elegance and style.
- **Grocery stores:** Utilize red and yellow to stimulate appetite and create a sense of urgency for sales.
- **Health and wellness stores:** Implementing green and blue to promote relaxation and a sense of well-being and nature.
- **Technology stores:** Often employ white and blue to convey modernity, cleanliness, and reliability.

Lighting

Types of Lighting (Figure 10)

- Ambient Lighting
 - *Description:* General lighting that provides overall lighting for the store.
 - *Impact:* Bright ambient lighting can create a lively environment, whereas dim lighting can make the space feel intimate and relaxed Figure 10(.
- Accent Lighting
 - *Description:* Focused lighting is used to create focus on specific areas or products.
 - *Impact:* Draws attention to key displays and merchandise, enhancing visual interest and emphasizing important items Figure 10(b) and (c).

- Task Lighting
 - *Description:* Lighting is designed for specific tasks, such as reading labels or trying clothes.
 - *Impact:* Improves functionality and usability and enhances customer experience by making tasks easier and more comfortable (Figure 10(d)).

Influence on Mood and Perception

- *Bright lighting:* creates positive energy levels and creates a sense of urgency. Effective in high-traffic areas and stores aiming for quick turnover.
- *Dim lighting:* Promotes relaxation and a leisure shopping pace. Suitable for luxury boutiques and high-end retail environments.
- *Color temperature:* Warm lighting (yellow) creates a cozy, inviting atmosphere, whereas cool lighting (white) offers a modern, clean look.

Sound and Music

Effects of Music Tempo and Genre on Shopping Behavior

- Music Tempo
 - *Fast-tempo:* Increases shopping pace and energy levels, leading to quicker purchases. Suitable for high-energy retail environments and clearance sales.
 - *Slow-tempo:* Encourages leisure browsing and longer time spent in-store, potentially increasing the number of items purchased.
- Music Genre
 - *Classical music:* Conveys sophistication and luxury, enhancing the perceived quality of products and the overall shopping experience.
 - *Pop/rock music:* Creates an energetic and upbeat atmosphere suitable for youth-oriented and casual retail stores.
 - *Ambient music:* Provides a calming background, reduces stress, and promotes a relaxed shopping environment.

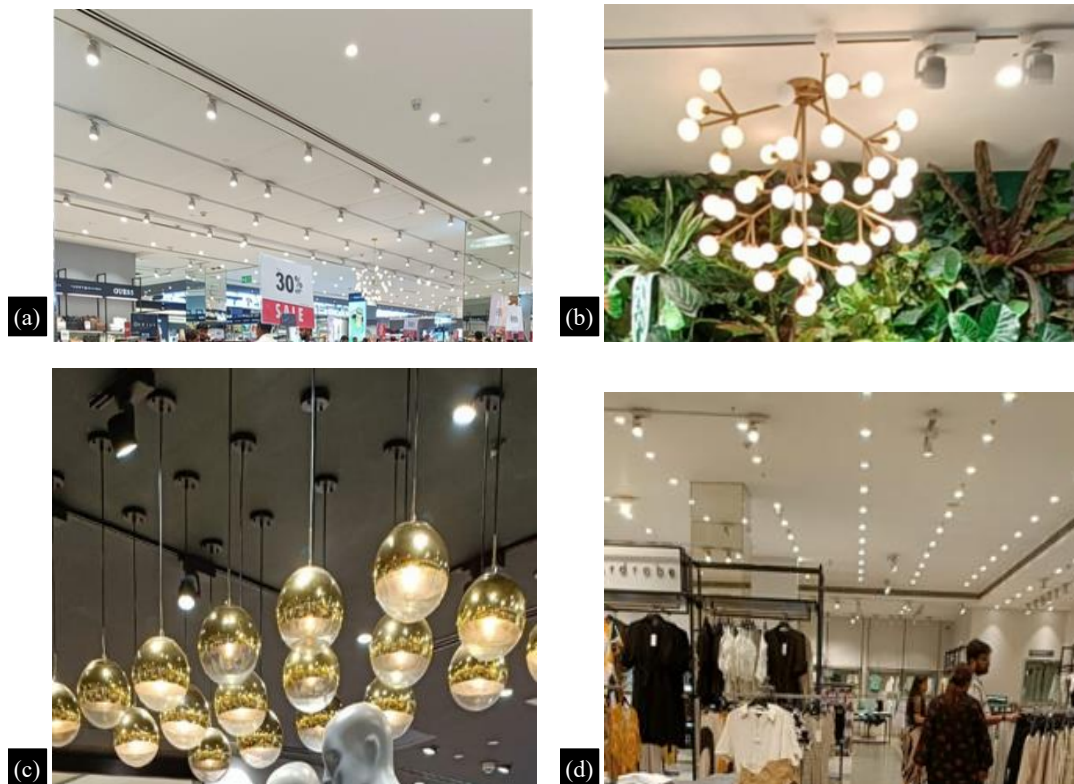


Figure 10. Types of Lighting used to create emphasis on the products.

Role of Ambient Noise

- *Positive impact:* Ambient noise, such as natural sounds or low-level chatter, can create a comfortable and engaging shopping atmosphere, enhancing the overall experience.
- *Negative impact:* High levels of noise or disruptive sounds can lead to discomfort and decreased satisfaction, potentially driving customers away [10].
- *Strategic use:* Balancing ambient noise to complement the store's atmosphere can enhance the sensory experience and improve customer retention and satisfaction.

CASE STUDIES

Westside at Phoenix Palassio (Figure 11)

Analysis of Psychological Principles Applied in the Store

1. Store Layout and Navigation
 - *Free-flow layout:* Westside uses a free-flow layout that encourages customers to explore various store sections.
 - *Clear signage:* Strategic signage helps guide customers through the store, reducing disorientation and making the shopping experience more enjoyable.
2. Color Psychology
 - *Warm colors:* The use of warm colors such as reds and oranges in sales sections creates a sense of urgency and excitement, encouraging quicker purchasing decisions.
 - *Neutral and Soft Colors:* Areas dedicated to high-end fashion and home decor use neutral and soft colors to convey elegance and sophistication, thus enhancing the perception of quality.
3. Lighting:
 - *Ambient lighting:* Bright, even ambient lighting, ensures that the entire store is well-lit, creating a welcoming and energetic atmosphere.
 - *Accent lighting:* Focused lighting highlights key displays and new arrivals, draws customer attention to these products, and increases their attractiveness.
4. Sound and Music
 - *Background music:* Upbeats and contemporary music play softly in the background, creating a lively and pleasant shopping environment without being intrusive.

Impact on Consumer Behavior and Experience

- *Increased browsing time:* The easy-to-navigate layout and comfortable atmosphere attract customers to spend more time exploring the store.
- *Enhanced product appeal:* Lighting and color make products more attractive, increasing the likelihood of purchases.
- *Positive emotional response:* The combination of ambient lighting, warm colors, and pleasant music creates a positive emotional response that enhances overall customer satisfaction and loyalty.





Figure 11. Phoenix Palassio, Westside, Layout, Colors, Lighting, Overall Inviting Ambiance.

Shopper's Stop at Phoenix Palassio (Figure 12)

The Design Elements and Their Psychological Effects

1. Store Layout and Navigation:
 - *Racetrack layout:* The Shopper's Stop has a racetrack layout, guiding customers through an easy path that ensures exposure to a wide range of products.
 - *Easy Navigation:* Clear and easy layout and signage help customers navigate the store efficiently.
2. Color Psychology
 - *Cool colors:* The use of cool colors like blues and greens in sections dedicated to electronics and personal care products conveys a sense of trust and relaxation.
 - *Bold colors:* The use of bold and vibrant colors to attract attention and create excitement.
3. Lighting
 - *Ambient lighting:* Even bright ambient lighting ensures a well-lit shopping environment that enhances visibility and comfort.
 - *Task Lighting:* Specific areas, such as fitting rooms and makeup counters, use task lighting to improve functionality and user experience.
4. Sound and Music
 - *Genre-specific music:* Different sections of a store feature music that aligns with the products sold. For instance, classical music in high-end fashion areas and pop music in youth-oriented areas.
 - *Ambient noise control:* Efforts are made to control ambient noise to ensure a pleasant and comfortable shopping atmosphere.

Consumer Feedback and Sales Data

- *Increased sales:* Sales data show a correlation between the implementation of these design elements and an increase in sales, particularly in sections where strategic color, lighting, and music choices are applied.
- *Repeat visits:* Customer feedback suggests a high rate of repeat visits, indicating that the positive shopping experience fostered by the store's design contributes to customer loyalty.



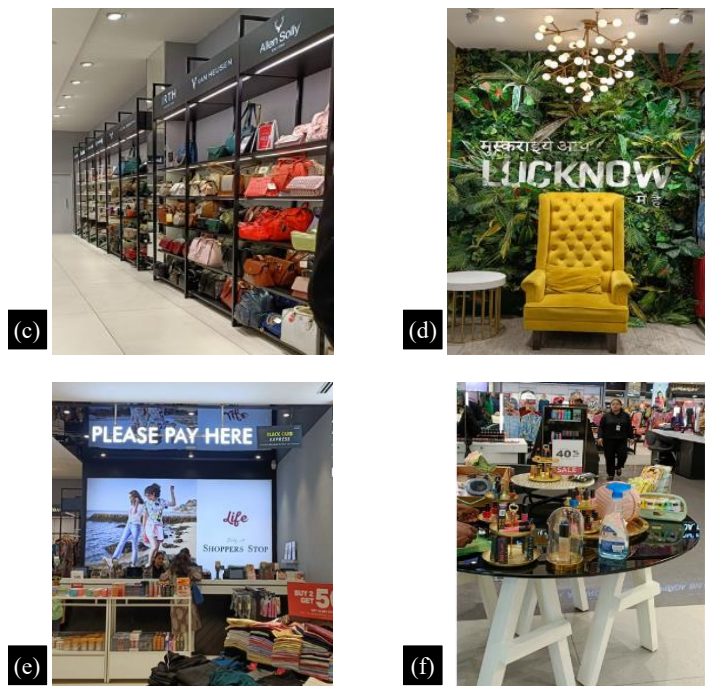


Figure 12. Phoenix Palassio, Shoppers Stop, Layout, display, Colors, Lighting, Overall Inviting Ambiance.

DISCUSSION

Interpretation of Findings

Alignment with Existing Research

The findings from the case studies of Westside and Shopper's Stop at Phoenix Palassio largely align with the existing research on the psychological impact of retail design:

- *Store layout and navigation:* The layouts used in both stores (free-flow at Westside and racetrack at Shopper's Stop) significantly influenced consumer movement and engagement. The free-flow layout at Westside encouraged exploration and impulse buying, whereas the racetrack layout at Shopper's Stop ensured comprehensive exposure to products, enhancing the shopping experience.
- *Color psychology:* The use of warm colors to evoke excitement, urgency, and cool colors to convey trust and relaxation. Westside's strategic use of colors in different sections to influence consumer perception and behavior corroborates these studies.
- *Lighting:* Impact of ambient, accent, and task lighting observed in case studies. Both stores utilize lighting to create inviting atmospheres, highlight products, and improve functionality, which enhances the overall shopping experience and increases the likelihood of purchases.
- *Sound and music:* The use of upbeat music to create a lively environment and genre-specific music to cater to different sections effectively influenced consumer behavior and satisfaction.

Differences from Existing Research

- *Cultural context:* The case studies were conducted in an Indian context, where cultural factors may influence consumer responses differently than in Western studies.
- *Integration of technology:* Unlike many traditional studies, these case studies did not extensively explore the integration of emerging technologies, such as augmented reality (AR) and virtual reality (VR), which could further enhance consumer experience and engagement. This represents an area for future research.
- *Long-term impact:* The Case studies primarily focused on immediate consumer reactions and behaviors. Further research is needed to explore the long-term impact of these design elements on customer loyalty and repeat business.

Practical Implications

Recommendations for Retail Designers and Managers

1. Optimizing Store Layouts
 - Free-flow layouts are used in sections in which exploration and impulse buying are desired, such as fashion and accessories.
 - Racetrack layouts should be implemented in larger stores to ensure comprehensive product exposure and effectively guide consumer movement.
2. Strategic Use of Color
 - Apply warm colors in promotional and sale areas to create excitement and urgency.
 - Use cool colors in sections that require a calm and trustworthy ambiance, such as electronics and personal care.
3. Effective Lighting Design
 - Ensure even ambient lighting to create a welcoming and energetic environment.
 - Utilize accent lighting to highlight key products and displays, drawing consumer attention.
 - Incorporate task lighting in areas requiring specific functions, such as fitting rooms and counters.
4. Incorporating Sound and Music
 - Choose music tempos that align with the desired shopping pace: fast-paced for quick turnover areas and slow-paced for leisurely browsed sections.
 - Select music genres that resonate with the target demographics and enhance the thematic atmosphere of the different store sections.
 - Manage ambient noise to maintain a comfortable and pleasant shopping environment.

CONCLUSION

Main Findings

- *Psychological principles in retail design:* The Impact on consumer behavior and enhances shopping experience.
 - *Store layout:* Free-flow and racetrack layouts effectively guide consumer movements and engagement. Free-flow layouts promote exploration and impulse buying, whereas racetrack layouts ensure comprehensive product exposure.
 - *Color psychology:* Different colors evoke specific emotions and behaviors. Warm colors, such as red and orange, create excitement and danger, while cool colors, such as blue and green, convey trust and relaxation.
 - *Lighting:* Ambient, accent and task lighting play distinct roles in creating a welcoming atmosphere, highlighting products, and improving product functionality. Lighting creates a visually appealing product that positively impacts consumer moods.
 - *Sound and music:* The tempo and genre of music influence the shopping pace and customer satisfaction. Upbeat music creates a lively environment, whereas genre-specific music caters to different store sections and demographics.

Future Research Directions

1. Cultural Variations
 - Investigate how cultural differences influence consumers' responses to various design elements. Understanding the market so that retailers can provide good services.
2. Technological Integration
 - Explore the influence of emerging technologies such as AR, VR, and smart retail technologies on consumer behavior and experience. These technologies have the potential to revolutionize retail designs by creating immersive and interactive shopping environments.
3. Long-Term Impact
 - Study the long-term effects of retail design elements on customer loyalty, repeat visits, and brand perception. This can provide deeper insights into how design influences consumers' relationships with brands over time.

4. Sustainability in Retail Design

- Examine the role of sustainable design practices in retail environments. Investigate how eco-friendly materials, energy-efficient lighting, and sustainable layouts impact consumer behavior and brand perception.

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