CHAPTER 4

4.0 STUDY ANALYSIS

4.1 Introduction

This chapter reveals the finding obtained from the analyses. It begins with demographic and dining profiles of the respondents. Normality tests were performed to ensure the sample normality. It is then followed by validity tests and two inferential analyses were conducted namely, Pearson's correlation and multiple regression. The bivariate analysis analyses the relationship between the independent variables and the dependent variables whereas multiple regression was carried out to identify the predictors of customer satisfaction and behavioural intention in full service restaurant in Malaysia.

4.2 Demographic and dining profiles of respondents

Frequency distributions are obtained for all personal data. All questionnaires are collected and keyed in using electronic data compiling to ensure complete forms are obtained for analysis. Incomplete return questionnaires are eliminated. There are 113 respondents from random electronic mailing and remaining 87 are from random distribution to diners.

Among the respondents, males accounted for 51% of diners while females accounted for 49% of total respondents. 126 (63%) diners are Chinese, Malays accounted for 39 (19.5%), 27 (13.5%) are Indians and 8 (4%) are others. A total of 67

respondents aged from 25 to 29 years old, 45 (22.5%) are aged from 30 to 34 years old and 31 (15.5%) respondents are in the range of 35 to 40 years old. These groups are accounted for over 70% of the respondents as they are likely to dine out more frequently due to work and other social activities.

In term of academic profile, of the total number of respondents, about half of the respondents are degree/professional certificate holders, 18.5% are postgraduates, 15% are diploma holders and 11% are others namely STPM, SPM, LCE, HSC and PMR or below. The group of respondents contained a mix of managers, administrators, and professionals in a wide variety of supervisory and nonsupervisory positions. Senior executives or executives are comprised of 41.5% (83) of the respondents while 33 or 16.5% of the respondents are managers/directors. Supervisor/team leader and service/sales personnel are 28 (14%) and 23 (11.5%) respectively. The other respondents are students 13 (6%), clerical/administration 11 (5.5%), individual/owner 8 (4%) and manual/craft worker 1 (0.5%). The mean of income level of the respondents is from RM 3, 001 to RM 4, 000.

In the dining profile of respondents, the frequency of dining out per week and dining companion data were collected. The frequency of respondents dining out is divided zero time, 1-3 times, 4-6 times, 7-9 times and more than 9 times per week. All the respondents have at least dined out once a week. Out of the 200 respondents, 70 of them would dine out 1-3 times a week, 58 would dine out 4-6 times, 32 and 40 would dine out 7-9 times and more than 9 times a week.

Respondents were most likely to dine out with their family (Spouse, Parents and Children), 47.6%, followed by friends (32.5%) and alone (10%), and were less likely colleagues (6.5%) and relatives (2.5%).

Demographic profile	
Item	**Percentage**
Gender	
Male	51.0%
Female	49.0%
Marital Status	
Single	55.5%
Married	44.5%
Ethnic Group	
Malay	19.5%
Chinese	63.0%
Indian	13.5%
Others	4.0%
Educational Level	
PMR/ LCE or below	1.0%
SPM/ STPM/ MCE/ HSC	9.5%
Certificate/ Diploma	15.0%
Degree/ Professional Certificate	56.0%
Postgraduate	18.5%
Others	0.5%
Income Level	
< 2,000	11.0%
2,001 – 3,000	21.0%
3,001 – 4,000	26.0%
4,001 – 5,000	14.0%
5,001 – 6,000	9.5%
6,001 – 7,000	5.5%
7,000 above	13.0%
Dining Profile	
Dining Companion	
Alone	10.0%
Family (Spouse, Parents, Children)	47.5%
Relatives	2.5%
Friends	32.5%
Colleagues	6.5%
Others	1.0%
Dine Out Frequency/week	
0	0.0%
1—3	35.0%
4—6	29.0%
7—9	16.0%
>9	20.0%

Table 4.0 Demographic and dining profiles of respondents.

4.3 Analyses of measures

4.3.1 Validity test

The importance and performance of each attributes were assessed using Kaiser-Meyer-Olkin (KMO) measure of sampling accuracy (Kaiser, 1970 & 1974) and Bartlett's test of sphericity (Bartlett, 1954) to access on the factorability of the data. The KMO value for all attributes is 0.865 of which satisfied the minimum requirement of 0.6. As shown on table 4.1, the significant level of Barlett's test of sphericity is at 0.000 which indicate that the factor analysis is appropriate.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.865
Bartlett's Test of Sphericity	Approx. Chi-Square	8100.644
	Df	1326.000
	Sig.	.000

Table 4.1 Importance of full service restaurant attributes.

In addition to KMO test, the number of components which meet Kaiser's criterion, a total variance explained was determined. There are six components explaining a total of 60.32% of the variance based on the acceptable eigenvalues. Varimax rotation was performed and the rotated solution revealed a number of strong and all variables are substantially on only one component. This has supported that the grouping of the attributes are appropriate (please refer to table 4.2 for factor loadings for each attribute).

4.3.2 Reliability test

All attributes were assessed on the reliability of each variable. The measurement's reliability was access by Cronbach's alpha to ensure adequate internal consistency. As shown on table 4.2, the alpha value of each construct is ranged from 0.811 to 0.956. As most of the attributes are used twice to measure on the importance of each attribute to diners and their perceived performance of the same attributes based on their dining experience in a full service restaurant, the alpha values for importance of attributes and attributes' performance are measured separately. No alpha values were measured for price fairness, customer satisfaction and behavioural intention for importance of attributes.

The alpha values for importance of attributes and attributes' performance are relatively comparable for all six constructs; physical environment, food quality, service quality, price fairness, customer satisfaction and behavioural intention. 7-items were used to evaluate physical environment, food quality and service quality. Only one-item used for price fairness under importance of attributes but 4-items were used to evaluate customer perception towards price fairness based on their last dining experience in a full service restaurant. There are 2-items under customer satisfaction and 3-items for behavioural intention for performance.

After rewording food safety to food cleanliness and accurate guest check to accurate guest billing the Cronbach's alpha values obtained in the study are 0.839 and 0.916 respectively. The modification is as discussed in Chapter 3.

	Factor loadings	Cronbach's alpha	
		Importance of Attributes	Attributes' performance
Physical Environment		0.811	0.871
Interior design and Decoration	0.816		
Lighting	0.647		
Music	0.716		
Appropriate room temperature	0.681		
Aroma	0.540		
Neat and well-dressed employees	0.609		
Environment cleanliness	0.578		
Food Quality		0.839	0.92
Taste	0.760		
Food presentation	0.737		
Menu variety	0.612		
Healthy food options	0.658		
Food freshness	0.808		
Appropriate food temperature	0.793		
Food cleanliness	0.680		
Service Quality		0.916	0.919
Friendly and helpful employees	0.651		
Attentive employees	0.690		
Employees have knowledge of the menu	0.633		
Serve food as ordered	0.619		
Accurate guest billing	0.460		
Prompt service	0.822		
Dependable and consistent service	0.707		
Price Fairness		-	0.914
The food prices at this restaurant are fair	0.765		
The beverage prices at this restaurant are fair	0.814		
The price charged by this restaurant is appropriate	0.876		
The price charged by this restaurant is rational	0.821		
Customer Satisfaction		-	0.874
I am satisfied with this restaurant	0.711		
I am pleased to have visited this restaurant	0.748		
Behavioural Intention		-	0.956
Repeat patronage	0.752		
Recommendation	0.768		
Favourable word-of-mouth	0.731		

Table 4.2 The result of confirmatory factor analysis and reliability analysis.

4.4 Importance-performance analysis

4.4.1 Importance of attributes

The importance of each attribute is ranked using the mean as the score for the importance level of the attributes. Table 4.2 shows the attribute importance ranking and scores. The six most important restaurant attributes are food cleanliness, accurate guest billing, environment cleanliness, food freshness, taste and food serve as ordered have average scores of above six. These rankings reveal the salient positions of food quality, environmental sanitation and service accuracy in the decision-making process in choosing a food establishment.

On the other hand, the five least important restaurant attributes include healthy food option, food presentation, lighting, interior design and decoration and music. Out of the five least important attributes, there are three attributes which have average scores of less than five. This is indicating that respondents perceived these attributes to be least important when choosing a food establishment or could simply mean they just don’t expect much from physical environment and particularly on the lighting, interior design and decoration and music when visiting a food establishment. The others restaurant attributes are ranged between 5.1 and 6. The mean for the importance of all attributes is 5.64.

Rank	Attributes	Mean	Std. Dev.
1	Food cleanliness	6.49	0.86
2	Accurate guest billing	6.29	0.96
3	Environment cleanliness	6.24	0.94
4	Food freshness	6.21	1.01
5	Taste	6.15	0.90
6	Serve food as ordered	6.13	0.94
7	Price Fairness	5.99	0.88
8	Prompt service	5.98	0.96
9	Dependable and consistent service	5.98	0.91
10	Appropriate food temperature	5.85	0.92
11	Friendly and helpful employees	5.83	1.04
12	Attentive employees	5.76	1.06
13	Employees have knowledge of the menu	5.60	1.12
14	Appropriate room temperature	5.48	1.13
15	Neat and well-dressed employees	5.45	1.14
16	Menu variety	5.31	1.16
17	Aroma	5.22	1.26
18	Healthy food options	5.18	1.27
19	Food presentation	5.16	1.16
20	Lighting	4.83	1.24
21	Interior design and Decoration	4.68	1.17
22	Music	4.23	1.43

Table 4.3 Importance of full service restaurant attributes.

4.4.2 Attribute performance

Similarly, the attribute performance perceived by respondents is ranked based on the average scores of each attributes. Table 4.3 reports the attribute performance ranks and scores. The mean score of the overall performance is 5.17, indicating that full service restaurants in Malaysia as a whole did relatively well in meeting diners' expectation. The top five highest performance attributes are accurate guest billing, food cleanliness, serve food as ordered, environment cleanliness and food freshness with the scores of 5.97, 5.78, 5.73, 5.66 and 5.58 respectively. In other words, full service restaurants provide accurate services in term of guest billing and serve as ordered, satisfying food quality and environment sanitation.

Rank	Attributes	Mean	Std. Dev.
1	Accurate guest billing	5.97	1.01
2	Food cleanliness	5.78	1.06
3	Serve food as ordered	5.73	1.07
4	Environment cleanliness	5.66	1.13
5	Food freshness	5.58	1.18
6	Appropriate food temperature	5.51	1.13
7	Taste	5.51	1.14
8	Friendly and helpful employees	5.35	1.25
9	Prompt service	5.28	1.47
10	Menu variety	5.25	1.21
11	Neat and well-dressed employees	5.24	1.11
12	Dependable and consistent service	5.22	1.32
13	Appropriate room temperature	5.20	1.31
14	Interior design and Decoration	5.07	1.12
15	Food presentation	5.07	1.21
16	Lighting	5.06	1.08
17	Employees have knowledge of the menu	5.03	1.39
18	Attentive employees	4.90	1.49
19	Aroma	4.84	1.13
20	Healthy food options	4.71	1.23
21	Music	4.29	1.48
22	Price fairness	3.65	0.89

Table 4.4 Performance of restaurant attributes for full service restaurant in Malaysia

The least performing attributes are attentive employees (4.90), aroma (4.84), healthy food options (4.71), music (4.29) and price fairness (3.65). Although the full service restaurants provide accurate guest billing but the price they are charging for food and beverages are perceived as overpriced. The attributes which have low scores are indicating that there are still rooms for full service restaurant to improve. However, the ranking of the importance and performance are relative measures and not absolute measures of the importance and performance level.

4.4.3 Importance – performance approach

Importance – performance approach is used to facilitate the data in the management decision making process. In this importance – performance matrix, the mid-points of the Likert scale for both importance and performance score are used as references to divide the grid into four quadrants. Under "Concentrate Here" quadrant, the attributes are considered to be important by respondents but have low performance level. Thus, more effort should be concentrated on these attributes to improve the diners' dining experience. As shown on figure 4.0, price fairness and attentive employees fall in the "Concentrate Here" quadrant. In other words, full service restaurants need to pay attention in these two attributes to improve customer satisfaction and behavioural intention.

There are nine attributes that are located at the quadrant "Keep up the Good Work" include food cleanliness, accurate guest billing, environment cleanliness, food freshness, taste, serve food as ordered, prompt service, dependable and consistent service, appropriate food temperature and friendly and helpful employee. In this quadrant the attributes are considered to be important and have high performance values by respondents. Thus, it is important to maintain the current effort and performance of these attributes to attract and retain diners.

There are three attributes that fall on the "Possible Overkill" quadrant whereby the attributes have a relative low importance score but coupled with high performance scores. Appropriate room temperature, neat and well-dressed employees and menu variety are among the attributes that fall under "Possible Overkill" quadrant. In specific cases, service providers may shift or reallocate their resources to other

quadrants. However, in the effort to improve customer satisfaction and encourage intentional behaviour, no attribute can be overdone as service providers need to provide more than what is necessary to face intense competition.

In this case, there are also seven attributes fall in the "Low Priority" quadrant namely, appropriate room temperature, employees have knowledge of the menu, aroma, healthy food options, food presentation, lighting, interior design and decoration and music. In this "Low Priority" quadrant, respondents ranked this as low priority and at the same time the service providers have paid less attention to the attributes and therefore have a low performance rating.

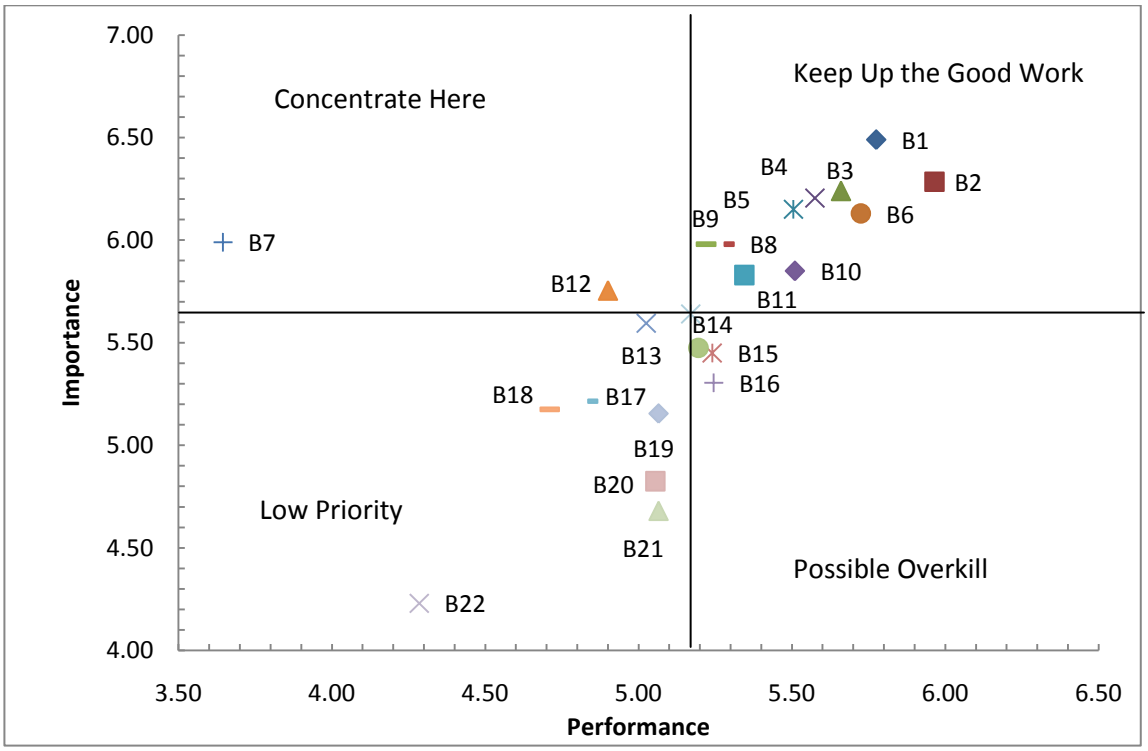

Figure 4.0 Importance - performance analysis matrix

4.5 Restaurant attributes influencing customer satisfaction

Besides attribute importance, the influence of each restaurant attribute toward customer satisfaction is identified using regression. Multicollinearity is not a main concern as all the VIF values for all constructs are at 1 which is below the acceptable level of 10 and tolerance statistic of more than the minimum requirement of 0.65. As price fairness is using a 5-point semantic scale and is different from customer satisfaction and behavioural intention which use 7-point Likert scale, the data collected were transformed into a 7-point scale using SPSS.

The R^2 obtained for physical environment is 0.065 and it is highly significant at 0.001 levels which translate that the physical environment has a significant influence on customer satisfaction. Among the physical environment attributes, all except music is significantly related to customer satisfaction. In other words, whether or not music is played in the restaurant, it does not affect customer satisfaction. Aroma, environmental cleanliness and lighting relationship are significant (p = 0.000) while interior design and decoration, appropriate temperature and neat and well-dressed employees are significant at the level of under 0.05. In this case, aroma is the biggest contributor to satisfaction compared to other physical environment related attributes. Favourable smell or aroma can stimulate customers' appetite, pleasant emotions, patronage duration, and food intake during visit which can positively affect customer satisfaction. Full service restaurant should put more emphasis in creating enticing aroma to improve customer satisfaction.

All food quality have show positive relationship with customer satisfaction at significant level of 0.000. Food quality has the highest R^2 (R^2 = 0.155; p = 0.000)

comparing to other independent variables. Appropriate food temperature is found to have greatest influence on customer satisfaction level and followed by food cleanliness, food freshness, taste, healthy food options, food presentation and menu variety. Taste was reported to have the lower influence on customer satisfaction compared to food cleanliness and food freshness. The level of satisfaction may be related to the importance level of the restaurant attributes. For instance, food cleanliness and food freshness are considered to be more important than taste when choosing a food establishment (refer to table 4.3) and thus resulted to have a bigger impact on customer satisfaction. The significant level of the food quality has proven that food quality attributes do have effect on customer satisfaction.

Service quality is the second most influential attribute on customer satisfaction with R^2 equals to 0.139 and the significant level is 0.000. All attributes in the service quality group are significant and do have comparable impact on customer satisfaction. Both prompt service and dependable and consistent service demonstrated the importance of service reliability and attentiveness of employees in improving customer satisfaction. The result obtained has demonstrated the significant positive effect service quality attributes on customer satisfaction.

As for price fairness, although it has the lowest R^2 of 0.032, it still has a significant effect on customer satisfaction but at the significant level of under 0.05 (0.011 as shown in table 4.5). However, it is shown price fairness for beverages does not have a significant influence on customer satisfaction. Fair food pricing, appropriate food pricing or rational food pricing show that if consumer perceived the

price charge by the full service restaurant is fair, appropriate and rational, it will result in customer satisfaction.

	Customer Satisfaction (Statistic)	R^2	Sig.
Physical Environment		0.065	0.000
Interior design and Decoration	0.179		
Lighting	0.209		
Music	0.124		
Appropriate room temperature	0.164		
Aroma	0.283		
Neat and well-dressed employees	0.198		
Environment cleanliness	0.221		
Food Quality		0.155	0.000
Taste	0.317		
Food presentation	0.315		
Menu variety	0.245		
Healthy food options	0.314		
Food freshness	0.327		
Appropriate food temperature	0.432		
Food cleanliness	0.395		
Service Quality		0.139	0.000
Friendly and helpful employees	0.254		
Attentive employees	0.320		
Employees have knowledge of the menu	0.320		
Serve food as ordered	0.281		
Accurate guest billing	0.307		
Prompt service	0.334		
Dependable and consistent service	0.333		
Price Fairness		0.032	0.011
The food prices at this restaurant are fair	0.155		
The beverage prices at this restaurant are fair	0.166		
The price charged by this restaurant is appropriate	0.150		
The price charged by this restaurant is rational	0.167		

Table 4.5 Restaurant attributes influencing customer satisfaction.

4.6 Restaurant attributes influencing behavioural intention

Similarly, regression and multicollinearity analysis were conducted to study the relationship of restaurant attributes with customer behavioural intention as well as to identify the significant determinants of behavioural intention. Multicollinearity is also not a main concern here as all the VIF values for all constructs are at 1 which is below the acceptable level of 10 and tolerance statistic of more than the minimum requirement of 0.65. Price fairness scale is transformed before conducting multiple regression to standardise analysis scale.

The physical environment related attributes have demonstrated significant influence on behavioural intention. Only music is significant predictor at 0.05 level while others are attributes significant predictor at 0.001. Among the physical environment attributes environment cleanliness has the greatest impact on behavioural intention and followed by lighting and aroma. Although lighting appears to be less important (refer to table 4.4) but it has revealed that it has strong effect in creating behavioural intention. This may be because lighting may create an environment whereby customer feel comfortable and have pleasant experience. On the other hands, music has the lowest impact on behavioural intention and it is in line with its impact on customer satisfaction. The R^2 value obtained for physical environment is 0.163 and the significant level is at 0.000. Based on the result, physical environment related attributes play a vital role in encouraging behavioural intention.

The food quality related attributes are reported to have stronger relationship compared to other attributes. Among food quality attributes, food freshness has the highest impact in influencing behavioural intention and followed by appropriate food

temperature, food cleanliness and taste. The food quality related attributes that show weaker relationship are healthy food options, food presentation and menu variety being the least influential in creating behavioural intention. Unlike the customer satisfaction model, food quality related attributes have a greater relationship in behavioural intention model. The R^2 obtained for food quality is 0.489 and significant level of 0.000 as shown in table 4.6.

In behavioural intention model, service quality related attributes have demonstrated to have stronger relationship compared to physical environment and price fairness. The R^2 and significant level are 0.326 and 0.000. As shown in table 4.6, employee knowledge on the menu appears to be the greatest influence in creating behavioural intention. Dependable and consistent service and prompt service have correlation of 0.538 and 0.500 with behavioural intention. Although food served as order and accurate guest billing are rated quite importantly by respondent (refer to table 4.3 for importance of attributes and table 4.4 for attribute performance), these two attributes are found to have the least effect on behavioural intention.

Price fairness has also demonstrated to have a relationship with behavioural intention, with R^2 equal to 0.186 and significant at the level of 0.000. Price fairness has a greater impact in creating behavioural intention such as return patronage, recommendation to customer and favourable word-of-mouth compared to physical environment. The correlation of the perceived price fairness for both food and beverage, appropriate food pricing and rational food pricing are quite similar. Thus, so long customer perceived the pricing is fair, appropriate and rational; they are likely to return, recommend and have favourable word-of-mouth of the full service restaurant.

	Behavioural Intention (Statistic)	R^2	Sig
Physical Environment		0.163	0.000
Interior design and Decoration	0.337		
Lighting	0.348		
Music	0.215		
Appropriate room temperature	0.293		
Aroma	0.343		
Neat and well-dressed employees	0.261		
Environment cleanliness	0.368		
Food Quality		0.489	0.000
Taste	0.601		
Food presentation	0.530		
Menu variety	0.416		
Healthy food options	0.547		
Food freshness	0.692		
Appropriate food temperature	0.652		
Food cleanliness	0.609		
Service Quality		0.326	0.000
Friendly and helpful employees	0.463		
Attentive employees	0.490		
Employees have knowledge of the menu	0.549		
Serve food as ordered	0.351		
Accurate guest billing	0.361		
Prompt service	0.500		
Dependable and consistent service	0.538		
Price Fairness		0.186	0.000
The food prices at this restaurant are fair	0.367		
The beverage prices at this restaurant are fair	0.380		
The price charged by this restaurant is appropriate	0.400		
The price charged by this restaurant is rational	0.393		

Table 4.6 Restaurant attributes influencing behavioural intention.

4.7 Hypotheses testing

4.7.1 Customer satisfaction model

In the study of influence of each attributes in customer satisfaction and behavioural intention, only music and perceived fair beverages pricing shown insignificant influence on customer satisfaction. However, to reaffirm the significant determinants/attributes in influencing customer satisfaction as well as the contribution of physical environment, food quality, service quality and price fairness in resulting customer satisfaction, a multiple regression is conducted.

Dependent Variable: Customer Satisfaction					
	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.550	0.444		5.745	0.000
Physical Environment	0.060	0.078	0.058	0.765	0.445
Food Quality	0.228	0.090	0.233	2.530	0.012
Service Quality	0.154	0.080	0.174	1.909	0.048
Price Fairness	0.063	0.081	0.053	0.776	0.439

Table 4.7 The coefficient of physical environment, food quality, service quality and price fairness with customer satisfaction.

As shown in table 4.7, the regression coefficient for physical environment and price fairness are 0.060 and 0.063 respectively. These two variables are reported to be insignificant contributor/determinant in customer satisfaction as the significant value is 0.445 and 0.439 which far above the minimum requirement of 0.05 significant levels. Thus, the hypothesis of physical environment is a significant determinant of customer satisfaction in full service restaurant (H1a) is rejected. Similarly, the

hypothesis of price fairness is the significant determinant of customer satisfaction (H4a) is also rejected.

Based on multiple regression, only food quality and service quality have a significant influence in resulting customer satisfaction prior to their dining experience. The beta coefficient of food quality and service quality are 0.228 and 0.154 respectively. Both beta coefficients are significant at 0.05. As a conclusion, the hypothesis of food quality is a significant determinant of customer satisfaction (H2a) and hypothesis of service quality is significant determinant of customer satisfaction in full service establishment are accepted.

Hypotheses Customer Satisfaction	**Significant Determinant**	**Acceptance**
Hypothesis 1a: The physical environment of the restaurant is a significant determinant of customer satisfaction.	No	Rejected
Hypothesis 2a: The food quality of the restaurant is a significant determinant of customer satisfaction.	Yes	Accepted
Hypothesis 3a: The service quality of the restaurant is a significant determinant of customer satisfaction.	Yes	Accepted
Hypothesis 4a: The price fairness of the restaurant is a significant determinant of customer satisfaction.	No	Rejected

Table 4.8 The summary of significant determinants in customer satisfaction model and hypotheses acceptance.

$$Y_{cs/bi} = \text{Constant} + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + \text{std. error}$$

Whereby:

$Y_{cs/bi}$ = Dependent Variable
X_1-X_4 = Independent Variable
B_1-B_4 = Regression Coefficient of Independent Variable

Customer satisfaction was regressed against physical environment, food quality, service quality and price fairness and the equation is expressed as above. In the customer satisfaction model, only two variables (food quality and service quality) are significant determinant in resulting satisfaction among diners. In other words, although all attributes have influence in customer satisfaction but only favourable food quality and service quality provided by full service restaurant have the significant contribution in customer satisfaction. The regression equation for the customer satisfaction model is expressed as follow:

$$\text{Customer Satisfaction} = 2.55 + 0.228X_1 + 0.154X_2 + 0.444$$

Whereby:
X_1 = Food Quality
X_2 = Service Quality

4.7.2 Behavioural intention model

Along the same line, the regression coefficient result is computed in table 4.9. In behavioural intention model, there are three significant determinants, namely food quality, service quality and price fairness and the coefficient values are 0.727, 0.183 and 0.405 respectively. Food quality and price fairness are significant at 0.000 whereas service quality is significant at 0.05. In simple term, the performance of these three attributes will be the core determinants of return patronage, recommendation and favourable word-of-mouth. In conclusion, all three hypotheses are supported.

In behavioural intention model, only physical environment attributes performance will not have a significant contribution (B = 0.117, Sig = 0.175) even though it were tested to have the influence in creating behavioural intention. This

result is aligned with customer satisfaction model. The hypothesis of physical environment is a significant determinant in behavioural intention is rejected.

Dependent Variable: Behavioural Intention	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-2.057	0.486		-4.229	0.000
Physical Environment	0.117	0.086	0.076	1.362	0.175
Food Quality	0.727	0.099	0.498	7.372	0.000
Service Quality	0.183	0.088	0.139	2.076	0.039
Price Fairness	0.405	0.089	0.228	4.541	0.000

Table 4.9 The coefficient of physical environment, food quality, service quality and price fairness with behavioural intention.

Hypotheses Customer Satisfaction	**Significant Determinant**	**Acceptance**
Hypothesis 1b: The physical environment of the restaurant is a significant determinant of customer satisfaction.	No	Rejected
Hypothesis 2b: The food quality of the restaurant is a significant determinant of customer satisfaction.	Yes	Accepted
Hypothesis 3b: The service quality of the restaurant is a significant determinant of customer satisfaction.	Yes	Accepted
Hypothesis 4b: The price fairness of the restaurant is a significant determinant of customer satisfaction.	Yes	Accepted

Table 4.10 The summary of significant determinants in behavioural intention model and hypotheses acceptance.

As shown in the table, the coefficient value for constant is negative 2.057. To compute the regression equation of behavioural intention, the contribution of the attribute performance (refer to unstandardised beta coefficient in table 4.9). Based on

the regression equation, it is important for full service restaurant to improve their food performance, service performance and price fairness to a certain level before behavioural intention is created as the constant is a negative value. The behavioural intention equation is as below:

$$\text{Behavioural Intention} = -2.057 + 0.727X_1 + 0.183X_2 + 0.405X_3 + 0.486$$

Whereby:
X_1 = Food Quality
X_2 = Service Quality
X_3 = Price Fairness

4.8 Discussion

4.8.1 Importance – Performance Approach

Using the importance – performance approach, it is found that overall performance of full service establishment is slightly below the expectation of respondents based on the importance of each attribute to customer in choosing a food establishment. This can be used as an indication for improvement in achieving customer satisfaction in Malaysia. In this study, three out of five restaurant attributes in top five ranking are food cleanliness, food freshness and taste which are grouped in the food quality related attribute. Environment cleanliness and accurate guest billing are also ranked in top five. These ranking show that food quality and environment sanitation play important role in affecting customer satisfaction. The result of obtained are found to be consistent with the previous study conducted by Liu & Jang, 2009 except that in Malaysia, accurate guest billing is considered to be highly important to customer when choosing a food establishment.

In the attribute performance ranking, four out of five attributes that are considered to be the top five most important attributes in choosing food establishment are also considered to have well performed among the other attributes. Full service restaurants' ability in serving the food as ordered are ranked third most well performed. Comparing the importance level with attribute performance, full service restaurant has did well in assuring accurate guest billing. This is important in improving customer satisfaction and later behavioural intention as customers may feel cheated if full service failed to provide accurate billing. After all, close to all full service restaurants in Malaysia or Klang Valley in particular should have cash register or payment method computerised which has minimised the human error. Another suggestion to full service restaurant is to ensure employees have the accountability in guest billing to reduce potential error.

The three attributes that ranked at the lowest the importance level are lighting, interior design and decoration and music. However, these attributes cannot be concluded it is not important or does not affect customer satisfaction or behavioural intention. This is because Importance – Performance Approach only identifies relative levels of importance. Liu & Yang, 2009 have also found that these three attributes appear to be at the bottom of the list when comparing the importance levels of each restaurant attributes. The finding as such may be because majority of the respondents usually dine out with their family members or friends whom they would catch up with in a big group and does not pay much attention on the physical environment. In line with Pettijohn et al. (1997), it is found that atmosphere and menu variety were relatively unimportant. As for attribute performance, music, price fairness and healthy option appear to be at the bottom three.

The full service restaurant in Malaysia need to relook into their pricing strategy as this attribute is considered to be important (seventh most important attribute) in affecting customer decision in choosing food establishment. Assessing each attribute with the importance – performance matrix, price fairness and attentive employees are among the attributes that fall into the quadrant "Concentrate Here" whereby full service restaurant failed to meet the basic requirement of customer. Full service restaurant should pay more attention in assuring the pricing strategy is appropriate and the value of the product or service is worth with price and not overly charged as failure in meeting the requirement can result in immediate dissatisfaction and loss of the customer.

In 2009, Liu & Jang has conducted a study in identifying the factors influencing customer satisfaction and behavioural intention in Chinese restaurants and has found that attentive employees and environmental cleanliness. In this study, it was found that full service restaurant needs to pay attention in improving employees' attentiveness for better customer satisfaction and behavioural intention. The importance of attentive employees is supported by other previous studies as it is an element that can affect overall service quality evaluation (Ekinci, 2001). Stevens et al. (1995) has concluded that employees need to be trained to be attentive to service details and take care of customers' personal and sometimes trivial requests to create customer satisfaction and behavioural intention. Additionally, employees are required to be sensitive to each customer needs rather than rigidly following fixed policies and procedures. This finding was further supported by Andaleeb and Conway (2006) whereby they have concluded that full service food establishment should focus on

three elements which are price, attentive service, and food quality if customer satisfaction is treated as strategic variable.

Out of the seven service quality related attributes, six attributes were located in the "keep up the good work". This has demonstrated that full service restaurants in Malaysia have done a pretty good job in providing quality services to their customer. They are highly recommended to keep up the good performance to maintain their core competency. Besides service quality attributes, two food quality related attributes (food cleanliness and food freshness) and environment cleanliness were also located in the "Keep up the Good Work". Bartlett and Han, 2007 finding has supported that in the food service industry, both food and service qualities are important to create a total experience for diners. This good practice should continue as food and environment sanitation in food service establishment are extremely important as if being associated with food-borne illness, it can result negative publicity, loss of customer trust and eventually loss of patronage (Knight, Worosz and Todd, 2007). It is recommended that food establishment should pay close attention to the hygiene conditions of not only the dining area but also waiting areas, restrooms and kitchen.

It was noticeable that half of physical environment attributes fall under "Low Priority". This result can be interpreted as customers do not expect much on physical environment when choosing a food establishment but again it does not indicate that physical environment attributes are unimportant. Liu & Jang, 2009 have similar outcome in their study and commented that these attributes can play a role as an excitement factor whereby it can create an inviting ambience or comfortable environment for them to dine in and prolong their stay in the food establishment.

Excitement factors are generally easier to generate customer satisfaction and behavioural intention compared to basic factors (i.e. food cleanliness, taste and environment cleanliness) and performance factors (i.e. service attentiveness, food presentation). Another study in Spain has found that full service restaurant should offer a good value of a favourable ambiance as offering good food and service is not good enough to attract and retain customer in today's market (Soriano, 2002). Thus, if financial resources are sufficient, improving physical environment of the food establishment could differentiate them from other competitors. Furthermore Malaysia is one of the famous tourists' destinations, a thematic restaurant or restaurant with local elements can generate and improve customers' interest to explore the food establishment's environment.

In today's food trend, the importance of healthy options are expected to be on the rise although in this study healthy options are found to be in the "Low Priority" quadrant. This can be observed through current situation whereby government is consistently reminding public to be health conscious and many people are getting more health conscious recently as more organic shops, sport centres and low-fat products are available in the market. For those restaurants that have sufficient financial resources, they should consider offering healthy cuisine to health conscious customers. In business perspective, full service restaurant can generate new market share and have the first mover advantage.

4.8.2 Customer satisfaction and behavioural intention models

In the study to identify the attributes that can affect customer satisfaction and generate behavioural intention, 20 attributes are found to have influence in customer satisfaction and all 22 attributes affect behavioural intention. The two attributes that have no influence in customer satisfaction is music and fair pricing for beverages. However, in previous studies, music tempo is found to affect pace of shopping, length of stay, and amount of money spent in restaurant settings. The different results obtained for music influence on customer satisfaction and behavioural intention may be due to the cultural differences in Malaysia. Similar to interior design and decoration, power of music to create an excitement level and ambiance that helped patrons to enjoy food and spirits, while encouraging repeat business (Ryu & Jang, 2008). As beverages pricing may not have a significant impact on customer satisfaction as beverages are not the core product in a food establishment but this may be different if this attribute is used to access the establishment that served beverages as their core product. Comparing with importance – performance analysis, the findings of both analyses are generally consistent with one another in the influence of customer satisfaction.

However, in multiple regression analysis, it was found that only food quality and service quality attributes are significant determinants for both customer satisfaction and behavioural intention whereas price fairness is found to be a significant determinant for behavioural intention. In the customer satisfaction model, only food quality and service quality are found to have significant influence or are the only two significant determinants in generating customer satisfaction in food establishment. The research findings on customer satisfaction have reinforced the

importance of food quality and service quality. It is critical for restaurant managers to emphasise the importance of the attributes to their employees and this can be done through continual training and positive reinforcement to develop customer trust and satisfaction. In addition they should strive to create warm and friendly environment to minimise the perceived risk of patronising their establishment as this can lead to customer satisfaction as well as behavioural intention. Previous researcher has also highlighted that food establishment, particularly luxury restaurants need to consistently stress on food quality. This is to ensure customers will have a positive experience each time they patronise the restaurant.

There is a slight different in behavioural intention model whereby price fairness was found to be significant in creating behavioural intention in addition to food quality and service quality. The results are found to be consistent with Soriano's finding in 2002 except for physical environment is also reported to be significant determinant in choosing food establishment. The Spain study has demonstrated that food quality is the most important attribute and followed by the value of the food (price fairness), service quality and lastly physical environment (Soriano, 2002). Based on the behavioural intention regression equation, it has a negative constant value and this result reinforce the importance level of food quality attributes, service quality attributes and price fairness in customer loyalty, i.e. return of patronage as well as leading to action such as recommending the food establishment to friends and having favourable word-of-mouth. If the full service restaurants failed to meet the minimum requirement of their food quality, service quality and fair pricing expectations, behavioural intention will not be resulted.

In both customer satisfaction and behavioural intention models, physical environment attributes were found to be insignificant although they do have some level of influence in creating customer satisfaction. This was confirmed using multiple regression analysis and development of structural equation. One interesting finding was that aroma was found to be most influential physical environment attributes which is consistent with previous study (Liu & Jang, 2009) and environment cleanliness is still has the greatest impact on behavioural intention. As discussed in earlier sections, physical environment attributes should not viewed as not unimportant as physical environment attributes can affect customer satisfaction and behavioural intention in a different way as reported in the previous studies. Physical environment attributes were reported to have significant relationship with customer satisfaction (Ryu & Jang 2008; Meng & Elliot, 2008; Liu & Jang, 2009). This suggests the possibility of cross cultural differences between consumers from different countries, different type of food establishment studied as well as from different background.

Lastly, the findings of this research can provide a guide to full service restaurant or any food establishment managers to focus on the key determinants of customer satisfaction and behavioural intention to remain competitive in the food service industry.

4.9 Conclusion

Food quality and environment sanitations are perceived as the high importance attributes in a full service restaurant and the least importance are the physical environment. The performance rating based on the same attributes revealed that full service restaurants in Malaysia are doing well in providing accurate service on top of good food and environment sanitation. However, it may be necessary to pay more attention in offering fair pricing food and beverages and ensuring employees are attentive. Only hypotheses 1a, 4a and 4b are rejected. The measures used are reliable and the studied population is normal.