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THE CUSTOMERS' PERCEPTION OF SERVICESCAPE INFLUENCE ON THEIR BEHAVIOR

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ABSTRACT

This study investigates the customers' perception of servicescape influence on their behavior in relation to retail industry specifically Shanmuga Agency, Batticaloa. The servicescape dimensions are ambient conditions; spatial layout and functionality; and signs, symbols, and artifacts adopted from Dharithri, T, & Ruberu, N 2017. Data were collected using structured questionnaire from 100 samples of Shanmuga Agency customers. While both the variables individually have high level attributes of the customers. The correlation coefficient (0.765) between servicescape and behavior indicates that the servicescape is useful to predict the variation in behavior. R Square value of 0.586 shows that 58% of the variation in servicescape is caused by the regression model. Further, this study empirically contributes to managers and entrepreneurs regarding servicescape and behaviour.

KEYWORDS: servicescape, Ambient and Behavior

1. INTRODUCTION

The retail and modern trade industry performs a vital role in expanding economic opportunity and it is the aggressive expansion and growth sector in developed and developing countries. During the last few years organized and systematized retail and modern trade has extended substantial prominence in Sri Lanka where fast rising consumer spending seemed to sign a remarkable demand for glowing new stores with large assortments, wide walkways, and bright lighting. Customer service and experience environment forms the heart of retail functions. Retailers have to plan and setting the customer service benchmarks in a proactive way to serving them than competitors. How effectively the product is offered to the consumer is very vital in retailing. According to Fitch ratings that increasing per capita income and rising urbanization should make modern grocery retail more affordable and accessible to a larger portion of the population. Sri Lanka's supermarket penetration is still around 15% compared to 30% for regional peers with similar social and economic characteristics, which indicates the potential for the industry to grow.

1.2 Identification of the Research Problem

1.2.1 Problem Justification

Global and local retail giants are stressed to grow profitably in many emerging markets. To sum up, numerous studies have highlighted various aspects of the servicescape. servicescape which determine its meaning for the actual behavior of consumers (Patil, S. 2014). This is the main reason is that supermarkets mostly considers the servicescape issues, critically. Another issue that, the results of Parasuraman et al.’s studies show that, the tangibles has a minor influence on consumer’s perceptions (Zeithaml et al., 1990). This contradicts the great importance attached to the servicescape by numerous authors. Therefore it can be assumed that the meaning of “tangibles” was insufficiently captured in these studies. Therefore this study is carried out.

Although Bitner’s (1992) servicescape framework remains invaluable to marketers, it contains a possible shortcoming. Namely, the servicescape
framework originates from research conducted in environmental psychology (Barker, 1968), which itself emulates from ecology and is the source of theoretical weakness. Hence, this study considers selected supermarket for testing the influence of servicescape in determining the behavior of customers.

1.2.2 Statement of the Problem

Therefore the problem addressed in this study is to identify the customers’ perception of servicescape influence on behavior in Shanmuga Agency consumers, Batticaloa.

1.3 Objectives of the Study

The purpose of this research is to determine customers’ perception of servicescape influence on their behavior in relation to consumers’ of Shanmuga Agency, Batticaloa.

2. LITERATURE REVIEW

According to Bitner, 1992; Wakefield & Blodgett, 1996, servicescape is a commonly used term to define the ‘physical surroundings’ of an organization. Baker, 1998 stated that ‘servicescape offers a multitude of easily accessible cues to customers seeking an information searching shortcut’. Zeithaml et al. (2009) defines servicescape as “the environment in which a service is delivered and in which the firm and the customer interact, and any tangible commodities that facilitate performance or communication of the service”. Later, in 2011, Rosenbaum and Massiah complete Bitner’s and Zeithaml’s definitions, explaining that servicescape includes several dimensions: ‘a physical, a social, a socially-symbolic and a natural dimension’.

2.1 Servicescape Dimensions

Bitner consolidated these environmental stimuli into three dimensions:

1. Ambient conditions;
2. Spatial layout and functionality; and
3. Signs, symbols, and artifacts (Brady and Cronin, 2001a, b; Hightower et al., 2002; Kotler, 1973; Lin, 2004).

Ambient conditions

Grayson and McNeil, 2009; Kotler, 1973; Turley and Milliman, 2000 stated that “ambient conditions represent background environmental stimuli, or atmospherics, that affect human sensations”. Dijkstra et al., 2008 indicates these ambient stimuli comprise visual (e.g. lighting, colors, brightness, shapes, aesthetic cleanliness, olfactory (scent, air quality, fragrance; Mattila and Wirtz, 2001), ambient (e.g. temperature (Reimer and Kuehn, 2005)), and auditory (e.g. music, noises (Morin et al., 2007; Oakes and North, 2008). Here the researcher decides to focus on lightening, noise, music and color as the ambient conditions.

Cockrill, Goode & Emberson, 2008; Bittner 1992; Rosenbaum and Massiah, 2012 have been proved that ambience may have an impact on consumers. Baker 1987, Baker, Berry, and Parasuraman 1988 & Russell and Snodgrass 1987 et al stated ambient conditions as a factor that affects perceptions of and human responses to the environment. As a general rule, ambient conditions affect the five senses. A very limited number of empirical studies in consumer research confirm that ambient factors may influence consumer responses.

Music

Jain and Badgare (2011) defined ‘musicscape is a term used by to talk about the musical environment’; it is an important part of numerous studies in the retail environment context. Music is used in retailing for several reasons: awareness, identification, association, remembrance, and because it can also have an impact on the customers’ shopping experiences. It can influence purchase act, cognitive and affective evaluation, evaluation of the service and therefore consumer responses.

Sullivan, 2002 indicates four variables have to be taken into account when it comes to music: the volume, the tempo, the style and the absence. Music is the greater the exposure to the individual behavior thus encourages the desired behaviour’.

Lightening

According to Custers et al. (2010) lighting takes into account several variables: brightness, contrast, glare and sparkle, decorative lighting and lighting installation. They explain in their article that lighting can not only influence emotions, moods, and cognition but also the atmosphere and the spatial impression. Some studies show that customers are drawn toward the light but also that light can draw the attention to particular products. Indeed according to Quartier, Vanri and Van Cleempopel, (2014) lighting can increase the attractiveness of a product in a store.

Noise

People can respond to a noisy atmosphere either by showing interest or tension. Indeed, noise can provoke a discomfort because of the physiological responses as hypertension due to stress. This can be interferes with the activity individuals are doing at the retail outlets.

Spatial layout and functionality

Spatial layout refers to ‘the ways in which machinery, equipment, and furnishings are arranged, the size and shape of those items, and the spatial relationships among them’. Functionality refers to ‘the ability of the same items to facilitate performance and the accomplishment of goals’.

Logic suggests that spatial layout and functionality of the environment are ‘highly salient to customers in self-service environments where they must perform on their own and cannot rely on employees to assist them’. A.J.Lamba, 2003 indicated
supermarkets attract customers because of clean organized layouts and low prices.

According to Edvardsson et al., 2010, space refers to the manner in which physical machinery, equipment (e.g. electronic technology), Bloch, 1995; Wakefield and Blodgett, 1996 defined space as ‘furnishings, and their arrangement, as well as the lesser observable furnishings of comfort, layout, and accessibility influence consumer purchase decisions’. According to Aubert-Gamet, 1997, functionality denotes ‘the ability of all these physical items to facilitate the service exchange process and to improve consumer support’.

**Signs, Symbols, and Artifacts**

Becker (1981); Davis (1984); Wener (1985); Wineman (1982) indicates many items in the physical environment serve as explicit or implicit signals that communicate about the place to its users. Signs displayed on the exterior and interior of a structure are examples of explicit communicators. They can be used as labels (e.g., name of company, name of department), for directional purposes (e.g., entrances, exits), and to communicate rules of behavior (e.g., no smoking, children must be accompanied by an adult. According to Wener and Kaminoff (1982) signage can play an important part in communicating firm image.

‘Signage’ is the communication tools that facilitate the customers’ progression through the servicescape. signage induce a good customers’ behaviour and a positive image of the service. Sign, symbols, and artifacts dimension refers to physical signals that managers employ in servicescapes to communicate general meaning about the place to consumers.

### 2.2 Behavior

Understanding behavior absolutely may not be possible because of its complex nature and many elements involved. Several definitions of consumer behavior are available in literature. According to Loudon and Della Bitta (2002) consumer behavior may be defined as “the decision process and physical activity individuals engage in when evaluating, acquiring, using or disposing of goods and services”. Kotler, (2012) defined “Consumer behaviour is “the study of how individuals or groups buy, use and dispose of goods, services, ideas or experiences to satisfy their needs and wants”. Solomon, (2013) argued that understanding customers’ behaviour can help companies to respond to consumers’ needs toward segmentation and targeting.

Consumer behavior involves a mental decision process as well as physical activities.

**Servicescape influence on behavior**

Bitner (1992) indicates to the servicescape as the “built individual behaviors suggest how individuals react to environment”. The servicescape has been acknowledged as a vital factor in shaping the consumer's experience in a retail setting. According to Mary Jo Bitner servicescape is about spatial layout and functionality, store ambience and elements related to aesthetic appeal design factors of a store that enhance customer and induce employee actions. Further his model follows organism-response model which impact customers and employees way of interactions. According to G.Joshi 2009, servicescape influences the customer perception and behavior at the retail outlet. Servicescape elements need to be designed properly to generate positive image and to enrich customer service experience. According to Mary Jo Bitner 1992 servicescape can be considered as one of the tools used in the area of consumer behaviour.

### 3. CONCEPTUAL FRAMEWORK

![Servicescape framework](image)

As Zeithaml (1991) indicates a positive relationship of servicescape to behaviour and this relationship is empirically supported by other studies (e.g., Bitner, M. J, 2009; Gremler, 2009).

4. METHOD
4.1 Data and Sampling

Primary data are collected through structured questionnaires with closed statements measured with Likert’s scale (1-5 as strongly disagree, disagree, marginal, agree and strongly agree, respectively), in the Shanmuga Agency in Batticaloa District in Sri Lanka. About two hundred (100) convenient random sampling techniques.

Table: 1: Sampling Framework

<table>
<thead>
<tr>
<th>Study Setting</th>
<th>Customers in Shanmuga Agency, Batticaloa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Horizon</td>
<td>Cross Sectional Research</td>
</tr>
<tr>
<td>Unit of Analysis</td>
<td>Customers in Shanmuga Agency, Batticaloa</td>
</tr>
<tr>
<td>Sample Size</td>
<td>Hundred (100) customers</td>
</tr>
<tr>
<td>Sample Method</td>
<td>Convenient Sampling Technique</td>
</tr>
</tbody>
</table>

4.2 Method of Data Analysis and Evaluation
4.2.1 Univariate Analysis

Univariate analysis is carried out for evaluating the attributes of dimensions and variables individually based on the response in the questionnaires. For this purpose, mean values and standard deviation of the dimensions and variables are taken into consideration. Therefore, this study initially evaluates servicescape and behaviours’ dimensions and variables. Assessing the levels of dimensions and variables individually is the secondary objective of this study with the following criteria.

Table: 2: Decision Criteria for Univariate Analysis

<table>
<thead>
<tr>
<th>Range for Decision Criteria</th>
<th>Decision Criteria</th>
<th>Decision Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xi &lt; -Z σx</td>
<td>Xi &lt; 3</td>
<td>Low Level</td>
</tr>
<tr>
<td>-Z σx ≤ Xi ≤ Z σx</td>
<td>Xi = 3</td>
<td>Moderate Level</td>
</tr>
<tr>
<td>Xi &gt; Z σx</td>
<td>Xi &gt; 3</td>
<td>High Level</td>
</tr>
</tbody>
</table>

Where Xi = mean value of a dimension/variable, σ = standard deviation, Z = value of the 95% confidence limit and = standard error of the mean

4.2.2. Bivariate Analysis

Bivariate analysis used to measure the magnitude and direction of the relationship between CA and FFC. Correlation can be categories based on possible ranges in relation to appropriate decision attributes in a corresponding way. The significance level of the correlation coefficient is considered to explore the meaningful linear relationship and analyze the hypothesis.

5. RESULT AND DISCUSSION
5.1 Level of Independent Variable and Its Dimensions

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Servicescape</td>
<td>100</td>
<td>3.3928</td>
<td>.73879</td>
</tr>
<tr>
<td>Ambient</td>
<td>100</td>
<td>3.4825</td>
<td>.68834</td>
</tr>
<tr>
<td>Space Layout and Functionality</td>
<td>100</td>
<td>3.4360</td>
<td>.85724</td>
</tr>
<tr>
<td>Signs Symbol Artifacts</td>
<td>100</td>
<td>3.2600</td>
<td>.92791</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Survey Data)
Servicescape has high level at its individual quality of its dimensions (Mean X1 = 3.39). In addition, most of the respondents expressed the common opinion regarding the variable of leisure shopping (SD = 0.738). With individual analysis, it is also noted that about all customers in this study have high level attribute for the servicescape. Specifically, all dimensions of servicescape have high level attributes in relation to their mean values (mean values of servicescape dimensions such as X1.1 = 3.48, X1.2 = 3.43 and X1.3 = 3.26).

5.2 Level of dependent Variable

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour</td>
<td>100</td>
<td>3.5250</td>
<td>0.86712</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Survey Data)

Behaviour has high level at its individual quality of its dimensions (Mean X2 = 3.52). In addition, most of the respondents expressed the common opinion regarding the variable of leisure shopping (SD = 0.867).

5.3 Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlation</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Servicescape</td>
<td>Sig. (2-tailed)</td>
<td>.765**</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>100</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Pearson Correlation</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.765**</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>100</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
(Source: Survey Data)

There is a strong positive relationship (0.765) between servicescape and Behaviour in the Shanmuga Agency in Batticaloa. This relationship is significant because the Sig value is less than 0.05.

5.4 Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.765*</td>
<td>.586</td>
<td>.581</td>
<td>.56107</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Servicescape
(Source: Survey Data)

R Square value of 0.586 shows that 58% of the variation in behaviour is caused by the regression model. In other words, 58% of the variation in behaviour is caused by Servicescape factors in Shanmuga Agency. As the R square value is more than 0.5, the regression model is adequate.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>43.587</td>
<td>1</td>
<td>43.587</td>
<td>138.458</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>30.851</td>
<td>98</td>
<td>.315</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>74.437</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Behaviour
b. Predictors: (Constant), Servicescape
(Source: Survey Data)

F statistics coefficient of 138.458 with an associated significant value of 0.000 shows that the regression model is significant (Sig value is less than 0.05). The regression model can be utilized to show the impact of independent variables on the dependent variable. In other words, at least one independent variable in the model influences the dependent variable.
According to coefficient table, it is clearly revealed that all of the independent variables are significant (Sig values of all the independent variables are less than 0.05). Regression results indicate that 1 unit of online brand trust for “Kapruka.com” is significantly (sig level 0.01) converted as (β1 =) 0.898 times into behavior for “Shanmuga Agency”.

6. CONCLUSIONS AND RECOMMENDATIONS

The aim of the present article was to examine the influence of the servicescape on the Behaviour of Shanmuga Agency customers. The results of the empirical study clearly show a higher significance for the servicescape. Hence a research was conducted among the consumers visiting leading Shanmuga Agency outlet under the topic of perceived servicescape influence on consumer perception in Batticaloa District. This study considers servicescape as independent variable and behavior as the dependent variable. Depending on the statistics identified, While these variables individually have high level attributes of the customers, the Pearson’s Correlation Servicescape have a stronger relationship towards consumer behavior. The correlation coefficient (r) was 0.765 at the 1% level. This implies that Servicescape can be predicted with behavior.

According to Dharithri, T. & Ruberu, N (2017), significant influence of perceived servicescape on consumer behavior in supermarket industry and this is consistent with Rosenbaum, M.S, & Massiah, C (2011), 2012. This study also has the same positive significant influence of perceived servicescape on behavior of Shanmuga Agency in Batticaloa.

**Recommendation:**

This study help to make a decision about the elements of servicescape in retail industry should propose in order to delight consumers. It will also help to make sure that the perception of servicescape becomes more positive and consider those three elements to enhance the perception of consumer of the retail sector. This research has shown the link between different servicescape dimensions and behavior of consumers. The author focus this research only on three dimension to measure servicescape. Further, I would like to suggest that future research should include some other factors such as expanded servicescape framework that shows that a perceived servicescape comprises physical, social, socially symbolic, and natural environmental dimensions. This study focuses only one

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**REFERENCES**


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**Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Constant</td>
<td>.478</td>
<td>.265</td>
<td>1.803</td>
</tr>
<tr>
<td></td>
<td>Servicescape</td>
<td>.898</td>
<td>.076</td>
<td>.765</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Behaviour
(Source: Survey Data)