

Impact of Store atmosphere on Customers' Buying Behavior in Super Market Environment

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Abstract:

The behavior of consumer depends on a number of factors and not limited to the services of the personnel provided to the customers in the supermarkets. These factors decide their buying behavior. The overall purpose of the study was to bring out the importance of intangible factors which have some impact on the buying behavior of customers in the super markets of Delhi NCR. In order to execute the research and reach to the results, a data of 310 respondents have been collected with the help of a questionnaire. The results found that store atmospherics and visual merchandizing have direct impact on the buying behavior of the customers. On the contrary, store design and pleasant atmosphere doesn't have any direct effect on customers' buying behavior.

Key Words: Store atmospherics; consumer; market environment; visual merchandizing; store design.

Introduction:

In the world of integrated economies and globalization, customers are provided with different options for a single product. In this case irrespective of the product itself, there are number of other major factors that are considered important in molding the buying behavior. Customer buying behavior has always been an important aspect for the marketers. The knowledge of this aspect of the customer helps the marketers and organizations to align their strategies according to customers taste. The buying behavior of the customers can be influenced by a number of factors such as social, personal, cultural and psychological. Most of these factors are beyond the control of marketers but bears utmost importance while understanding the buying behavior of the customers. The concept and idea that a consumer simply decided to purchase a product or service at the spot also influences his buying behavior (Adelaar et al., 2003).

In the marketing context, the term consumer “ refers not only to the act of purchase itself, but also to patterns of aggregate buying which include pre-purchase and post-purchase activities. Pre-purchase activity might consist of the growing awareness of a need or want, and a search for and evaluation of information about the products and brands that might satisfy it. Post-purchase activities include the evaluation of the purchased item in use and the reduction of any anxiety which accompanies the purchase of expensive and infrequently-bought items. Each of these has implications for purchase and repurchase and they are amenable in differing degrees to marketer influence (Foxall, 1987). Engel et al. (1986) define consumer behaviour as “those acts of individuals directly involved in obtaining, using, and disposing of economic goods and services, including the decision processes that precede and determine these acts”. Simple observation provides limited insight into the complex nature of consumer choice and researchers have increasingly sought the more sophisticated concepts and methods of investigation provided by behavioral sciences in order to understand, predict, and possibly control consumer behaviour more effectively. Managers should boost a good store layout to maximize the ease of the consumer (Crawford and Melewar, 2003). A trained salesman can minimize frustration by guiding and helping the consumer in the purchase process and augment impulse buying behavior (Crawford and Melewar, 2003). Store atmospherics is important to stimulate impulse purchase (Crawford and Melewar, 2003). Store owners may look upon a number of environmental design variables to stimulate buying intentions in their shops. Impulsiveness sometimes depends on store type (Wong and Zhou, 2003). According to the environmental psychology model, an environment (like retailing store) produces an emotional feeling in consumer’s mind, which can be separated as pleasure, arousal or dominance in different buying situations (Adelaar et al., 2003). Most companies study consumer behavior. The major reason behind analyzing consumer behavior is to determine the factors that decide consumer’s behavior in particular situations (Ayanwale et al., 2005). This study intends to investigate whether variables like visual merchandizing, store design, store atmospherics and human factors responsible for influencing consumer buying behavior or not.

To accomplish the purpose of the study, the following objectives will be addressed during the research process:

- ✓ To find the relationship of store atmospherics and consumer’s buying behavior.
- ✓ To find the relationship of visual merchandizing and consumer’s buying behavior.
- ✓ To find the relationship of pleasant atmosphere and consumer’s buying behavior
- ✓ To find the relationship of store design and consumer’s buying behavior.

Research methodology:***Sampling and Data Collection:***

The primary research was carried out in front of 7 super markets located in different areas of NCR region. Sample of 308 respondents was taken. To make the current study holistic in nature, data were collected from the consumers of all demographic profiles.

Questionnaire formulation:

The researcher has designed the questionnaire which is composed of 20 sets of question. The responses of the customer will be tested on a five point Likert scale where number 1 to 5 is used to be marked by the respondent. Number 1 means the factor which is considered to be least important and number 5 to be marked as the most important factor in the decision.

Data Analysis and Results:

Exploratory Factor Analysis (EFA) was used to check the large number of statements in the data and to downsize to a manageable level of dimensions. Factor extraction involves determining the smallest number of factors which can be extracted to best represent the interrelations among the set of variables (Pallant, 2007). Factor analysis using principal components method of factor extraction with varimax rotation was used. Kaiser's criterion or eigenvalue rule is one of the most frequently used techniques in EFA. Using this rule, the basis for factors extraction was kept as the Eigen value of 1.0 and factor loading above 0.5 was only considered. There were 20 statements in the store environment section and with the help of factor analysis researcher came up with 4 factors which are able to define 79.95 per cent variance in statements (Table 1).

Table 1: Latent Factors Determination of Store Environment using Principle Component Analysis

| Factor and Variables for Store Environment | Factor loading | % of Variance | Cumulative % |
|--|----------------|---------------|---------------|
| (1) Store Atmospherics Cronbach's Alpha = 0.994 | | 33.891 | 33.891 |
| (Q5) I think that neatness of the supermarket affects the buying behavior. | 0.993 | | |
| (Q6) I think that space allocated to the display of merchandize affects the buying behavior. | 0.993 | | |
| (Q8) I think that signs used in the supermarket affect the buying behavior. | 0.975 | | |
| (Q10) I think that behavior of employees in the super markets affects the buying behavior. | 0.983 | | |
| (Q15) I feel that show windows of the super market affects the buying behavior. | 0.972 | | |
| (Q17) Pleasant atmospheric conditions makes you indulge in browsing at the items displayed in store. | 0.993 | | |
| (Q18) Pleasant atmospheric conditions makes you to spent more time in supermarket. | 0.953 | | |
| (2) Visual Merchandizing Cronbach's Alpha = 0.950 | | 17.596 | 51.487 |
| (Q4) I think that fragrances used in the supermarket affects the buying behavior. | 0.931 | | |
| (Q11) I think that professional attire of employees in the super market affects the buying behavior. | 0.962 | | |
| (Q12) I think that services given by personnel in the super market affects the buying behavior. | 0.947 | | |
| (Q13) I think that stores front entrance area of the supermarket affects the buying behaviour. | 0.885 | | |
| (3) Store Design Cronbach's Alpha = 0.972 | | 14.307 | 65.794 |
| (Q14) I think that parking space available outside the supermarket affects the buying behavior. | 0.984 | | |
| (Q19) Pleasant atmospheric conditions make you to do unplanned shopping in supermarket. | 0.942 | | |
| (Q20) Pleasant atmospheric conditions arouse the feeling of "pleasure" in super market. | 0.984 | | |
| (4) Pleasant Atmosphere Cronbach's Alpha = 0.966 | | 14.361 | 79.955 |
| (Q2) I think that music played in the supermarket affects the buying behavior. | 0.984 | | |
| (Q9) I think that number of people available in the super market or overcrowding of the place affects the buying behavior. | 0.965 | | |
| (Q16) I feel that surrounding area of the super market affects the buying behavior. | 0.951 | | |

Source: Primary data

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization

The statements from Q5, Q6, Q8, Q10, Q15, Q17 and Q18 with high factor loadings correlate with factor 1 after rotation is labeled as “Store Atmosphere” along with reliability coefficient (alpha value) which is 0.994 and is highly satisfactory and the factor loading of all the variables are also high. Statements Q4, Q11 to Q13 correlate with factor 2 and labeled as “Visual Merchandizing” along with reliability coefficient (alpha value) which is 0.950. Factor 3 contains statements number Q14, Q19 and Q20 which has alpha value of 0.972 and named “Store Design”. Factor 4 contains Q2, Q9 and Q16 which has alpha value of 0.966 named “Pleasant Atmosphere”.

Secondly, behaviour perceptions statements are also reduced with the help of factor analysis and statements Q23 to Q25 constitutes the factor “Buying behaviour”. This single factor is able to define 48.389 per cent variance in statements (Table 2).

Table 2: Latent Factors Determination of Behavior Perceptions using Principle Component Analysis

| Factor and Variables for Buying Perceptions | Factor loading | % of Variance | Cumulative % |
|---|----------------|---------------|---------------|
| (1) BUYING BEHAVIOR Cronbach's Alpha = 0.775 | | 48.389 | 48.389 |
| (Q23) I like to try new stores/ shopping outlets. | 0.942 | | |
| (Q24) Purchasing is a fun activity for me. | 0.898 | | |
| (Q25) I prefer to purchase branded apparels. | 0.942 | | |

Source: Primary data

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization

Table 3: Cross tabulation of Gender and Age

| Gender * Age Crosstabulation | | | | | |
|------------------------------|--------|-------------|-------------|-------------|-------|
| Count | | | | | |
| | | Age | | | Total |
| | | 20-30 Years | 31-40 Years | 41-50 Years | |
| Gender | Male | 84 | 103 | 21 | 208 |
| | Female | 63 | 24 | 13 | 100 |
| Total | | 147 | 127 | 34 | 308 |

Source: Primary data

Out of 308 respondents, there are 208 male respondents and 100 female respondents. The three age groups taken are 20-30, 30-40, 40-50 years. The maximum male respondents are from the age group of 30-40, whereas maximum female respondents are from the age group of 20-30 years.

Table 4: Correlations between Store Atmospheric and Buying Behavior

| Correlations | | | |
|--|---------------------|-----------------|-------------------|
| | | Buying Behavior | Store Atmospheric |
| Buying Behavior | Pearson Correlation | 1 | .599** |
| | Sig. (2-tailed) | | .000 |
| | N | 308 | 308 |
| Store Atmospheric | Pearson Correlation | .599** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 308 | 308 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

Source: Primary data

The correlation between store atmospheric and buying behaviour is positive and statistically significant ($r = 0.599$, $p < 0.01$). This means that cleanliness, proper signs, show windows and atmospheric conditions of the store increases the buying behaviour of the respondents.

Table 5: Correlations between Visual Merchandizing and Buying Behavior

| Correlations | | | |
|--|---------------------|-----------------|---------------------|
| | | Buying Behavior | Visual Merchadizing |
| Buying Behavior | Pearson Correlation | 1 | .754** |
| | Sig. (2-tailed) | | .000 |
| | N | 308 | 308 |
| Visual Merchadizing | Pearson Correlation | .754** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 308 | 308 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

Source: Primary data

The correlation between visual merchandizing and buying behaviour is positive and statistically significant ($r = 0.754$, $p < 0.01$). This means that fragrance, professional attire and services given by the store influences the buying behaviour of the respondents.

Table 6: Correlations between Store design and Buying Behavior

| Correlations | | | |
|-----------------|---------------------|-----------------|--------------|
| | | Buying Behavior | Store Design |
| Buying Behavior | Pearson Correlation | 1 | -.020 |
| | Sig. (2-tailed) | | .720 |
| | N | 308 | 308 |
| Store Design | Pearson Correlation | -.020 | 1 |
| | Sig. (2-tailed) | .720 | |
| | N | 308 | 308 |

Source: Primary data

The correlation between store design and buying behaviour is negative. This means that the store design has no impact on the buying behaviour of the respondents.

Table 7: Correlations between Pleasant Atmosphere and Buying Behavior

| Correlations | | | |
|---------------------|---------------------|-----------------|---------------------|
| | | Buying Behavior | Pleasant Atmosphere |
| Buying Behavior | Pearson Correlation | 1 | .001 |
| | Sig. (2-tailed) | | .980 |
| | N | 308 | 308 |
| Pleasant Atmosphere | Pearson Correlation | .001 | 1 |
| | Sig. (2-tailed) | .980 | |
| | N | 308 | 308 |

Source: Primary data

There is no correlation found between pleasant atmospheres and buying behaviour. This means that the pleasant atmosphere has no impact on the buying behaviour of the respondents.

Table 8: ANOVA test statistics

| ANOVA | | | | | | |
|---------------------|----------------|----------------|-----|-------------|--------|------|
| | | Sum of Squares | df | Mean Square | F | Sig. |
| Store Atmospheric | Between Groups | 130.522 | 21 | 6.215 | 11.124 | .000 |
| | Within Groups | 159.795 | 286 | .559 | | |
| | Total | 290.317 | 307 | | | |
| Visual Merchadizing | Between Groups | 254.018 | 21 | 12.096 | 21.350 | .000 |
| | Within Groups | 162.040 | 286 | .567 | | |
| | Total | 416.057 | 307 | | | |
| Store Design | Between Groups | 8.547 | 21 | .407 | .653 | .877 |
| | Within Groups | 178.340 | 286 | .624 | | |
| | Total | 186.887 | 307 | | | |
| Pleasant Atmosphere | Between Groups | 15.249 | 21 | .726 | .586 | .927 |
| | Within Groups | 354.700 | 286 | 1.240 | | |
| | Total | 369.949 | 307 | | | |

Source: Primary data

The results from the Anova analysis indicate that store atmospheric and visual merchandizing has a significant effect on the buying behaviour of the respondents, F (11.12, 21.35), $p < 0.001$. Mean value of the visual merchandizing shows that this factor is more effective in having a significant effect on buying behaviour of the respondents. Store design and pleasant atmospheric have no significant effect on respondents buying behaviour.

Table 9

| No. | HYPOTHESES | RESULTS |
|-----|--|--------------------|
| H1 | There is a significant relation between store atmospheric and buying behavior. | Accepted (Table 4) |
| H2 | Well designed stores help to attract customers for buying. | Rejected (Table 6) |
| H3 | Visual merchandizing affects the buying behavior | Accepted (Table 5) |
| H4 | Pleasant atmosphere leads to non planned shopping | Rejected (Table 7) |

Discussion:

Consumer buying behavior is always been unpredictable for the marketers. Numbers of studies have been done to understand and analyse this aspect of consumers. But change in consumer's buying behavior is inevitable. The result of this study indicates that buying behavior of the respondents is influenced by the store atmospherics and visual merchandizing. This supports the results given by Crawford and Melewar (2003). They also found that store atmospherics is one of the leading factors in determining the consumer's buying behavior. On the contrary, store designing was not found important in influencing consumer's buying behavior as it was found imperative in the research study of Crawford and Melewar (2003). Similarly, pleasant environment of the super market doesn't have any significant effect on the purchasing behavior of the respondents.

Conclusion:

From the study, it can be concluded that cleanliness, lightening, music, displaying of items and dealing attributes of the employees of the store has a positive relationship with the buying behavior of the respondents. All these factors can be clubbed under store atmospherics. Similarly, outlook, entrance, services and the overall attire of the store personnel also has positive relationship with customers buying behavior. All these factors can be clubbed under visual merchandizing. This can be said that these two aspects of the store can be taken care of to enhance the buying habits of the customers by a super market.

References:

- Adelaar, T., Chang, S., Lanchndorfer, K. M., Lee B. & Morimoto M. (2003). Effects of media formats on emotions & impulse buying behavior. *Journal of Information Technology*, 18, 247–266.
- Ayanwale, A. B., Alimi, T. & Ayanbimipe, M. A. (2005). The influence of advertising on consumer brand preference. *Journal of Social Science*, 10(1), 9-16.
- Aubert-Gamet, V. (1997). Twisting servicescapes: Diversion of the physical environment in a re-appropriation process. *International Journal of Service Industry Management*, 8, 26-41.
- Bawa, K., J. T. Landwehr & Krishna, A. (1989). Consumer response to retailers' marketing environments: An analysis of coffee purchase data. *Journal of Retailing*, 65, 471-495.
- Bitner, M. J. (1992). Servicescape: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56, 57-71.
- Crawford, G. & Melewar, T. C. (2003). The importance of impulse purchasing behavior in the international airport environment, *Journal of Consumer Behavior*, 3(1), 85-98.
- Engel, J. F., Blackwell, R. D. & Miniard, P. W. (1986). *Consumer Behavior*. 5th Edn., Dryden Press, Hinsdale, IL., USA., ISBN-13: 9780030018923, Pages: 633.
- Foxall, G. R. (1987). Radical behaviorism and consumer research theoretical promise and empirical problems. *International Journal of research in Marketing*, 4, 111-127.
- Hasty, R. & Reardon, J. (1996). *Retail Management*. McGraw Hill, New York.
- Hutton, J. D. & Richardson, L. D. (1995). Healthscapes: The role of the facility and physical environment on consumer attitudes, satisfaction, quality assessments and behaviors. *Health Care Management Review*, 20, 48-61.
- Kotler, P. (1974). Atmospherics as a marketing tool. *Journal of Retailing*, 49, 48-64.
- Levy, M. & Weitz, B. A. (2009). *Retailing Management*. 7th Edn., McGraw-Hill/Irwin, New York.
- Marsh, H. L. (1991). A comparative analysis of crime coverage in newspapers in the United States and other countries from 1960-1989: A review of the literature. *Journal of Criminal Justice*, 19, 67-79.
- McGoldrick, P. J. (1990). *Retail Marketing*. McGraw-Hill, London, UK.
- Mehrabian, A. & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press, Cambridge, MA., USA., ISBN-13: 9780262130905, Pages: 266.
- Pallant, J. (2007). *SPSS Survival Manual*. Open University Press, Maideuhead, Berkshire.

- Pan, F. C., Su, S. J. & Chiang, C. C. (2008). Dual attractiveness of winery: Atmospheric cues on purchasing. *International Journal of Wine Business Research*, 20, 95-110.
- Solomon, M., Bamossy, G. J., Askegaard, S. & Hogg, M. K. (2006). *Consumer Behaviour: A European Perspective*. 3rd Edn., Prentice Hall, London, UK., ISBN-13: 978-0273687528.
- Thang, D. C. L. & Tan, B. L. B. (2003). Linking consumer perception to preference of retail stores: An empirical assessment of the multi-attributes of store image. *Journal of Retailing and Consumer Services*, 10, 193-200.
- Turley, L. W. & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: A review of the experimental evidence. *Journal of Business Research*, 49, 193-211.
- Wakefield, K. L. & Baker, J. (1998). Excitement at the mall: Determinants and effects on shopping response. *Journal of Retailing*, 74, 515-539.
- Woodworth, R. S. (1928). Dynamic Psychology. In: *Psychologies of 1925: Powell Lectures in Psychological Theory*, Murchison, C. (Ed.). Clark University Press, Worcester, MA., USA., pp: 111-126.
- Zhou, L. & Wong, A. (2003). Consumer impulse buying and In-store stimuli in Chinese supermarkets. *Journal of International Consumer Marketing*, 16(2), 37-53.