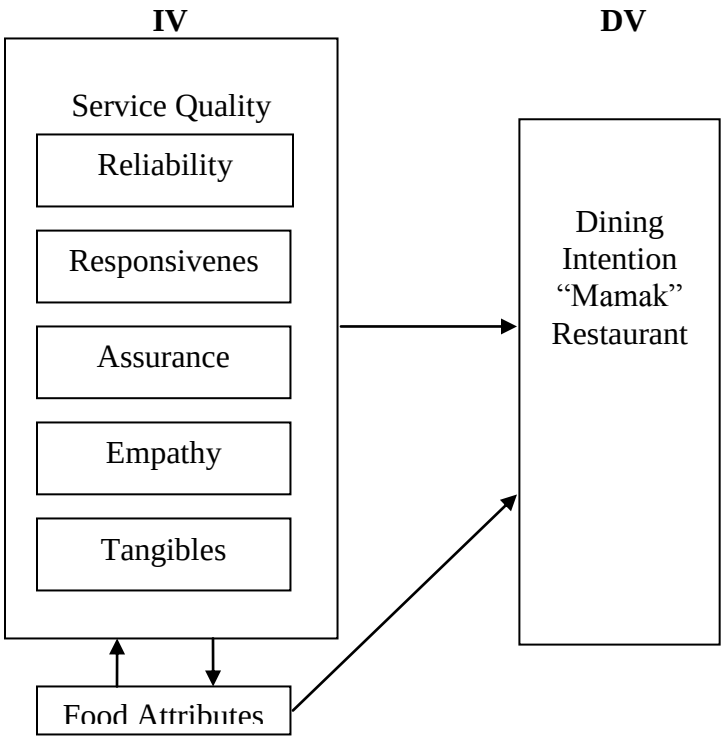
3.1 Introduction

This chapter outlines the methodology employed in this research. It begins with the research framework. Then it provides the hypotheses developed in this study. Thereafter, the design of the research instrument, scales and measurements, and the data collection procedure will be discussed. Finally, the data analysis techniques used also presented.

3.2 Framework of the study

Based on the related theories and literature presented in the previous chapter, a framework that has been developed to investigate the relationship among service quality, food attributes, and dining intention towards “Mamak” food.

Figure 3.1 Theoretical Framework



3.3 Research Design

This study confined to the residents of Klang Valley only as it is known as the most developed region in Malaysia. This is because most of the commercial, business industries can be found in this area hence many food operators will take this opportunity to run their business in this area.

Sampling can be defined as “the deliberate choice of a number of people, the sample who are to provide you with data from which you will draw conclusions about some larger group, the population, whom these people represent” (Jankowicz., 1995). The population consists of people living in Klang Valley. Klang Valley was chosen as most of the “Mamak” restaurant can be found in most of the residential area around Klang Valley compared to other places.

A convenient sampling approach was adopted, with the population defined as people living in the Klang valley who are aware or knows of “Mamak” restaurant. The questionnaires survey was decided on as a best method to obtain the data required and self administered questionnaires were distributed. A total of 350 questionnaires were distributed to people who are aware or knows of “Mamak” restaurant and only 290 questionnaires were collected, representing a response rate of 82.9% which compares favourably to other hospitality studies (Barsky and Huxley, 1992; Danaher and Haddrell, 1996)

3.4 Measurement Instrument

The survey instrument is four pages questionnaires (refer Appendix 1). The questionnaires relevant to this study consist of three sections. Section A measures the respondents demographic profile. Section B measures the important of a service quality towards the dining intention; Section C measures the important food attributes in “Mamak” restaurant and Section C measures the patrons dining intention in “Mamak” restaurant.

The first part of section was designed to collect the demographic profile information of the respondents. Examples of the demographic variables measured are gender, age, race and marital status. These variables are measured using the close ended multiple choice format.

The section B measures the important of service quality to respondents when dining in “Mamak” restaurant. Among the question asked in the section are: “efficient service, employee friendliness, hygiene and cleanliness”. In order to determine the respondents’ important over the service quality, they are asked to rank the format choice according to their important. (1 being unimportant and 6 extremely important)

The section C measure the important of “Mamak” food attributes to patrons dining intentions. The list of food attributes covered are taste of food, spicy, while texture and temperature are the new variables that being asked in this study. A pilot study was conducted in order to measure these new variables validity.

Lastly in section D, consumer patronage intentions to dining in “Mamak” restaurant were measured. The respondents were asked to rank whether they’re agree with the statements of dining intention behavior in “Mamak” restaurant. For example; items included”the likelihood I would dine at “Mamak” restaurant is very high, I feel emotionally attached to “Mamak” restaurant” . All of these items are measured on a Six - point Likert – type scale, ranging from “Extremely Disagree” (1) to “Extremely Agree” (6).

3.5 Data Analysis Techniques

Statistical analysis of the data collected from the survey was accomplished using the statistical package for social sciences – SPSS version 17.0 software. Data was first entered into the software and was then screened to exclude any incomplete response or correct the errors found in the data file. The summary of the data analysis used in this is listed in Table 2.0

Table 3.1 Summary of Types of Analysis Used for Questionnaires

Type of Analyis	**Type of Statistics**	**Section of Questionnaires**	**Objective of Analysis**
Descriptive	Frequency, mean and standard deviation analysis	**Section A** Demographics of the respondents	To understand the profile of the respondents dining in "Mamak" restaurant
Normality Test	Kurtosis, skewness, anlysis and histogram chart	**Section B** Service quality **Section D** Dining intention behavior	To ensure the data collected is normally distributed
Validity Test	Factor analysis	**Section B** Service quality, **Section C** Food attributes **Section D** Dining intention behavior	To ensure that all the variables are not correlated to each other
Reliability Test	Cronbah's alpha	**Section B** Service quality, **Section C** Food attributes **Section D** Dining intention behavior	To ensure the scale of the measurements are reliable
Bivariate and Multiple Analysis	Pearson's correlation and multiple regression	**Section B** Service quality, **Section C** Food attributes **Section D** Dining intention behavior	To understand the relationship between service quality, food attributes and dining intention behaviour

3.6 Measurement of Variables

3.6.1 Behavior Intentions

The dependent variable, in this study is behavioral intentions of guest dining in full service, casual dining restaurants. According to Zeithalm, et al. (1996)

behavioral intentions are either favorable or unfavorable. These two factors will then in turn affect individual behaviors: customers will either remain with the organization of defect to another. Fornell and Wernerfelt (1987, 1988) stated companies' marketing effort would be spent on trying to keep current customers instead of attracting new ones.

Therefore the goal of organization should be to provide favorable experiences, which cause customers to remain with organizations. Zeithalm, et al. (1996) indentified five behavioral dimensions which affect intentions: loyalty to the company (Loyalty) ; propensity to switch (Switch) ; willingness to pay more (Pay more) ; external response to a problem or situation (External response) ; internal response to a situation or problem (Internal response) (Zeithalm et al.) . The dependent variable for this study was measured using the Behavioral Intentions Battery develop by Zeithalm et al. 1996) and the most recently used by others (Alexandris, Dimitriadis & Markata, 2002; Athanassopoulos, Gounaris & Stathakopoulos 2001; Baker & Crompton, 2000; Bloemer, deRuyter, & Wetzels, 1999; Shaw-Ching Liu, Furrer, & Sudharshan, 2001).

Table 3.2 Dimension statements of behavioral intentions

Dimension / Statement	Reference Sources
Word of mouth	(Alexndris, Dimitriadis, & Markata, 2002; Zethalm et al., 1996) Athanassopoulos, Gounaris & Stathakopoulos 2001
Purchase intentions	(Alexndris, Dimitriadis, & Markata, 2002; Zethalm et al., 1996) Athanassopoulos, Gounaris & Stathakopoulos 2001
Price sensitivity	(Alexndris, Dimitriadis, & Markata, 2002; Zethalm et al., 1996) Baker & Crompton, 2000
Complaining behavior	(Alexndris, Dimitriadis, & Markata, 2002; Zethalm et al., 1996) Shaw-Ching Liu, Furrer, & Sudharshan, 2001
Propensity to switch	Bloemer, deRuyter, & Wetzels, 1999; Zeithaml et al. , 1996) Shaw-Ching Liu, Furrer, & Sudharshan, 2001
Willingness to pay more	Bloemer, deRuyter, & Wetzels, 1999; Zeithaml et al. , 1996) Baker & Crompton, 2000
External response to a problem	Bloemer, deRuyter, & Wetzels, 1999; Zeithaml et al. , 1996) Shaw-Ching Liu, Furrer, & Sudharshan, 2001

These factors and reliability scores were tested and validated across four different industries and averaged across the samples to attain an average main alpha. The industries include a computer manufacturer; retail chain, automobile insurer, and a life insurer (Zeithalm et al., 1996).

This current will include the dimensions to test the relevance of the internal response in the restaurant industry. The recent research of Alexandris, Dimitriadis, and Markata (2002) shows similar result and reliabilities. The only

major difference was that their study was conducted in two hotels located in northern Greece. The reasons for the slight variation in alpha were attributes to the different culture and their perceptions of the questions asked in the battery (Alexandris et al., 2002). The most current reliabilities from the behavioral intentions battery are found in Table 3.3.

Table3.3. Most current Reliability Scores of the Behavioral Intentions Battery. Alexandris, Dimitriadis, & Markata (2002)

B-I	**Alpha**
WOM Communication	.85
Purchase Intentions	.87
Price Sensitivity	.70
Complaining Behavior	.29

As in the originals study (Zeithalm et al. , 1996) , the last dimensions, complaining behaviors, had an extremely low reliability score, which could possibly means that people didn't understand the question being asked or that the question themselves were unclear (Alexandris et al. , 2002). This study included this dimensions to test its relevance in the restaurant industry.

The same instrument was used to operationalize the dependent variable, behavioral intentions, in this current study. The survey were set in the same manner, adding a Likert type scale with a range of 1, = "extremely disagree" likely" to 6, = "extremely agree" with each item.

3.6.2 Service Quality

The first independent variables is service quality, a construct that has been tested and validated across many different industries including the hospitality industry (Parasuraman et al. , 1988, 1999; Faouk & Ryan, 1991; Cronin & Taylor, 1992; Knutson et al. , 1990; Stevans et al. , 1995).

The five dimensions of service quality are again defined as follows: (1) Reliability, the ability to perform the promised dependably and accurately; (2) Assurance, knowledge and courtesy of employee and their ability to convey trust and confidence; (3) Responsiveness, willingness to help customers and provide prompt service; (4) Tangible, physical facilities, equipment, and appearance of personnel; (5) Empathy, caring, individualized attention (Parasuraman et al. , 1988).

As stated in Chapter 2 these five dimensions were develop by Parasuraman et al. (1988) and were implemented into one of the validated instruments to measure service quality. The instrument was a 22 – item questionnaire based on the afore-mentioned five dimensions. A Likert scale ranging from 7 strongly agree to 1 strongly disagree were used to measure the response. The SERVQUAL instrument was tested in a wide array of industries. Table 7 will show a sampling of different service firm that have been examined through the used of the SERVQUAL instrument. The table will also show associated reliabilities for the instruments for those services.

Table 3.4. Dimensions and Industries used SERVQUAL

Industries	Dimensions	Researcher/ Years
Bank	Reliability, Tangibles, Empathy, Responsiveness, Assurance	Parasuraman, Berry, and Zeithalm (1988)
Credit Card Company	Reliability, Tangibles, Empathy, Responsiveness, Assurance	
Repair/Maintenance	Reliability, Empathy, Responsiveness, Assurance	
Long Distance Telephone Company	Reliability, Empathy, Responsiveness, Assurance	
Telephone Company	Reliability, Empathy, Responsiveness, Assurance	Parasuraman Et al. (1991)
Hospital Services	Reliability, Empathy, Responsiveness, Assurance	Babakus & Mangold (1991)
Hotels	Reliability, Tangibles, Empathy, Responsiveness, Assurance	Farouk & Ryan (1991) Bojanic & Rosen (1994) Seidman (2001)
Restaurant – full services	Reliability, Tangibles, Empathy, Responsiveness, Assurance	
Restaurant – quick services	Reliability, Tangibles, Responsiveness, Assurance	

Modified by Seidman (2001)

Knutson, Stevens, Wullaert, Patton, and Yokoyama (1990) saw the SERVQUAL instrument as viable way to measure the construct of service quality. They took the fundamental five dimension of the SERVQUAL instrument and made

modifications to it creating a new 26 - item instrument called LODGSERVE (Stevens, Knutson, & Patton, 1995). This instrument was tested both domestically and internationally and found to be very valid and reliable instrument in lodging industry (Stevens, Knutson, & Patton, 1995).

Five years later three of the same researcher that developed LODGSERV developed an instrument to specifically assess the service quality in restaurant and called it DINESERV (Stevens, Knutson, & Patton, 1995), DINESERV again was based on the original five dimensions develop by Parasuraman et al. (1998), Reliability, Assurance, Responsiveness, Tangible and Empathy. Stevens et al. , developed a 29 item scale, using a Likert type scale ranging from 7 “strongly agree” to a 1 “strongly disagree” to measure responses.

The study was conducted in the midsize city in the north-central United States. The DINESERV instrument was via telephone interview from adult who had eaten out six or more item in the previous six month. The researchers broke the various types of restaurant and down as follows: Fine Dining Restaurant, Casual Dining Restaurant and Fast Food Restaurant. They were able to get approximately 200 respondents for each category.

The first ten items on the scale measure the dimensions pertaining to the tangible. Items 11-15, measured the reliability dimensions, item 16-18 measured responsiveness, items 19-24 measured assurance and items 25-29 measured empathy (Stevens et al., 1995). Because of the uneven numbers of items

representing each dimension and then divided by five factors. This was done in order not to make it seem that any of the five dimensions were more important than others (Stevens et al., 1995). The overall reliability alpha for this instrument was .9528 (Stevens et al., 1995), showing an extremely high level of statistical significance. Table 8 will show the reliability scores of the DINESERV instrument.

Table 3.5 Reliabilities of DINESERV (Stevens et al. , 1995)

Dimension	**Reliability (Alpha)**
Assurance	.9180
Empathy	.9153
Reliability	.9025
Responsiveness	.8883
Tangibles	.8966
Overall	.9528

The scores from this research ranged from scores of the 3.24 to 7.0 with the median score being 5.95 (Stevens et al., 1995). Additionally, test showed that there was a slight increase in the normal distribution curve (kurtosis value = .12). Ninety five percent of the respondent's score were between 5.28 and 6.62 with a standard deviation of .76 (Stevens et al., 1995). The score were calculated for each dimension and were reported as follows:

1. Reliability – 6.47
2. Tangible – 5.99
3. Assurance – 5.96

4. Responsiveness – 5.82
5. Empathy – 5.77

The mean for the entire five-dimension service quality index was a 6.0. According to the researchers this showed that restaurant diners, regardless of which category of restaurant that they dine at, have higher level of expectations when it comes to dining out (Stevens et al., 1995) . Stevens et al. showed that there was a hierarchy of a service quality dimensions, and were as follows, in order of significance:

1. Reliability
2. Tangibles
3. Assurance
4. Responsiveness
5. Empathy (Stevens et al. , 1995)

DINESERV in the instrument used to operationalize the service quality construct of this research study. The same instrument and seven – point scale were used, however the instrument was handed out to the customers after the host/hostess sat the customers at their respective tables. Due to this research format and other variables measured, this research study focused on rating the perceptions of the service quality rendered at each of the participating restaurants.

3.6.3 Food Attributes

A three-step procedure was employed to develop items for Asian food attributes First, 32 attributes related to Asian foods were identified based on a literature review (Chowdhury et al., 1998), (Jain and Etgar., 1977), (Letarte et al., 1997) and (Rozin and Vollmecke., 2001)

Table 3.6 Dimension statement of food attributes

Dimension / Statement	Reference Sources
Taste of food	Chowdhury et al., (1998), Jain and Etgar., (1977), Letarte et al., (1997), Rozin and Vollmecke., (2001), Lin (1991)
Price	Verbeke and Lopez (2005)
Spiciness	Kivela et al., (2000), Raajpoot (2002), Namkung and Jang (2007)
Personal preference	Chowdhury et al., (1998), Jain and Etgar., (1977), Letarte et al., (1997)
Appearance of the food	Lin (1991)
Familiarity with dishes	Chowdhury et al., (1998), Jain and Etgar., (1977), Letarte et al., (1997)

Table 3.6 continued

Dimension / Statement	Reference Sources
Aroma/smell	Lin (1991)
Texture	Added in this research
Temperature	Added in this research

3.6 Conclusion

This chapter provides an overview of the research design and framework for this study. An overview of the questionnaires has also been discussed. In this chapter also the discussion of the research instrument, sampling procedures, data collection and data analysis techniques used to conduct the study. In the following chapter, the findings of the research will be discussed. It also discuss the significance of the variables that being measured in this study.