



3500000024166

869827

EXAMINATION ON DETERMINANTS OF CUSTOMER
SATISFACTION IN STUDENT FOOD SERVICES

MUHAMMAD ZAFIR BIN MOHD WAZIR

A dissertation submitted in partial fulfillment of the
requirements for the award of the degree of
Master of Management (Technology)

Faculty of Management
Universiti Teknologi Malaysia

JUNE 2017

ACKNOWLEDGEMENT

Alhamdulillah, praise and thank to Allah because of His Almighty and His utmost blessings. I was able to finish this dissertation within the time duration given. Firstly, my special thanks go to my supervisor PM Dr.Mohd Shoki Bin Md. Ariff. Nor for his guidance, patience and supported throughout the project.

Special appreciation also goes to my beloved parents, En. Mohd Wazir Bin Mustafa and Puan Rosliza Binti Salleh for giving support in spiritually throughout my life.

Last but not least, I would like to give my gratitude to my dearest friends and classmates whom I had known for one and half year, thank you for your advice and support throughout this journey to the finish line. Thank you for being there for me when I asked for help and for motivating me when I feel down.

ABSTRACT

Customer satisfaction plays a pivotal role in success of every business organization whether it is meant for a product or a service. The increasing numbers of higher education students on university campuses ensured the expansion of demand for food service availability and quality on campus. This research conducted to examine impact of service quality, food quality, price, ambience and sustainability practices on customer satisfaction in student's food services. This study also will analyze the mediating effect of perceived value between service quality, food quality, price, ambience, sustainability practices and customer satisfaction. Questionnaires had distributed to 310 respondents which are students who experienced dine at sustainability cafeterias in UTM Skudai. Finding of this study shows that service quality, food quality and sustainability practices positively impact customer satisfaction. Finding also indicated that food quality, ambience, sustainability practices positively impact on perceived value. In addition, results indicated that perceived value mediate relationship between service quality, food quality, and ambience and sustainability practices with customer's satisfaction as independent variable. Practical implication of this study can be utilized by food service to improve customer satisfaction efficiently.

Table of Contents

CONTENTS	PAGE
ACKNOWLEDGEMENT	i
ABSTRACT	ii
TABLE OF CONTENTS	iii
LIST OF FIGURES	ix
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xiv
CHAPTER ONE: INTRODUCTION	
1.1 Introduction	1
1.2 Background of Study	1
1.3 Problem Statement	3
1.4 Research Questions	6
1.5 Research Objectives	6
1.6 Research Scope	7
1.7 Research Significance	8
1.8 Student's Food Services	9
1.8.1 Cafeterias in UTM	9
1.8.2 Sustainability practices in Student's Food Service in UTM	10
1.9 Operational definition	10
1.10 Summary	12
CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction	13
2.2 Review of Literature related to Customer Satisfaction in Student Food Services	13
2.2.1 Determinant of Customer Satisfaction in Student Food Services	13
2.2.2 Issue of Perceived Value in Determining Customer Satisfaction	15

2.2.3 Issue of Service Quality in Student Food Services	15
2.2.4 Issue of Sustainability Practices in Student Food Services	17
2.3 Theoretical Consideration	18
2.3.1 Customer Satisfaction Theory	18
2.3.2 Customer Satisfaction Model	19
2.4 Past Researches on Determinants of Customer Satisfaction in Student Food Services	22
2.5 Research Framework	23
2.6 Explanations of Variables	23
2.6.1 Service Quality	23
2.6.2 Food Quality	23
2.6.3 Price	24
2.6.4 Ambience	24
2.6.5 Sustainability Practices	24
2.6.5 Perceived Value	25
2.6.6 Customer Satisfaction	25
2.7 Hypothesis Development	26
2.7.1 Service quality, food quality, price, ambience and sustainability practices are determinants of Customer Satisfaction	26
2.7.2 The impact of service quality, food quality, price, ambience and Sustainability practices on Customer Satisfaction	27
2.7.3 The impact of service quality, food quality, price, ambience and sustainability practices on customer perceived value	29
2.7.4 Perceived Value Impact on Customer Satisfaction	31
2.7.5 Customer Perceived Value as mediator	32
2.8 Summary	32

CHAPTER THREE: METHODOLOGY

3.1	Introduction	33
3.2	Research Design	33
3.3	Population and sampling procedure	34
3.3.1	Defining Population	34
3.3.2	Determining Sampling Frame	35
3.3.3	Selecting Sampling Technique	35
3.3.4	Determining Sample Size	36
3.3.5	Implementing Sampling Process	37
3.4	Data Collection	37
3.5	Research Instrument	38
3.5.1	Research Questionnaire	39
3.6	Instrument Development	40
3.7	Reliability	44
3.8	Validity	46
3.8.1	Exploratory Factor Analysis (EFA)	46
3.9	Data Analysis	47
3.9.1	Descriptive Analysis	47
3.9.2	Factor Analysis	48
3.9.3	Multiple Regression	49
3.9.4	Linear Regression	49
3.9.5	Hierarchical Regression	50
3.9.5.1	Mediation Effect Analysis Step	50
3.9.5.2	Testing and Hypothesis	51
3.10	Summary of Statistical Analysis	53
3.11	Chapter Summary	54

CHAPTER FOUR: DATA ANALYSIS

4.1	Introduction	55
4.2	Response rate	55
4.3	Demographic Analysis	56
4.3.1	Gender	56
4.3.2	Race	57
4.3.3	Age	58
4.3.4	Nationality	59
4.3.5	Educational Level	59
4.3.6	Dining Frequency	60
4.4	Validity Test	61
4.4.1	Determinant of Customer Satisfaction	61
4.4.2	Customer Satisfaction	70
4.5	Reliability Analysis	72
4.6	Examining Data Variables and Assumption Test	72
4.6.1	Normality Test	73
4.6.2	Linearity Test	73
4.6.3	Multicollinearity Test	74
4.7	Descriptive Analysis	77
4.8	Hypothesis Testing	78
4.8.1	Determinants of Customer Satisfaction in student food services	79
4.8.2	The Impact of Service Quality, Food Quality, Price, Ambience And Sustainability Practices on Customer Satisfaction	83
4.8.3	The Impact of Service Quality, Food Quality, Price, Ambience, Sustainability Practices on perceived value	84
4.8.4	The Impact of Perceived Value on Customer Satisfaction	86

4.8.5 Mediating Effect of Perceived Value on the Relationship between Determinants and Customer Satisfaction	86
4.8.5.1 Mediating Effect of Perceived Value on the Relationship between Service Quality and Customer Satisfaction	88
4.8.5.2 Mediating Effect of Perceived Value on the Relationship between Food Quality and Customer Satisfaction	92
4.8.5.3 Mediating Effect of Perceived Value on the Relationship between Price and Customer Satisfaction	97
4.8.5.3 Mediating Effect of Perceived Value on the Relationship between Ambience and Customer Satisfaction	98
4.8.5.4 Mediating Effect of Perceived Value on the Relationship between Sustainability Practices and Customer Satisfaction	103
4.9 Summary of Hypotheses Testing	108
4.10 Chapter Summary	110
 CHAPTER FIVE: CONCLUSION AND RECOMMENDATION	
5.1 Introduction	111
5.2 Discussion on findings	111
5.2.1 Finding on the determinants of customer satisfaction in student food services	112
5.2.2 Findings on the Impact of Service Quality, Food Quality, Price, Ambience and Sustainability Practices on Customer Satisfaction	114
5.2.3 Findings on the Impact of Service Quality, Food Quality, Price, Ambience, Sustainability Practices on Perceived Value	115
5.2.4 Findings on the Impact of Perceived Value on Customer Satisfaction	116

5.2.5 Findings on the mediating role of perceived value in relationship between service quality, food quality, price, ambience and sustainability practice with customer satisfaction	117
5.3 The Implication of the Findings	118
5.4 Limitation of the Study	122
5.5 Recommendation for Future Research	123
5.6 Chapter Summary	124
REFERENCES	125

LIST OF FIGURES

FIGURE	PAGE
2.1 EDT Model	19
2.2 ACSI Model	20
2.3 ECSI MODEL	20
2.4 Customer Satisfaction Framework	21
2.5 Customer Satisfaction Model	21
2.6 Research Framework	23
3.1 Linearity Test	74

LIST OF TABLES

FIGURE	PAGE
1 - Past Researches on Determinants Customer Satisfaction in University Food Service	22
2 - Five Point Likert Scale	40
3 - Instrument Development	40
4 - Cronbach's alpha values	45
5 - Mediation Effect Analysis Step	50
6 - Stastical Analysis Method	53
7 - Response Rate	56
8 - Gender	57
9 - Race	57
10 - Age	58
11 - Nationality	59
12 - Educational Level	60
13 - Dining Frequency	60
14 - KMO and Bartlett's test	62
15 - Total Variance Explained	63
16 - Rotated Component Matrix	64
17 - 1 Items deleted	66
18 - 2 Items deleted	66
19 - 3 Service Quality move to Food Quality	67
20 - 4 Perceived Value move to Sustainability	67
21 - 5 Rotation Component matrix	68

- 6 KMO and Bartlett's Test	70
- 7 Total Variance Explained	71
- 8 Component Matrix	71
- 9 Cronbach's Alpha for All Variables	72
- 10 Normality Test	73
- 11 Multicollinearity Test of Determinants with Customer Satisfaction	75
- 12 Multicollinearity Analysis of Service Quality, Food Quality, Price, Ambience, Sustainability with Perceived Value	75
- 13 Multicollinearity Analysis of Perceived Value Mediate the Relationship between Service Quality and Customer Satisfaction	76
- 14 Multicollinearity Analysis of Perceived Value Mediate the Relationship between Food Quality and Customer Satisfaction	76
- 15 Multicollinearity Analysis of Perceived Value Mediate the Relationship between Price and Customer Satisfaction	76
- 16 Multicollinearity Analysis of Perceived Value Mediate the Relationship between Ambience and Customer Satisfaction	77
- 17 Multicollinearity Analysis of Perceived Value Mediate the Relationship between Sustainability Practices and Customer Satisfaction	77
- 18 Descriptive Analysis on Determine of customer Satisfaction	78
- 19 Total Variance Explained	80
- 20 Rotation Component Matrix	81
- 21 Relationship between Determinants and Customer Satisfaction	84
- 22 Relationship between Service Quality, Food Quality, Price, Ambience,	85

Sustainability Practice on Perceived Value	
- 2.1 The Impact of Perceived Value on Customer Satisfaction	86
- 2.1.1 Relationship between Service Quality and Customer Satisfaction	87
- 2.1.2 Relationship between Service Quality and Perceived Value	88
- 2.1.3 Relationship between Perceived Value and Customer Satisfaction	88
- 2.1.4 Relationship between Service quality, Perceived Value and Customer Satisfaction	89
- 2.1.5 Hierarchical Multiple Regression Analysis for Mediating Effect of Perceived Value on the Relationship between Service Quality and Customer Satisfaction	90
- 2.2 Summary of Testing Mediator Hypothesis	91
- 2.2.1 Relationship between Food Quality and Customer Satisfaction	92
- 2.2.2 Relationship between Food Quality and Perceived Value	93
- 2.2.3 Relationship between Perceived Value and Customer Satisfaction	93
- 2.2.4 Relationship between Food quality, Perceived Value and Customer Satisfaction	94
- 2.2.5 Hierarchical Multiple Regression Analysis for Mediating Effect of Perceived Value on the Relationship between Food Quality and Customer Satisfaction	95
- 2.3 Summary of Testing Mediator Hypothesis	96
- 2.3.1 Relationship between Price and Customer Satisfaction	97
- 2.3.2 Relationship between Ambience and Customer Satisfaction	99
- 2.3.3 Relationship between Ambience and Perceived Value	99
- 2.3.4 Relationship between Perceived Value and Customer Satisfaction	100
- 2.3.5 Relationship between Ambience, Perceived Value and Customer Satisfaction	100

- 51	Hierarchical Multiple Regression Analysis for Mediating Effect of Perceived Value on the Relationship between Ambience and Customer Satisfaction	101
- 52	Summary of Testing Mediator Hypothesis	102
- 53	Relationship between Sustainability Practices and Customer Satisfaction	103
- 54	Relationship between Sustainability Practices and Perceived Value	104
- 55	Relationship between Perceived Value and Customer Satisfaction	104
- 56	Relationship between Sustainability Practices, Perceived Value and Customer Satisfaction	105
- 57	Hierarchical Multiple Regression Analysis for Mediating Effect of Perceived Value on the Relationship between Sustainability Practices and Customer Satisfaction	106
- 58	Summary of Testing Mediator Hypothesis	107
- 59	Summary of Results	108
60	Items deleted	113
61	Item shifted 1	113
62	Item shifted 2	113

LIST OF ABBREVIATIONS

ACSI	American Customer Satisfaction Index
B2C	Business to Customer
CSI	Customer Satisfaction Index
ECSI	European Customer Satisfaction Index
EDT	Expectancy Disconfirmation Theory
EFA	Exploratory Factor Analysis
PCA	Principle Component Analysis
SPSS	Statistical Package for the Social Sciences

REFERENCES

- Al-Jabaly, S. M., & Khraim, A. S. (2014). The Effect of Perceived Value and Customer Satisfaction on Perceived Price Fairness of Airline Travelers in Jordan. *Universal Journal of Management*, 2(5), 186-196.
- Al-Tit, A. A. (2015). The effect of service and food quality on customer satisfaction and hence customer retention. *Asian Social Science*, 11(23), 129.
- Arif, M. S. B. M., Fen, H. S., & Ismail, K. (2012). Relationship Between Customers' Perceived Values, Satisfaction and Loyalty of Mobile Phone Users. *Review of Integrative Business and Economics Research*, 1(1), 126.
- Arton, A. S., Scott, N., Solnet, D., & Breakey, N. (2010). Hotel restaurant dining: The relationship between perceived value and intention to purchase. *Tourism and Hospitality Research*, 10(3), 206-218.
- Asri, A. (2012). Review On Expectancy Disconfirmation Theory (EDT) Model In B2C E-Commerce. *Journal of Information Systems Research and Innovation (JISRI)*, 2(a), 95-102.
- Das-Smith, A., Choy, V., Chong, H., & Verma, R. (2015). Environmental Sustainability in the Hospitality Industry: Best Practices, Guest Participation, and Customer Satisfaction.
- Eng, D., Ling, M., Suki, N. M., & Tam, A. Y. L. (2014). Student satisfaction with the service quality of cafeteria: A structural approach. *International Journal of Business, Economics and Law*, 4(1), 105-111.
- Grull, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *the Journal of Marketing*, 7-18.
- Grčić, S., Tešanović, D., & Jovičić, A. (2013). The vital components of restaurant quality that affect guest satisfaction. *Tourism*, 17(4), 166-176.
- H. N. A. A., Fikry, A., & Zainuddin, A. (2016). The Impact of Store Atmospherics, Perceived Value, and Customer Satisfaction on Behavioural Intention. *Procedia Economics and Finance*, 37, 538-544.

- Jeong, E.. & Jang, S. (2010). Effects of restaurant green practices: Which practices are important and effective?
- Lin, N.-H., Lee, S.-M., & Huffman, L. (2011). What matter experiential value in casual-dining restaurants?
- Johnson, M. D., Gustafsson, A., Andreassen, T. W., Lervik, L., & Cha, J. (2001). The evolution and future of national customer satisfaction index models. *Journal of economic Psychology*, 22(2), 21
- Khan, S., Hussain, S. M., & Yaqoob, F. (2012). Determinants of customer satisfaction in fast food industry. *International Journal of Management and Strategy*, 3(4), 12-13, 7-245.
- Kim, W. G., Ng, C. Y. N., & Kim, Y.-s. (2009). Influence of institutional DINESERV on customer satisfaction, return intention, and word-of-mouth. *International Journal of Hospitality Management*, 28(1), 10-17.
- Kong, J. P., & Mohd Jamil, S. (2014). Level of satisfaction among postgraduate health sciences students on the cafeteria facilities in Universiti Kebangsaan Malaysia, Kuala Lumpur Campus. *International Journal of Quality and Service Sciences*, 6(4), 258-273.
- Kristensen, K., Martensen, A., & Gronholdt, L. (2000). Customer satisfaction measurement at post Denmark: results of application of the European customer satisfaction index methodology. *Total Quality Management*, 11(7), 1007-1015.
- Liang, X., & Zhang, S. (2009). Investigation of customer satisfaction in student food service: An example of student cafeteria in NHH. *International Journal of Quality and Service Sciences*, 1(1), 113-124.
- Lin, C. C. (2003). The role of customer perceived value in generating customer satisfaction: An e-business perspective. *Journal of Research in Marketing & Entrepreneurship*, 5(1), 25-39.
- MARKOVIC, S., KOMSIC, J., & STIFANIC, M. (2013). *Measuring Service Quality in City Restaurant Setting Using DINESERV Scale*. Paper presented at the Proceedings of the 1st International Conference on Management, Marketing, Tourism, Retail, Finance and Computer Application, 176.
- Milfelner, B., Snoj, B., & Korda, A. P. (2011). Measurement of Perceived Quality, Perceived Value, Image, and Satisfaction Interrelations of Hotel Services: Comparison of Tourists

- from Slovenia and. *Društvena istraživanja-Časopis za opća društvena pitanja*(3), 605-624.
- Mohammad, A. A. S., & Alhamadani, S. Y. M. (2011). Service quality perspectives and customer satisfaction in commercial banks working in Jordan. *Middle Eastern Finance and Economics*, 14(1), 60-72.
- Muturi, F. M., Wadawi, J. K., & Owino, E. O. (2014). Antecedents of customer perceived value: Evidence of mobile phone customers in Kenya. *International Journal of Business and Social Science*, 5(4).
- Namkung, Y., & Jang, S. (2008). Are highly satisfied restaurant customers really different? A quality perception perspective. *International Journal of Contemporary Hospitality Management*, 20(2), 142-155.
- Ng, Y. N. (2005). *A study of customer satisfaction, return intention, and word-of-mouth endorsement in university dining facilities*. Oklahoma State University.
- Niezurawski, L. (2006). Determinants of customer satisfaction on the markets of selected dairy products. *Polish journal of food and nutrition sciences*(15/56).
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of marketing research*, 460-469.
- Pedraja Iglesias, M., & Jesus Yagüe Guillén, M. (2004). Perceived quality and price: their impact on the satisfaction of restaurant customers. *International Journal of Contemporary Hospitality Management*, 16(6), 373-379.
- Qin, H., & Prybutok, V. R. (2009). Service quality, customer satisfaction, and behavioral intentions in fast-food restaurants. *International Journal of Quality and Service Sciences*, 1(1), 78-95.
- Ryu, K., Lee, H.-R., & Gon Kim, W. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200-223.
- Saad Andaleeb, S., & Conway, C. (2006). Customer satisfaction in the restaurant industry: an examination of the transaction-specific model. *Journal of Services Marketing*, 20(1), 3-

- Sabir, R. I., Ghafoor, O., Hafeez, I., Akhtar, N., & Rehman, A. U. (2014). Factors Affecting Customers Satisfaction in Restaurants Industry in Pakistan. *International Review of Management and Business Research*, 3(2), 869.
- Sánchez-Fernández, R., & Iniesta-Bonillo, M. A. (2007). The concept of perceived value: a systematic review of the research. *Marketing theory*, 7(4), 427-451.
- Sweeney, J. C., Soutar, G. N., & Johnson, L. W. (1999). The role of perceived risk in the quality-value relationship: a study in a retail environment. *Journal of retailing*, 75(1), 77-105.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter begins with a discussion on the background of the study which describes the underlying issues related to customer satisfaction in student food services. It then defines the problem statement of this study by highlighting the issues that triggered a need to conduct this study. The chapter also identifies several research questions and objectives that are intended to be achieved from executing this study. It ends with a brief elaboration on the scope of study and possible significance for the both practitioner and academic.

1.2 Background of study

Customer satisfaction plays a decisive role in success of every business organization whether it is meant for a product or a service. Every business needs not only to retain its current customers but also to significantly expand customer's base (Saad Andaleeb & Conway, 2006). In restaurant industry, customer satisfaction is often used to predict the likelihood of customers returning to a restaurant. Some studies have shown that customer satisfaction is important to food service managers because it leads to repeat patronage, brand loyalty and new customers through word-of-mouth promotion. The satisfaction will not only strengthen customer loyalty but also improve the dining facility's status and produce greater profits (Ryu, Lee, & Gon Kim, 2012).

The United Nations Educational, Scientific and Cultural Organization(UNESCO) stated that Malaysia is among the top favorite education destinations in the world for

local and international students citing quality of life, education, cost of living and cultural diversity among the reasons behind Malaysia's attractive reputation (Kong & Mohd Jamil, 2014). Malaysia Universities can provide affordable high-quality education but at the same time they also have to pay attention on service provide to the students which include food service in university. Food service defines as businesses, institutions, and companies responsible for any meal prepared outside the home (Liang & Zhang, 2009). This industry includes restaurants, school, university, hospital cafeterias and many other formats. Cafeteria is the main form for student foodservice in colleges or universities all over the world and students nowadays are more sophisticated or prefer a higher variety of types of food (Kong & Mohd Jamil, 2014).

The increasing numbers of higher education students on university campuses ensured the expansion of demand for food service availability and quality on campus (Liang & Zhang, 2009). Not only number of university students keep increasing, students also come from different races and also come from different countries. Nowadays, student foodservice unquestionably becomes big market today not only they competing within local and private food service operators but also fast foods and vending machines (Liang & Ziang, 2009). With that, today's students are no longer tolerating poor quality of food served by university dining but expecting more than good food quality and nutritional value of the food they consume (Chang, Ling, Suki, & Tam, 2014). Therefore, it is important for university food service operators to fully recognize the wants of students and meet their needs to keep up their satisfaction and valuable campus dining experiences.

1.3 Problem statement

Cafeteria is one of the main forms in University because it is a centre for food service especially for students (Martin Cosuegra *et al*, 2007). Good service from cafeteria will represent that University have good food service. The major issues of university food service are aspects of student satisfaction. In UTM, there also a lot of cafeterias provided for students and every day UTM students will dine and buy their meal at those cafeterias.

When determinants of customer satisfaction been debated, factors such as service quality, product quality and price will be mentioned. Based on previous study on dining services by (Ashton, Scott, Solnet, & Breakey, 2010), it stated that service quality, food quality and price positively impact customer satisfaction. In other study by (Lin, 2003) which examined customer satisfaction in e-business, study found that convenience, price and service quality are main determinants of customer satisfaction. Thus, determinants of customer satisfaction from variety of industries such as hotel, e-commerce and hospitality are well-addressed. However, in student food service industry, determinants of customer satisfaction are still questionable and inconclusive. Based on previous research studied on determinants of customer satisfaction in student food services by (Chang *et al.*, 2014; Kim, 2009; Kong & Mohd Jamil, 2014; Liang & Zhang, 2009), there are number of determinants that were believed could impact customer satisfaction which include service quality, food quality, price, ambience, convenience and value. Unfortunately, customer perceived value in determine customer satisfaction in student food service is less emphasized. Only few researchers (Chang *et al*, 2014; Kong, 2014) did mentioned about value, but it still not been addressed well even though value is really crucial and important in determine customer satisfaction.

This study also identified relationship between service quality, food quality, price and ambience on value. Based on previous study by (Lin, 2003) which study on online business, results shows that service quality, price and convenience positively influence customer perceived value. On the other hand, study by (Ryu *et al.*, 2012)

indicates that physical environment, food quality and service quality significantly impact customer customer perceived value in full-service restaurant. Moreover, according to (Muturi, Wadawi, & Owino, 2014), they found that service quality and price have positively affect customer perceived value of mobile phone customers. Despite the role of perceived value really well addressed in variety of sectors such as hotel, tourism, e-commerce and technology sector, customer perceived value in student food service is still weak to be emphasized. Previous researches on determinants of customer satisfaction in students' food service emphasized model that it have direct relationship. Previous researches show that there are direct relationship between determinants and customer satisfaction without any mediator. However, based on American customer satisfaction index (Fornell, Johnson, Anderson, Cha, & Bryant, 1996) and European customer satisfaction index (Kristensen, Martensen, & Gronholdt, 2000), it shows that perceived value act as mediator between the determinants and customer satisfaction. Therefore it is possible and relevant to include perceived value as mediator in relationship between service quality, food quality, price and ambience with customer satisfaction since value can be perceived from all determinants. Thus it means that all determinants can effect customer satisfaction so this research had examined this relationship.

Based on previous papers, perceived value and satisfaction are two different things but both have close relationship. Customers will only buy and obtain satisfaction from the company that they perceive offers the highest customer perceived value to meet their demand. Study by (Milfelner, Snoj, & Korda, 2011) stated that perceived value directly impact guest satisfaction in hotel industry. Besides that, refer to (Al-Jabaly & Khraim, 2014), results found that customer perceived value effect customer satisfaction in airline travelers in Jordan. In student food services, relationship between customer perceived value and customer satisfaction is still doubtful since it is scarce to get reference. In fact, customer perceived value in student food services should be defined more deeply because another important element that usually been overlooked by previous researchers in student food services is sustainability value. In student food services environment, most of cafeterias encourage sustainability

practice in their operation which customers will involve in the service process such as take their own meal and bring own container. Then once they finish eating, they will put all materials into the available bin which divide into categories such as food waste, non food waste and trash. This kind of sustainability practices let student to gained experience value during their dining time. So this research examined whether this experience value could affect student satisfaction.

Besides that, number of previous studies in different sectors indicated customer perceived value as mediator in their model. Study by (Al-Jabaly & Khraim, 2014) found that customer perceived value is mediator between perceived price and customer satisfaction in Airline Travelers. In addition, according to (Lin, 2003), result show that customer perceived value mediates between convenience, service quality and price with customer satisfaction in e-business perspective. Moreover, (Milfelner et al., 2011) indicated that customer perceived value mediate relationship between image, service quality and customer satisfaction in hotel services. Therefore, it is important for this research to consider perceived value issues in order to identify whether perceived value has a mediator role on the relationship between service quality, food quality, price and ambience with customer satisfaction. Moreover, there are lack number of studies explored the concept and role of perceived value as mediator in student food service institution. Therefore, this study is required to identify the mediating effect of perceived value on the relationship between service quality, food quality, price and ambience with customer satisfaction.

1.4 Research questions

According to the problem statement mentioned above, this study specifically focuses on the determinants of customer satisfaction in student food service. Therefore, in addressing the underlying issues related to this study, the following questions were raised:

1. What are the determinants of customer satisfaction for student food service?
2. What are the impacts of service quality, food quality, price, and ambience and sustainability practices on customer satisfaction?
3. What are the impacts of service quality, food quality, price, ambience and sustainability practices on perceived value?
4. What is the effect of perceived value on customer satisfaction?
5. Does customer perceived value mediates the relationship between service quality, food quality, price, ambience, sustainability practices and customer satisfaction?

1.5 Research Objectives

This study highlighted several research objectives related to determinants of customer satisfaction in university food service. This discovered the objective as follows:

1. To identify determinants of customer satisfaction for university food service.
2. To determine the impact of service quality, food quality, price, ambience and sustainability practices on customer satisfaction.
3. To examine the impact of service quality, food quality, price, ambience and sustainability practices on perceived value.
4. To examine effect of perceived value on customer satisfaction.
5. To analyze the mediating effect of perceived value between service quality, food quality, price, ambience, sustainability prsctices and customer satisfaction.

1.6 Research Scope

This research emphasized on determinants of customer satisfaction in student food service. Based on previous research studied on customer satisfaction, there are number of determinants were believed to have huge impact on customer satisfaction which include service quality, food quality, price, ambience, risk and convenience and value. For this research which emphasize on customer satisfaction toward food service in university, researcher had include only 5 determinants which have really strong impact on customer satisfaction and really suitable with university cafeteria situation which are service quality, food quality, ambience and price and value.

Besides that, this research also stressed on important of perceived value on customer satisfaction. There are several forms of value. These forms of value can be categorized as functional, social, emotional, epistemic, and experience (Ashton et al., 2010). For this research, researcher focused on experience value based on consumption experience by customer. Experience value is the total outcome to the customer from the combination of environment, goods, and services purchased (Lewis, 2000). This experience is the core of the hospitality sector because intangible experience plays an important role in this business. Thus, for this research, researcher looked into the experience value gained by students reflect from the determinants in customer satisfaction which are service quality, food quality, ambience and price. By the way, researcher also identified how the sustainability practices in UTM cafeteria effect experience value of the students.

Moreover, since this research also emphasized on experience value reflect from sustainability practices, thus only selected cafeteria had been chosen. There are two types of cafeterias in university. First type of cafeteria is cafeterias that pursue full service which customer not much participate in service process. However this type of cafeteria is rarely exist in university even in UTM. Second type of cafeteria is cafeterias that pursue self service and sustainability practices in operation which are the most common operation in university include in UTM. So for this research, cafeteria that been chosen was cafeterias that pursue self service and sustainability

practices in operation which customers will involve or participate in certain process during their dining time

Besides that for the respondents, this research examined UTM Students satisfaction toward student food service. Respondents consist of local students and also international students. Since cafeterias that been chosen were cafeterias that pursue self service operation, therefore respondents for this research were students that have dining experience in those selected cafeterias since researcher also analyzed on students satisfaction in term of their involvement in sustainability practices..

1.7 Research Significant

This study can be constitutes for two point of view. First party is academic literature while second party is UTM food service. For academic literature, this research had extended previous literature regards to the determinants of customer satisfaction in business operation. There are numbers of papers discussing about determinants of customer satisfaction but in term of customer satisfaction in student food service, it is quite rare to be address. So this research had extended literature regarding to determinants of customer satisfaction in student food service thus it contributed to future scholars to extent this kind of research.

Besides that, this research also gives new model in determining customer satisfaction in student food services. . Based on previous researches related with determinants of customer satisfaction in student food service, the frameworks have direct relationship between determinants and customer satisfaction. However for this research, variable which is customer perceived value acted as mediator between all four determinants and customer satisfaction. Moreover, this research also enriched current model by incorporating experience value to determine customer satisfaction in food service. Since perceived value come in variety of forms, this research emphasized more on one of forms of value which is experience value.

Experience values are reflecting from involvement of customers with sustainability practices during their dining time.

For food service in UTM, this research had exposed to them what are determinants of customer satisfaction in food service thus they can find ways to improve their service and operation so it will meet student's expectation. Besides that, this research gives view to food service institution about perceived value which acts as mediator in the model. Perceived value is crucial because it is outcome service quality, food quality, price and ambience. By the way, perceived value is also important as determinants of customer satisfaction. Furthermore, this research also emphasized on sustainability value in cafeteria thus can be used by food service to improve in term of sustainability activity.

1.8 Student's Food Service in UTM

Foodservice defines as businesses, institutions, and companies responsible for any meal prepared outside the home (Liang & Zhang, 2009). Nowadays, student foodservice unquestionably becomes big market today including in UTM. Good service provided by food service institution in UTM will reflect on overall satisfaction of students during their study time at UTM.

1.8.1 Cafeterias in UTM

Refer to UTM's Office and Asset Development, there 101 rental lots in UTM which consist of 8 arcades, 8 single cafeterias and 9 kiosks. Moreover from 8 arcades, it consists of 67 units of cafeterias. In UTM, there are two types of cafeterias. First type of cafeteria is cafeterias that pursue full service which customer not much participate in service process. However this type of cafeteria is rarely exist in university even in UTM. Second type of cafeteria is cafeterias that pursue self service and sustainability practices in operation which are the most common operation in university include in UTM.

1.8.2 Sustainability practices in Student's Food Service in UTM

In this study, researcher had stressed on student satisfaction during dining time at cafeteria that pursue sustainability practices. Sustainability is referred to at a societal level with the idea of developing sustainable ways of living result in smaller pollution and more ecology, and ultimately reduce the environmental impact (Bruns-Smith, Choy, Chong, & Verma, 2015). In UTM cafeterias, one of the famous sustainability practices is student have to take their meal by themselves and once they finished they have to separate the excess food from the plates put all the materials include plates or plastic at the cleaning station. At cleaning station, it divides into 3 containers which are non-food waste, food waste and trash. Moreover, students also been advised to bring their own food container, use biodegradable utensils and take healthy foods. This kind of sustainability practices pursue by UTM Cafeterias is in line with the UTM cafeterias policy which are clean, healthy and environmental friendly.

1.9 Operational Definition

Service Quality

Service quality defined as the extent to which a service meets customer's needs or expectations (Mohammad & Alhamadani, 2011). Service is assumed to be quality when it consistently conforms to customer expectations. In this study, service quality refers to service provide by student food services to students in UTM.

Food Quality

Food quality is the quality characteristics of food that is acceptable to consumers (Liang & Zhang, 2009). Food is the most important part of the overall restaurant. According to (Chang et al., 2014), food quality is an absolute requirement to fulfill the customer's needs and expectation in the restaurant. In this study, food quality refers to quality of food that provide by UTM food services which include taste, healthy, freshness and appeal.

Price

Price as the amount of money a needs to sacrifice to gain something have aspirations for with price contributing to perceived value and influencing consumer decision making (Pedraja Iglesias & Jesus Yagüe Guillén, 2004). In this study, price refers to amount of money that UTM spend during their dining time at UTM cafeterias.

Ambience

Ambience or popularly known as operating physical environment is one of the crucial attributes in retaining customer to dine at the cafeterias (Namkung & Jang, 2008). In this study, it refers to physical environment in UTM cafeterias which include lighting, aroma, temperature and background sound.

Sustainability Practices

Sustainability practices are sustainable development practice to reducing negative environmental impact. In UTM, their food services institutions adhere to cafeteria policies of sustainability which are healthy, clean and environmental friendly. In this study, sustainability practices include separate food from plate at cleaning station and bring own container.

Perceived Value

Customer Perceived value is consumers overall assessment of the utility of product based on perception of what received and what is given (Ariff, Fen, & Ismail, 2012). Customer value is the basis for all marketing decisions. In this study, customer perceived value refer to overall dining experience in UTM cafeterias that has sustainability practices. Perceived value in this study refers to experience value that reflects from sustainability practices in UTM Cafeterias.

Customer Satisfaction

When a consumer or customer is pleased with either the product or services it is termed satisfaction (Al-Tit, 2015). Satisfaction can also be a person's feelings that results from comparing a product's perceived performance or outcome with their

expectations (Jalil, Fikry, & Zainuddin, 2016). In this study, Customer satisfaction refers to student satisfaction toward food services in UTM.

1.10 Summary

This chapter was about the introduction of the study, the researcher started with the background of this study. Besides, the researcher briefly explained why this research is important, problem statements, scope of study, research questions, research objectives and contribution of this study. This chapter was an overview of the study. Then, in next chapter it will discussed the literature review related to this study.