

IMPACT OF STORE ATMOSPHERICS ON CONSUMER BUYING BEHAVIOR AT D-MART STORE

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Received: 20 Aug 2018

Accepted: 23 Aug 2018

Published: 30 Aug 2018

ABSTRACT

This study was conducted with an aim to investigate the impact of store atmospherics on consumer buying behavior at D-MART store in Vadodara District. With the retail industry becoming highly competitive as a result of many convenience stores cropping up in the city, the bigger brands have to put in that extra effort to increase footfalls and convert footfalls into sales. What ways can the retailers adopt to increase their top lines remains an Achilles heel for many retailers. Can store atmospherics be used to differentiate the image of stores from competitors, whereby consumers will spend more time and money and further patronize a particular retailstore.

A survey research was conducted in which primary data was collected from 301 customers from D-Mart store in Vadodara. Atmospheric variables of crowd density, store floor space, and product assortment were used to find out the impact of atmospherics on consumer buying behavior.

Sample respondents were selected using non-random convenience sampling data was collected using a questionnaire that employed the Likert Scale to measure the responses. SPSS was used to analyze the data. Product assortment, store floor space, and crowd density has a significant impact on consumer buying behavior at D-Mart store in Vadodara.

KEYWORDS: *Consumer Behavior, Store Atmospherics, Retail Stores*

INTRODUCTION

Retail industry sees its incumbents facing extreme competition, hence its ability to attract and retain customers depends upon its ability to respond to consumer needs and hence understand consumer behavior. Consumer behavior is the study of how consumers search, use, evaluate and dispose of goods and services they feel will satisfy their needs. (Kotler et al., 2013). Store atmosphere is a designed environment that reinforces buyers learning towards buying a product (Kotler et al., 2013). Business practitioners need to focus on store atmospherics in crafting their business strategies.

LITERATURE REVIEW

“Atmosphere is a term that explains our feelings towards the shopping experience which is not visible” (Milliman, 1986). Kotler (1973-74) describes the atmosphere as “the design of the of retail chain outlet that produces specific emotional effects on the buyer that enhances his purchasing probability”. The pleasant atmosphere of retail chain outlets create an enjoyable experience for the consumers, which affects consumers' purchase intention directly and aids

their decision-making process (Srinivasan & Srivastava, 2010)

A study by Wakefield & Baker (1998) proved that atmospheric stimulus increases the probability of customers staying longer in store. A customer buys more from a particular store when he/she feels satisfied with the environmental stimuli and pleasant atmosphere of a store (Bohl, 2012). The effect of the pleasant environment has a huge impact on the consumers' emotion and satisfaction. Customer satisfaction level and purchase experience enhance due to the impressive atmosphere of the store (Silva & Giraldi, 2010).

In spite of several researchers studying the effect of the atmosphere on the behavior of consumers in the store (Russell & Mehrabian, 1978), empirical research on the impact of store atmosphere on the behavior of consumers is limited (Zeynep & Nilgun, 2011). The scope of consumer studies in previous researches is narrow (Areni & Kim, 1994; Bitner, 1992). Research conducted earlier focused on one atmospheric variable at a time and left others. In reality, though consumer behavior is affected by several atmospheric cues collectively (Zeynep & Nilgun, 2011).

Crowd Density

Crowding is not a matter of density in a given space, it appears to arise through the juxtaposition of density with certain personal and social circumstances that sensitize individuals to the potential constraints of limited space (Dion, 2004)

Tlapana, (2009) on the other hand argues that to provide high-quality services under conditions of crowding, it is important to understand the relationships between personal controls & crowding.

Improving availability of goods on-shelf and customer traffic flow has become very important in retailing. If products are not on the shelf or are not properly placed, the store can lose a potential customer (Emberson et al., 2006). Perceived control consumers feel, or the degree of social power they experience is affected by social density (Rucker et al., 2012). Social density elicits clear and predictable effects on buyer behavior (Adriana et al., 2014).

Product Assortment

A basic feature that pulls customers towards a store is an assortment of products and services (Levy & Weitz, 2008). Product assortment represents a strategic positioning tool for customer attention and retention (Grewal et al., 2002).

Deciding on the assortment in retailing is an extremely difficult task as the consumer preferences and perceptions are ever evolving, there are also some constraints at the retailer's end which poses a great difficulty for assortment. Assortment plays a fundamental role from the consumer's perspective for a store choice (Ishita & Suhsma, 2015).

Customer perceptions have an equally strong relationship with product assortment and product availability. Typically, consumers chose a store because of product assortment and availability. Product assortment and availability are especially important for consumers choosing grocery products (Surabhi & Mishra, 2013).

Store Floor Space

Well, designed floor space stimulates customers to stay longer and explore more in a store, also mingle with other shoppers and sales associates (Michon et al., 2008). Shopping trips are easier and more fun for customers if there is ease of access outside the store and there are clear navigations to browse within the store.

It has been found that store floor space has got a significant impact on the overall performance of the retailer through an influence on the information processing among customers that in turn stimulates purchase intentions and attitude towards the retail establishment (Griffith, 2005). A retail environment can guide customers inferences about the merchandise, service quality and enjoyment at a store and store floor space can influence customers decision to visit a store (Turley & Milliman, 2000).

PROBLEM STATEMENT

Earlier studies have shown that atmospheric design of a retail store has the significant impact on consumer behavior (Priyanka et al., 2014). Store atmospherics influences cheerfulness, pleasure level, and mood in the store which in turn has a positive impact on consumer buying behavior (Sabrina, 2014).

However, very fewer studies have been conducted to assess the impact of crowd density, store floor space and product assortment together to find its impact on consumer buying behavior. Therefore this research study intends to study the impact of the above mentioned 3 variables on consumer buying behavior in a selected D-Mart store in Vadodara District.

RESEARCH OBJECTIVES

The main objectives of this research were to study the impact of three variables namely crowd density, store floor space and product assortment on consumer buying behavior in D-Mart store and identify which of the three variables have more impact on consumer buying behavior.

Research Methodology

Conceptual Model and Hypothesis

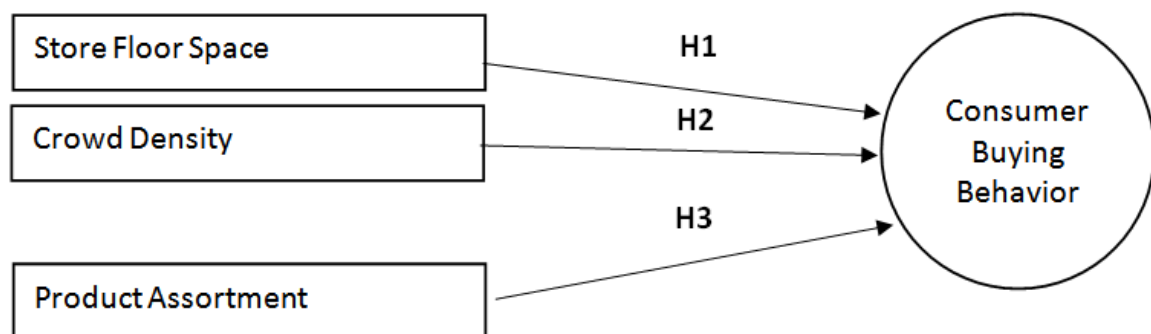


Figure 1: Conceptual Framework of Factors Affecting Consumer Buying Behavior
Based on the above Conceptual Framework, following Hypotheses Were Developed

H1: Store Floor space has a positive impact on consumer behavior.

H2: Crowd density has a positive impact on consumer behavior.

H3: Product Assortment has a positive impact on consumer behavior.

The Research design used was Causal. Primary Data was collected through a structured questionnaire from D-Mart store in the heart of Vadodara city. The Sample Size was 300. Respondents were selected on the basis of Judgment and Convenience. Data Collection was done by visiting the store at different time durations considering the number of

footfalls. To make the study more effective and efficient, questionnaire consists of closed-ended question and five-point Likert scale questions.

Data Analysis

Descriptive Statistics for Demographic Factors

Out of the 300 respondents, 60 % of the customers were females and 40 % of customers were males. Majority of the customers' fell in the age bracket between 30-45 years. 61% of the respondent was employed with a private organization, 33% were homemakers and the remaining 6% had government jobs. 62% of sample respondents had income between 25,000 to 50,000 and 8% of respondents had income above 50,000, remaining were homemakers.

Principal Component Analysis

A principal component analysis was used to reduce data, KMO and Bartlett's test was used to check 1.

Table 1: KMO and Bartlett's Test for IVs and DV

Variables	KMO Measure of Sampling Adequacy	Sig
Store floor space	0.768	0.000
Crowd density	0.775	0.000
Product assortment	0.742	0.000
Consumer Buying Behavior	0.714	0.000

Regression Analysis

The regression analysis is used to reveal how different store design factors affect the consumer purchasing behavior at self-serving convenience stores. Several independent variables may contain information about the variables that are trying to predict or

Table 2: Results of Regression Analysis

Predictors	Beta	P	t	VIF
Store floor space	.193	.001	4.024	1.015
Crowd density	.613	.040	3.660	1.078
Product Assortment	.313	.015	2.224	1.073
Dependent Variable: Consumer Buying Behavior				

$F=20.207$, $P < 0.05$, $R^2 = .620$, Adjusted $R^2 = .597$, $n = 300$ Constant = 1.411, $X_1 = .238$, $X_2 = .393$, $X_3 = .420$,

$R^2 = .597$ (60%), explains 60% variance in the predictors, hence the regression model explains a significant impact of the three predictors on the dependent variable.

Multicollinearity

The above table indicates that the VIF for the independent variables is between 1.5 – 1.7, which indicates some correlation, but not enough to be concerned about. VIF between 5 and 10 indicates high correlation that may be troublesome. $VIF > 10$ assumes that the regression coefficients are poorly estimated due to multicollinearity.

As per table 1.3: Results of Regression Analysis, the $VIF < 0.05$, which indicates there is no significant multicollinearity problem, therefore, the regression coefficients are estimated well.

Coefficient of the Variables

Standardised coefficient shows that the highest beta value is 0.420 for product assortment, which is significant at the 0.000 level. This indicates that the product assortment has the highest influence on consumer buying behavior at D-Mart.

On the basis of the beta scores of crowd density and store floor space the following equation is derived:

$$Y=1.411+0.238X_1 +0.393X_2 +0.420X_3$$

Y = Consumer Behavior, X₁ = Store floor space, X₂ = Crowd density, X₃ = Product Assortment

6.6 Hypotheses Testing

Table 3

Variables	P - Value	$\alpha = 5\%$	Null Hypothesis	Alternative Hypothesis
Product Assortment	.011	0.05	Reject	Accept
Crowd Density	.042	0.05	Reject	Accept
Store Floor Space	0.00	0.05	Reject	Accept

CONCLUSIONS

The research throws light on the fact that atmospheric variables can have a significant impact on consumer buying behavior this finding is in sync with earlier studies that have shown similar results. This study particularly highlights the importance of product assortment and crowd density on consumer purchase behavior with respect to D-Mart store in Vadodara.

RECOMMENDATIONS

Based on the results of the study store manager of D-Mart was recommended to give special attention to product assortment and make sure that products that are in high demand are always available on the shelf and are also displayed properly. Special queuing designs have to be implemented to avoid rush so that crowd density could be maintained.

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