

# Foodscape and Customer's Future Behavioral Intentions in Casual Dining Restaurant

Suria Sulaiman and Mahmod Sabri Haron

**Abstract**—The trend of eating out has leads the food service industry to the needs of managing the customer and making sure that all their needs and preferences can be fulfilled. Foodscape been recognized as one of the factors to attract and retain the customers and at the same time increase the revenue of the restaurant. This is proven through the researches done earlier in the effects of foodscape on the consumer behavior in the restaurant industry. However, the questions of which foodscape dimensions have the most influence on the future behavior intentions of the customer in casual dining restaurant in Malaysia scenario is rarely been discussed. This study has surveyed 146 customers and proven that there is a relationship between foodscape and future behavior intentions. Through results, it revealed that presentation and freshness play an important role in capturing the customer heart and give positive impacts on their future behavioral intentions.

**Index Terms**—Foodscape, future behavioral intentions, casual dining restaurant.

## I. INTRODUCTION

Food and beverage industry is one of the four main components in the hospitality industry. The trend of eating out has leads to the growth of this industry supported by the other emerging trends such as higher income and higher population especially in urban area. This leads to the needs of managing the customer and making sure that all the needs and preferences can be fulfilled in order to increase the revenue of the industry. According to the demographic and economic indicators, consumer expenditure on food in 2009 was USD11, 989.34 million and is expected to rise to USD12, 473.13 this year [1]. On top of that, tourist's receipts also contribute to the revenue of food and beverage industry in Malaysia.

It is one of the challenge face by the industry in providing not only a quality food but also compelling for the customer and superior than their competitors [2]. It is believed that tasty and fresh food plays an important role in the attempt to outpace the competitors but nevertheless, the quality food is the one of the best means to maximize success in the restaurant business [2]-[3]. This aligned with the earlier study, which found that food quality was the only factor that has a significant effect on return patronage [4]. Previous studies also had shown that food quality influence customer

satisfaction [5]-[7]. It was reported that the attributes serve as tangible cue of service quality in the restaurants [2]. Research also shows that there is a significant effect between food attributes and return patronage [3], [4], [8]. The food attributes that had effects on the return patronage varies from the food tastiness, consistent food, menu variety and food quality. All this attributes falls under the dimension of foodscape.

The purpose of this study is to examine the relationship between customer behavior due to foodscape elements in the casual dining restaurant and its effects on their future behavioral intentions. It also hopes to reveal the important elements in foodscape that contribute to this positive future behavior intentions. The foodscape dimensions consist of temperature, taste; healthy options, presentations, variety and freshness are used to measure foodscape in this study.

## II. LITERATURE REVIEW

### A. Foodscape

In general, the term foodscape has been used to describe the spatial distribution of food across urban spaces and institutional settings [9],[10]. The term used to describe a social construction that captures and constitutes cultural ideas of how food relates to specific places, people and food system [11],[12]. Foodscape may also variously capture or obscure the ecological sites and social relations of food production, consumption and distribution [13].

Over the past ten years, the concept of foodscape becomes important for research in the field of food studies. This includes the concept of foodscape in food chains, food production, food ethics and food policy [14]. Foodscape is defined as a multiplicity of sites where food is found and/ consumed [10], whereas some look at it as structure in society forming the food environment [15]. Foodscape is used in a design approach exploring the meaning of the space, place and attributes [9] or as the interacting process of what is eaten, where and by whom [16].

Some researchers used the term foodscape to label the food landscape [17]-[20]. Nevertheless, it is argued that the usage is not suitable with geographical landscape terminology [9]. This is due to the use of the root term "food" is not a spatial concept appropriate for combining with "scape". In this study, foodscape is defined as the view of a particular object, as seen in a sum appearance of the food's visual features [21]. It is the evident in the actual preparation, presentation and eating of food which produce a quality food.

Foodscapes have many dimensions that may influence the food intake. The parameters include size, shape, texture,

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colors and other qualities and may include other attributes such as divisions or demarcations apparent on the surface of food [9]. Previous research treated all the selected food attributes as one variable- that is food quality [4]. From the model of dining satisfaction and return patronage, the food quality been described in many attributes- presentation, tastiness, menu item variety and temperature [5].

In this study, it focuses more on presentation, freshness, temperature and variety. Presentation refers to how attractively food is presented and decorated as a tangible cue for customer perception of quality [22]. The presentation of food is a key food attribute in modeling dining satisfaction and return patronage [5]. It is also describes earlier by as one of the product and/or service factors in tangible quality TANGSERV scale [7]. This scale is based solely on the tangible quality elements of importance to restaurant patrons.

Freshness usually refers to the fresh state of food and appears to be related to crispiness, juiciness, and aroma [23]. It was found that freshness of food as a crucial intrinsic quality cue of food [5], [6],[24]. The crispiness of food refers to the food items such as taco, tempura and cookies. Juiciness can be in terms of meat items such as steak while aroma is referring to the smell of the food items. It was found that some people are emotionally and physically affected by the imaginary presence of an odor [11]. Some in house bakeries have been releasing synthetic scents to increase sales of bakery products such as Dunkin Donut and Starbucks coffee chain [25].

Temperature is a part of sensory element of food quality [5]-[6]. It can influence how the perceived flavor of food was evaluated, interacting with other sensory properties such as taste, smell and sight [26]. It can also be considered as one determinant enhancing pleasure in food experience [27]. Temperature is referring to the food that should be served hot is hot and vice-versa. The correct temperature will leads to satisfaction as it is related with taste, sight and smell.

Food variety involves the number or assortment of different menu items. This is where the restaurants can constantly develop new menus to entice diners and create an assortment of food and menu offerings [22]. It was found that menu item variety was a crucial attribute of food quality in creating dining satisfaction [5], [7], [8]. By giving more choices, the customer can select according to their food preferences.

The definition of future purchase intentions varies depending on the research context. The future purchase behavior can be in negative or positive ways. In this study, behavior/ intentions is defined as a customer's willingness to provide positive word of mouth, to visit the restaurant again in the future, to stay longer than anticipated, and to spend more than anticipated [28]. The behavioral intentions frequently develop from the service experience that the customer had in the organizations. Others describe it as a decision making process about whether to stay or leave the service firm [29]. It can also be referred as attitude of fairly stable like/ dislike of a product based on the experience and as an affirmed likelihood to engage in a certain behavior [30].

For the present study, future behavioral intentions is described as the likelihood to return to the restaurant,

recommend the restaurant to family and friends and the power of separating the information through word of mouth. The dimensions are important in tracking the trend of the customers and at strategize the marketing concept of the organizations.

Foodscape is a fundamental of restaurant experience and there can be no doubt that it has and will continue to have a major impact on customer satisfaction and return patronage [22]. From their study, it shows that overall food quality significantly affects customer satisfaction and behavioral intentions. They revealed that the relationship between food quality and customer future behavioral intentions is mediated by satisfaction. It is revealed that taste and presentations were the two greatest contributors to customer satisfaction and behavioral intentions. This is similar with the earlier studies, which found that foodscape and satisfaction play an important role in determining customer behavioral intentions toward restaurant [3], [4],[8], [31]. It also shows that there is a significant effect between food attributes and return patronage [3], [4], [8]. The food attributes that had effects on the return patronage varies from the food tastiness, consistent food, menu variety and food quality. Nevertheless, setting and category of the restaurant also play parts in supporting this relationship [2]. Different setting and category have different effects toward future behavioral intentions of the customer.

### III. METHODOLOGY

Data were collected through questionnaire and the sampling method was convenience sampling. The questionnaire was divided into 2 parts- foodscape and future behavior intentions. The dimensions of foodscape are presentation, variety, freshness and temperature. The dimensions for future behavior intentions such as repeat patronage and word of mouth are derived from the scales developed by Ziethaml et.al (1996). Respondents were asked to rate the items using the 5-points Likert type scale (1-extremely disagree; 5-extremely agree). The reliability of the scale was measured.

### IV. RESULTS

#### A. Subject Demography

The results of the demographic profiles are based on 146 respondents consist of 48.6% (71) were male and 51.4% (75) were female, within the age of 15-64 years old who had experienced dining in a casual dining restaurant within the last 3 months. Most of the respondents had been visited the restaurant for two to five times. Purpose of visit to the restaurant were for brunch (34.9%) followed by dinner (21.9%), lunch (18.5%), supper (13%), business meeting (7.5%) and special event (4.1%). Majority of the respondents spent 1-2 hours in the restaurant eating 1 type food product in the restaurant. Set meal was the most popular food product consume by the customers followed by beverage, main course, dessert, appetizer and soup.

**B. Factor Analysis**

Factor analysis was performed on the independent variable (foodscape) which consists of 4 components- presentation, variety, temperature and freshness. The varimax method was used to determine any underlying components for the variable.

Factor analysis was run on 23 items measuring the independent variable. It was observed that the Bartlett’s test of sphericity was significant and that the Kaiser-Meyer-Olken (KMO) measure of sampling is far greater than 0.6 with a value of 0.921 for foodscape. The KMO measure indicated sufficient intercorrelations. Therefore, the study proceeded with factor analysis.

**C. Reliability**

Part A consisted of 23 items that measured the perceptions of the customer towards the foodscape in the restaurant, which they experienced within the past 6 months. Reliability of 4 sub-dimensions was measured for presentation, variety, freshness and temperature. They respectively achieved the value of 0.89, 0.80, 0.85 and 0.92. Part B consisted of seven items related to future behavior intentions of the customers. Reliability of the dimension achieved the value of 0.92.

**D. Descriptive Analysis**

Descriptive data used to describe series of observation in a more meaningful way. Mean and standard deviations were obtained for the interval-scale dependent and dependent variables. The results are presented in the table below. Foodscape with sub dimensions of presentation, variety, freshness and temperature and future behavioral intentions were formatted into 5- point Likert scale format. The mean of all variables ranged from 3.71 to 3.95. For the standard deviations it ranged from 0.53 to 0.64. The variable with the highest mean for foodscape is temperature and the lowest mean is freshness.

TABLE I: DESCRIPTIVE ANALYSIS FOR THE VARIABLES

Variable	Mean	Standard deviation
Foodscape	3.89	0.53
Temperature	3.94	0.63
Presentation	3.95	0.58
Variety	3.92	0.64
Freshness	3.71	0.61
Future behavioral Intentions	3.87	0.54

**E. Multiple Regressions**

The result shows the R-Square and Durbin-Watson test. R-Square test result of 0.514 can be accepted for the regression analysis. The Durbin-Watson test result of 1.702, an indicator that the autocorrelation is almost reaching to zero (no autocorrelation) or there is significant difference that exists between the dependent and independent variables. It appears that the four predictor variables are not all equal to each other and could be used to predict the dependent variable, customer purchase intention as is indicated by F value of 37.31 and strong significance level of 0.000 ( $p < 0.05$ ). The VIF value of less than 10 for all variables show that the problem of multi-collinearity has not existed and all data are mutually exclusive. In Table I, beta coefficient indicates which variables are important by looking at the

largest value derived. The results show that two of the foodscape variables are significant ( $p < 0.05$ ), which are presentation and freshness and have unique contributions towards future behavior intention of the customer.

TABLE II: RESULT OF COEFFICIENTS FOR FOODSCAPE DIMENSIONS

Variable	Standardized coefficients Beta	Sig	Collinearity statistics	
			Tolerance	VIF
Temperature	0.161	0.101	0.362	2.759
Presentations	0.349	0.001	0.307	3.524
Menu Variety	0.018	0.812	0.589	1.697
Freshness	0.261	0.006	0.395	2.532

**V. DISCUSSIONS AND CONCLUSIONS**

It is important to discover the importance of the elements that have effect towards the future behavioural intentions of the youth customer. Even though all the foodscape elements have significant relationship towards the independent variable, this preliminary study found that only two of the elements is significant and have unique contribution towards the future behavioral intentions of the customer, presentations and freshness.

Through results, it can be suggested that presentations and freshness play an important role in capturing the customer’s heart. Presentations are important in foodscape as it indicate the first impressions of the food product to the customer. It can be in terms of color, food presentations, and even a showmanship of the chef in preparing the dishes for the customer with an open kitchen concept. The customer is also expecting a meal that worth the money that they are willing to spend in the restaurant. This inclusive the freshness of the product- the way the product been prepared, standardized recipe and fresh and quality product in preparing the menu. These two elements lead to good taste of the food, satisfaction of customer and positive future behavioral intentions towards the restaurant. It is one of the challenge face by the industry in providing not only a quality food but also compelling for the customer and also superior than their competitors [2]. It is believed that tasty and fresh food plays an important role in the attempt to outspace the competitors but nevertheless, the quality food is the one of the best means to maximise success in the restaurant business [2]-[3].

With the wide variety and options, customers now have the power to choose the best place that fit their preferences. The restaurant operators have to take some actions in marketing their food products to capture and retain their customers and compete with others. Several ways are through marketing in the physical of the restaurant, displaying of the products, transparent kitchen or a see through kitchen to give the guest some presentation and action, smell of a freshly baked cookies and brewed coffee to invite the guest to have and spend more in the restaurant. Presentation do plays an important role in foodscape. Through the sensory, customer perceive and evaluate the food that they are going to buy and consume. Not only foodscape, the other element that must be considered in marketing the restaurant is servicescape. Nevertheless, creativity and new ideas should be continuously developed to create positive intentions of the customer.

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