

**WOULD WAITING TIME INFLUENCES CUSTOMER  
SATISFACTION TOWARDS SERVICES PATRONAGE?  
A STUDY OF LEMBAGA TABUNG HAJI**

**By**

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## **DEDICATION**

This thesis is dedicated to my lovely mum and dad,  
Haji Abd. Aziz bin Tajuddin and Hajah Zailan binti Mansor,  
to my beloved siblings,  
Abdul Mu'izz, Fatimatuzzahra', Muhammad Ubaidullah,  
Naemah, Ahmad Tawfiq, Zubaydah,  
Khairul Ashraf and Basyeerah,  
to my sister-in-law, Sarina and my first daring nephew, 'Ammar Faiz  
and  
to my 'special' friend, Nur Sophian.

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“All praise for Almighty Allah”

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## TABLE OF CONTENTS

	<u>Page</u>
TITLE	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRAK	ix
ABSTRACT	x
<b>Chapter 1 INTRODUCTION</b>	<b>1</b>
1.1 Introduction	1
1.2 Problem Statement	4
1.3 Research Objectives	6
1.4 Research Questions	6
1.5 Definition of Key Terms	7
1.6 Significance of Study	9
1.7 Summary and Organization of Chapters	10
<b>Chapter 2 LITERATURE REVIEW</b>	<b>11</b>
2.1 Introduction: An Overview of Waiting time Issues	11
2.2 Customer Behavior Model	14
2.3 Customer Satisfaction	15
2.3.1 Satisfaction as a Function of Disconfirmation	16

2.3.2	Satisfaction as a Function of Perception	18
2.4	Expected waiting Time	19
2.5	Perceived Waiting Time	19
2.6	Waiting Environment	20
2.7	Post-purchase Behavior	21
2.7.1	Service Loyalty	22
2.7.2	Service Switching	22
2.7.3	Word-of-Mouth	22
2.8	Research Framework and Hypotheses	23
2.9	Summary	25
<b>Chapter 3</b>	<b>METHODOLOGY</b>	26
3.1	Introduction	26
3.2	Research Design	26
3.3	Unit of Analysis	26
3.4	Time Horizon	27
3.5	Population and Sample	27
3.6	Data Collection Method	27
3.7	Measurement and Instrument	28
3.8	Statistical Analysis	30
3.8.1	Descriptive Analysis	31
3.8.2	Reliability Analysis	31
3.8.3	Hierarchical Regression Analysis	32
3.9	Summary	32

<b>Chapter 4</b>	<b>RESULTS</b>	33
4.1	Introduction	33
4.2	Profile of Respondents	33
4.3	Reliability Measurement	36
4.4	Descriptive Analysis	36
4.5	Hypotheses Testing	37
4.5.1	Test for Hypothesis 1	38
4.5.2	Test for Hypothesis 2	39
4.5.3	Test for Hypothesis 3	40
4.5.4	Test for Hypothesis 4	42
4.6	Summary of Results	45
<b>Chapter 5</b>	<b>DISCUSSION AND CONCLUSIONS</b>	47
5.1	Introduction	47
5.2	Recapitulation of the Study Finding	47
5.3	Discussion	48
5.4	Implications	49
5.5	Limitations	51
5.6	Future Research	53
5.7	Conclusion	54
REFERENCES		55
APPENDIX A – QUESTIONNAIRE		59
APPENDIX B – SPSS OUTPUT		66

## LIST OF TABLES

		<u>Page</u>
Table 3.1	Summary on Number of Items in Waiting Environment	
	Sub-Sections	29
Table 3.2	Summary on Number of Items in Post-Purchase Behavior	
	Sub-Sections	30
Table 4.1	Summary on Data Collection	34
Table 4.2	Profile of Respondents	35
Table 4.3	Cronbach's Alpha Values for Variable Groupings	36
Table 4.4	Overall Descriptive Statistics of the Study Variables	37
Table 4.5	Hierarchical Regression for Satisfaction as a Function of Disconfirmation	39
Table 4.6	Hierarchical Regression for Satisfaction as a Function of Perception	40
Table 4.7	Hierarchical Multiple Regression for Waiting Environment to Perceived Waiting Time	41
Table 4.8	Relationship of the Independent Variables	42
Table 4.9	Hierarchical Regression for Customer Satisfaction to Service Loyalty	43
Table 4.10	Hierarchical Regression for Customer Satisfaction to Service Switching	44
Table 4.11	Hierarchical Regression for Customer Satisfaction to Word-of- Mouth	45
Table 4.12	Results Summary of All Hypotheses	46

## LIST OF FIGURES

		<u>Page</u>
Figure 2.1	Customer Behavior Model	15
Figure 2.2	Disconfirmation Model of Customer Satisfaction	17
Figure 2.3	Modified Disconfirmation Model of Customer Satisfaction	18
Figure 2.4	Partial Framework for Understanding Environment-User Relationships in Service Organizations	21
Figure 2.5	Research Framework	24

## **ABSTRAK**

Kajian ini melihat kepuasan pelanggan dari perspektif waktu menunggu sebelum mendapat layanan di kaunter perkhidmatan. Seramai 225 orang pelanggan Lembaga Tabung Haji di Kaunter Ibu Pejabat Tabung Haji, Kuala Lumpur dan Tabung Haji Kulim telah dipilih sebagai sampel untuk kajian ini. Hasil kajian menunjukkan fungsi ketidakpastian sebagai kepuasan dan fungsi tanggapan sabagai kepuasan merupakan ciri penting dalam mempengaruhi kepuasan pelanggan dari segi waktu menunggu. Ruang/fungsi juga didapati mempengaruhi tanggapan waktu menunggu pelanggan Lembaga Tabung Haji. Pelanggan yang berpuas hati dengan perkhidmatan Lembaga Tabung Haji mempunyai kelakuan selepas perkhidmatan yang positif.

## **ABSTRACT**

This study investigates on the impact of waiting time perspective towards customer satisfaction before being served at the service counter. About 225 customers of Lembaga Tabung Haji at Tabung Haji Head Office Counter and Tabung Haji Kulim were selected to participate in this study. The results from this study show that satisfaction as a function of disconfirmation and satisfaction as a function of perception are important factors to determine the customer satisfaction with waiting time. Space/function found to have an influence on perceived waiting time of Lembaga Tabung Haji customers. Satisfied customers of Lembaga Tabung Haji services have a positive post-purchase behavior.

## **Chapter 1**

### **INTRODUCTION**

#### **1.1 Introduction**

Consumers' needs and wants are not easy to satisfy. This is true for both products and services provided. Customers search for products and services that give value for money. It is also important that these products and service attributes exceed their expectations. However, these dimensions of satisfaction are different for each customer and it is based on individual preferences.

Ghobadian, Speller and Jones (1993) in their article mentioned that service and manufactured goods are different in their characteristics. These differences have an impact on the approach of management quality. The differences are listed below:

1. Inseparability of production and consumption.
2. Intangibility of services.
3. Perish ability of services.
4. Heterogeneity of services.

For service organizations, the most crucial issue to handle is waiting time in queues. Accordingly, (Davis & Heineke, 1993) has written, "Every organization which directly interacts with its customers confronts the issue of queues. Customers wait for service in a wide variety of settings, including manufacturing and services business, profit and non-profit organizations, and private and public agencies. In each and every instance the key issue associated with queues is this: customers do not like to wait".

This statement is further supported by Kaboudant (1997) who states among other factors, customers perception of service quality is a function of waiting time. It is a universal phenomenon that a customer does not like to wait.

Many researches have studied queuing in terms of mathematical models. They do not focus on what are customers' expectations and perceptions of queuing experience but most of the studies focused on reducing the amount of waiting time while maintaining throughput in collection of service facilities, either parallel or serial (Tavana & Rappaport, 1996, p. 305). These mathematical models came out with an aggregate optimization model for a collection of simple system (M/M/1), multichannel (M/M/S), constant service (M/D/1) and limited population (finite population).

“A pure operations management viewpoint would focus on the tradeoff between customer waiting time and the number of workers to schedule” (Davis & Vollmann, 1990, p. 61). On the other hand, marketing focuses with customer satisfaction more directly. This based upon customer opinions and perceptions about the service. For that reason, waiting lines and waiting time are an increasingly important marketing problem.

Kostecki (1996) postulated that the main reasons waiting lines and waiting time have become more important and critical marketing issues are:

1. Cost of waiting tends to rise

Due to the improvement in productivity and the increasing salaries, the full price of the service for which a customer has to wait is increasing with the value of time.

2. Pace of life

This factor is rapidly reducing customer's propensity to tolerate waits especially in the urban areas because of their social perception of rapidity with which services should be provided and products produced is being modified.

3. Consumer satisfaction is an increasingly important determinant of business success

Long waits are likely to affect negatively the performance evaluation of the customer and firms have to manage to reduce their impact. By improving waiting line management, service firms can improve customer satisfaction as well as their image based on time-relevant behavior.

4. Time has become a major factor of competitiveness

When producing goods that cannot be stored, time management is the critical skill to the service organizations.

5. In most firms, consumers' waits are an unresolved issue

Waits are related to the first impression effect and if the waiting time is not managed properly, customer perception on service quality of the organization will remain negative.

Having the knowledge on how to manage waiting time and waiting lines and also implementing the best strategy helped the organization to gain competitive advantage over its rivals or competitors.

## **1.2 Problem Statement**

Studies on the relationship between waiting time and satisfaction is lacking in Malaysia. As time become more precious compared to about 10 to 20 years ago, there is important for an organization to properly deal with the management wait of 'customers' waiting' in organization. The affluent and high standards of living further enhance Malaysian customers' search for value in services.

Based on an article in The Star, 23 April 2004, banking customers demand short processing time and easy access to services. Research done by ACNielsen found that bank customers in Malaysia saw short processing time as "very important" and aggressive advertising did not affect their choice of bank. Speed and efficiency in service is the most important. Therefore, for the purpose of this study, customer satisfaction will be studied from the perspective of waiting time.

Previous researches have found that the more satisfied a customer, is the more guaranteed their subsequent positive behavior. As cited in Oliva, Oliver and MacMillan (1992), satisfaction is thought to be an immediate antecedent to quality judgements and then to loyalty (Bitner 1990; Kasper 1988; LaBarbera & Mazursky 1983). Also cited from Olive et al. (1992) is customer loyalty has been found to be directly to related to firm profitability (Heskett, Sasser & Hart, 1990).

Retention of satisfied customers is important to make sure on the repeat business with the firm in the future. Customers switch to another firm is the cost to our company. There are several reason customers switch to another company such as dissatisfaction

and service quality failures. The most difficult to measure is service switching because sometimes satisfied customers also tend to switch to another firm due to their common habit and desire to experience new products or services offered in another company. Keaveney (1995) stated that “once customers switch services, it is likely that they will engage in post-switching behaviors related to the incident” (p. 79). Results showed that 75% of customers engaged in word-of-mouth communications about the service switching incident. They had told at least one other person and usually several other people.

As cited in Kim, Kim, Im and Shin (2003), dissatisfied customers communicate about their negative experience with an average of nine other persons, and 10 to 15 percent of a firm’s sales losses can be accounted for by these dissatisfied customers (TARP, 1981). Customers choose indirect behavior such as negative word-of-mouth and exit rather than complain directly to the firm (Best & Andreasen, 1977; TARP, 1986; Tschol, 1994). Negative word-of-mouth is the most silently damageable factor; sometimes firm does not realizing what is the issue of dropping in sales due to no complaint received.

### **1.3 Research Objectives**

Generally, this study promotes better understanding and, the importance of waiting time towards customer satisfaction in a service organization. Specific objectives are:

1. To determine the influence of disconfirmation (perceived waiting time – expected waiting time) on customer satisfaction.
2. To determine the influence of perceived waiting time on customer satisfaction.

3. To explore whether waiting environment have an impact on perceived waiting time.
4. To determine the subsequent behavior (positive post-purchase behavior) upon satisfaction.

#### **1.4 Research Questions**

In order to achieve the above stated objectives, this study will try to answer the following research questions:

1. Does disconfirmation (perceived waiting time – expected waiting time) has an impact on customer satisfaction?
2. Does perceived waiting time has an impact on customer satisfaction?
3. Does waiting environment influence customer perception of waiting time?
4. Does satisfaction leads to positive post-purchase behavior?

#### **1.5 Definition of Key Terms**

**Expected waiting time** is defined as how long customers expect to wait based on their previous experience, number of customers in the service, critically time to the customer and other distractions, intended or otherwise (Davis & Vollmann, 1990).

**Perceived waiting time** is defined as how long customers perceived they had waited depending on the ambience of waiting area provided by the firm, length of the lines and many more (Tom & Lucey, 1997; Davis & Heineke, 1998).

**Disconfirmation** is a function of perception minus expectation (Maister, 1985; Churchill & Suprenant, 1982; Davis & Heineke, 1998).

**Customer satisfaction** is defined as core element in customer service (Oliva, Oliver and MacMillan, 1992) and occupies a central position in marketing thought and practice, major outcome of marketing activity and serves to link processes culminating in purchase and consumption with post-purchase phenomena such as attitude change, repeat purchase and brand loyalty (Churchill & Suprenant, 1982).

**Waiting environment** is the whole components of service encounter which can be controlled by managers (Baker & Cameron, 1996).

**Physical and tangible surroundings** are defined as the “built” environment or the servicescape (Bitner, 1992) and represents where a product or service is purchased.

**Ambient conditions** refers to the factors that may affect the five senses including background characteristics of the environment such as temperature, lighting, noise, music, and scent (Bitner, 1992).

**Space/function – Space** 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. **Function** refers to the ability of the same items to facilitate performance and the accomplishment of goals (Bitner, 1992).

**Sign, Symbols and Artifacts** - **Signs** refer to exterior and interior of a structure of explicit communicators such as label and etc. **Symbols** and **Artifacts** refer to the objects in the environment that give implicit cues to users about the meaning of the place and norms and expectations for behavior in the place. Items such as quality of materials used in construction, artwork, presence of certificates and photographs on walls, floor coverings, and personal objects displayed in the environment can all communicate symbolic meaning and create an overall aesthetic impression (Bitner, 1992).

**Service loyalty** is defined as the strength of the relationship between an individual's relative attitude and repeat patronage to a particular service (Dick & Basu, 1994).

**Service switching** is defined as losing customers in term of they switch or change from one service provider to another due to the results of dissatisfaction (Keaveney, 1995).

**Word-of-mouth** is defined as a behavior of spreading either positive or negative experience about products or services to another person (Kim, Kim, Im & Shin, 2003).

## **1.6 Significance of Study**

This study attempt to make theoretical and managerial contributions to the understanding of customer satisfaction. First, this study contributes to the development of more “system view” of literature by proposing framework for the

customer satisfaction. Thus, it is necessary to conduct a study to investigate the selected waiting time perspective that are controllable that could positively and significantly explain the customer satisfaction. The findings should make clear to managers about which waiting time perspectives may be contributed on customer satisfaction.

Second, according to Ghobadian et al. (1993) companies with perceived high quality “goods” and “services” typically had higher market share, higher return on investment and asset turnover than companies with perceived low quality. This led to the conclusion that in the long term, the most important factor affecting business performance is the quality of “goods” and “services” offered by the organization, relative to its competitors (p. 43).

Thirdly, particularly to Lembaga Tabung Haji, managing waiting time issue is crucial because there is no other medium that their customers can interact with them except really involved in actual service provider. Lembaga Tabung Haji has no automated teller machines (ATMs) and not providing telephone or Internet banking. This study is very important to Lembaga Tabung Haji.

Most of the customer satisfaction with services researches has been conducted in Western countries using western services and their services are more efficient compared to our country. These studies also employ Western customers as their samples and Western are known for their aggressive action on consumer welfare. Therefore, results cannot be generalizing towards Malaysia because of differences in environment and value. Moreover, there is very limited research on this subject in

Malaysia. It is hope that useful information could be obtained from this research as a guide for the local organizations.

## **1.7 Summary and Organization of Chapters**

The report of this study has been organized in five chapters. The first chapter covers the background of the study, problem statement, research objective, research questions, and significance of the study and organization of remaining chapters. Chapter 2 is designed to reflect an overview of the history of research followed by the research framework and hypotheses of the study. A view on waiting time issues and the impact of customer satisfaction has been discussed in this chapter too. Chapter 3 sets the research plan, design and methodology. Chapter 4 represents the data analysis and presentation of findings using different statistical methods. Finally in chapter 5, we discuss on the finding, highlighted some limitations, recommendation for future research and conclusion of the research.

## Chapter 2

### LITERATURE REVIEW

#### 2.1 Introduction: An Overview of Waiting Time Issues

Waiting are common for most of service-related industry. We wait almost everywhere, in hospitals, clinics, banks, post offices, supermarkets and many other places. Taylor (1994) mentioned in her article “to understand the waiting experience, one must understand what is meant by *wait for service*. Here, it refers to the time from which a customer is ready to receive the service until the time the service commences” (p. 56). She also mentioned that wait for service also refers to the state of readiness felt by the customer during the wait.

Customer waiting time for service typically represents the primary or first direct interaction connecting customers and service delivery process. “The queue is most often a customer’s first interaction with a service operation. How the service manager addresses those factors which can result in dissatisfaction with waiting can have an impact, therefore, on the customer’s overall level of satisfaction with the entire service encounter” (Davis & Heineke, 1993, p. 24).

Nowadays, consumers do not simply demand for quality but they also demand for speed. Katz, Larson and Larson (1991) suggested that this thing happened in America due to the increase of average work week from 40.6 hours in 1973 to 47 hours a week in 1988 and during the same period, U.S. leisure time has decreased from 26.2 hours to 16.6 hours a week. Davis and Heineke (1993) proposed that “as the standard of

living in the developed countries increases, the value of customers' time also increases, and consequently they seek out those goods and services which will minimize the expenditure of their time" (p. 21). Therefore, customers do not tolerate waiting in line for long periods of time just to receive whatever kind of products or services unless those things are really important or more valuable than the time spent for waiting.

Katz et al. (1991), Jones and Dent (1993), Jones and Peppiatt (1996) and Agnes Durrande-Moreau (1999) mentioned in their article about David Maister's eight principles which can be used by the organizations to influence customers' satisfaction with waiting time. Eight propositions are listed below:

1. Unoccupied time feels longer than occupied time
2. Pre-process waits feel longer than in-process waits
3. Anxiety makes waits seem longer
4. Uncertain waits are longer than certain waits
5. Unexplained waits are longer than explained waits
6. Unfair waits are longer than fair waits
7. The more valuable the service, the longer the customer will wait.
8. Solo waits feel longer than group waits.

Those propositions are relating to the "psychology of waiting lines" and Agnes Durrande-Moreau (1999) came out with name of the variables for each of the propositions, which listed below in a sequence manner based on the list of propositions stated above:

1. distraction

2. moment
3. anxiety
4. uncertainty
5. explanation
6. fairness
7. value
8. solo wait

Jones and Dent (1993) in their research wrote that Forte management group developed fifteen statements for the basis of their research, whereby some of the statement matched closely with Maister's propositions without knowing of the existence factors proposed by Maister which can influence customers' perceptions of waiting time. Fifteen statements were:

1. If I have to wait I want something to occupy my time.
2. I do not mind waiting if I see things happening.
3. I do not mind waiting as long as I know why.
4. I do not mind waiting as long as I know for how long.
5. A good meal but a long wait is a bad experience.
6. I do mind waiting if the system appears inefficient.
7. Value is worth waiting for.
8. Quality is worth waiting for.
9. If I had known I would have to wait I would have gone elsewhere.
10. If I see a queue I go elsewhere.
11. I would pay more not to have to queue.
12. I do not feel like spending after I have been waiting.

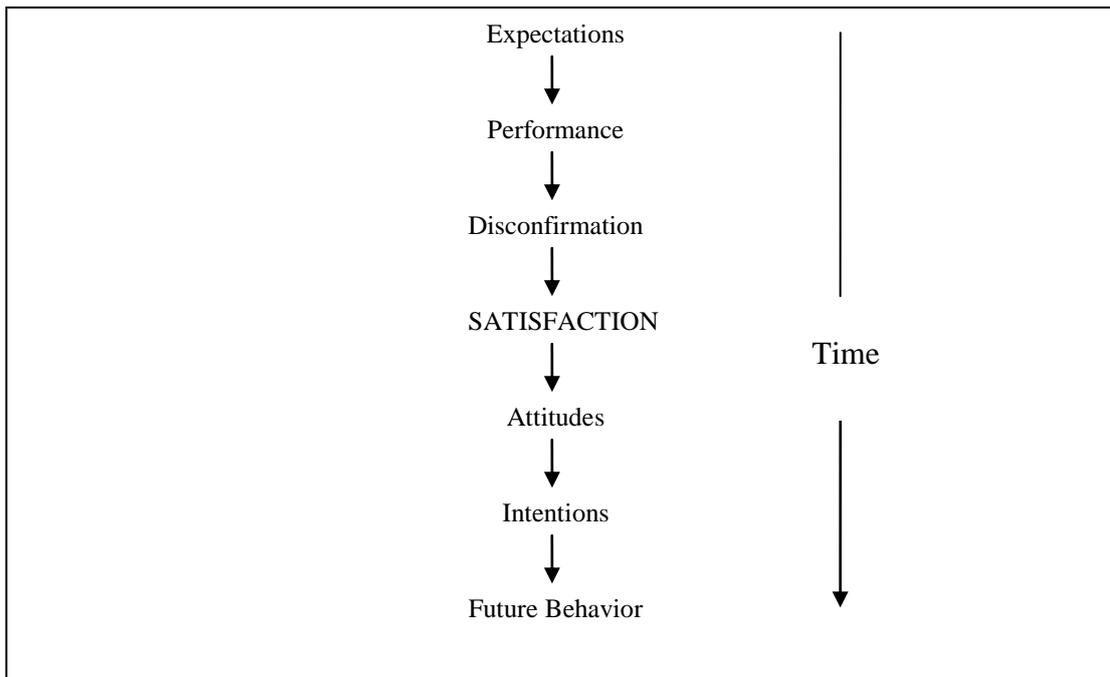
13. Waiting affects my purchasing mood.
14. I do not mind waiting longer at weekends.
15. A smiling face and an apology at the end of the queue make it more bearable (p. 54).

Jones and Dent (1994) were using these statements on hotel customer and customers using a Harvester restaurant during a period of one week by asking them to express their level of agreement on a five point scale. They found that over 70 percent of all respondents were clearly concerned about waiting time because most of them strongly agreed or agreed with statements 1 to 13 but disagreed with statement 14.

Jones and Dent (1994) also found that results of this survey indicated that waiting does affect the mood of the customer and their propensity to spend. Results also suggest that, while customers believe both quality and value are worth waiting for, there comes a point where an unacceptable wait begins to affect their perception of quality (p. 54).

## **2.2 Customer Behavior Model**

Figure 2.1 on the next page shows a customer behavior model. This figure shows how customer satisfaction is based upon expectations, performance and the difference between the two (disconfirmation). Upon satisfaction are customer attitudes, intentions and future behavior.



*Figure 2.1.* Customer Behavior Model.

Source: Davis and Vollmann (1990).

### **2.3 Customer Satisfaction**

In general, satisfaction is a person’s feeling of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relations to his or her expectations. Kostecki (1996) found that long waits are likely to affect negatively the performance evaluation of the clients and have to be managed to reduce their impact. By learning how to deal with waiting lines, service firms improve consumer satisfaction as well as their image based on time-relevant behavior (p. 295).

“Generally, customer satisfaction is inversely related to customer waiting time. In other words, the longer customers wait, the less satisfied or the more dissatisfied they become”(Davis & Heineke, 1993).

Based on Davis and Heineke (1998), customer satisfaction in service operations have been defined in two general ways:

- 1) satisfaction as a function of disconfirmation and
- 2) satisfaction as a function of perception.

### ***2.3.1 Satisfaction as a Function of Disconfirmation***

Maister (1985) incorporating several of the concepts described above, presented an initial framework for focusing on customer satisfaction with waiting. He presented the following equation to describe the relationship between customer satisfaction, customer perception and customer expectation:

$$\text{Satisfaction} = \text{Perception} - \text{Expectation}$$

Written in the article of Davis and Heineke (1998) is the equation of satisfaction as a function of disconfirmation.

$$\text{Satisfaction} = f(\text{Perception} - \text{Expectation})$$

Expectations are based from previous experience or after dealing with the company for the first time or through advertising and recommendation from other customers. Figure presented below show the disconfirmation model of consumer satisfaction, taken from Walker (1995). He mentioned that the figure depicted was from Woodruff et al. (1983) and illustrated by Hill (1986).

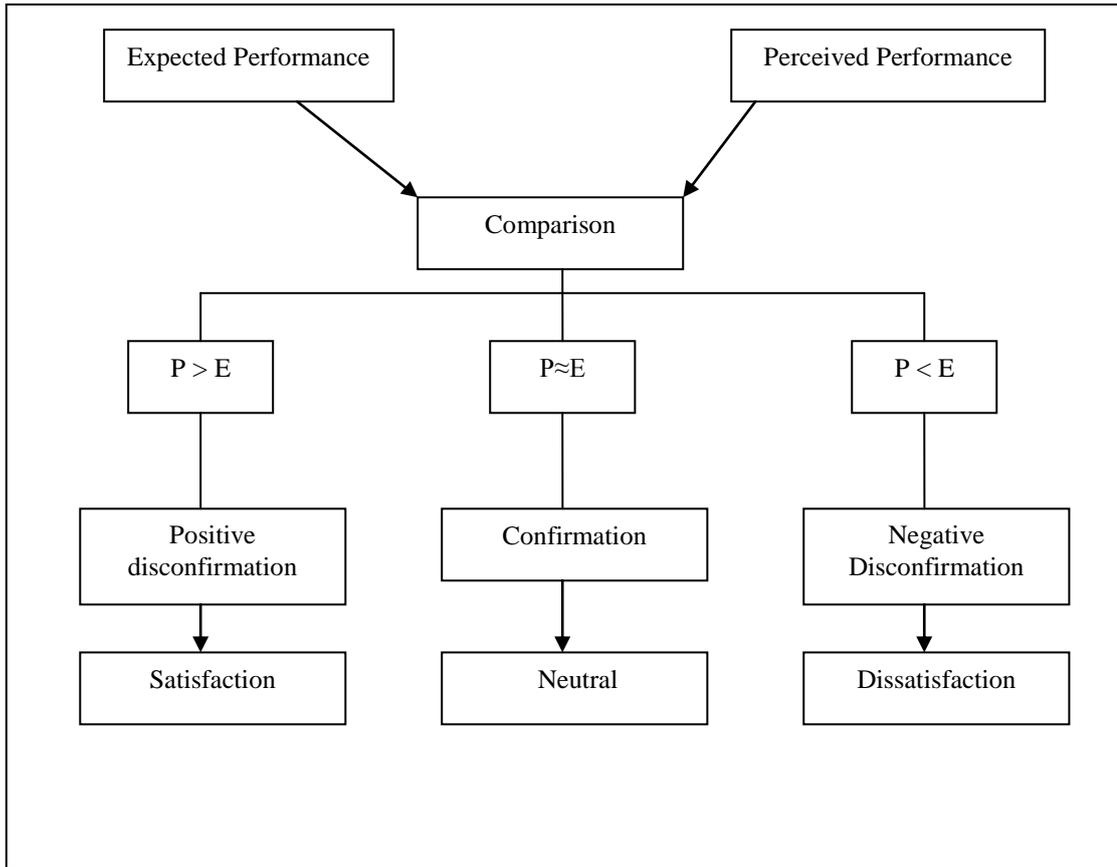


Figure 2.2. Disconfirmation Model of Customer Satisfaction.

Source: Walker (1995)

The above figure show the disconfirmation model of customer satisfaction and this figure is directly true when it deals with direct consumption of products and services. To apply this model on the waiting time perspective, it will turn to the other way round. If people perceived that they wait shorter than they expected, it is a case of positive disconfirmation and will lead to satisfaction. If people perceived the wait longer than they expected, it is a case of negative disconfirmation whereby it will lead to dissatisfaction. The above model should be look like the modified version of disconfirmation model of customer satisfaction to show the disconfirmation relationship in waiting time perspective. This is shown in Figure 2.3 presented below.

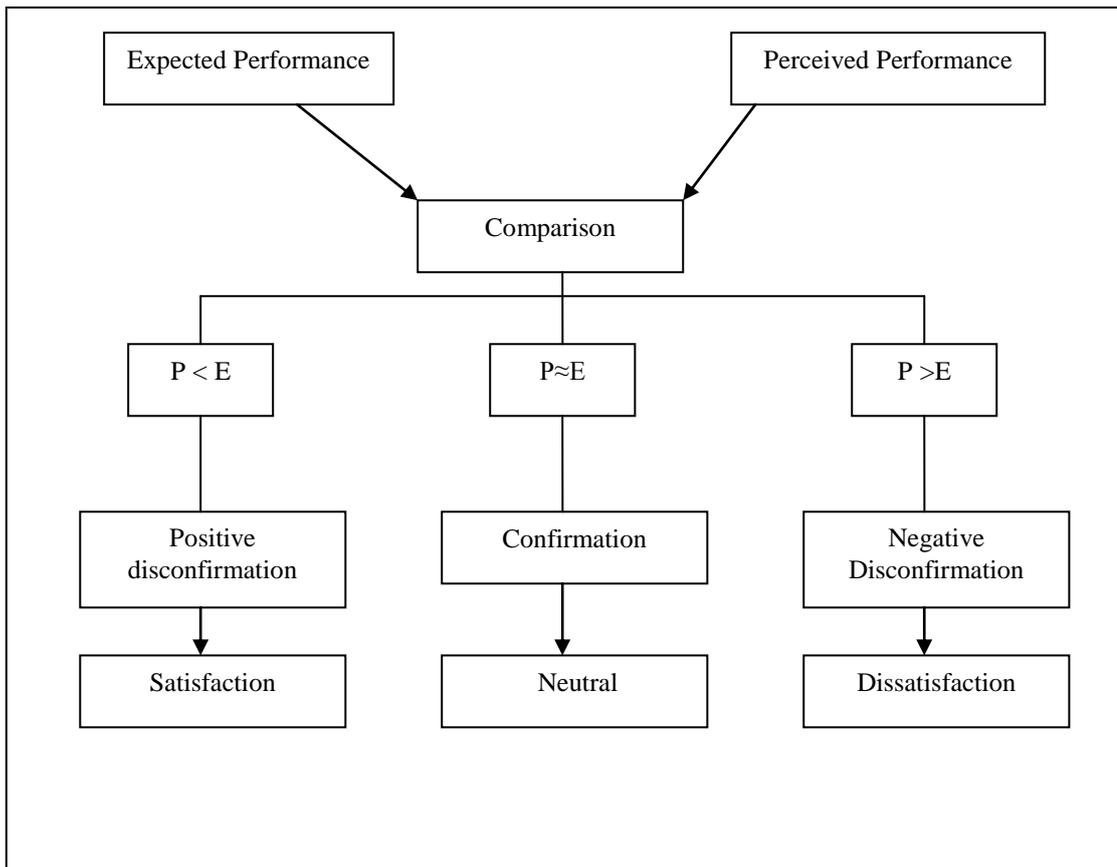


Figure 2.3. Modified Disconfirmation Model of Customer Satisfaction.

### 2.3.2 Satisfaction as a Function of Perception

There are still arguments on using the disconfirmation model to measure the customer satisfaction. Alternative approach is to use the function of perception of service performance rather than the disconfirmation model. This is also suggested by Cronin and Taylor (1994) and Teas (1993).

Davis and Heineke (1998) wrote the equation of this function is as follows:

$$\text{Satisfaction} = f(\text{Perception})$$

## **2.4 Expected Waiting Time**

According to Davis and Vollmann (1990), customer expectation of waiting time are based on the customer's prior experience, the number of customers in the service facility, critically time to the customer and other distractions, intended or otherwise. Customers normally expect to wait longer when the service operation is busy. They are also willing to wait longer during weekend rather than weekdays.

## **2.5 Perceived Waiting Time**

Tom and Lucey (1997) suggested that although the objective waiting time may be the same, the perceived waiting time for food will differ depending upon one's state of hunger, the length of the line, or the ambience of the restaurant. Based on the idea, we can say that ambience of a place might be reducing our perceived waiting time when it is really comfortable and entertaining us.

Katz et al. (1991) in their finding discover that customers tend to overestimate the amount of time they spend in line. Previous researches investigated the impact of waiting time fillers such as television as an entertainment during wait (Jones and Peppiat, 1996), Pruyn and Smidts, 1998) and duration information (Katz et al, 1991).

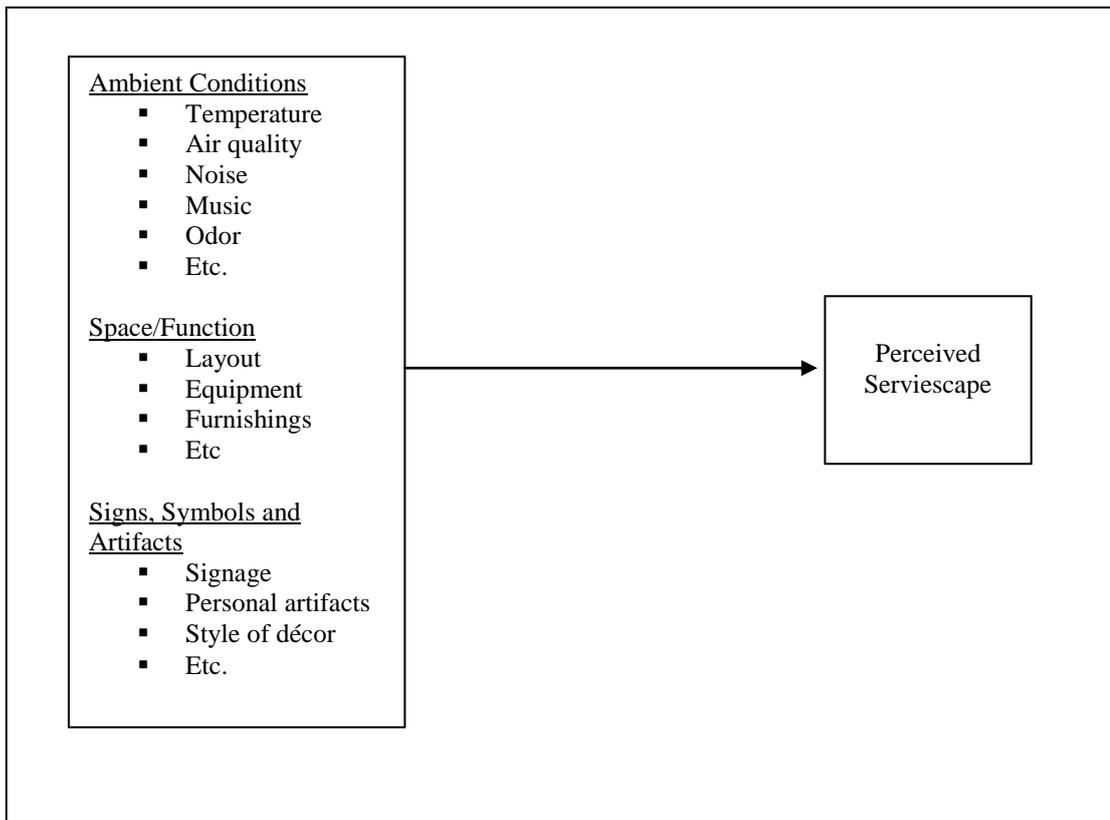
Katz et al. (1991) found that duration information given to the customers increased their perceived waiting time. Customers were become more obvious on how long they have been waited to get the service. Pruyn and Smidts (1998) also found a negative

effect on placing a television to entertain the hospitals' patients. They found that TV watchers perceived that they waited longer than non-watchers.

## **2.6 Waiting Environment**

Davis and Heineke (1993) proposed that comfortable waiting area is where the temperature, lighting, seating and sound levels are appropriate. When calling system or "take a number" system is used, comfort and fairness can often be combined. "Customers who are unoccupied tend to perceive longer waiting times than customers who are occupied during their waits. Many options are available to occupy the customer's time in a queue: reading materials, interesting displays, mirrors, fish tanks and music have all been demonstrated to be useful" (Davis & Heineke, 1993, p. 30).

It is also possible to provide a waiting environment where customers can be working productively on their own task in order to occupy the customer's time in a queue. Bitner (1992) proposed a framework for understanding environment-user relationships in service organizations. The partial framework are shown in the next figure, because her framework tell us that environmental dimensions such as ambient conditions and sign, symbols and artifacts and space/function will lead to perceived serviescape.



*Figure 2.4.* Partial Framework for Understanding Environment-User Relationships in Service Organizations.

Source: Bitner (1992)

## 2.7 Post-Purchase Behavior

Satisfied customers were proving in the previous researches for being the contributor of positive outcome on company. Previous research proved that the more satisfied the customer, the positive subsequent behavior that contributes to the company.

### **2.7.1 Service Loyalty**

Service loyalty is defined as the strength of the relationship between an individual's relative attitude and repeat patronage to a particular service (Dick & Basu, 1994). Satisfied customers often to be more loyal compared to dissatisfied customers. Loyalty was found to be directly related to firm profitability and growths.

### **2.7.2 Service Switching**

Service switching is defined as losing customers in term of they switch or change from one service provider to another due to the results of dissatisfaction (Keaveney, 1995). Dissatisfied customers have tendency to switch to another business or less likely to do the repeat business with the firm in the future. But some of the customers although they have been satisfied, they still switch to other services. This might be true especially for banking services. It is important for a company to retain their customers in order to be success in the business industry.

### **2.7.3 Word-of-Mouth**

Word-of-mouth is defined as a behavior of spreading either positive or negative experience about products or services to another person (Kim, Kim, Im & Shin, 2003). As cited in Kim, Kim, Im and Shin (2003), dissatisfied customers communicate about their negative experience with an average of nine other persons, and 10 to 15 percent of a firm's sales losses can be accounted for by these dissatisfied customers (TARP, 1981).

## 2.8 Research Framework and Hypotheses

The major objectives of this study is to determine the influences of disconfirmation in waiting time (perception – expectation) on customer satisfaction and function of perception in waiting time on customer satisfaction. The models for these two functions of satisfaction were adapted from the research done by Davis and Heineke (1998). This study is different from Davis and Heineke (1998) due to elimination of one independent variable used in their study, actual waiting time to determine customer satisfaction with waiting.

In order to know whether perceived waiting time is influenced by the antecedent, Bitner (1992) conceptual framework for understanding environment-user relationships in service organization was adapted to this study. Her environmental dimensions is studied in this research as the independent variable and we would to see if there is any waiting environment that influence perceived waiting time. To the further extend, we would like to test on the outcome upon satisfaction. This part of research framework was adapted from Bitner (1990).

Based on the research model proposed and previous literature found on the study of waiting time, listed below are the research hypotheses.

*H1: The higher the negative disconfirmation, the lower the satisfaction.*

*H2: As perceived waiting time increases, customer satisfactions decrease.*

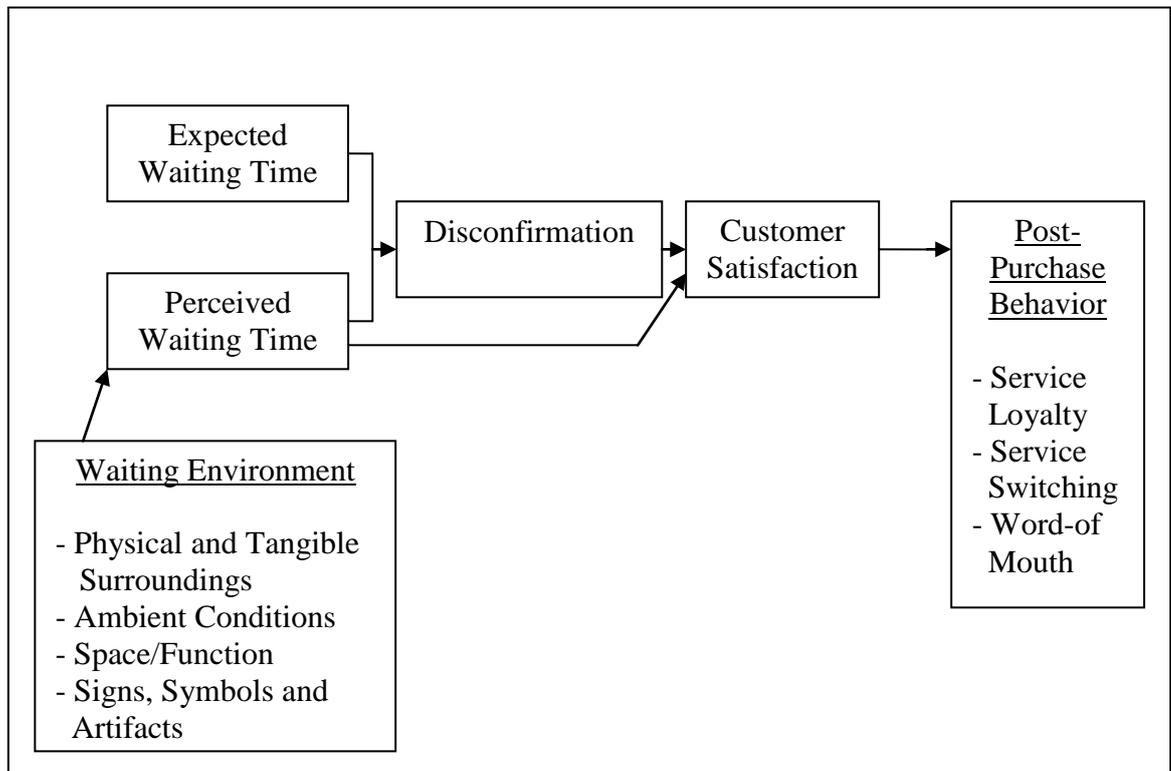


Figure 2.5. Research Framework.

Source: Adaptation from Bitner (1990), Bitner (1992) and Davis and Heineke (1998).

*H3: Conducive waiting environments will reduce perceived waiting time.*

*H3a: Conducive tangible and physical surroundings will reduce perceived waiting time.*

*H3b: Conducive ambient conditions will reduce perceived waiting time.*

*H3c: Conducive space/function will reduce perceived waiting time.*

*H3d: Conducive signs, symbols and artifacts will reduce perceived waiting*

*H4: Satisfied customer will lead to positive outcome (post-purchase behavior).*

*H4a: Satisfied customer will lead to greater service loyalty.*

*H4b: Satisfied customer will lead to less service switching.*

*H4c: Satisfied customers will lead to positive word of mouth.*