

The Impact of Servicescape on Quality Perception and Customers' Behavioral Intentions

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Abstract

The theme restaurant shaped by servicescape can enhance consumers' quality perception, create a unique identification of experience, and produce market segmentation and differentia. However, most of the theme restaurant owners are still believed that there are the causal relationships between dazzling space decorations and improvement of business objectives. Although they have inputted a lot of restructure funds, some can achieve the profit goals and others are not, what caused it to happen is urgent to clarify. Furthermore, previous studies have often been focused on the linear relationship between servicescape attributes and consumers' quality perception, seldom efforts in distinguishing the attributes of servicescape quality perception. Respondents were randomly selected and required to have had at least six times theme restaurant consumption experience in past one year. Those who met this criterion were given an in-depth interview. There were 286 usable responses obtained in total. The Kano modeling approach was used to classify the quality attributes. The 18 servicescape attribute can be classified as different quality categories, and proved the non-linear relationship between attributes of quality perception and customer satisfaction. To confront the business competitions, and concern of the limitation of resources, the more important servicescape elements should be executed earlier, in order to strengthen consumers' quality perception.

JEL classification numbers: L20, L22

Keywords: Servicescape, Quality perception, Kano model, Theme restaurant

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1 Introduction

As the advent of the age of experience economy, the nature of consumption generated a tremendous change. Business firms exclusively focused on the supply side (physical aspect) in the past shift to the demand side (psychological aspect). Along with the evolution of consumption patterns, business providers develop a variety of consumer space in response to the satisfaction of food and beverage consumption. Theme restaurant primarily run by spatial planning, decor and entertainment arrangements, with a distinctive theme or specific style to attract consumers and create a value to the minds of consumers. However, after a rapid growth in popularity in the early to mid-1990s, theme restaurants began to lose market share, and many once popular brands were forced to downsize (Weiss, Feinstein, & Dalbor, 2004).

Levitt (1981) pointed out that when consumers evaluate intangible products (such as services); it is usually based on subject appearance and impression respectively. In other words, for dining services, consumer will make a judgment through the visible prospects, such as restaurants appearance or interior decor. Therefore, physical environment attributes (i.e., servicescape) in theme restaurants are likely to play a significant role in improving customers' perceptions and behaviors (Kim & Moon, 2009). Unfortunately, when designer planning such space, most follow the traditional design criteria or persistent a personal style, rarely consider the preferences of the target consumers and their habits. This study drew on Bitner (1992) framework of environmental perception as first theoretical basis, to build physical factors of the consumers' perception image in theme restaurant servicescape.

Previous studies (Baker, 1986; Bitner, 1990; Wakefield & Blodgett, 1999) emphasize servicescape affects consumer perception of service quality. Steenkamp (1989, p.100) explains the quality perception as: "an overall judgment that is based on the perception of the object (or product) on the quality attributes", and points out that consumers' overall assessment of services will be based on these perceptual cues. Other words, the servicescape performance can be considered one kind of the 'quality', and it is an important factor on consumers' satisfaction or consumption intention. The importance of quality attributes to customers is a commonly used measure of customers' preferences. Likert scales having typically 5 or 7 grades varying e.g. from strongly agree to strongly disagree are often used to exam the quality attribute of consumers. Using these kinds of measure implies a presumption of linearity effect of quality attributes on customer satisfaction (Huiskone & Pirttilä, 1998). This study argues that it's not necessary satisfaction is granted with quality attributes, sometimes be unhelpful, which means a non-linear relationship between customer satisfaction and quality attributes. To verify the consumers' needs in different levels in servicescape quality attributes, Kano model is employed to explore the classification.

This study has two primary purposes: 1) The consumption environment formed by servicescape plays a role in influencing consumer behavior. 2) Identify the priority of servicescape quality attributes, which enable business owners to satisfy consumers' quality perception in effective way, moreover, to offer designers a business model for future space planning.

2 Literature Review

2.1 The theme-oriented dining space

The theme is defined as a systematic concept or holistic description, becoming a consumption space of theme, the designer would make the concept or describe of the space materialization, so that consumers have felt fully the space of theme. A theme restaurant is a dining place decorated by a complex of distinctive signs, which derived from popular culture for which a complete and recognizable concepts (Beardsworth & Bryman, 1999). A restaurant's theme is not necessary associated with the type of meals it offer, Gottdiener (1997) takes three theme restaurants; Planet Hollywood, TGI Friday's, Hard Rock Café as examples, the dishes are the salad, burgers, sandwiches, and grilled chicken wings, comparing to other American restaurants on any town in the United States, it's hard to distinguish which of several theme restaurants from. The impression remained to consumers is the nostalgia atmosphere of the restaurant, an array of rock and roll musical instruments and memorable film world. Consumers are placed in this specific space of consumption, the purpose does not just get physical goods, moreover, enjoy the experience of appreciating theme-oriented environment and performances.

2.2 Servicescape

The consumption situation shaped by servicescape plays will affect the consumer's decision-making process at time of purchase. The situation for the behavior, most early research focused on the areas of psychology until Sandell (1968) proposes in addition to consumer and product characteristics should be explored by adding situation factors, a breakthrough in the past only for personal psychology or product factors, situation factors began to be used in the analysis of consumer behavior.

Bitner (1992) identified the dimension of servicescape as three composites (see Figure. 1): 'ambient conditions,' 'spatial layout and functionality,' and 'signs, symbols and artifacts.' 'Ambient conditions' include background characteristics of the environment such as temperature, lighting, noise, music, and scent. '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. For consumers, the servicescape can provide clues and create the immediate perceptive impression, but also on the surrounding environment to form beliefs as a basis for infer service quality.

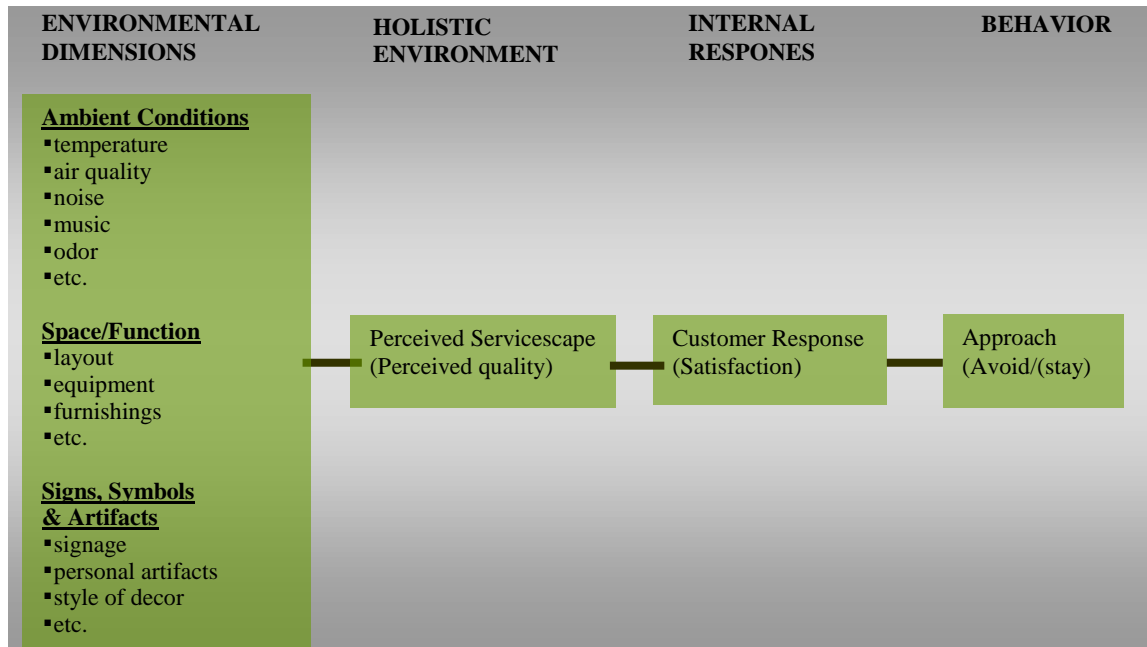


Figure 1: Servicescape framework

Since Binter (1992) proposed the term servicescape, scholars continue to amend the concept, and study the contents of different industries (see Table 1): such as Wakefield and Blodgett (1994) examined the effect of the servicescape in Major League Baseball (MLB) stadiums, and the servicescape dimensions are classified as ‘spatial layout and functionality’ and ‘aesthetics.’ Then in 1996 they advanced the five dimensions of leisure service settings: ‘layout accessibility,’ ‘facility aesthetics,’ ‘seating comfort,’ ‘electronic equipment and displays,’ and ‘cleanliness.’ Comprehensive different literature, this study classified into several dimensions: 1) aesthetics (architectural design, interior decoration), 2) ambient conditions (temperature, scent, music, lighting, color), 3) space / function (layout, aisle width, signs, dinnerware), 4) seating comfort (the distance between the table and seat, seat material and comfort), 5) cleanliness (Employee cleanliness, facilities cleanliness, toilet cleanliness).

Table 1: Prior research on the servicescape dimensions

Author	Servicescape dimensions	Attributes
Bitner (1992)	<ol style="list-style-type: none"> 1. Ambient conditions 2. Space/Function 3. Signs, Symbols and Artifacts 	<ol style="list-style-type: none"> 1. Temperature, air quality, noise, music, and odor 2. Layout, equipment, and furnishings 3. Signage, personal artifacts, and style of décor
Wakefield and Blodgett (1994)	<ol style="list-style-type: none"> 1. Spatial layout and functionality 2. Aesthetics 	<ol style="list-style-type: none"> 1. Stadium seats, ticket windows/gates, hallways/walkways, entrances/exits, food service areas, and rest-rooms (men's) 2. External environment, exterior construction, interior construction, score-boards, and facility cleanliness
Wakefield and Blodgett (1996)	<ol style="list-style-type: none"> 1. Layout accessibility 2. Facility aesthetics 3. Seating comfort 4. Electric equipment / displays 5. Cleanliness 	<ol style="list-style-type: none"> 1. Layout of exit and entry, furnishing, and equipment layout 2. Architectural design, color, and interior design 3. Physical seat and space of seat 4. Signs, symbols, and artifacts for leisure experience 5. Facility cleanliness
Wakefield and Blodgett (1999)	<ol style="list-style-type: none"> 1. Building design and décor 2. Equipment 3. Ambience 	<ol style="list-style-type: none"> 1. Outside appearance, interior design, layout, and seats 2. Electric equipment 3. Cleanliness, temperature, and neatness of employees' appearance
Lucas (2003)	<ol style="list-style-type: none"> 1. Layout navigation 2. Cleanliness 3. Seating comfort 4. Interior décor 5. Ambience 	<ol style="list-style-type: none"> 1. Architecture, interior design, and spatial layout 2. Clean slot floor 3. Padding, backrests, fabric/heat-dissipating seat, and uncrowded seat 4. Lighting, color, and floor décor 5. Internal climate, music, and visual graphic
Ryu and Jang (2008)	<ol style="list-style-type: none"> 1. Facility aesthetics 2. Lighting 3. Ambience 4. Layout 5. Dining equipment 	<ol style="list-style-type: none"> 1. Architectural design, color, and interior design 2. Type of lighting and illumination 3. Music, temperature, and scent 4. Object (e.g., machinery, equipment, and furnishings) layout 5. High-quality flatware, china, glassware, and linen
Newman (2007)	<ol style="list-style-type: none"> 1. Space 2. Way-findings 	<ol style="list-style-type: none"> 1. Spatial density 2. Legibility of internal design such as central passageways and meeting
Edwards and Gustafsson (2008)	<ol style="list-style-type: none"> 1. Internal variables 2. Layout and design variables 	<ol style="list-style-type: none"> 1. Music, noise, and odor 2. Table layout and seating
Kim and Moon (2009)	<ol style="list-style-type: none"> 1. Ambient condition 2. Facility aesthetics 3. Layout 4. Electric equipment 5. Seating comfort 	<ol style="list-style-type: none"> 1. Lighting level, temperature, aroma, and background music 2. Architecture, interior, décor, color, and overall attractiveness 3. Tables, service areas, and passageways 4. Audio/video equipment 5. Comfortable seat and uncrowded seat

2.3 Kano model

Kano, Seraku, Takahashi, and Tsuji (1984) improved people more focus on 'physical aspect' while ignoring the 'psychological aspect' quality concept, and proposed Kano model (see Figure 2).

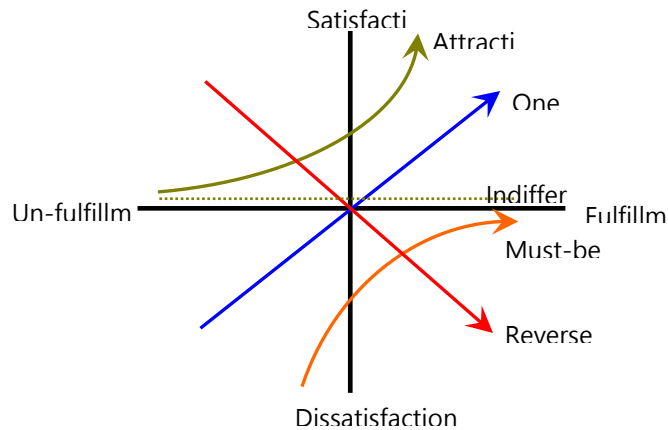


Figure 2: Kano's model of customer satisfaction

Using this model, quality attributes can be divided into five categories as follows: (1) Attractive quality attribute: an attribute that gives satisfaction if present, but that produces no dissatisfaction if absent. (2) Must-be quality attribute: an attribute whose absence will result in customer dissatisfaction, but whose presence does not significantly contribute to customer satisfaction. (3) One-dimensional quality attribute: an attribute that is positively and linearly related to customer satisfaction - that is, the greater the degree of fulfillment of the attribute, the greater the degree of customer satisfaction. (4) Indifferent quality attribute: an attribute whose presence or absence does not cause any satisfaction or dissatisfaction to customers. (5) Reverse quality attribute: an attribute whose presence causes customer dissatisfaction, and whose absence results in customer satisfaction.

For each quality attribute a pair of questions is formulated to which the customer can answer in one of five question concerns the quality has that attribute; the second concerns his reaction if the quality does not have that attribute. Surveys are carried out to collect the respondents' evaluation according to the functional and dysfunctional forms of Kano questions (Table 2).

Table 2: Kano questionnaire

Functional form of the question <i>e.g., if the quality has that attribute, how do you feel?</i>	Dysfunctional form of the question <i>e.g., if the quality doesn't have that attribute, how do you feel?</i>
<input type="checkbox"/> I like it that way	<input type="checkbox"/> I like it that way
<input type="checkbox"/> It must be that way	<input type="checkbox"/> It must be that way
<input type="checkbox"/> I am neutral	<input type="checkbox"/> I am neutral
<input type="checkbox"/> I can live with it that way	<input type="checkbox"/> I can live with it that way
<input type="checkbox"/> I dislike it that way	<input type="checkbox"/> I dislike it that way

By combining the two answers in the Kano evaluation table (Table 3), the quality attribute can be classified. If the customer answers, for example, ‘I like it that way,’ - the functional form of the question, and answers ‘I am neutral,’ or ‘I can live with it that way,’ - the dysfunctional form of the question, the combination of the questions in the evaluation table quality category A, indicating this quality attribute is an attractive customer requirement from the customer’s viewpoint. Category O means that the customer is indifferent to this quality attribute, and his satisfaction level is directly proportional to this attribute. If looking up the answer in the evaluation table yields category M, this attribute is expected by the customers and it leads to extreme customer dissatisfaction if it is absent or poorly satisfied. Category I means that the customer is indifferent to this quality attribute. He does not care whether it is present or not. He is, however, not willing to spend more on this attribute. If combining the answers yields category R, this means that the customer will be satisfied when the current quality attribute absent and dissatisfied when the current quality attribute present. Category Q stands for questionable result. Normally, the answers do not fall into this category. Questionable scores signify that the question was phrased incorrectly or that the person interviewed misunderstood the question or crossed out a wrong answer by mistake (Matzler & Hinterhuber, 1998).

Table 3: Kano evaluation table

Responses		Dysfunctional				
		like	must be	neutral	live with	dislike
Functional	like	Q	A	A	A	O
	must be	R	I	I	I	M
	neutral	R	I	I	I	M
	live with	R	I	I	I	M
	dislike	R	R	R	R	Q

In the evaluation table quality category, there are other scholars consider that more in-depth or more details questionnaire items may cause consumers to assess the results showed more dispersed condition and may also have more ‘indifferent

quality'. At this point the future should be revised in the following manner (Berger et al., 1993):

If $(A + O + M) > (I + R + Q)$, then Maximum of A or O or M

If $(A + O + M) < (I + R + Q)$, then Max. (I, Q, R).

The customer satisfaction coefficient (CS-coefficient) states whether satisfaction can be increased by meeting a product requirement, or whether fulfilling this product requirement merely prevents the customer from being dissatisfied (Berger et al., 1993). The CS-coefficient is indicative of how strongly a product feature may influence satisfaction or, in case of its 'non-fulfillment' customer dissatisfaction.

Extent of satisfaction:	Extent of dissatisfaction:
$\frac{A + O}{A + O + M + I}$	$\frac{O + M}{(A + O + M + I) \times (-1)}$

The positive CS-coefficient ranges from 0 to 1; the closer the value is to 1, the higher the influence on customer satisfaction. A positive CS-coefficient which approaches 0 signifies that there is very little influence. At the same time, however, one must also take the negative CS-coefficient into consideration. If it approaches -1, the influence on customer dissatisfaction is especially strong if the analyzed product feature is not fulfilled. A value of about 0 signifies that this feature does not cause dissatisfaction if it is not met (Matzler & Hinterhuber, 1998).

3 Research Methodology



3.1 Survey area




Taichung is located in the center of western Taiwan, and the population growth rate is first among the three major metropolitan areas (Taipei, Taichung and Kaohsiung) in Taiwan. As the citizen demands for quality of dining consumption is also more and higher, The Museum-Park- Avenue restaurant business has used different design elements materials, and has created exotic and nostalgic dining space in recent years. There are nearly 40 theme restaurants located in the 650 meters on both sides of the street, which shows extreme density.

3.2 Data Collection

Comparing with the consumer’s needs in the general restaurant, psychological aspect's pursuit of consumer behavior in the theme restaurant is far greater than the aspect of material want, there are certain intensity psychology reflections and emotional responses in the physical surroundings of the restaurant while consumption in the theme restaurant. For further purifying the cognitive response to the servicescape in the theme restaurant’s scene, eight senior interviewers were trained and hired from the Poll Center of Chien-Kuo University (Taiwan) as interview conductor. The interviewers were divided to four groups and separated from a same interval distance to conduct interview to those customers who were entering or finished the meals. Respondents were randomly selected and required to have had at least six times theme restaurant consumption experience in past one year. Those who met this criterion were given an in-depth interview and showed the scene pictures (see table 4) while interview conducting.

Table 4: The dimensions of the theme restaurants servicescape

Dimensions	Definition	Situation picture
Aesthetics	Wakefield and Blodgett (1996) argued that aesthetics are a function of architectural design, as well as interior design and décor, both of which contribute to the attractiveness of the servicescape.	
Ambient conditions	Baker (1986) stated that ambience means intangible background characteristics that tend to affect the non-visual senses and may have a subconscious effect on customers. These background conditions usually include music, scent, and temperature.	

Space / Function	Binter (1992) proposed that ‘Spatial’ refers to the ways in which machinery, equipment, and furnishings are arranged, and the spatial relationships among them. ‘Functionality’ refers to the ability of the same items to facilitate performance and the accomplishment of goals.	
Seating comfort	Refers to the diversity of body supports, according to size, material, shape, arrangement and other combinations. Wakefield and Blodgett (1996) also showed seating comfort is affected by both the physical seat itself and by the space between the seats.	
Cleanline	By order, straighten and clean, so employees and facilities presented in order. Wakefield and Blodgett (1996) stated cleanliness is an important part of the servicescape, especially in those situations in which customers must spend several hours in the leisure service setting.	

The pre-test was conducted in two weekends (including two Friday evenings) from June 3 to 12, 2014, researchers received 40 validated interview surveys, the purpose for the pre-test was to examine the validity and factor analysis of survey items, and necessary content revised according to the investigation. The official interview surveys were conducted from June 24, 2014, and ended by July 17, 2014, researcher received 300 surveys out of the 330 they distributed; after deleting incomplete 14 responses, 286 surveys were used for final analysis (86.6% response rate). Table 5 summarizes the demographic profile of the respondents.

Table 5: Demographic characteristics of participants (N=286)

Characteristics	Category	N	%	Characteristics	Category	N	%
Sex	Male	177	61.9	Age	19 and below	24	8.4
	Female	109	38.1		20~19	104	36.4
Education Level	Junior High and below	2	.7		30~39	113	39.5
	Senior High	59	20.6		40~49	41	14.3
	College	188	65.7		50 and above	4	1.4
	Graduate and above	37	12.9	Occupation	Student	71	24.8
Allowance	US\$ 330 and below	48	16.8		Public Servant and Teacher	28	9.8
	US\$ 331~600	82	28.7		Service Industry	101	35.3
	US\$ 601~1515	124	43.4		Unemployed	31	10.8
	US\$ 1516~3030	23	8.0		Manufacturing Industry	18	6.3
	US\$ 3031 and above	9	3.1		Professional Jobs	26	9.1
					Others	11	3.8

4 Measurements & Discussions

4.1 Servicescape Attributes and Purification of Measures

Survey includes three components: theme restaurant servicescape with customer satisfaction questionnaire, Kano questionnaire and demography information. Based on the review of the literature, 18 items were developed to measure the five elements of servicescape and three items were developed to measure the customer satisfaction. The items assess multiple aspects of the servicescape and adapted from previous studies, such as Kim and Moon (2009), Wakefield and Blodgett (1994), Binter (1992) and Baker, Grewal, and Parasuraman (1994) which including aesthetics (5 items), ambient conditions(5 items), space and function (6 items), seating comfort (3 items), and Cleanliness (3 items). With regard to the servicescape, subjects were asked to rate from one to five (strongly unsatisfied-strongly satisfied) how they actually felt while being in the theme restaurant. Customer satisfaction (4 items) was measured with three-item scale developed by Fornell (1992), Oliver (1980) and Lin and Wang (2006) that

contains perceived satisfaction (strongly disagree–strongly agree). The Kano questionnaire consists of pairs of customer requirement questions: how do you feel like to (1-5, strongly dislike-strongly like) if a feature is presented (functional questions), and How to you feel like to if the same feature is not presented (dysfunctional questions). Depending on customers' responses on two types of questions (functional/dysfunctional questions), we determine whether a specific service is an attractive feature, a one-dimensional feature, a must-be feature, an indifferent feature, or a reverse feature (Baek, Paik, & Yoo, 2009).

For the purposes of deleting a small number of items that had an almost equal loading on more than one factor, and to reveal a clearer factor pattern, a principal component analysis with oblique rotation was applied (Gerbing & Anderson, 1988). Then, the study checked for a possible overlap of items across factors. After the iterative deletion of items with absolute factor loading values less than 0.5 and Eigenvalue more than 1 (Lederer and Sethi, 1991), 21 items remained. Then, exploratory factor analysis (with scree test) confirmed that there were five factors underlying the servicescape construct. These factors included aesthetics (3 items), ambient conditions (5 items), space and function (4 items), seating comfort (3 items), and cleanliness (3 items). The factor analysis and associated statistics are presented in Table 6. Combined factor loadings accounted for 64.09% of the total variance in the factor pattern.

Table 6: Exploratory factor analysis and confirmatory factor analysis

Dimensions and items	Loadings
Factor 1 : Satisfaction (Eigenvalue=5.160 , Variance=24.572%, Alpha =0.856)	
Overall, I am satisfied for the service of the theme restaurant.	.878
I think that I did the right thing when I decided to go to the theme restaurant.	.864
I think that the service of the theme restaurant has met my expectations.	.846
Factor 2 : Cleanliness (Eigenvalue=2.331 , Variance =11.100%, Alpha =0.818)	
Employees are neat appearing.	.866
This theme restaurant maintains clean restrooms.	.853
Overall, this theme restaurant is kept clean.	.774
Factor 3 : Space/function (Eigenvalue=2.013 , Variance = 9.585%, Alpha =0.743)	
In this theme restaurant, the seating between neighbor are well spaced out.	.820
In this theme restaurant, the aisles between the tables are wide enough to pass through easily.	.746
The signs in this restaurant environment provide adequate direction and help you find your way.	.728
Exquisite tableware adds dining atmosphere.	.467
Factor 4 : Ambient condition (Eigenvalue=1.553 , Variance =7.395%, Alpha =0.698)	
The temperature in this theme restaurant is comfortable.	.685

The aroma in this theme restaurant is pleasant.	.654
The background music, played overhead, makes this theme restaurant a more enjoyable place.	.612
The overall lighting level in this theme restaurant environment is appropriate.	.602
The use of color in the décor scheme adds excitement to this theme restaurant environment.	.590
Factor 5 : Aesthetics (Eigenvalue=1.222 , Variance =5.818%, Alpha =0.701)	
This theme restaurant's architecture gives it an attractive character.	.793
This theme restaurant's interior décor is decorated in an attractive fashion.	.772
This restaurant's style meets the theme.	.661
Factor 6 : Seating comfort (Eigenvalue=1.180 , Variance =5.619%, Alpha =0.728)	
This theme restaurant's chairs allow me to sit at a comfortable distance from the table.	.797
It is easy to get in and out of the seats at This theme restaurant.	.775
This theme restaurant's seats are comfortable.	.648

4.2 Kano classification and analysis

All attributes for the servicescape, Kano questionnaire is a set of ‘relative’ question inquiries the Respondents' ideas, and through the ‘Kano evaluation table’ (see Table 3) to determine its ‘quality attributes’. An overview of the attributes categories of the individual quality attributes is gained from the table of results (Table 7). The method is evaluation and interpretation according to the frequency of answers. To ‘This theme restaurant's interior décor is decorated in an attractive fashion’, for example, its ‘attractive,’ ‘must-be,’ ‘one-dimensional,’ ‘indifferent’ and ‘reverse’ are as follows: 32.9%, 22.7%, 11.9%, 31.8% and 0.7%, of which ‘attractive’ accounted for 32.9% was significantly higher than other categories, we can determine the quality attributes of ‘attractive quality’.

Table 7: Table of results

Servicescape attributes		A	O	M	I	R	Category	Positive CS-coefficient	Negative CS-coefficient
Aesthetics	This theme restaurant's architecture gives it an attractive character.	26.9	19.2	14.7	25.2	14.0	A	53.60	-39.42
	This theme restaurant's interior décor is decorated in an attractive fashion.	32.9	22.7	11.9	31.8	0.7	A	55.99	-34.84
	This restaurant's style meets the theme.	22.4	23.4	21.0	32.5	0.7	I	46.12	-44.71
Ambient conditions	The temperature in this theme restaurant is comfortable.	13.3	33.9	25.9	26.6	0.3	O	47.34	-59.98
	The aroma in this theme restaurant is pleasant.	10.5	31.1	31.5	26.2	0.3	M	41.89	-63.04
	The background music, played overhead, makes this theme restaurant a more enjoyable place.	29.0	18.5	11.2	40.9	0.3	I (A)	47.69	-29.82

	The overall lighting level in this theme restaurant environment is appropriate.	23.4	21.0	15.7	39.5	0.3	I (A)	44.58	-36.85
	The use of color in the décor scheme adds excitement to this theme restaurant environment.	29.7	11.5	16.4	41.6	0.7	I (A)	41.53	-28.13
Space / Function	In this theme restaurant, the seating between neighbor are well spaced out.	13.6	26.9	24.1	34.3	0.3	I	40.95	-51.57
	In this theme restaurant, the aisles between the tables are wide enough to pass through easily.	12.9	27.6	24.1	34.6	0.7	I	40.83	-52.12
	The signs in this restaurant environment provide adequate direction and help you find your way.	16.8	17.8	17.8	45.8	0.7	I	35.23	-36.25
	Exquisite tableware adds dining atmosphere.	24.1	15.4	10.5	49.7	0.3	I (A)	39.62	-25.98
Seating comfort	This theme restaurant's chairs allow me to sit at a comfortable distance from the table.	16.4	27.3	23.1	32.2	0.7	I	44.14	-50.91
	It is easy to get in and out of the seats at This theme restaurant.	20.3	26.9	21.3	30.4	0.7	I	47.72	-48.74
	This theme restaurant's seats are comfortable.	16.1	36.0	21.3	25.5	0.3	O	52.68	-57.94
Cleanliness	Employees are neat appearing.	13.6	44.1	26.6	15.0	0.3	O	58.11	-71.20
	This theme restaurant maintains clean restrooms.	9.1	51.0	26.9	11.9	0.3	O	60.77	-78.77
	I think that the service of the theme restaurant has met my expectations.	9.8	50.7	25.9	12.9	0.3	O	60.93	-77.14

By the table, the Kano Category of the servicescape attributes such as the following description:

(1) 2 items were classified as ‘attractive’, which include ‘This theme restaurant's architecture gives it an attractive character’ and ‘This theme restaurant's interior décor is decorated in an attractive fashion’. This shows that the ‘function’ of the attribute significantly enhances ‘satisfaction’, but when the ‘dysfunction’ the consumers' ‘dissatisfaction’ will not significantly improve.

(2) 5 items were classified as ‘one-dimensional’, which include ‘The temperature in this theme restaurant is comfortable,’ ‘This theme restaurant's seats are comfortable,’ ‘Employees are neat appearing,’ ‘This theme restaurant maintains clean restrooms,’ and ‘I think that the service of the theme restaurant has met my expectations.’ That is, the five attributes are those for which better ‘function’ leads to linear increment of customer ‘satisfaction’.

(3) 1 items was classified as ‘must-be’, namely, ‘The aroma in this theme restaurant is pleasant’. This means that respondents for the design requirements of theme restaurant servicescape must have ‘pleasant aroma’ character, although the

strengthening of the 'function', the 'satisfaction' will not improve; but when it is not enough, the consumers' 'dissatisfaction' will increase substantially.

(4) 10 items were classified as 'indifferent', which include 'This restaurant's style meets the theme,' 'The background music, played overhead, makes this theme restaurant a more enjoyable place,' 'The overall lighting level in this theme restaurant environment is appropriate,' 'The use of color in the décor scheme adds excitement to this theme restaurant environment,' 'In this theme restaurant, the seating between neighbor are well spaced out,' 'In this theme restaurant, the aisles between the tables are wide enough to pass through easily,' 'The signs in this restaurant environment provide adequate direction and help you find your way,' 'Exquisite tableware adds dining atmosphere,' 'This theme restaurant's chairs allow me to sit at a comfortable distance from the table,' and 'It is easy to get in and out of the seats at This theme restaurant.' That is, whether the ten attributes are 'function' or 'dysfunction', the consumers 'satisfaction' are not affected.

4.3 Customer satisfaction coefficient analysis

To the ten 'indifferent' case of Table 7, its more than half of the total items, the causes may be more in-depth or more details questionnaire items, this time to follow the way of future amendment (Berger et al., 1993), can be precipitated, 'The background music, played overhead, makes this theme restaurant a more enjoyable place,' 'The overall lighting level in this theme restaurant environment is appropriate,' 'The use of color in the décor scheme adds excitement to this theme restaurant environment,' and 'Exquisite tableware adds dining atmosphere.' There is likelihood 'attractive' effect, and the CS are greater than the DS, indicating that 'function' of the four attributes for impact of the 'satisfaction' is greater than the 'dysfunction' for 'dissatisfaction' effect. Therefore, this study classified the four attributes in 'attractive / indifferent', to keep multidimensional concept.

Furthermore, CS-coefficient can be regarded as an index to measure the quality attributes come into force, increase satisfaction and eliminate dissatisfaction. In order to facilitate further explore, The CS-coefficient can be plotted in a two-dimensional diagram, where the horizontal axis indicates the dissatisfaction degree and the vertical axis stands for the satisfaction degree. Respectively two coefficients divided by the average level of 0.5, the 18 attributes of the restaurant servicescape will fall within the four areas to facilitate interpretation and decision-making (see Figure 3).

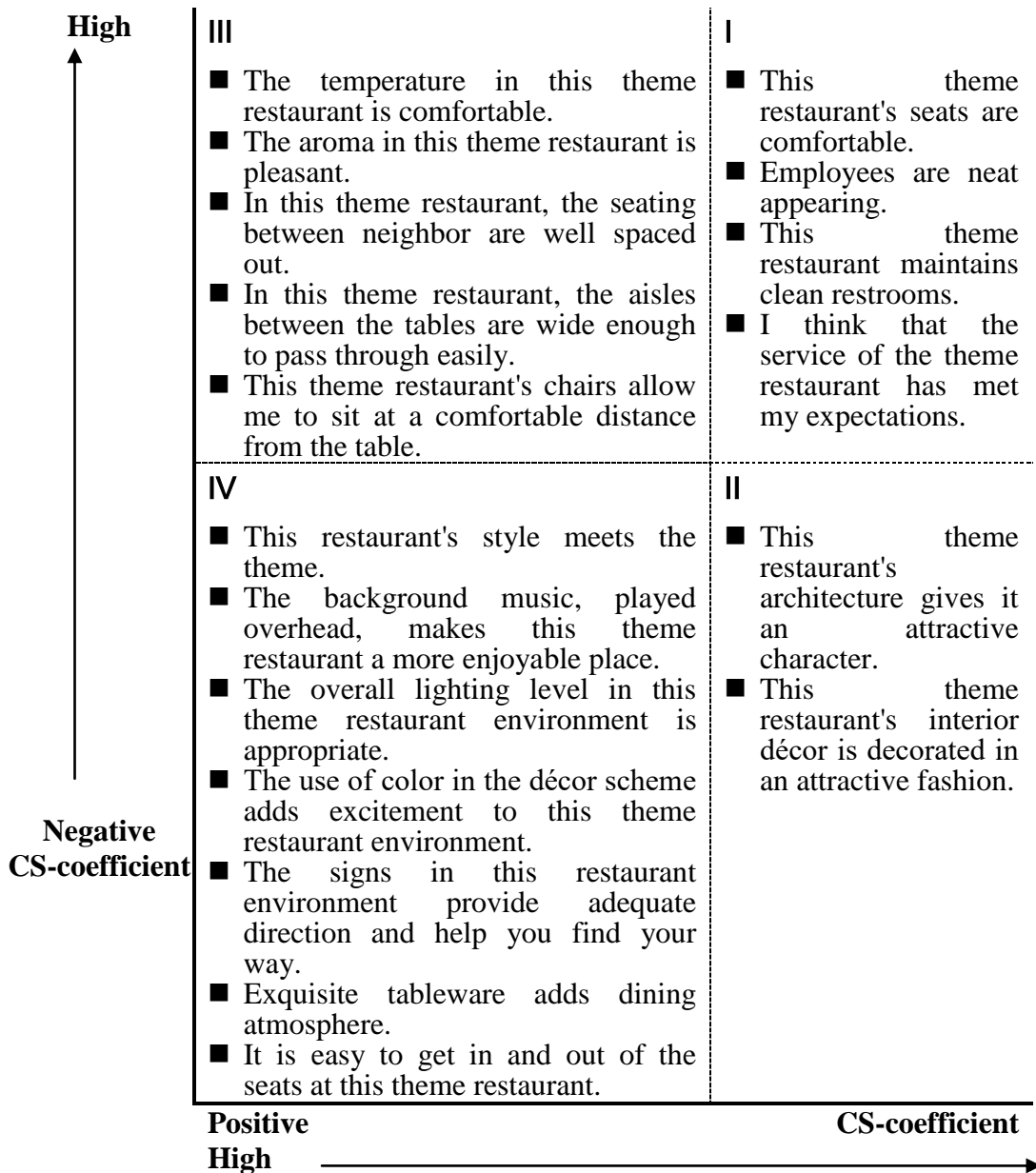


Figure 3 CS-coefficient analysis

Areal : These items can greatly increase satisfaction and eliminate dissatisfaction, and they almost match the items of the ' one-dimensional' category. This means that customer satisfaction is proportional to the level of fulfillment - the

higher the level of fulfillment, the higher the customer's satisfaction and vice versa. Therefore, the theme restaurant business should give priority to the implementation of these items.

Area II : Although these items do not eliminate the high degree of dissatisfaction, but can be a significant increase in satisfaction; they are entirely consistent the items of the 'attractive' category. This shows the availability of the two items can greatly enhance satisfaction. Therefore, the theme restaurant business should be targeted for early implementation of the two items as a tool to create differentiation.

Area III : Although these items do not eliminate the high degree of dissatisfaction, but can be a significant increase in satisfaction; they are entirely consistent the items of the 'attractive' category. This shows the availability of the two items can greatly enhance satisfaction. Therefore, the theme restaurant business should be targeted for early implementation of the two items as a tool to create differentiation.

Area IV: Although these items does not eliminate the high level of dissatisfaction, but with a revised classification of this study more than half of the items in line, and the positive CS-coefficient are higher than the negative CS-coefficient. Therefore, the theme restaurant business will be able to meet the needs of specific customer groups if they take these items to create significant characteristic.

5 Conclusion

As income increases and improved standard of living, consumers are no longer limited to basic dietary needs, but also require an atmosphere of restaurant décor and service quality better. Therefore, the food and beverage business are also facing a need to develop a variety of appearance and customized services to meet consumer demand challenges. Theme restaurant business are not unaware of the servicescape and the importance of service quality, but the lack of how to decide what kind of quality attributes available, and for a certain quality attributes and satisfaction with the relevance of understanding. The Kano model itself contains a meaning of identification and differentiation, so this study apply Kano model to explore the relationship between the quality attributes and satisfaction, in order to clarify the real consumer demand for the servicescape. The results pointed out that the 18 servicescape attributes can be classified as different quality categories, and there is the existence of the non-linear relationship between quality attributes and consumer satisfaction. Summarized in this study and the questionnaire related to the theme restaurant servicescape dimensions, also do follow-up study for reference.

In view of the frequent inconsistency between 'attractive' and 'indifferent' frequently, the main reason may be derived from the characteristic of 'attractive' in itself: when the quality is sufficient, will greatly enhance satisfaction, and often beyond the consumer expected, not easily articulated (Sauerwein, Bailom, Matzler, & Hinterhuber, 1996). This study also conducted CS-coefficient analysis, originally classified as four 'indifferent' categories in correction for 'attractive', and the 18 servicescape attributes are divided into four areas. The items of areal almost match the items of the 'one-dimensional' category, and they can be implemented as priority projects, which means is to provide comfortable seating and clean environment for consumers to talk, dining and leisure activities, and thus to satisfy the heart; the items of areall are entirely consistent the items of the 'attractive' category, they can be used as a tool to create differentiation, which means based on architecture and interior design have contributed to the attractiveness of the servicescape, through shape, line, texture and scale to convey the consumer's personality Field, so that consumers in a variety of topics in space conducted by sensory experience, enhanced quality experience, providing an effective trade-off oncrete results in order of importance, and feedback to design professional application.

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