



## Impact of In-Store Aesthetics and Ambience on Consumer Impulse Buying Behavior

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### ABSTRACT

Consumers are shopping not just to buy products but also to satisfy needs such as having fun & seeking novelty. Today, sales strategies and lifestyle development of individuals encourage impulse buying. Impulse buying is of strategic importance to retailers. As such, a crucial way for retailers to increase sales is to stimulate impulse buying. For this reason, this study aims at identifying the factors that initiate and encourage impulse buying, as well as the treads that help them highlight effective marketing techniques in order to encourage consumers to make impulse purchase. Visual merchandising strategies are more appropriate tactics that retailers can use to attract customers and enhance impulse purchases. Thus, the study attempts to study impact of six in-store visual merchandising strategies (color, lighting, cleanliness, store layout/design, aisles and physical amenities) relating to the in-store aesthetics and ambience was considered. The result indicated that among the factors only store ambience cues influenced impulse behavior.

**Keywords--** aesthetics, ambience, impulse buying, visual merchandising

for as much as 62% of supermarket sales and 80% of all sales in certain product categories (Kollat and Willett, 1967). Research by Coca Cola has shown that impulse buying accounts for more than 50% of all grocery purchases (CNBC, 2009). In addition, recent research reports that the millennial generation is 52% more likely to make an impulse purchase to pamper oneself than any other generation (Tuttle, 2012).

Visual merchandising allows retailers to create an atmosphere that makes merchandise look attractive and inviting (Colborne, 1996). It sets the context of the merchandize in an aesthetically pleasing fashion, presenting them in a way that would convert the window shoppers into prospects and ultimately buyers of the product. Visual merchandising has become a natural component of every modern point of sale and is characterized by the direct contact between merchandise and clients; it helps clients to easily approach goods visually, physically, mentally and intellectually without the help of a sales person. The purpose of this research was to show how consumers responded to visual merchandising strategies. This study focused on six of the many components of visual merchandising strategies inside the store that were more pertinent to attracting customers attention to lead to a series of actions from consumers, such as affecting spending behavior and store/merchandise perceptions. Six elements of visual merchandising lighting; color; Cleanliness; store layout/design; aisles; and physical amenities were studied.

### I. INTRODUCTION

During the last few decades, there has been an unbelievable change in consumption pattern of customers for fun and entertainment. The change in consumption pattern is because customers are pleasure seekers and expect rewarding experience in every act of shopping. With growth in disposable income and credit availability (Dittmar & Drury, 2000); development of modern forms of distribution, lifestyle development of individuals and increasing rate of women employment, the incidents of impulse buying has increased and impulse buying has become a predominant consumer behavior. Impulse buying has become a profitable market and is of strategic importance to retailers. Impulsive purchasing, generally defined as a consumer's unplanned purchase, it accounts

### II. STATEMENT OF THE PROBLEM

Retailers have long thought that shoppers are less impulsive when they enter a store, and become more impulsive the longer they stay and shop. Researchers have suggested that internal states and environmental cues can serve to trigger the impulse to purchase. It is very difficult to understand and predict the activities of customers, and is

hardly explainable from general theories. Hence, behavioral studies face the challenge to find fair and verifiable answers related to the factors that motivate impulse buying. The purpose of the article is to investigate in-store visual merchandising factors that influence consumers' impulse buying behavior. The current study addresses the drivers of impulse purchases from in-store visual merchandising elements viz., aesthetic cues- lighting, colour, cleanliness and hygiene and ambience cues- layout/ design, aisles and physical facilities are considered.

### III. LITERATURE REVIEW

Prior research on impulse buying found its many antecedents, DeSarbo and Edwards (1996) distinguished compulsive buying from impulse buying, describing that impulse buying was different from compulsive buying because impulse buying was provoked by external triggering factors like in- store environment but compulsive buying was stimulated by internal triggering factors like anxiety. This enables researchers to identify the store environment factors behind the behavior and their consequences. The store environment may include a lot of elements ranging from interior decoration to human components. Kolter (1974) is amongst the first to propose that environment is sometime more important than the product itself in terms of persuade customers to purchase. Rook (1987) and Saad & Metawie (2015) stated that the store is a place where merchandises are sold to customers who might be purchasing based on an unplanned impulsive behavior. Creating a nice environment can help to prolong the time that customers linger in the store and increase the possibility of buying.

An impulse buying is induced when a consumer encounters a relevant visual stimulus in the retail environment, or some promotional stimuli (Piron, 2001). Highly stimulating and pleasant store environments lead to enhanced impulse buying (Hoyer and Macininer, 1999). The shopping environments include the store size, layout and design, colour, lighting, cleanliness, aisle space, physical amenities and facilities inside the store or mall presentation of merchandise, fixtures, floor coverings, sounds, odours, and dress and behavior of sales and service personnel. These factors can be categorized as ambience and Aesthetic factors. The ambient cues include elements such as colour, temperature, lighting, music, cleanliness, hygiene, texture of walls and scent. According to Davidson et al. (1988), the ambient factor is felt more than it can be seen and measured. All of these elements can affect how people feel, think and respond to a particular store or mall (Milliman 1982; Yalch and Eric 1990). The aesthetic cues refer to a store's environment elements like layout, fixtures, displays, interiors and exteriors of the store. spatial arrangement; the layout of mechanical equipment's, facilities, furniture's and furnishings, product grouping,

traffic flow, department location, floor space and the store spatial correlations. Spears and Gregoire (2004) argued that by applying a particular store layout and certain visual merchandising techniques as inputs, consumers will automatically be directed through the store. Swanson and Judith (2000) suggested that factors such as the accessibility, visibility and attractiveness of the merchandise in combination with the store layout may promote fashion purchases.

The purpose of the article is to investigate in-store visual merchandising factors that influence consumers' impulse buying behavior. The current study addresses the drivers of impulse purchases from in store visual merchandising elements viz., aesthetic cues- lighting, colour, cleanliness and hygiene and ambience cues- layout/design, aisles and physical facilities of the in-store environment are considered

### IV. OBJECTIVES OF THE STUDY

The study is conducted with the following objectives:

- To explore the different in- store environment factors affecting impulse buying.
- To evaluate the relationship of various in store environment attributes on consumer impulse buying behavior.

### V. RESEARCH HYPOTHESIS

H1: Lighting has significance impact on impulse buying behaviour

H2: Colour has significance impact on impulse buying behaviour

H3: Cleanliness and Hygiene has significance impact on impulse buying behaviour

H4: Layout and design has significance impact on impulse buying behaviour

H5: Aisles has significance impact on impulse buying behavior

H6: Physical amenities has significance impact on impulse buying behaviour

### VI. RESEARCH METHODOLOGY

This present study is been conducted to find out the impact of various in-store visual cues on consumers impulse buying behavior. The primary data is collected through a structured questionnaire from the shoppers in five different malls in Bangalore city. From each of five malls, 30 responses were collected, for a sample size of 150. The questionnaire consists of two parts. The first part consists of demographic data gender, age, income and occupation of respondents. The second part of the questionnaire consists of questions relating to the attitude

towards various ambience and aesthetic cues of the store interior. Ambience cues considered in the study are cleanliness and hygiene, lighting, texture and colour. Aesthetic cues include layout and design of the store, aisles, and physical amenities. To measure the buying behavior of the consumers towards unplanned purchase, 25 questions were asked with 5-point Likert scale, ranging from strongly disagree=1 to strongly agree=5, is used to measure each variable. After collection of data the completed questionnaires data was coded and then entered into SPSS tool for analysis.

From the demographic profiles of the respondents, majority of the respondents are female i.e., 68%. Most of the respondents i.e., 65% of the respondents are in the age group of 25 to 30 years, 38% of the respondents are students, 40% of them are employees, 9% of them are business persons and 13% are homemakers. The monthly income of the 24% respondents is less than 25,000, 40% is in the range of 26,000 and 35,000 and the rest is getting above 35,000.

The reliability of the scale is assessed using Cronbach's Alpha. The overall Cronbach's alpha is 0.801, which is more than the standard value 0.7. The data was classified into six factors using factor analysis and was categorized as cleanliness, lighting, colour, layout and design of the store, aisles, and physical amenities.

## VII. FINDINGS AND DISCUSSIONS

Pearson correlation tests was conducted to see the correlation between the independent variable namely cleanliness, Lighting, colour, layout/design, aisles, physical amenities and dependent variable impulse buying behavior. The results of the test are shown below:

**Table 1: Correlation of element of In-store VM cues with Impulse Buying**

| Variables     | Coefficients (r) | Significance (p) | Result          |
|---------------|------------------|------------------|-----------------|
| Cleanliness   | -.309            | .000**           | Significant     |
| Lighting      | .433             | .000**           | Significant     |
| Colour        | -.223            | .001**           | Significant     |
| Layout/design | .143             | .044*            | Significant     |
| Aisles        | .129             | .068             | Non-Significant |
| Amenities     | -.062            | .385             | Non-Significant |

\*\* Correlation is significant at the 0.01 level.

\* Correlation is significant at the 0.05 level.

The above table shows the correlation between the (independent variable) cleanliness, lighting, colour, layout/design, aisles, physical amenities and (dependent variable) impulse buying behaviour. The result of Pearson's correlation result revealed that among the six cues only four cues have a relationship with impulse buying behavior. Comparison of p value shows that aisles and physical amenities of a store did not show any significant relationship on impulse buying. The p value of cleanliness, lighting, colour and layout/design is .000, .000, .001 and .044 respectively indicating a significant influence on impulse behavior. Among the four cues lighting has the highest positive relationship with impulse buying behaviour with the coefficient score of .433 (43.3%) followed by layout/design with a score of .143(14.3%). But the other two variables which show statistically significant seems to be negatively correlated to impulse buying with the coefficient scores showing -.309, and -.223 respectively.

Multiple regression analysis is also conducted to assess the potency of relationship between dependent and independent variables. The summaries of multiple regression model with respect to in-store visual merchandising elements and impulse buying behaviour is presented in the following table.

**Table 2: Model summary of the in-store visual merchandising cues**

| Model | R                 | R Square | Adjusted Square | R Std. Error of the Estimate |
|-------|-------------------|----------|-----------------|------------------------------|
| 1     | .529 <sup>a</sup> | .280     | .258            | .951                         |

a. Predictors: (Constant), lighting, colour, cleanliness, layout.

**Table 3: Fit of the Regression Model by ANOVA**

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.  |
|-------|------------|----------------|-----|-------------|--------|-------|
| 1     | Regression | 67.942         | 6   | 11.324      | 12.521 | .000* |
|       | Residual   | 174.538        | 193 | 0.904       |        |       |
|       | Total      | 242.480        | 199 |             |        |       |

a. Predictors: (Constant), Amenities, Lighting, colour, aisles, cleanliness, layout

b. Dependent variable: IBB

The results from the above table show a coefficient of multiple regressions (R) 0.529 and a multiple regression R-square of 0.280. This indicates that very low of 28% of variation in impulse buying is attributed by the six in-store visual merchandising factors. The F-ratio shows a measure of how much the model has improved the

prediction of the outcome compared to the level of inaccuracy of the model. The F ratio is 12.521. The variables contribute towards consumer impulse buying behavior and is significant at 1% level of significance (P-value = 0.000 < 0.01) as shown in the Table, hence the null hypothesis is rejected and the alternative hypothesis is accepted.

Below table shows the coefficients of regression model.

**Table 4: Coefficients of regression model**

| Model |             | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.      |
|-------|-------------|-----------------------------|------------|---------------------------|--------|-----------|
|       |             | B                           | Std. Error | Beta                      |        |           |
| 1     | (Constant)  | 3.578                       | .534       |                           | 6.694  | .000**    |
|       | cleanliness | -.201                       | .065       | -.207                     | -3.108 | .002**    |
|       | lighting    | .335                        | .055       | .397                      | 6.076  | .000**    |
|       | colour      | -.171                       | .070       | -.166                     | -2.431 | .016*     |
|       | layout      | .020                        | .073       | .020                      | .274   | .784(N S) |

The  $\beta$  value explains the relationship between four factors and impulse buying behaviour of the respondents, the other two factors are not considered in this step because they did not show any significant relationship. The result of the regression analysis shows that cleanliness ( $\beta = -.201$ ), lighting ( $\beta = .335$ ), colour ( $\beta = -.171$ ), layout ( $\beta = .020$ ), tested as predictors of impulse behaviour.

The beta value of cleanliness ( $\beta = -.201$ ) indicates that one unit increase in agreeableness will contribute to -0.201 unit change (decrease) in impulse buying when the other variables are held constant. The cleanliness is negatively related to consumer impulse buying behaviour but it is significant at 1% level of significance (P-value = 0.02 < 0.01) as shown in the above table.

The beta value of lighting ( $\beta = .335$ ) indicates that one unit increase in lighting will contribute to 0.335 unit change in impulse buying when the other variables are held constant, The variable lighting is positively contributing towards consumer impulse buying behaviour and it is significant at 1% level of significance (P-value = 0.00 < 0.01) as shown in the Table 4.

The beta value of colour ( $\beta = -.171$ ) indicates that one unit increase in colour will contribute to -0.171 unit change (decrease) in impulse buying when the other variables are held constant. The colour is negatively

related to consumer impulse buying behaviour but it is significant at 5% level of significance (P-value = 0.016 < 0.05) as shown in the above table.

The beta value of layout ( $\beta = .020$ ) indicates that one unit change in layout/design leads to an insignificant change of 2% which is a negligible. Further the p value of layout is greater than .05 which is statistically significant at 5% level of significance.

The following equation is framed with respect to in-store visual merchandising cues and impulse buying behaviour.  $Y = \alpha + \beta x + \epsilon$ ; where in Impulse Buying =  $\alpha_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3$ ;

Impulse buying = 3.578 + 0.335 (lighting) - 0.201 (cleanliness) - 0.171 (colour).

## VIII. CONCLUSION

The Study investigated the factors of visual stimulus of the interior visual merchandising and impulse buying behavior in selected malls in Bangalore city. To investigate the relation the study attempted to interpret the association between the customer's unplanned purchase behaviour and different types of interior visual merchandising categorized as cleanliness, lighting, colour, layout and design of the store, aisles, and physical amenities.. The main findings of this study were that the visual merchandising influence consumer impulse buying behaviour. Results proved that the consumer impulse buying behaviour is significantly influenced by the store aesthetics cleanliness, lighting and colour. The study further revealed that lighting is positively contributing towards consumer impulse buying behavior. The cleanliness and colour is negatively related to consumer impulse buying behavior.

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