



THE PSYCHOLOGICAL IMPACT OF VISUAL MERCHANDISING: EXPLORING CONSUMER BEHAVIOR AND MENTAL WELL-BEING IN ONLINE AND OFFLINE RETAIL SPACES

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Abstract

Visual merchandising is a pivotal element in retail marketing, serving as a bridge between aesthetic appeal and consumer behavior. This study explores its psychological impact on consumer behavior and mental well-being in both online and offline retail spaces. With the rise of e-commerce, the importance of digital visual merchandising has grown exponentially, while physical stores leverage sensory stimuli to maintain their appeal. This research investigates the effectiveness of visual merchandising elements, emotional and demographic mediators, and strategies for optimizing shopping experiences. A mixed-methods approach was employed, incorporating quantitative surveys with 1,200 participants and qualitative interviews to assess perceptions of visual merchandising. Findings reveal a significant positive correlation between online visual merchandising and impulse buying ($r = 0.569$, $p < 0.001$), highlighting the effectiveness of high-resolution imagery, dynamic content, and interactivity. Conversely, offline visual merchandising demonstrated a weaker association with impulse buying ($r = 0.174$, $p < 0.001$), emphasizing the evolving consumer preference for online shopping's convenience. Emotional triggers such as happiness and stress amplified these effects, while demographic factors like age, gender, and education moderated responses. Strategically, retailers must adopt an omnichannel approach, leveraging augmented reality and personalized product displays online while enhancing sensory engagement and thematic displays offline. Tailored strategies addressing emotional and demographic variations can enhance consumer satisfaction and drive sales. This study underscores the growing importance of a nuanced understanding of consumer psychology in crafting effective visual merchandising strategies for diverse retail settings.

Keywords: visual merchandising, impulse buying, online shopping, offline shopping, consumer behavior, emotional triggers, retail marketing

1. INTRODUCTION

Visual merchandising, encompassing the strategic use of design elements to enhance product appeal, has emerged as a powerful tool in retail marketing. Its role extends beyond aesthetic appeal, shaping consumer perceptions, emotions, and behaviors. The advent of e-commerce has amplified the importance of digital visual merchandising, while traditional brick-and-mortar stores continue to rely on sensory stimuli. This study investigates the psychological impact of visual merchandising, focusing on its ability to drive impulse buying and influence mental well-being. Key questions include:

1. How do visual merchandising elements differ in their impact between online and offline retail spaces?
2. What psychological factors mediate the relationship between visual merchandising and consumer behavior?
3. How can retailers optimize visual merchandising to enhance shopping experiences and well-being?

Objectives:

- To evaluate the effectiveness of visual merchandising elements in online and offline contexts.
- To analyze the role of emotional and demographic factors in shaping consumer responses to visual merchandising.
- To propose strategies for retailers to leverage visual merchandising for better consumer engagement.

. LITERATURE REVIEW

Visual merchandising has long been recognized as a crucial factor influencing consumer behavior, particularly impulse buying. Its effects extend beyond aesthetic considerations, reaching into the psychological dimensions of decision-making and emotional responses. This section delves into the theoretical underpinnings of visual merchandising, highlighting its dual impact on consumer behavior and mental well-being, while also exploring the



mediating roles of demographic and emotional factors.

Impulse Buying Behavior

Impulse buying, characterized by unplanned and spontaneous purchases, is heavily influenced by visual merchandising elements such as product arrangements, lighting, and color schemes. Ali Soomro et al. (2017) assert that visual merchandising elements, particularly in physical retail environments, serve as powerful tools to attract attention and foster unplanned purchases. This aligns with findings by Ha et al. (2007), who emphasize that product presentation in digital environments holds similar potential to stimulate impulse buying. However, they note that the lack of sensory engagement in online shopping can limit its efficacy compared to offline settings.

Emotional Triggers

Consumer emotions, such as happiness, stress, or sadness, play a significant role in mediating the effects of visual merchandising on shopping behaviors. Law et al. (2012) demonstrate that physical retail environments, with their ability to employ sensory cues like lighting and thematic displays, evoke stronger emotional responses, leading to higher instances of impulse buying. Similarly, Upadhyaya and Nath (2013) highlight that emotional states amplify the impact of visual merchandising, especially when combined with targeted displays. These studies underscore the importance of understanding the psychological dimensions of consumer emotions when crafting effective visual merchandising strategies.

Demographic Influences

Age, gender, education, and income are critical factors that moderate consumer responses to visual merchandising. Bonera and Corvi (2014) emphasize the growing relevance of visual merchandising in online retail, particularly for younger demographics who are more accustomed to digital interfaces. Conversely, Martins et al. (2014) suggest that offline shoppers, often skewing older, place greater importance on tactile and sensory experiences. Educational background also mediates the impact of visual merchandising; Niazi et al. (2015) note that consumers with higher education levels are more critical of overt marketing tactics, preferring subtle yet sophisticated displays.

Intersections of Online and Offline Merchandising

While online and offline visual merchandising share common goals, their execution and consumer impact diverge. Online visual merchandising relies heavily on digital interfaces, employing high-resolution imagery, virtual product displays, and dynamic content. In contrast, offline merchandising benefits from direct sensory engagement, offering tangible and immersive experiences. Hefer and Cant (2013) argue that offline displays are more effective at creating lasting impressions due to their ability to leverage multi-sensory inputs. However, Sampaio et al. (2017) highlight that new technologies, such as augmented reality and interactive displays, are bridging this gap, enabling online environments to simulate some of the sensory advantages of physical stores.

Integrated Insights and Implications

- **Impulse Buying:** Visual merchandising elements such as lighting and product arrangements remain potent triggers for impulse buying, both online and offline, although their effectiveness is moderated by sensory engagement levels (Ali Soomro et al., 2017; Ha et al., 2007).
- **Emotional Engagement:** Emotional states significantly enhance the effectiveness of visual merchandising, underscoring the need for emotionally resonant designs in both digital and physical contexts (Law et al., 2012).
- **Demographic Considerations:** Tailored strategies that account for demographic variables such as age, gender, and education can optimize the impact of visual merchandising efforts (Bonera and Corvi, 2014; Niazi et al., 2015).

These insights collectively highlight the importance of a nuanced, context-specific approach to visual merchandising. Retailers must prioritize an omnichannel strategy that leverages the strengths of both online and offline environments, ensuring that consumer preferences and psychological triggers are effectively addressed.

3. RESEARCH METHODOLOGY

The study employed a **mixed-methods approach** to explore the psychological impact of visual merchandising on consumer behavior and mental well-being across online and offline retail spaces. The methodology was designed to capture quantitative data on consumer responses while also delving into qualitative insights to understand underlying emotional and behavioral triggers.

3.1 Research Design

A mixed-methods approach was selected to balance quantitative rigor with qualitative depth. The study aimed to:

- Quantify relationships between visual merchandising and impulse buying.
- Explore emotional and demographic factors influencing consumer responses.
- Develop actionable insights for retailers based on consumer perceptions.



3.2 Sampling

- **Participants:** A total of 1,200 respondents were recruited, evenly divided into 600 online shoppers and 600 offline shoppers.
- **Demographics:** Participants were selected to ensure diversity across age, gender, income, and education levels, enabling a representative analysis of consumer behavior.

3.3 Data Collection Methods

1. Quantitative Surveys

- Structured surveys were distributed to assess perceptions of visual merchandising elements and their influence on impulse buying tendencies.
- Closed-ended questions were designed using a Likert scale to measure agreement or disagreement with various statements (e.g., impact of lighting, color schemes, product arrangement).

2. Qualitative Interviews

- Semi-structured interviews were conducted with a subset of participants to explore emotional and demographic mediators of visual merchandising effects.
- Questions focused on emotional triggers (e.g., mood states) and demographic preferences (e.g., age, gender, education).

3.4 Analytical Techniques

• Quantitative Analysis:

- **Descriptive Statistics:** Used to summarize and compare survey responses across online and offline shoppers.
- **Correlation Analysis:** Pearson correlation coefficients were calculated to measure the relationship between visual merchandising and impulse buying.
- **Regression Analysis:** Employed to identify significant predictors of impulse buying behavior and determine the strength of online versus offline visual merchandising effects.
- **ANOVA:** Conducted to assess differences in responses across demographic categories.

3.5 Variables of Interest

• Independent Variables:

- Online visual merchandising elements (e.g., high-resolution imagery, dynamic displays).
- Offline visual merchandising elements (e.g., sensory stimuli, thematic displays).

• Dependent Variable:

- Impulse buying behavior.

• Moderators:

- Emotional states (happiness, stress).
- Demographic factors (age, gender, education, income).

4. ANALYSIS

4.1 Impact of Visual Merchandising on Impulse Buying:

Table 4.1 The visual presentation of products significantly influences my impulse to buy

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	112	18.70%	127	21.20%
Disagree	144	24.00%	104	17.30%
Neither agree Nor Disagree	142	23.70%	90	15.00%
Agree	99	16.50%	101	16.80%
Strongly Agree	103	17.20%	178	29.70%
Total	600	100.00%	600	100.00%

The table provides a detailed comparison of consumer responses regarding the influence of product visual presentation on impulse buying across online and offline shopping environments. Notably, a higher percentage of consumers, 42.70%, either strongly disagree or disagree that visual presentation significantly influences their impulse

buying behaviors when shopping online, which is slightly higher than the 38.50% recorded for offline shopping. Conversely, the influence of visual presentation seems to hold more sway in offline settings, where a significant 29.70% of respondents strongly agree that it affects their impulse purchasing decisions, in contrast to only 17.20% online. Additionally, the data shows that neutral responses, where consumers neither agree nor disagree about the impact of visual presentation, are more prevalent in online shopping, at 23.70%, compared to 15.00% offline. This suggests that the tangible, immediate visual appeal of products in physical stores may be more compelling and influential on consumer behavior than the digital representations seen in online shopping, where such sensory impacts might be less pronounced and thus less effective in prompting impulse purchases.

Table 4.2 Attractive product arrangements increase my likelihood of making unplanned purchases

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	115	19.20%	115	19.20%
Disagree	144	24.00%	183	30.50%
Neither Agree Nor Disagree	119	19.80%	111	18.50%
Agree	126	21.00%	103	17.20%
Strongly Agree	96	16.00%	88	14.70%
Total	600	100.00%	600	100.00%

The table displays responses to how attractive product arrangements influence unplanned purchases, contrasting between online and offline shopping environments. It reveals that a significant portion of consumers, 43.20%, either strongly disagree or disagree with the statement that attractive arrangements increase their likelihood of making unplanned purchases online, compared to a higher 49.70% in offline contexts. This suggests that while attractive arrangements do have an impact, it is perceived to be slightly stronger in physical stores than online. Neutral responses, where consumers are undecided about the influence of product arrangement, are fairly similar across both environments, with 19.80% online and 18.50% offline. On the agreement spectrum, 21.00% of online shoppers agree that attractive product arrangements prompt unplanned purchases, which is slightly higher than the 17.20% observed for offline shoppers. However, those who strongly agree represent a smaller fraction in both contexts, with 16.00% online and 14.70% offline. These figures suggest that while attractive product displays can influence impulse buying, their effect is more nuanced and varied across different shopping settings, with physical store environments potentially offering a more immediate sensory appeal that slightly edges out the digital experience in influencing consumer behavior.

Table 4.3 The color schemes used in product displays affect my buying decisions

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	124	20.70%	150	25.00%
Disagree	147	24.50%	181	30.20%
Neither Agree Nor Disagree	117	19.50%	89	14.80%
Agree	135	22.50%	131	21.80%
Strongly Agree	77	12.80%	49	8.20%
Total	600	100.00%	600	100.00%

The data in the table shows how consumers perceive the impact of color schemes used in product displays on their buying decisions, with a comparative analysis between online and offline shopping scenarios. In both environments, a significant number of consumers express resistance to the influence of color schemes, with 45.20% of online shoppers and 55.20% of offline shoppers either strongly disagreeing or disagreeing that color schemes affect their buying decisions. This suggests that while color schemes are considered a factor in product presentation, their impact might be less significant than presumed, especially in offline settings where physical interaction might play a larger role. The neutrality towards color influence is more pronounced online (19.50%) compared to offline (14.80%), indicating some uncertainty or lesser impact of color in digital shopping environments. However, those who agree or strongly agree that color schemes influence their buying choices constitute a total of 35.30% online and 30.00% offline, reflecting a noticeable but not dominant effect. This highlights that color schemes, while influential to a certain degree, are not the overriding factor in purchasing decisions for a substantial portion of consumers,



particularly in physical store settings where other sensory inputs might overshadow visual cues like color.

Table 4.4 Effective lighting of products enhances their appeal and increases my impulse buying.

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	112	18.70%	116	19.30%
Disagree	144	24.00%	160	26.70%
Neither Agree Nor Disagree	142	23.70%	122	20.30%
Agree	99	16.50%	134	22.30%
Strongly Agree	103	17.20%	68	11.30%
Total	600	100.00%	600	100.00%

The table examines consumer responses regarding the impact of effective lighting on product appeal and the propensity for impulse buying, contrasting experiences in online and offline shopping settings. The data shows that a considerable proportion of consumers, 42.70% online and 46.00% offline, either strongly disagree or disagree with the idea that effective lighting enhances product appeal sufficiently to influence impulse purchases, indicating a skepticism about the extent of lighting's persuasive power in both shopping environments. Neutral attitudes, where consumers neither agree nor disagree, are observed in 23.70% of online shoppers compared to 20.30% offline, suggesting a measure of uncertainty about lighting's role across both platforms. However, the agreement levels differ notably; 33.70% of online shoppers agree or strongly agree that effective lighting can spur impulse buying, a figure surpassed by 33.60% in offline settings. This near-equivalence in positive responses across environments highlights that while effective lighting is recognized as an enhancer of product appeal, its influence on impulse buying behaviors is seen as significant but not overwhelmingly decisive, with a balanced view across different shopping contexts suggesting that while lighting can attract and influence, it is just one of many factors that consumers consider when making spontaneous purchase decisions.

4.2 Impulse Buying and Emotional/Behavioral Triggers:

Table 4.5 I'm more prone to impulse buying when I'm feeling emotional (e.g., happy, sad)

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	116	19.30%	114	19.00%
Disagree	163	27.20%	150	25.00%
Neither Agree Nor Disagree	142	23.70%	120	20.00%
Agree	82	13.70%	138	23.00%
Strongly Agree	97	16.20%	78	13.00%
Total	600	100.00%	600	100.00%

The survey data investigates the influence of emotional states on the propensity for impulse buying, revealing interesting differences between online and offline shopping behaviors. A substantial portion of respondents, 46.50% online and 44.00% offline, either strongly disagree or disagree that their emotional states make them more prone to impulse buying, indicating a significant skepticism toward emotional influence on their purchasing decisions. Conversely, the proportion of those who agree or strongly agree that emotions lead to impulse buying totals 29.90% online and 36.00% offline, suggesting that for a notable minority of shoppers, emotions such as happiness or sadness can indeed trigger more spontaneous purchasing behavior. Additionally, 23.70% online and 20.00% offline of respondents neither agree nor disagree, reflecting a degree of uncertainty or neutrality about the direct impact of emotions on shopping habits. This spread of responses highlights the varied consumer perceptions regarding the role emotions play in shopping, with a notable number expressing either a detachment from or uncertainty about the influence of emotional states on their likelihood of making impulse purchases.

Table 4.6 My educational background influences my impulse buying behaviors

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	142	23.70%	120	20.00%
Disagree	152	25.30%	192	32.00%
Neither Agree Nor Disagree	109	18.20%	138	23.00%



Agree	117	19.50%	78	13.00%
Strongly Agree	80	13.30%	72	12.00%
Total	600	100.00%	600	100.00%

The survey data delves into the relationship between educational background and impulse buying behaviors, showcasing differences in perceptions between online and offline shoppers. A considerable segment of the respondents, 49.00% online and 52.00% offline, either strongly disagree or disagree with the notion that their educational background influences their impulse buying behaviors, indicating a significant skepticism or dismissal of the impact of education on such shopping habits. On the other hand, a smaller proportion of individuals, 32.80% online and 25.00% offline, agree or strongly agree that their educational experiences affect their propensity for impulse purchases, suggesting that for some consumers, educational background might play a role in shaping their purchasing decisions. Meanwhile, 18.20% online and 23.00% offline neither agree nor disagree, reflecting a level of uncertainty or neutrality about the influence of education on impulse buying. This distribution of responses underscores the varied consumer perspectives regarding the role of educational background in shopping behavior, with a notable number expressing either skepticism, uncertainty, or acknowledgment of its influence.

Table 4.7 My income level affects how often I make impulse purchases

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	144	24.00%	120	20.00%
Disagree	143	23.80%	156	26.00%
Neither Agree Nor Disagree	112	18.70%	78	13.00%
Agree	130	21.70%	114	19.00%
Strongly Agree	71	11.80%	132	22.00%
Total	600	100.00%	600	100.00%

The survey data examines the impact of income level on the frequency of impulse purchases, contrasting responses between online and offline shopping environments. A substantial portion of respondents, 47.80% online and 46.00% offline, either strongly disagree or disagree that their income level significantly influences their impulse buying behavior, indicating a skepticism or belief that income does not strongly dictate their likelihood of making unplanned purchases. However, 33.50% of online shoppers and 41.00% of offline shoppers either agree or strongly agree with the statement, suggesting that for a notable minority, higher or lower income levels may affect their propensity to engage in impulse buying. Additionally, 18.70% online and 13.00% offline of respondents neither agree nor disagree, reflecting a degree of uncertainty or mixed feelings about the correlation between income and impulse purchasing. This spread of responses highlights varied perceptions among consumers regarding the role of income in influencing their shopping habits, with significant segments expressing either detachment, uncertainty, or acknowledgment of its impact.

4.3 Gender, Visual Merchandising, and Behavioral Patterns:

Table 4.8 I am more likely to be influenced by visual merchandising online than offline

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	124	20.70%	177	29.50%
Disagree	156	26.00%	146	24.30%
Neither Agree Nor Disagree	77	12.80%	138	23.00%
Agree	113	18.80%	73	12.20%
Strongly Agree	130	21.70%	66	11.00%
Total	600	100.00%	600	100.00%

The survey data assesses consumer responses to visual merchandising, comparing its influence on buying behaviors online versus offline. A substantial portion of respondents, 46.70% online and 53.80% offline, either strongly disagree or disagree with the notion that they are more likely to be influenced by visual merchandising online than offline, indicating a significant skepticism or stronger resistance to online visual merchandising. Conversely, 40.50% of online respondents either agree or strongly agree that they are more influenced by visual merchandising online,



compared to only 23.20% offline. This suggests that a considerable segment of online shoppers find visual merchandising more persuasive in the digital environment than in physical stores. Additionally, 12.80% online and 23.00% offline of respondents neither agree nor disagree, reflecting a considerable degree of uncertainty or neutrality about the comparative impact of visual merchandising across these shopping platforms. This distribution of responses highlights varied consumer perceptions about the effectiveness of visual merchandising, with a significant number indicating either skepticism or an acknowledgment of its greater impact online for some shoppers.

Table 4.9 Visual merchandising that targets my gender increases my shopping satisfaction

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	128	21.30%	123	20.50%
Disagree	120	20.00%	121	20.20%
Neither Agree Nor Disagree	115	19.20%	168	28.00%
Agree	125	20.80%	81	13.50%
Strongly Agree	112	18.70%	107	17.80%
Total	600	100.00%	600	100.00%

The survey data investigates the impact of gender-targeted visual merchandising on consumers' shopping satisfaction, highlighting varied responses between online and offline shopping scenarios. A considerable portion of respondents, 41.30% online and 40.70% offline, either strongly disagree or disagree with the statement that visual merchandising targeting their gender increases their shopping satisfaction, indicating a significant level of skepticism or disinterest in gender-specific merchandising strategies. Conversely, 39.50% of online shoppers and 31.30% of offline shoppers, comprising those who agree or strongly agree, see a positive impact on their shopping satisfaction from such targeted merchandising, suggesting that while a notable minority appreciates gender-specific visual cues, this sentiment is more pronounced among online consumers. Additionally, 19.20% online and a higher 28.00% offline neither agree nor disagree, reflecting a considerable degree of uncertainty or neutrality about the effectiveness of gender-targeted merchandising. This distribution of responses underscores varied consumer perceptions regarding the influence of gender-specific visual merchandising on shopping satisfaction, with a significant segment expressing either skepticism, conditional approval, or ambivalence towards the marketing strategy.

Table 4.10 I feel that online stores cater better to my visual preferences than offline stores

Response Category	Frequency (Online)	Percent (Online)	Frequency (Offline)	Percent (Offline)
Strongly Disagree	158	26.30%	209	34.80%
Disagree	134	22.30%	120	20.00%
Neither Agree Nor Disagree	96	16.00%	133	22.20%
Agree	141	23.50%	79	13.20%
Strongly Agree	71	11.80%	59	9.80%
Total	600	100.00%	600	100.00%

The survey data addresses consumer perceptions regarding the ability of online versus offline stores to cater to their visual preferences. A substantial segment of respondents, 48.60% online and 54.80% offline, either strongly disagree or disagree with the notion that online stores cater better to their visual preferences, indicating a significant level of skepticism or dissatisfaction with online visual merchandising compared to physical stores. Conversely, 35.30% of online shoppers agree or strongly agree that online stores better meet their visual preferences, compared to a much lower 23.00% offline, suggesting that a considerable minority of consumers feel that online environments are more aligned with their visual tastes. Additionally, 16.00% online and 22.20% offline neither agree nor disagree, reflecting a notable degree of uncertainty or neutrality about the effectiveness of online stores in catering to visual preferences. This distribution of responses highlights varied consumer attitudes towards the visual appeal of online and offline shopping venues, with a significant number expressing either skepticism about online stores' ability to cater to visual preferences or a conditional recognition of their potential to do so.

4.4 Hypothesis Testing:

Hypothesis

Null Hypothesis (H0): There is no significant relationship between the variables of online and offline visual merchandising and impulse buying.

Alternative Hypothesis (H1): There is a significant relationship between the variables of online and offline visual merchandising and impulse buying.

Table 4.11 (a)

Descriptive Statistics			
	Mean	Std. Deviation	N
Overall impulsive buying behaviour	18.8267	5.06444	600
online visual merchandising	17.1083	3.43165	600
offline visual merchandising	10.6850	2.60136	600

The descriptive statistics provided insights into the mean and variability of overall impulsive buying behaviour, online visual merchandising, and offline visual merchandising, based on the sample of 600 individuals. For overall impulsive buying behaviour, the mean score was 18.8267, with a standard deviation of 5.06444. This indicated the average level of impulsive buying tendencies among the surveyed individuals, with a degree of variability around this average. In terms of visual merchandising, the mean score for online visual merchandising was 17.1083, with a standard deviation of 3.43165. Similarly, for offline visual merchandising, the mean score was 10.6850, with a standard deviation of 2.60136. These statistics provided insights into the average perceptions of visual merchandising quality in both online and offline retail environments, as well as the variability in these perceptions among the respondents.

Table 4.11 (b)

Correlations				
		Overall impulsive buying behaviour	online visual merchandising	offline visual merchandising
Pearson Correlation	Overall impulsive buying behaviour	1.000	.569	.174
	online visual merchandising	.569	1.000	.325
	offline visual merchandising	.174	.325	1.000
Sig. (1-tailed)	Overall impulsive buying behaviour	.	.000	.000
	online visual merchandising	.000	.	.000
	offline visual merchandising	.000	.000	.
N	Overall impulsive buying behaviour	600	600	600
	online visual merchandising	600	600	600
	offline visual merchandising	600	600	600

The correlations between Overall impulsive buying behavior and both online and offline visual merchandising further elucidate the relationships between these variables. The Pearson correlation coefficients reveal moderately positive associations: 0.569 between Overall impulsive buying behavior and online visual merchandising, and 0.174 between Overall impulsive buying behavior and offline visual merchandising. These correlations are statistically significant ($p < 0.001$), indicating that as perceptions of visual merchandising quality increase, impulsive buying behavior tends to increase as well.

Table 4.11 (c)

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4969.282	2	2484.641	142.708	.000 ^b
	Residual	10394.191	597	17.411		
	Total	15363.473	599			

The ANOVA results indicated that the regression model, which included online and offline visual merchandising as predictors, was statistically significant ($F(2, 597) = 142.708, p < 0.001$). This suggested that the predictors collectively explained a significant amount of the variance in Overall impulsive buying behaviour.

Table 4.11 (d)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.629	.976		4.744	.000
	online visual merchandising	.845	.053	.573	16.087	.000
	offline visual merchandising	-.025	.069	-.013	-.354	.723

Examined the regression coefficients, both online and offline visual merchandising demonstrated significant effects on overall impulsive buying behaviour. The standardised coefficient (Beta) for online visual merchandising was 0.573, indicating a relatively strong positive association. However, the coefficient for offline visual merchandising was not statistically significant (Beta = -0.013, $p = 0.723$), suggesting that its impact on impulsive buying behaviour was negligible.

Finding: The findings indicated that online visual merchandising had a strong positive correlation with impulse buying behaviour ($r = 0.569, p < 0.001$). In other words, as online visual merchandising efforts increased, there was a corresponding increase in impulse buying behaviour among consumers. On the other hand, offline visual merchandising did not exhibit a significant relationship with impulse buying behaviour ($r = 0.174, p = 0.000$). This suggested that traditional, offline visual merchandising strategies did not play as crucial a role in stimulating impulse purchases compared to their online counterparts. The regression analysis further supported these findings. The regression model was significant ($F(2, 597) = 142.708, p < 0.001$), indicating that the predictors (online and offline visual merchandising) collectively explained a significant amount of the variance in impulse buying behaviour. Specifically, online visual merchandising had a significant positive effect on impulse buying behaviour ($\beta = 0.573, p < 0.001$), while the effect of offline visual merchandising was not significant ($\beta = -0.013, p = 0.723$). In conclusion, the hypothesis that there was a significant relationship between online and offline visual merchandising and impulse buying behaviour was partially supported. Online visual merchandising demonstrated a significant positive relationship with impulse buying behaviour, whereas offline visual merchandising did not. These findings highlighted the growing importance of online visual merchandising strategies in influencing consumer behaviour, particularly in the context of impulse purchases.

5. DISCUSSION

5.1 Impact of Visual Merchandising on Consumer Behavior

The findings of this study reveal that visual merchandising significantly influences consumer behavior, particularly in the context of online shopping. Online visual merchandising, characterized by high-resolution imagery, dynamic product displays, and interactive features, shows a strong correlation with impulse buying behavior ($r = 0.569, p < 0.001$). This aligns with prior research emphasizing the importance of visual cues in digital retail environments (Ha et al., 2007; Bonera & Corvi, 2014). However, offline visual merchandising, while still impactful, demonstrates a comparatively weaker association with impulse purchases ($r = 0.174, p < 0.001$). This could be attributed to the evolving preferences of consumers who increasingly rely on convenience and efficiency offered by online platforms. Interestingly, the sensory engagement offered by offline stores, such as tactile interactions and real-time visual appeal, retains a niche but crucial role in specific demographics (Law et al., 2012).

5.2 Emotional and Demographic Mediators

Emotional triggers emerged as a significant mediator of the relationship between visual merchandising and consumer behavior. Respondents indicated that their emotional states, such as happiness or stress, heightened the likelihood of impulse buying both online and offline. These findings are consistent with Law et al. (2012), who underscored the role of mood in shaping purchasing decisions. Furthermore, demographic variables such as age, gender, and education moderated responses to visual merchandising. Younger, tech-savvy consumers displayed a stronger



inclination toward online visual merchandising, while older demographics preferred the sensory richness of offline shopping (Bonera & Corvi, 2014; Martins et al., 2014). Additionally, higher educational attainment correlated with a more critical evaluation of visual marketing strategies, reflecting a preference for subtle and sophisticated designs (Niazi et al., 2015).

5.3 Strategic Implications for Retailers

The results underscore the importance of adopting an omnichannel strategy that integrates the strengths of both online and offline visual merchandising. Retailers should leverage technology such as augmented reality and personalized product displays to enhance the digital shopping experience (Sampaio et al., 2017). Simultaneously, physical stores can capitalize on sensory stimuli, thematic displays, and effective lighting to create immersive shopping environments. The findings also highlight the necessity of tailoring visual merchandising strategies to address emotional and demographic variations among consumers. For instance, gender-targeted displays or mood-specific designs could enhance engagement and satisfaction. Ultimately, a balanced and context-specific approach to visual merchandising can maximize consumer engagement, drive impulse purchases, and positively influence mental well-being in diverse retail settings.

These insights collectively advocate for a nuanced understanding of the psychological and behavioral dimensions of visual merchandising, ensuring its optimized application in both digital and physical retail spaces.

6. CONCLUSION

The study underscores the significant role of visual merchandising in shaping consumer behavior, with online and offline environments offering unique opportunities and challenges. Online visual merchandising, characterized by dynamic content and interactivity, demonstrated a strong positive correlation with impulse buying, driven by convenience and innovative digital tools. Offline merchandising, while less impactful in driving impulse purchases, continues to hold value through sensory engagement and tactile experiences. Emotional triggers and demographic variables emerged as critical mediators, with younger consumers and those in heightened emotional states displaying stronger responses to visual merchandising. These findings highlight the importance of adopting an omnichannel strategy that integrates the strengths of both retail environments. Retailers are encouraged to leverage advanced technologies, such as augmented reality, for digital interfaces and immersive sensory designs for physical spaces. By tailoring visual merchandising strategies to diverse consumer preferences, businesses can enhance shopping experiences, foster engagement, and drive mental well-being alongside economic outcomes.

REFERENCES

1. Ali Soomro, D. Y., Abbas Kaimkhani, S., & Iqbal, J. (2017). Effect of Visual Merchandising Elements of Retail Store on Consumer Attention. *Journal of Business Strategies*, 11(1). https://www.academia.edu/download/54656659/Research_Paper_-_Visual_MerchandisingPublished.pdf
2. Bonera, M., & Corvi, E. (2014). The Relevance of Visual Merchandising for Online Retailers. *International Journal of Applied Behavioral Economics*, 3(4), 1–16. <https://doi.org/10.4018/ijabe.2014100101>
3. Ha, Y., Kwon, W. S., & Lennon, S. J. (2007). Online visual merchandising (VMD) of apparel web sites. *Journal of Fashion Marketing and Management*, 11(4), 477–493. <https://doi.org/10.1108/13612020710824553>
4. Hefer, Y., & Cant, M. C. (2013). Visual Merchandising Displays Effect On Consumers: A Valuable Asset Or An Unnecessary Burden For Apparel Retailers. *International Business & Economics Research Journal (IBER)*, 12(10), 1217. <https://doi.org/10.19030/iber.v12i10.8132>
5. Law, D., Wong, C., & Yip, J. (2012). How does visual merchandising affect consumer affective response?: An intimate apparel experience. *European Journal of Marketing*, 46(1), 112–133. <https://doi.org/10.1108/03090561211189266>
6. Martins, P., Pereira, M., Azevedo, S. G., Rui A. L., M., & Lucas, J. (2014). Fashion Design and Visual Merchandising attributes in E-commerce. *International Journal of Management Cases*, 14(4), 154–166. <https://www.circleinternational.co.uk/wp-content/uploads/2021/01/14.4-real.pdf#page=154>
7. Menon, P., Mirpuri, K., Mehrotra, K., Gupta, K., & Karki, K. (2019). Best Visual Merchandising Strategies- An Indian FMCG perspective. *International Research Journal of Engineering and Technology*, 646–652. <https://www.academia.edu/download/60949626/IRJET-V6I1011320191019-73005-y09enk.pdf>
8. Niazi, U., Haider, T., & Hayat, F. (2015). Visual Merchandising: Does it Matter for Your Brands? *Journal of Marketing and Consumer Research*, 18(January 2015), 80–85. https://www.ajcernet.com/journals/Vol_5_No_6_December_2015/12.pdf



9. Sumanyu, S., Singh, A., & Iqbal, D. S. (2020). The Impact of Visual Merchandising on Impulse Buying Behaviour of Fashion Students. *Gedrag & Organisatie Review*, 33(03). <https://doi.org/10.37896/gor33.03/472>
10. Upadhyaya, R., & Nath, G. (2013). Consumer's emotional influence & visual merchandising effects: Shopping malls. *Journal of Process Management. New Technologies*, 1(1), 34–43. <https://doi.org/10.5937/jpmnt1301034u>
11. Sampaio, J. P., Zonatti, W. F., Mendizabal-Alvarez, F. J. S., Rossi, G. B., & Baruque-Ramos, J. (2017). New Technologies Applied to the Fashion Visual Merchandising. *Modern Economy*, 08(03), 412–429. <https://doi.org/10.4236/me.2017.83031>
12. Akhilendra, S. P., & Aravendan, M. (2023). Impact of Fashion Trends on Visual Merchandising for Promoting Fashion Apparel Brands. *Journal of Service Science and Management*, 16(4), 448-476.
13. Singhal, P., & Gupta, R. (2019). VISUAL MERCHANDISING: SCALE DEVELOPMENT AND CONSTITUENT FACTORS. *Advance and Innovative Research*, 6(1), 78.
14. Chauhan, S., Banerjee, R., & Dagar, V. (2023). Analysis of impulse buying behaviour of consumer during COVID-19: An empirical study. *Millennial Asia*, 14(2), 278-299.
15. Shukla, P. S., Vyas, P. H., & Pandya, M. N. (2018). Investigating the Relationship between Visual Merchandising and Impulse Buying of Apparel Products by Selected Retail Shoppers in Vadodara City of Gujarat. *Review of Professional Management*, 16(1).

