Exterior Atmospherics and Their Impact on Consumer Purchasing Behavior at Self-Serving Convenience Stores

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Abstract: The aim of this study was to investigate the impact of exterior store atmosphere on consumer purchasing behavior at self-serving convenience stores, in Ampara District, Sri Lanka. Today, retail industry became highly competitive with the increasing number of convenience and other types of retail stores in the area. Hence, the retailers need to be more customer focused and have to differentiate from their competitors by making their exterior atmosphere more attractive to consumers and to encourage increase their footsteps into the store and stimulate their purchase intention. A survey research was employed to collect primary information from 292 customers from convenience stores in Ampara District. Exterior atmospheric factors such as store appearance, landscaping and window display were used to identify the impact of exterior atmosphere on consumer purchasing behavior. Significant exterior atmospheric factors that influence consumer purchasing behavior included all the three independent variables used in this study.

Keywords: Exterior atmosphere, convenience stores, consumer behavior

1. Introduction

The retail industry is highly competitive. Retailers should fast in understanding consumers’ behaviors and respond to their demands, to become successful. According to Priyanka et al., (2014), retailers should focus on the preferences of their consumers and the factors influencing their purchase decision. To become successful in retailing, identifying costumer needs and motives is not enough and this knowledge has to be used and conceptualized into the retail context, the location where shopping takes place (Hassan, 2015).

In order to understand shopping behavior, many researchers studied how consumers are affected by the store atmosphere and store environment (Donovan et al. 1994; Foxall, 1997; Tai & Fung, 1997; Foxall & Greenley, 1999; Foxall & Greenley, 2000; Turley & Milliman, 2000; Groeppel-Klein, 2005; Priyanka et al., 2014; Sabrina, 2014; Farias et al., 2014; Charles et al., 2014; Hassan, 2015; Goel, 2015). Most of these researches have been conducted by using a conceptual model, known as the Mehrabian and Russell model; some authors studied the direct relationship between the variables.

Store Atmosphere Store atmospheres are designed environment that create or reinforce the buyers’ learning towards buying a product (Kotler et al., 2013). Consumer purchasing behavior is the behavior that consumer display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs. (Kotler et al., 2013). Self-serving A type of retail business where customers help themselves to the products that they wish to purchase (Business Dictionary.com). Convenience Store is usually a food-oriented retailer that is well located, is open long hours, and carries a moderate number of items. This type of retailer is small (only a fraction of the size of the conventional super market), has average to above average prices and average atmosphere and customer service (Berman & Evans, 2005).

The main aim of the study is to investigate the impact of exterior atmosphere on consumer purchasing behavior at self-serving retail convenience stores in Ampara District and to extent the knowledge of the impact of exterior atmosphere on consumer purchasing behavior at self-serving retail stores.

From the previous researches, it is found that retail store atmosphere is an important factor for the companies engaged in retail business and use store atmospheric as a way of differentiation and to offer positive value to customers, better store atmospherics would increase the number of footfalls and finally would lead to a more satisfying buying experience (Hassan, 2015). According to Sabrina (2014) store environments have to be considered by dealers, retailers, traders…etc. As a management tool, able to affect positively the emotions of their clients, the number of their purchases, amount of their purchases.

However, Hassan (2014) noted that most of the studies only focused on one store atmospheric stimulus instead of examine few stimuli together at one time. Therefore, those literature reviews may not be appropriate for the real stores since successful retailers always have mixed various stimuli to strengthen their distinctiveness. For this research, the researcher try to use all the relevant exterior atmospheric stimuli to interpret its impact on consumer purchasing behavior. By considering different types of exterior atmospheric stimuli, it would be more accurate to predict purchasing behavior of consumer. Using wrong exterior atmospheric applications may lead to lower customer purchase intention because most of the store visit decision are made when customer attracted by the exterior atmosphere. Very few researches were done based on Sri
2. Theoretical Framework of the Research

Exterior atmospheric factors receive the highest level of satisfaction among all other atmospheric factors of a retail store, (Feng et al., 2008). The exterior atmosphere of a store includes the store appearance, characteristics of the building, storefront, entrances, display windows, surrounding area, and parking (Berman & Evans, 2005). According to Turley & Milliman (2000), store exterior includes exterior signs, entrances, exterior display windows, height of building, size of building, color of building, surrounding stores, lawns and gardens, address and location, architectural style, surrounding area, parking availability, congestion and traffic, and exterior walls. Retailers can give customers a unique shopping experience that starts with the store exterior, when customers liked the exterior atmosphere of the retail store, they experienced higher pleasure and arousal, which increased purchase intentions (Sangvikar et al., 2012).

According to Hu & Jasper (2006), the holistic view defines the store appearance as the total impression a store makes on the minds of its customers. Areas built on a store site with a scenic view and which are designed and maintained with the customer in mind, will have a considerable impact on customer satisfaction (Feng et al., 2008). Desirable retail store appearance, facilitated by an effective positioning strategy, can be considered an essential component of the retail mix and can be vital in influencing store choice. Consumer loyalty will be more likely when the consumer perceives the appearance of a store to be desirable to them. A wide belief exists that consumers perceive store appearance to be desirable when the store image and the self-image of the customers’ are matching or the image to which they aspire (Devlin et al., 2003).

According to Wolf (2009), landscaping generates positive emotional reactions and evaluations of urban settings. It is found that consumers reacted positively to the presence of trees in and at mini-malls. When stores were well landscaped, consumers were more likely to visit stores and were even willing to travel longer distances. Chebat & Morrin (2007), suggest potential influences of landscaping on consumer behaviors. Shoppers prefer the retail store environment when more plants, flowers, and trees are used to manipulate the decor than when these elements were not used. Therefore it is concluded that exterior atmosphere of retail store with landscaping will have a positive impact on customer purchasing behavior.

Store window displays are viewed as a key instrument of a retailer’s communication and visual merchandising strategy (Chandran et al., 2002). They are an integral part of a consumer’s surrounding during their shopping experience and therefore have an impact on consumer buying behavior in retail store settings. Window displays serve two main purposes: to identify the retail store and its product offerings (e.g. promotion, merchandise and fashion), and to persuade consumers to have shopping experience in the store (Berman & Evans, 2005). “The store windows are the first look that a customers get before they come into a store” (Kim et al., 2015). Using window displays retailers can give customers a wide variety of information about a store. By showing a representative merchandise offering, a store can create an overall image. By showing fashionable or seasonal goods, a store can show that it is contemporary. By showing sale items, a store can lure price-conscious consumers. By showing eye catching displays that have little to do with its merchandise offering, a store can attract pedestrians’ attention. By showing public service messages, a store can show its concern for the community (Berman & Evans, 2005). Edwards & Shackley (1992) found that larger window displays were more successful in attracting the attention of consumers compared to smaller window displays since there were more design elements to take in. It is also found that sales increased when stores use attractive window displays compared to retail shops use no window display.

3. Research Methodology

3.1 Formulation of Conceptual Model and Hypotheses Development

Based on the extracts of literature review the following conceptual framework was developed. The consumer purchasing behavior as dependent variable, and the store appearance, landscaping and window display as independent variables.

For this study, store appearance, landscaping and window displays were selected as key elements of store exteriors because Sen et al., (2002) argues that their high visibility and key role in attracting customers into a store and ease of control for retailers to improve their exteriors.

Store exteriors are what customer first encounter as they engage in shopping behavior and thus are an important opportunity for retailers to build positive impressions. It is very essential for retailers operates in small scale without strong brands or store names, exterior atmosphere of the store play an important role in building a first impression of a retail store and attracting customers into a store. When deciding to shop at smaller retail stores customers rely on external atmospheric cues such as window displays to form an impression about the store and its offerings even before stepping foot inside the store (Kim et al., 2012).

Hence, the researcher hypothesizes and empirically tests the proposition that store exterior atmosphere can significantly influence consumer purchasing behavior at self-serving retail stores. So, the following hypothesis is developed:
H1: Store appearance has a positive impact on consumer behavior.
H2: Landscaping has a positive impact on consumer behavior.
H3: Window display has a positive impact on consumer behavior.

3.2 Population, Sampling and Data Collection

The population refers to the entire group of people, events or things of interest that the researcher wishes to investigate. It is the group of people, events or things of interest for which the researcher wants to make inference (Sekaran and Bougie, 2013). In this research the total population of the Ampara district was considered as population. According to the available information, it is estimated that 648,057 people live in Ampara district in the year 2012, but the actual population during the survey period is not known and the population statistics was not available as it was not done. If the data are valid, the results of research on a sample of subjects drawn from a much larger population can then be generalized to the population. From the researcher’s point of view, target population in this research was all the customers who shop at self-serving retail stores in the Ampara District.

Convenience sampling was used because it is easy to collect data. This approach is practiced because everybody is a retail store customer nowadays, because the exact number of customers who buy from self-serving retail stores could not be obtained and everyone in the area has a kind of experience in purchasing at any form of self-serving retail stores. Sample size is defined as the number of elements to be included in a study. In this case the sample size was 300 respondents as they were considered to provide sufficient input to ascertain findings. The consumer population of Ampara District exceeds 500 000. In support of this sample size, Sekaran (2003) points out that if the population size is 1,400 a sample size of 302 should be adequate to support the research findings.

The questionnaire is the most common instrument to collect data. The researcher has chosen a self-administered questionnaire as a tool for the data collection. The questionnaire was in the form of closed-ended (or structured) questions in which respondents were asked to make the choice from a list of possible responses. Close-ended questions are also easy to administer and usually evoke rapid response (Schmidt & Hollensen, 2006). To make the study more effective and efficient, questionnaire consists of closed ended question and five point Likert scale questions.

4. Data Analysis

4.1 Principal Component Analysis

Principal component analysis is used as a method of reducing data, this technique appropriate when a large sample size is used. Statistical Consulting Group cited Tabacknick & Fidell (2001) and Lee’s (1992) advised regarding sample size: 50 cases is very poor, 100 is poor, 200 is fair, 300 is good, 500 is very good and 1000 or more is excellent. Principal component analysis was used here because the sample size was 300 which is good to conduct principal component analysis. KMO and Bartlett’s Test used to check whether it is appropriate to conduct factor analysis, Communalities used to extract the items and the Eigen values used to explain the variables by combining items using the rule of thumb.

<table>
<thead>
<tr>
<th>Variables</th>
<th>KMO Measure of Sampling Adequacy</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store appearance</td>
<td>0.626</td>
<td>0.000</td>
</tr>
<tr>
<td>Landscaping</td>
<td>0.635</td>
<td>0.000</td>
</tr>
<tr>
<td>Window display</td>
<td>0.609</td>
<td>0.000</td>
</tr>
<tr>
<td>Consumer Purchasing Behavior</td>
<td>0.767</td>
<td>0.000</td>
</tr>
</tbody>
</table>

(Source: Survey Data)

4.1.1 Regression Analysis

The regression analysis is used to reveal how different exterior atmospheric factors affect the consumer purchasing behavior at self-serving convenience stores. Many independent variables may contain information about the variables that are trying to predict or understand. Results of Regression Analysis is shown in table 1.2

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Beta</th>
<th>t</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store appearance</td>
<td>.335</td>
<td>2.214</td>
<td>1.768</td>
</tr>
<tr>
<td>Landscaping</td>
<td>.199</td>
<td>3.659</td>
<td>1.853</td>
</tr>
<tr>
<td>Window display</td>
<td>.245</td>
<td>4.040</td>
<td>1.529</td>
</tr>
</tbody>
</table>

| Dependent Variable: Consumer Purchasing Behavior |

(Source: Survey Data)

Notes: $F=78.121, P < 0.05, \ R^2 = .450$, Adjusted $\ R^2 = .444, n = 291$

The overall model explains the fit for the research. $\ R^2$ in the table given above shows this aspect. This coefficient is a measure of how well the regression equation fits the data. According to the above table 1.1, the $\ R^2 = 0.450$ (45 percent), hence, the regression equation apparently have a fit with the data. It can be predicted that 45% of the variance ($R$-square) in dependent variable has been significantly explained by the three independent variables (store appearance, landscaping and window displays). Here, $p = 0.000 < 0.05$ and ANOVA table shows that the $F$ value of 78.121 is significant at the 0.000 level. So the model is significant and model exists. When the individual variables are focused, at first, considering the store appearance is considered; $p = 0.000 < 0.05$, hence, highly significant and explain a much about the dependent variable. Landscaping values; $p = 0.000 < 0.05$, highly significant to the model. Window display values; $p = 0.000 < 0.05$, highly significant to the model.

Multicollinearity used to test whether the predictors of one variable are correlated with other predictors. Multicollinearity arise when the multiple factors of the model that are correlated not just to the dependent variable, but also to each independent variables. VIF value is used to explain the multicollinearity in this research. If the VIF = 1 there is no multicollinearity among factors, but if the VIF > 1, the predictors may be moderately correlated. The above table shows that the VIF for the independent variables are in
between 1.5 – 1.8, which indicates some correlation, but not enough to be overly concerned about. The rule of thumb is, a VIF between 5 and 10 indicates high correlation that may be problematic. And if the VIF > 10, it is assumed that the regression coefficients are poorly estimated due to multicollinearity.

According to above table 1.2: results of Regression Analysis, the VIF < 0.05, it means that there is no significant multicollinearity problem and therefore, the regression coefficients are estimated well.

The Coefficients table indicate the most important independent variables among three that influence most of the variance in consumer purchasing behavior. The standardised coefficient shows that the highest number in the beta is 0.335 for store appearance, which is significant at the 0.000 level. This indicates that the consumer purchasing behavior at self-serving convenience stores is influenced by store appearance in great extent. The coefficient of landscaping in the exterior atmosphere is a determinant factor of consumer purchasing behavior, a one percent increase in landscaping would rise to a 0.199 percent increase in consumer purchasing behavior. Conversely, Coefficient of window display is a determinant factor of consumer purchasing behavior which would give 0.345 percent increase in consumer purchasing behavior. All these were significant to the model at 0.05 level. Hence, the following Model fit regression equation is derived.

\[ Y = 0.868 + 0.335 X_1 + 0.199 X_2 + 0.245 X_3 \]

Y = Consumer Behavior, X1 = Store appearance, X2 = Landscaping, X3 = Window display

5. Conclusion

After the analysis of the data, hypothesis was tested to make sure the assertion in the light of the data analyzed. The most common policy in statistical hypothesis testing is to establish a significance level, denoted by \( \alpha \), and to reject \( H_0 \) when the \( p \) – value falls below it.

Three hypotheses were proposed to investigate the impact of exterior store atmosphere on consumer purchasing behavior, and the results of the hypotheses tests supported all three hypotheses. These results provided valuable insights for understanding the stimulus of exterior atmospheric factors on consumer purchasing behavior at self-serving convenience stores. Based on the analysis, it is found out that store appearance, landscaping and window display have significant and positive impact on consumer behavior. As the finding imply, self-serving convenience stores have to find out the best mix of exterior atmospheric variables / cues that increases the intention to spend more time and money, purchase more items and the repeat purchase intention. Previous studies (Hasan, 2014; Jennifer et al., 2012; Feng et al., 2008; Kemal et al., 2007) were found that the exterior atmospheric factors have significant impact on consumer behavior which also influence customers’ impulse purchasing which is unplanned and stimulated by the exterior atmosphere.

6. Managerial Implications

This study provides a validated instrument/scale to measure the relationship between exterior store atmosphere and consumer purchasing behavior and its serves as a tool for understanding the impact of exterior atmospheric cues. Further, the study has empirically derived and discussed the key exterior atmospheric factors that influence the consumer purchasing behavior. Hence, for businesspeople, this research findings suggest that in an effort to increase the number of foot falls in to the retail store an attempt should be made to explicitly focus on effectively tailoring the exterior atmospheric factors. Finally, this model helps when strategizing the organizational communication mix for any type of a business.

7. Limitations and Future Research

From a larger retail industry the self-serving convenience stores type and the location of study is Ampara District area being selected for this research. Further, the customer base of the study limits to the end user consumer of self-serving convenience stores which mainly sell food items not a fashion or the customers of other retail types. Population consist only the customers who shop at self-serving retail convenience stores who are customers of one or many self-serving retail stores in Ampara District and those selected conveniently to administer questionnaires. Furthermore, the customers’ responses are not comparatively studied based on different players in the industry. Finally, the variables restricted only to a specific constructs of three independent variables but there are many other motivators are not taken to the study. All these should be considered in the future researches. Although, the study narrowed the scope of the broad concepts of exterior store atmosphere and consumer purchasing behavior by focusing on specific aspects of those concepts, and limited to a particular type of retailing industry, one customer base, and one district, the majority of population live in villages in the study area, and having no or less self-serving convenience stores in the village are chosen for this study to improve the generalizability of the findings. When limitations arise, it will create issues that are need to be resolved. So, the future researcher need to put more effort and being more discipline in order to produce a valid result and good research. To achieve more accurate research finding, the researcher must choose more reliable sample, future researcher can use random sampling techniques for this purpose. At the same time, future research should consider the impact of atmospheric variable comparing all the different outlets to see how it is really affected. Besides that, the future research also can explore other store atmospheric variables such as the temperature of the store, cleanliness of the store, facilities for customers, store layout, atmospheric design, and scent since all of these factors also are important to create an appeal store atmosphere. Future research also can study other store atmosphere from different retail industries like fashion retail, electronic, restaurants, pharmacies and so on.
References


