

**FACTORS AFFECTING CHOICE OF CAFETERIA  
AMONG UNIVERSITI UTARA MALAYSIA STUDENTS**

**BY**

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## ABSTRAK

Tujuan menjalankan projek penyelidikan ini adalah untuk mengkaji faktor-faktor kualiti makanan, kualiti perkhidmatan, menu, harga, kemudahan serta kebersihan yang mempengaruhi kepuasan pelanggan terhadap kafeteria beroperasi di Universiti Utara Malaysia, Kedah Malaysia Barat. Untuk mencapai objektif kajian ini, persoalan kajian dan hipotesis telah dibangunkan dan diuji. Tambahan pula, setiap hipotesis diukur dengan sewajarnya manakala keputusan yang diperolehi adalah yang kemudiannya dijelaskan oleh penyelidik. Ulasan sastera termasuk dalam projek penyelidikan ini diperkukuhkan lagi teori dan pemahaman yang lebih baik daripada faktor yang mempengaruhi pilihan kafeteria di kalangan pelajar UUM keseluruhan pada masa yang sama menyediakan bukti untuk menyokong teori tersebut. Data primer dikumpul dengan menggunakan soal selidik yang diedarkan berulang alik sebanyak 200 set seluruh pelajar UUM. Menggunakan Pakej Statistik untuk Sains Sosial versi 19.0, data yang telah dikumpul daripada soal selidik dianalisis menggunakan jadual dan carta. Di samping itu, dapatan kajian juga sedang dibincangkan untuk memahami hubungan antara pemboleh ubah bebas seperti kualiti makanan, kualiti perkhidmatan, menu, harga, kemudahan dan kebersihan dengan pembolehubah bersandar iaitu kepuasan pelanggan. Selepas data dianalisis, pengkaji bersetuju bahawa semua faktor penting dan mempunyai peratusan yang tinggi terhadap kepentingan mempengaruhi pemilihan kafeteria di kalangan pelajar UUM. Implikasi pengurusan juga dibincangkan untuk memberi gambaran yang profesional kepada pengusaha mengenai faktor permintaan dan trend ke arah kepuasan pelanggan. Kajian lanjutan juga dibincangkan maklumat terletak pada batasan faktor boleh membantu penyelidik masa depan ke arah menyediakan kajian yang lebih baik tentang faktor-faktor yang memberi kesan kepada pilihan kafeteria.

## **ABSTRACT**

The purpose of conducting this research project is to examine the factors of food quality, service quality, menu, price, convenience as well as cleanliness that influenced customer satisfaction towards cafeteria operating in Universiti Utara Malaysia, Kedah West Malaysia. To attain the objectives of this research, research questions and six hypotheses are being developed and tested. Furthermore, each hypothesis is measured accordingly while the results obtained are being subsequently explained by the researcher. Literature reviews included in this research project further strengthened the theory and better understanding of the factors affecting choice of cafeteria among UUM students whole at the same time provide evidence to support the theory. Primary data were collected using questionnaires being distributed fro a total of 200 sets throughout UUM students. Using Statistical Package for Social Science version 19.0, data that had been collected from the questionnaire being analyzed using tables and charts. In addition, findings of the research are also being discussed in order to understand the relationship between independent variables like food quality, service quality, menu, price, convenience and cleanliness with dependent variables that is customer satisfaction. After the data being analyzed, the researcher concurred that all the factors are significant and having high percentage of importance towards affecting the choice of cafeteria among UUM students. Managerial implications are also being discussed to provide professional insight to the operators about the factors in demand and in trend towards customers satisfaction. Further research are being discussed as information lies in limitations factors can assist future researchers towards providing better research about the factors affecting choice of cafeteria.

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## **LIST OF ABBREVIATIONS**

DPP – DEWAN PENGINAPAN PELAJAR (STUDENTS' RESIDENTIAL HALL)

IPT – INSTITUSI PENGAJIAN TINGGI (HIGHER EDUCATION INSTITUTION)

SAC – STUDENTS' ACCOMODATION CENTRE

UUM – UNIVERSITI UTARA MALAYSIA

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background**

Eating is a daily necessity. According to the hierarchy of needs, a person must fulfil the physiological needs which are food, water air and shelter. People concentrate on satisfying these needs before turning to higher needs (Lewis, 1983)

Managing eateries to provide catering services must be appropriate and meet the needs and requirements of the clients and are aligned with customers' needs. Therefore quality and service facilities shall be given priority in order to achieve organizational objectives. Catering services is essential for many organizations, particularly in the case of Higher Education Institutions (IPT). For the IPT, the service is provided through the cafeteria where it serves as a place that provides a focal point for students of all food needs from breakfast until dinner. This is because most of them spend more time on campus and in doing so relies heavily on food provided by the operators or contractors on campus area.

Forms of facilities and services provided should be of a very high quality in order to create a healthy competition between these cafeteria operators. Researchers indicated that customers will select restaurants that meet their standards for quality and value; restaurateurs who ignore this will see customer traffic decline as guests support competing restaurants (Stevens, Knutson et al. 1995). Operators who provide high quality services can obtain a clean, positive image of their business. This indirectly can guaranteed returns the number of customers and the amount of profit. Therefore,

researchers have noted that in a competitive service business environment, managers should understand their customers and provide service that increases their ability to attract new customers and to win the loyalty of existing customers, as well as increasing the positive word-of-mouth effect (Boulding, Kalra et al. 1993).

Management of eating places that do not meet the needs of customers and is not consistent with the behaviour of customers in the campus will affect either the rate of return and profit as well as image for the management. All of its stated goals are important to expand the services provided.

Emerging number of students nowadays in public universities is making it harder for operators because the expansion of number of students is also making the expansion of quality foodservice outlets.

**Table 1.1: Number of Students Enrolment for Tertiary Education in Malaysian Public Universities by Level of Studies**

Level of studies	Number of students in public universities			
	2000	2005	2010	2013
Certificate	23,816	37,931	141,290	66,821
Diploma	91,398	98,953	285,690	104,928
First degree	170,794	212,326	293,650	331,410
Masters	24,007	34,436	111,550	63,463
PhD	3,359	6,742	24,410	29,280
Total	313,374	390,388	853,590	

(Source: Ministry of Higher Education, 2013)

Based on Figure 1.1, it shows that the numbers of undergraduates are increasing each year in Malaysian university. It has created a major business opportunities for the operators nowadays compared to before where operators who decided to do business

in campus are only small time operators. Manipal International University Malaysia estimated that student will spend around RM400 to RM500 per month on food expenses alone while Study Advisor stated that student's meals expense estimated to be about RM500 to RM800 for three decent meals. All these calculation shows that food are one of the more important expenses for students as said by Shahryar Sorooshian & Tan Seng Teck (2014), students spend most of their extra money on food. Together with the high anticipation of higher profitability, operators are in demand to provide for the customer higher expectation and needs. Malaysian foodservice operators also have the most difficult task of serving a community of individuals that is typically diverse, dynamic, and confined in universities.

Although tempted by the convenient factors of having on campus foodservice nearby, students might opt for alternatives as they seek more of quality rather than convenience. This factor is making it harder for university foodservice operators to face the challenge of fulfilling the needs and wants of the students.

## **1.2 Factors to Consider In Making Decisions**

In the competitive market, many restaurants have struggled to attract customers, providing services differentiated by quality, price or convenience. There are several factors that influence customers' decision to choose a restaurant. According to Lewis (1981) there are five factors that are food quality, menu variety, price, atmosphere and convenience. According to Yong (2012) the importance of these attributes varied according to the type of restaurant which in Lewis case was a category united with food type, family, popularity, atmosphere and gourmet.

Numerous restaurant studies have attempted to identify the consumer restaurant choice. Various determinants motivating restaurant choice have been identified.

According to Auty (1992), the influences of restaurant attributes toward consumer choice vary depending on dining occasions (i.e., celebration, social occasion, or quick meal), restaurant type (i.e., fine dining, casual dining, or fast-food), and consumer demographics (i.e., income, occupation, or age). Among various restaurant attributes, food quality has been identified as the highest influential factor driving consumer dining choice, regardless of the occasion (Auty, 1992; Lewis, 1981; Namkung & Jang, 2007).

In another research, Auty's (1992) study more closely follows the distinct pattern set out by June and Smith (1987). There are variety of choice factors in the restaurant decision process were collected and then collapsed into ten categories: food type; food quality; value for money; image and atmosphere; location; speed of service; recommended; new experience; opening hours; and facilities for children. To see if the type of restaurant chosen varied according to dining occasion, Auty also elicited four such occasions from the pilot: a celebration (e.g. birthday); a social occasion; convenience/need for a quick meal; and business meal.

Auty's (1992) study resulted that food types were the most important factor in choosing full-service restaurant. This is the ranking for the ten variables that Auty had study; food type (71%); food quality (59%); value for money (46%); image and atmosphere (33%); location (32%); speed of service (15%); recommended (11%); new experience (9%); and opening hours.

June and Smith (1987) noted that there are five key criteria were used in their study of customer choice among restaurants: price, atmosphere, liquor license, service and quality. Surroundings, customer turnover, location, price, quality of food, quality of service, and type of food are the factors that consumers consider in choosing restaurant. These variables were chosen because they are used in restaurant trade journals to identify strategies of competing restaurants (Reeves and Hoy, 1993). Huang (2007) stated that the consumer need evaluate the factors such price, variety of food, parking lot, reservation, and special request in choosing full-service restaurant.

Clearly, price is more important than service in affecting consumers' choice. The implication of the results is that, while service is an important factor in restaurant selection, customers are nevertheless unwilling to pay an extra amount for a higher level of service, while other things are being held constant. Hence, restaurant managers might be better off maintaining an acceptable level of service, while keeping price as low as possible. (Alan, 2001). According to Dutta and Venkatesh (2007), the major types of service failure in restaurants have been identified as – slow service; inefficient staff; food and beverage quality problem; cleanliness; unfriendly and unhelpful staff; incorrect billing; untidy staff; reservation missing; physical evidence lacking in ambience; and finally, advertised promises not having been met.

Jillian, Lester and Robert (1992) stated that the factors that influencing consumer to choose restaurant are prices of meal, past experience with similar types of restaurants, reputation of restaurant among people that respondent know,

convenience of location, whether any memorable advertisement seen, appearance of other customers, whether employee appropriately dressed, manner of employees, and premise. In determining the expected quality of service, price plays a surprisingly small role, the manner of the employees and the word-of-mouth again dominating respondents' perception. Martin and Frumkin (2005) stated that consumer's reasons for choosing a particular full-service restaurant, first is because of they like be at that restaurant, convenience location, quality of food, good variety of food, and lastly price factor.

### 1.3 Topic Area

This study will cover UUM students. Currently, they are two zones separating the cafeteria in UUM that is cafeteria in the academic zones and cafeteria in the accommodation zones. The entire cafeterias are managed by the Students Accommodation Centres (SAC). Altogether they are 66 owners of the cafeteria and food courts. The cafeterias are named based on their operation hours and type of establishments. Cafeteria with single owner will be called cafeteria while cafeteria with multiple owners will be called food courts. These terms was widely used in UUM.

**Table 1.2: Number of Cafeteria Operators in Universiti Utara Malaysia**

<b>Zone</b>	<b>Number of Operators</b>
Residential Hall	38
Academic	28
Total	66

(Source: Students' Accommodation Centres, UUM)

For the purpose of this study, all the outlets will be named cafeteria. The scope of this study is dedicated to all students who are present in the cafeteria accommodation area (DPP) of the UUM campus cafeteria in the students' residential hall.

The focus of the respondents for this study consist students who are the main clients for this cafeteria. Respondents consist of students eating in the cafeteria involved. This research will be focusing on cafeteria operating in UUM campus. Currently there are 66 outlets for staff and students to choose from. These outlets are divided into 2 sections that are Residential section and academic section. Residential section is located near the student's residential hall while the academic section is located near the academic building.

Currently students of UUM have the options of eating at all of these outlets. However, some of them will prefer to eat outside of campus. Since the restaurants are located quite near with each other, pulling power is essential in this one small area. Each restaurant is competing with one another to gain revenue. There are many factors that influence a student to purchase or not purchase food from any of the cafeteria, such as quality of food, price and service.

#### **1.4 Statement of problem**

In the last 20 years, Malaysia has been at the forefront of becoming the educational hub in the region of South East Asia (Baharun, Awang & Padlee, 2010). Evidence to the increasing demands of the university foodservice customers is the gradually high enrolment in universities (Kim. Moreo & Yeoh, 2004) including Malaysia. This in

turns contributes to increasingly higher demands and consequently invokes fiercer competition amongst foodservice operators from within the institutions as well as the off-campus commercial sector (Gassenheimer, Davids & Dahlstron, 1998).

In Malaysia, higher education institutions were required to offer the best overall products and services to their potential customer that is the students (Baharun, Awang & Padlee, 2010). This is inclusive but not limited to the quality of their of on-campus foodservices. Even so, university foodservice operators are struggling to please the campus communities that are naturally diverse, dynamic, and confined, as the discontent with the current food and service quality of on-campus foodservice continues. This may encourage students to search for alternative elsewhere off-campus (Gassenheimer, Davids & Dahlstron, 1998). Therefore, to better understand customer's needs, this research will evaluate factors that affect student's choice of cafeteria in Universiti Utara Malaysia.

As a major customer in the cafeteria at higher education institutions, students rely heavily on catering services provided to meet their nutritional needs. According to Nadzirah et. al 2013, majority of the university campus populations are at least temporarily limited to on-campus food outlets to satisfy their day-to-day nutritional requirements. This is because most of their time is spent on campus. Therefore, the operators need to take into account the activities of catering students to meet the daily needs of the students in the preparation of food. The food provided should also be of the highest quality and with friendly services.

Food service at Universiti Utara Malaysia (UUM), Sintok had been introduced since its establishment in 1990. The cafeteria was located at all Students Residential Hall, which are 14 of them. Previously, there are 28 outlets operating in DPP area which is 2 outlets operating for one DPP but, the University decided to closed down some of them to make way for the building of multipurpose halls for the students to use for their activities. Currently there are 14 outlets operating throughout the respective DPP's.

The cafeteria was operated by contracted food service providers, mostly locals who are living near the University. Only for the last two years that the University decided to contract out some of the cafeteria to the bigger establishment that comes with some investment.

Operating hours for the cafeteria are set at 7 am until 11 pm everyday with no leave. During the semester break, some of the cafeteria will be closed while some of them are opened for students who are staying in the DPP.

The food services systems used were conventional food service and ready-prepared food service operation system. A variety of foods and beverages are sold at the cafeteria including various rice and noodle, fruits, drinks and snacks. The cafeteria normally served local menu like a variety of Malay dishes and some Chinese, Indian and vegetarian dishes. Previously, vegetarian dishes are not prepared but due to the request of the students, they are being prepared nowadays. Made to order food like Thai's delicacies are prepared during the evening because normally students who came back from classes are more likely to spend some time in the cafeteria because

they now have some free time to spend.

Cafeteria in UUM is divided into cafeteria that operates in Students Residential Hall to be identified as Residential Hall Zone. The other area is the centre of campus activities or Academic Zone near the centre of administration and teaching or faculty. The administration of UUM expects that the operators of these food catering will provide the best service to its customers. However, there are some problems faced by these entrepreneurs. For catering business in residential hall zone, they face the problem of poor customer number especially at breakfast time. This is because they receive competition from cafeteria which is located outside of the residential hall and at the centre of campus activities. This leads to food wastage and losses that have to bear by the operators.

This contrasts with cafeteria located outside of the college which is near the centre of campus activities as close to the administrative office buildings and faculty. The situation in the cafeteria is crowded at certain times. Congestion can be seen in the choice of food and beverage counter. Living-dining room was packed so there are some students who had to wait his turn to get the meals and to be seated. This is in sharp contrast to the situation in residential hall zone. It can be perfectly seen that the location of a cafeteria is the influence in customer behaviour in choosing a place to eat.

## **1.5 Significance to knowledge**

This research contributes to general understanding of the catering services in UUM and will help specifically in the area of management of food catering services for the Food & Beverage Division of the Students Accommodation Centre.

Those who can benefit from the research results will be the college students, the foodservice operators that are located inside UUM, and the UUM and staff that represent those who make the business decisions. Students are users of the research results because they can understand the reasons other college students eat at the food court. Students can benefit from these results by knowing which restaurant is favoured the most or least and which has the highest customer service to fulfil their needs.

Also, this study or research can be used by food service operators to understand more on how or what the customer's needs. They can use the research results to learn how to improve their customer service and cater to the student's needs better.

This study is also very important as it can be as an assist to catering provider and the Food & Beverage Division managers to learn how to better serve the communities in the area of catering services

Finally, the faculty and staff of UUM are users of the research results because they can learn the demands of college students, therefore, creating future services that can cause more students to look forward to rather than seek other alternatives.

## 1.6 Research Questions

Based on the issues discussed and which occurs in catering management at UUM this, then there are several questions raised. The objective is to determine if there is a causal relationship between students attending the campus food court and one or more modifiable variables. The question that we will answer through the results of analysis is as follows:

- a) What are the factors that attract students to the cafeteria?
- b) What is the priority of students in choosing a place to eat?

The answer to this question will allow decision makers at UUM to allocate their resources to improve the attendance, sales, and profitability of the campus food court. The problems identified in this research that deem to be important in order to better understand the college student are:

- What food preferences are the least or most favoured at the cafeteria?
- Are the operating hours of the cafeteria convenient for the students at UUM?
- Does the price of food in each restaurant affect the selection of dining for the student?
- Are students satisfied with the customer service they receive from their restaurant selection?

By gathering this information, it will help us better understand why students choose to eat at the cafeteria or elsewhere.

The decision alternatives that can be evaluated when doing this research surveying college students who happen to be at UUM campus.

### **1.7 Objectives**

- a) Identify if there are relation between student's choices and their satisfaction;
- b) Identify the main factors that affect student's choices of cafeteria.

### **1.8 Hypothesis**

**H1:** Students choices of cafeteria is affected by quality of food

**H2:** Students choices of cafeteria is affected by quality of services

**H3:** Students choices of cafeteria is affected by price

**H4:** Students choices of cafeteria is affected by menu item

**H5:** Students choices of cafeteria is affected by convenience

**H6:** Students choices of cafeteria is affected by cleanliness

### **1.9 Definition of key words**

#### **University foodservice**

Refers to a food business that is being conducted on campus

## **Foodservice**

Phase of food flow (that is from the purchasing of the foods to service to the customer) mainly concerned with the delivery and presentation of the food to the customer, after the completion of food production. In some situations foodservice may include an element of transportation due to the separation of the foodservice facilities from the food production (Davis, Lockwood & stone, 2006)

## **Cafeteria**

Self-service restaurant in which customers select various dishes from an open counter display. The food is usually placed on a tray, paid for at a cashiers station, and carried to a dining table by the customer. The modern cafeteria, design to facilitate a smooth flow of patrons, is particularly well adapted to the needs of institutions, schools, hospitals, corporations attempting to serve large numbers of people efficiently and inexpensively. In addition to providing quick service, the cafeteria requires fewer service personnel than most other commercial eating establishments. (Encyclopaedia Britannia, 2009).

## **Quality of food**

A certain standard on external and internal features of food such as appearance texture or flavour. Also the quality of food that are served to customer whether it meets expectation.

## **Quality of services**

A certain standards towards the services given whether it meets expectation of the customer. It is also to establish whether the customer being served appropriately. The differences between customer expectations of a service and their perceptions of the service delivered; also an overall attitude of customer's encounters with the service provider (Zeithaml, Parasuraman et al. 1990).

## **Price**

Price is a tool to measure and justify whether the customer's money is well spent and the item they are paying is indeed value for money spent.

## **Menu**

Menu on display at the cafeteria as ways to look if they are covering the whole community at large and whether they properly planned

## **Convenience**

Convenience is ways to measure if the facilities provided by the cafeteria are appropriate and meets customer's needs and wants.

## **Surroundings**

Surroundings are a factor to distinguish that stores are properly lighted and is bright and clean to the customer's satisfaction

## **Cleanliness**

Cleanliness is both the abstract state of being clean and free from dirt, and the process of achieving and maintaining that state

## **Customer satisfaction**

The expectancy confirmation framework, which is a function of the degree to which expectations match, exceed, or fall short of product or service performance (Oliva, Oliver et al. 1992). Customer satisfaction is a key performance indicator to measure if the product and services meets customer demands and expectation

### **1.10 Organization of the Study**

The thesis consists of five chapters.

#### **Chapter 1**

The first chapter is the introductory part of this research and it talks about the objectives of the study and definition of key words.

## **Chapter 2**

The second chapter presents the theoretical frame work with theories relevant to the problem area and the literature has been structured in such a way to include customer satisfaction, quality of food, and quality of service, price, menu, convenience, surroundings & cleanliness. Conceptualization factors of customer preferences in choosing cafeteria.

## **Chapter 3**

Chapter three presents the method which explains the research design that has been used, research approach, data collection methods, sources of data, reliability and validity and the limitation of the research.

## **Chapter 4**

Chapter four presents data analysis and results.

## **Chapter 5**

Finally chapter five deals with conclusion, recommendation and future research. The references and appendix are presented at the end of the thesis.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The catering service is a service of the food supply by food manufacturers to customers. Catering covers several aspects such as the food is safe to eat, tasty, nutritional and provide satisfactory service. As a result of this food delivery service, operators can generate revenue from services provided. Various factors can influence the development of food service preparation. Among them is the increase in per capita income, increasing the number of women in the industrial sector and growth in the number of schools and institutions of higher learning. This resulted in an increase in the rate of demand for food preparation. Thus, many food manufacturers take the opportunity to venture in the world of food business.

### **2.2 Definition of Catering Services**

Catering industry is an industry "hospitality" that provide a variety of food and drinks in a variety of organizations such as hotels, hospitals, educational institutions, offices, schools and others (Richard Kotas, 1994). According to Patti, and Stefanelli J.S J.M. (1992), the main objectives of a catering business are:

- a) To prepare a hearty dish and contains nutrients.
- b) To provide consistent quality services - Customers will be satisfied if the services provided are commensurate with what has been promised. This will cause 'repeat patronage in which customers will come back to eat in the cafeteria and also provide'

positive referrals' where customers will convey a good message to the public about the treatment received from the restaurant or cafeteria.

c) To benefit corresponding to the services provided and meet financial objectives of the organization.

d) Deliver a certain image – presentation provided ultimately reflects the overall performance of the organization. Thus, the images should be delivered in line with the overall organizational goals.

e) Develop the desired reputation - Customers should feel confident that their needs will be met. By the catering service organizations should play an important role in shaping the organization's reputation.

### **2.3 Types of Catering Services**

Catering services are available in all shapes and types. Among them are service restaurants, contract catering services, catering services booking, transportation and catering services catering services move (Aishah Hamzah, 1992).

Catering services are generally divided into two parts, commercial catering services and catering services in welfare or subsidies. Commercial catering services carried out in an organization where catering is primary or secondary activities of the organization. Catering services in welfare or subsidies often carried out in institutions such as schools, colleges, hospitals, colleges, prisons and welfare services. Institutions of higher education in particular, contract catering services provided.

Organizations that implement core business (core business) often use this contract catering services as support services. This meant that the organization is able to fully focus on its core business and reduce the burden of providing support services such as catering services are.

As for contract catering services for party or meetings, food operators are capable of estimating the number of initial customers and meal preparation. Estimated costs can also be determined. Still there is also the risk of loss to be borne if the number of customers who came is less than the estimated number of customers. (Aishah Hamzah, 1992).

#### **2.4 Features of Catering Services**

Yvonne Johns (1995), there are some characteristics that impact on the provision of catering services. Among them are:

- a) the customer - the customer in an institution called the customer "Captive" or "semi-captive". They do not have a lot of dining options. Thus, the cafeteria is seen as the only place to get food needs to enable them to everyday activities;
- b) customers of all races - *the menu* is influenced by clients ranging from different races. There are some customers who are customers "vegetarian" that consuming vegetables alone. So, cafeteria operators should provide special menus to cater for them;
- c) financial constraints - financial constraints imposed on the management of this cafeteria influencing food choices and the type of food provided; and

d) menu options - for customer "Captive", a variety of menu choices influence in the selection of eating places. This is important so that customers are not bored with the menu.

## **2.5 Customer's Satisfaction**

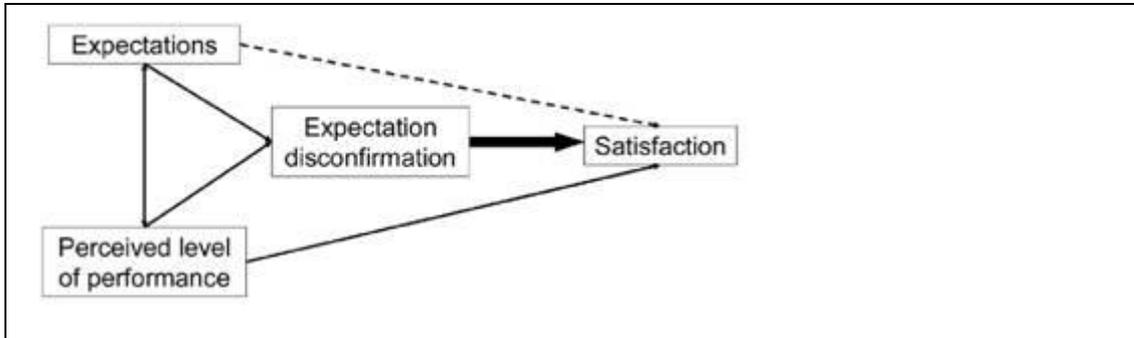
Customers are the major part of the business and market (Khan, Hussain, & Yaqoob, 2012). Before this, not many foodservice organization pays attention much on customer satisfaction. Today, however we can see that all that has changed. This things happened because of the nature of foodservice market that is more competitive now. Restaurateur pays more attention towards customer needs and wants. Customer satisfaction plays an important role in the market. As a result, restaurateurs have to ensure customer satisfaction as it will affect customers' perception towards the restaurant (Oliver, 1981).

Customer satisfaction is very important factors for the operators of the cafeteria to look into. Therefore, customer satisfaction is an important indicator of a company's performance by which to determine retention of the customers (Lee, 2004). Satisfaction can be defined as an individual's pleasure feeling or disappointment that can be resulted by comparing a product's perceived performance in relation to his or her expectations (Oliver, 1981; Brady & Robertson, 2001). Past researchers had theorized two general conceptualizations of satisfaction namely transaction-specific satisfaction and cumulative satisfaction (Boulding, Kalra, Staelin, & Zeithaml, 1993). Transaction-specific satisfaction is a transient that customer's evaluation of his or her experience and reactions to a particular service encounter (Cronin & Taylor, 1992; Boshoff &

Gray, 2004). Alternatively, cumulative satisfaction is a customer's evaluation of the overall consumption experience with a product or service to date, which directly affects post purchase phenomena such as attitude change, repeat purchase, and brand loyalty (Johnson & Fornell, 1991).

Oliver (1981) had introduces the expectancy disconfirmation model which explained that customer satisfaction was determined by expectations and perceived performance. Based on this theory, customer satisfaction is the measuring of the outcome's gap between customer expectation and perceived performance. If the perceived performance exceeds the expectation, the expectation is positively disconfirmed and the customer is satisfied where the provided performance was better than expected. In contrast to positive disconfirmation, if the perceived performance fall below expectations, the comparison results in negative disconfirmation and the customer is dissatisfied with the performance. Therefore, the application of expectancy disconfirmation theory is one of the most common and widely accepted theories for customer satisfaction analysis in the service industry (Oh, 1999). Besides that, Oh & Jeong (1996) also studied the customer behaviour based on expectancy-disconfirmation theory in fast food restaurant.

**Figure 2.1: Oliver Customer Satisfaction Model – Expectation Disconfirmation Model**



(Source: Oliver, R. L. 1993)

As revealed by some researcher, customer satisfaction is a factor in determining customer retention and the positive emotions may also lead to satisfaction, while negative emotions will lead to dissatisfaction (Noone, Kimes, & Mattila, 2007). Customers emotions can be influenced from extrinsic factors like product quality ,service quality, menu, price, convenience and cleanliness. The interaction between consumers and restaurant servers are crucial because both parties’ emotions may be interacted to affect customer’s satisfaction perception (Liu et al., 2009; Noone et al., 2007).

A Succesfull foodservice operation is where the operators understand their target customers’ needs and wants (Gregory, Smith, & Lenk, 1997). Operators who provide good services and are always open to customers’ complaints and listen to their expectation and care for them will have direct impact on the performance of a restaurant (Parsa, Gregory, Self & Dutta, 2012).

Revenues and profitability of a restaurant will be influenced by customer satisfaction. Increasing customer satisfaction by meeting or exceeding their needs or requirements, it will increase their loyalty towards the particular products and ultimately increased restaurant's revenues and profitability (Perutkova & Parsa, 2010). In addition, retention is always cheaper than acquiring new customers (Khalifa & Liu, 2003). Major breakdown in customer service is when the customer is dissatisfied with anything. Unsatisfied customer will choose to go somewhere else and also will tell others about the bad experience that they have in the restaurant. This will badly affected the business and in the long run the business might suffer. Customer satisfaction will determine the long-term success of a restaurant. Customers will spread positive word-of-mouth if they have a positive evaluation towards the restaurant. Unfortunately, they will also spread negative word-of-mouth if they have a negative evaluation towards the restaurant.

There are a lot of factors that may influence customer satisfaction. There are some studies have identified factors that influence customers' satisfaction with their dining experience including waiting time, quality of service, responsiveness of employees, menu variety, food prices, food quality, food consistency, ambience of the facilities, and convenience (Sulek et al., 2004; Inglesias & Guillen, 2004; Andaleeb et al., 2006). Therefore, it is important to make customer feel themselves are important and special by satisfying even their simplest requests (Soderlund & Rosengren, 2007). According to Liu et al. (2009), restaurant should provide customer services which are consistent, efficient and genuine in

order to create customer satisfaction because highly satisfied customers are one of the most important assets to the organization.

Customer satisfaction is always highly related to perceived restaurant quality. Customers are more likely to be satisfied with the perceived restaurant quality if they have achieved good experience and restaurant establishment that meets or exceeds their expectation (Harrington et al., 2011). On the other hand, underperforms of highly expected establishment may also lead to customer dissatisfaction (Namkung et al., 2007). Practically, according to Harrington et al. (2011), the restaurants need to take additional care to understand the consumer expectations toward the restaurant they visit in order to ensure the customer satisfaction can be maximised and achievable in long run.

Although the perceived expectation of customer has associated with the perceived restaurant quality, there are many quality factors can influence the customer satisfaction (Namkung et al., 2007). As in this study, six general categories of perceived restaurant quality are provided as greatest potential determinants of customer satisfaction. These general categories are food quality, service quality, price, menu, convenience and cleanliness.

Besides that, there are many studies have been done which support the idea that food quality, service quality price, menu, convenience and cleanliness will affect customer satisfaction. However, they have been done separately. Therefore, the purpose of this research is to bridge the research gap by investigating the factors that influence dining experience on customer satisfaction among undergraduates.

## **2.6 Food Quality**

According to Shaharudin, Mansor, and Elias (2011), food quality is a crucial factor that impacts on the consumer. Nowadays, consumers are very conscious and aware to the food quality issues. In addition, according to U.S. Food and Drug Administration (2004), additives are used in processed foods to preserve the food in order to maintain or improve the food freshness and appearance. However, with the health concerned trend, consumers nowadays are more demanding for fresh ingredients instead of chemical components or additives in food processing and food freshness preservation. Consequently, according to Whitehall, Kerkhoven, Freeling and Villarino (2006), fresh food is relatively a current phenomenon in parallel with the consumers' growing awareness of nutrition and quality, therefore, it is an important attribute to be learned by all parties who are involved in the food industries in order to satisfy of their customers' needs and wants.

Food quality can be the most important aspect in determining consumers decision making of a restaurant. Research by Shanka and Taylor (2005) noted that students satisfaction on university foodservice is indeed inherent in the food quality sold in the cafeterias. Estepa, Shanklin & Back (2005) also clarified that customer perception on food are directly proportionate to customer satisfaction. Freshness of ingredients are also some of the reasons for revisit intention to a food outlets (Brumback, 1998). Consumers' food perception and food choice decision, quality is one of the important elements (Grunert, 2005; Rohr, Lu'ddecke, Drusch, Muller, & Alvensleben, 2005). However, there are no one attributes to constitute food quality and therefore all attributes are lumped together in one variable that is food quality

(Sulek & Hensley, 2004). According to Grunert (2005), the food quality attributes are depend on the food type and the individual's food preference itself because the food attributes that constitute quality may change over the time as well in consumer's minds. Moreover, different cognitive determinants may lead to confusion in understanding consumer behaviour ( Rijswijk & Frewer, 2008)

There is no one certain definitions to define food quality. It can be of various determinants in customers' minds and perceptions (Shaharudin, et al., 2010). This is supported by Becker (2000), quality has defined as a diverse meaning which depends specifically to the person's background who using the term of quality. The word quality itself is very vague and unstructured when used by different person or even by the same person but in different conditions and situations.

However, the most popular "quality" definition and accepted by almost all the people who working in food industry area is developed by International Standardization Organization (ISO) and it defined quality as "the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs" (Shaharudin et al., 2011).

Nowadays, customer's demands of high quality product including the choice of food that they are consuming are very high. Thus, consumers need to understand their own quality perception as they usually will make purchasing decisions on these beliefs (Rijswijk et al., 2008). Having said that, in order for operators to determine customer's perceived views of quality towards the overall food quality, there is essential to link the consumer's quality understanding with the quality attributes.

**Table 2.1: Summary of Food Quality Dimensions and Comparisons from the Past Researches**

No.	Author	Year	Food Quality Dimensions Used
1	Grunert, Larsen, Madsen & Baadsgaard	1996	Taste and appearance, health, convenience, and process
2	Soriano	2002	Food quality, quality of service, cost/value and place/ambience
3	Brunso, Fjord, & Grunert	2002	Process characteristics such as organic production, natural production, animal welfare, GMO-free, etc.
4	Grunert	2005	Sensory, health, convenience and process
5	Rijswijk & Frewer	2008	Taste, good product, natural/organic and freshness
6	Namkung and Jang	2008	Presentation, healthy options, taste, freshness and temperature.
7	Shaharudin, Ismail, Mansor Elias, Jalil, & Omar	2011	Freshness, presentation, taste & innovative food

(Source: Shaharudin, Mansor, & Elias 2011)

### 2.6.1 Food Attributes

Food quality attributes are depending on the food type and the individual's food preference itself because the food attributes that constitute quality may change over the time as well in the consumer's mind. Grunert (2005). Therefore, all the food attributes are lumped together in only one variable that is food quality (Sulek & Hensley, 2004). Moreover, different individual cognitive determinants on food quality may also lead to the difficulty to understand the consumer behaviour (Rijswijk & Frewer, 2008) Food attributes may be varying. According to Rajpoot (2010), product is considered as technical quality but it depends because size or portion of food, food arrangement can be considered a part of tangible quality clues. Kincaid et. all agreed that the concept of food and service are includes the variety, presentation and the quality of the menu. They added, the quality factor will benefit the restaurateur because it likes a reward when the consumers re-

visit and also loyal to the restaurant. Rajpoot (2010) also suggested that aroma can be a strong indicator for the quality of food itself. Besides that, there are many researches were done on the food quality attributes such as freshness of food, food presentation, food taste, variety of food, food temperature and innovative of food. But, only a few researches have done with the crucial attributes of food quality in relation to customer satisfaction and behavioural intention (Shaharudin et al., 2011; Namkung & Jang, 2007). Nevertheless, Joshi (2012) divided food quality into sub elements that comprise of menu variety, taste, presentation of the food, healthy food options and familiar food. All in all, most researchers agreed that quality of food is the most important factor in determining consumer loyalty and the key factor to influence consumer satisfaction (Andaleeb and Conway, 2006; Sulek and Hansley, 2004; Ryu and Han, 2010; Namkung and Jang, 2010).

### **2.6.2 Food Freshness**

The concept of freshness is associated with the main component that is sensory properties that including firm, crisp, crunchy texture, appropriate and bright colour, absence of visual defects and absence of off- or stale flavours (Peneau, 2005). In term of food attribute, freshness is the essential sensory element that interacted with the factors such as taste, smell and sight (Delwiche, 2004). Generally, freshness also refers to the fresh and physical state of food that appear to be related to the food properties such as crispness, juiciness, and aroma (Peneau, Hoehn, Roth, Escher, & Nuessli, 2006). In terms of the quality factors, freshness should be focused by the management team in the fast food industry in order to serve their customer at the right standard of quality required (Shaharudin et al., 2011). Fresh food is relatively a current phenomenon in parallel with the consumers' growing awareness of nutrition

and quality. Therefore, it is an important attribute need to be learned by all parties who are involved in the food industries in order to satisfy the consumer's needs and wants (Whitehall et al., 2006).

### **2.6.3 Food Presentation**

According to Namkung et al. (2007), food presentation is a factor that constitutes food quality and impacts the appetite of the customer and their perception of food quality. Presentation is associated with how the food is being prepared and presented to the customers. It is a part of tangible cue and by successfully presenting a good-looking and well-decorated food can stimulate the customer perception of quality (Shaharudin et al., 2011). Most of the people go out to eat because they are captivated by the appearance of food (Johnson, 2011). Shaharudin et al. (2011), by successfully presenting a good-looking and well-decorated food can stimulate the customer perception of quality and it will create a good impression in terms of the feeling and mood of consumers toward consuming the food in fast food restaurants.

They also mentioned that food presentation actually is about how the consumer perceived the value of the product physically or internally (ingredients). Physically, the product may be perceived as good quality if it is presented with attractive packaging or informative labelling about the product. Internally, food may be associated with quality if the ingredients are in a complete mixture of necessary raw materials. Factors Influencing Dining Experience on Customer Satisfaction and Revisit Intention among Undergraduates towards Fast Food Restaurants

Food presentation is the process that the diners have offered the selected food in a fashion that is visually appealing. The food presentation has significantly impacted on the way in which customers consume their foods. In addition, the different colour, components, texture, shape and arrangements of foods must work together pleasantly and appropriately in order to form pleasing combination on plate (Zampollo, Kniffin, Wansink, & Shimizu, 2011).

## **2.7 Service Quality**

Lately, service quality has become the most important factor in foodservice industries. Results shown that there is a relationship between service quality and customer satisfaction (Lim, 2010). The study further added that most of the customer will start to evaluate the service quality when they are dining in the restaurant, and the perceive service quality is used as an indicator of customer satisfaction towards the restaurant. Due to the intense competition in food service industry, the restaurant operators who are able to provide quality service to their customer will gain a great advantage over their rivals to retain customers and to attain survival and growth (Ryu & Han, 2010).

Although there are several studies have been done on the service quality and the customer satisfaction in fast food restaurants such as Brady, Robertson, & Cronin, 2001; Gilbert, Veloutsou, Goode, & Moutinho, 2004; Huam et al., 2011; Qin & Prybutok, 2008, however these five dimensions of SERVQUAL may not necessary be included at the same time simply because some of them seem less appropriate for the restaurant context (Andaleeb & Conway, 2006). Instead it is important to measure the reliability as stated in Tang and Bougoure (2006) that this dimension is

the most important factor of service quality. Hence, there is a need to study in this area to identify how the dimensions of service reliability and responsiveness impact customer satisfaction and revisit intention among undergraduates towards fast food restaurants.

Service largely depends on the type of restaurant whether it a full service restaurant, cafeteria or food courts. Of the three types, a full service restaurant is the most difficult because it offers high quality services beyond expectation of the customers (Dabholkar, Shepherd, & Thorpe, 2000). It is normal for a restaurant to offer a high level of quality services to customers in order to maintain or positioned them in a competitive market. According to Stevens, Knutson, & Patton, (1995), restaurateur who provides great services has a competitive advantage over those who do not. Service quality is the important source for service organizations to gain advantage over their rivals according to Palmer (2001), (as cited in Chow, Lau, Lo, Sha, & Yun, 2007).

Parasuraman, Zeithaml, and Berry, (1988) innovated service quality measurement tool which is called “SERVQUAL”. This model has become a widely accepted instrument for the service operators to diagnose and also improve the service quality in order to achieve high level of customer satisfaction. This instrument consists of five service dimensions which included tangibility, reliability, responsiveness, assurance, and empathy. Customers evaluate the service quality based on these 5 distinct dimensions: tangibility refers to appearance of physical facilities, equipment, and appearance of personnel; reliability indicates ability to perform the promised service dependably and accurately; responsiveness represents the ability to provide

prompt service and willingness to help customers; assurance is defined as an employee's knowledge and courtesy.

Andaleeb et al. (2006), does not really agree altogether with the SERVQUAL dimensions. According to him, among the SERVQUAL dimensions, the measurement of reliability and responsiveness are far more desirable in restaurant context when providing pleasing dining environment to the customers. Andaleeb, et al. (2006). The tangibility aspect should refer to the restaurant's environment and physical attributes, which the customer will experience first when they step in the restaurant (Ramseook-Munhurrun, 2012). However, the service provided by the restaurant cannot be counted and is intangible, heterogeneous, and inseparability in terms of production and consumption of the product (Andaleeb et al., 2006).

Therefore, it is clearly not appropriate to put service aspect under tangibility dimension. The assurance and empathy dimensions proposed in the SERVQUAL framework may not show a significant result for restaurant context. Assurance dimension is more appropriate for the credence based industries where the customer involve in high risk of transaction or purchase such as legal service, auto repair and healthcare service. Assurance is not likely to be as important in the food service industry given the customer's risk is low. Whereas the empathy dimensions is less applicable to the food service industries where transaction marketing is involved. But it is more appropriate to the relationship marketing where it is crucial for the staff to pay individualized attention and offer high technical consultation and advice to their customers.

### **2.7.1 Service Reliability and Responsiveness**

According Ko (2008), service reliability is implicitly delivered by the firm to their customers. This is very important because customers are smart and are only willing to deal with premises or businesses that are willing to perform they promised to do. Furthermore, it is more successful to offer the promised service (reliability) to the customers. In addition, her study also stated that for the company which is responsive, they will concern about the duration they will take to deal with their customers' enquiries and problems. In customer point of view, server responsiveness is the interaction that occurred between customer and the staff of the restaurant pertaining to which the server was alert and attentive to customers' enquiry and requirement (Winsted, 1997).

### **2.8 Restaurant Price**

Normally, food outlets offer a wide variety of menus for the customer to choose from with also wide variety of prices. According to Han and Ryu (2009), the role of price on consumer behaviour is salient to the restaurant industry. Consumer plan for the service consumption are not identical therefore it is highly subjective to the particular needs of the customer itself. The role of price in the restaurant setting often has been regarded as the communicator of restaurant value (Naipaul & Parsa, 2001). It can be said that price can be the most important of factors to decide customers decision making. Even if the customers opted for high quality products, price can be the motivating factors because they don't tend to purchase beyond their budget limit.

Despite low quality, customer will purchase item essential to their minimum requirement (Anderson et al., 2000).

Though we never admit to it, price is proven to be an important constraint on choice. Sanctifications are made to acquire goods or services (Dodds et al., 1991; Zeithaml, 1988). According to Monroe (1990), price is the amount of money which customers have to sacrifice for something with aspirations in purchase contexts. Okeiyi and Finley (1994) stressed the significant role of price in restaurant choice and clearly saw that price becomes the highest attributes in decision making. Kwun and Oh (2004) found that price was negatively associated with behavioural intention among customers. Homburg et al. (2005) also emphasized the negative influence of price on revisit intention among customers.

## **2.9 Convenience/Atmosphere**

Many studies indicated that making the atmosphere more pleasant and innovative is essential for a firm's success (Reimer & Kuehn, 2005; Wakefield & Blodgett, 1996). Sometimes restaurant environment played a key factor in customers choosing a restaurant although the food served is not very good. A study by Kokko (2005) suggests that atmosphere in a restaurant is often perceived by customers as the single most positive characteristic of the establishment, and even more important than food served. This is because the surrounding will create an expectation of dining experience even before the customer is served (Young, Clark, & McIntyre, 2007). This study further stated that environment of a restaurant reinforces more intangible

aspects such as food quality and services. Customers will “read the environment” and choosing which restaurant to dine (Kwun & Oh, 2006).

Although the primary function of a restaurant is to provide quality food, consumers today would really like to enjoy comfortable dining places thus enhancing their quality of life furthermore, thus making good food might not be enough to satisfy customer’s needs. (Hong, Chou, Liu, & Tsai, 2013).

Based on Servicescape model, atmospheric or physical setting is includes ambient conditions- temperature, air quality, noise, music, odour; space is includes layout, equipment and furnishing while sign, symbols and artefacts are include signage, personal artefacts and style or décor. Atmospheric is referred to tangible and intangible environment features (Liu and Jang, 2009). Tangible quality may refer to all physical factors where this factor can be controlled by restaurateurs (Bitner, 1992).

In order to attract customer while we already have good quality product, restaurateur must also look into other external factors such as ambience. Ambient scent is an important matter for restaurateur to take into consideration to attract customers. This is because ambience can impact customer buying behaviour (Fiore, Yah, & Yoh, 2000). Spangenberg, Crowley, and Henderson (1996) stated that there is an effect of ambient scent on purchase intention. Morrin and Ratneshwar (2000) also illustrate ambient scent can improve evaluation of a particular products that are unfamiliar. Ambient scent of a

restaurant is important because it will link to the emotional responses of customers. As a result, restaurant atmosphere has significant impact on customer's perception toward overall quality of the restaurant, which will directly affect customer satisfaction (Ryu & Jang, 2008). Essentially, restaurateur have to have a better understanding of customer needs and wants to ensure total satisfaction.

Baker (1987) divided environmental factors into three categories that is ambient cues, design cues and social cues. Table 2.2 shows detailed characteristics as said by Baker.

**Table 2.2: Components of Physical Environment**

<b>Category</b>	<b>Definition</b>	<b>Features</b>
Ambient	Background conditions that exist below the level of our immediate awareness	Air quality Noise level Scent Cleanliness
Design	Stimuli that exist at the forefront of our awareness	Aesthetic Functional
Social factors	People in the environment	Audience (other customer) Service personnel

(Source: Baker, 1987)

### **2.10 Cleanliness**

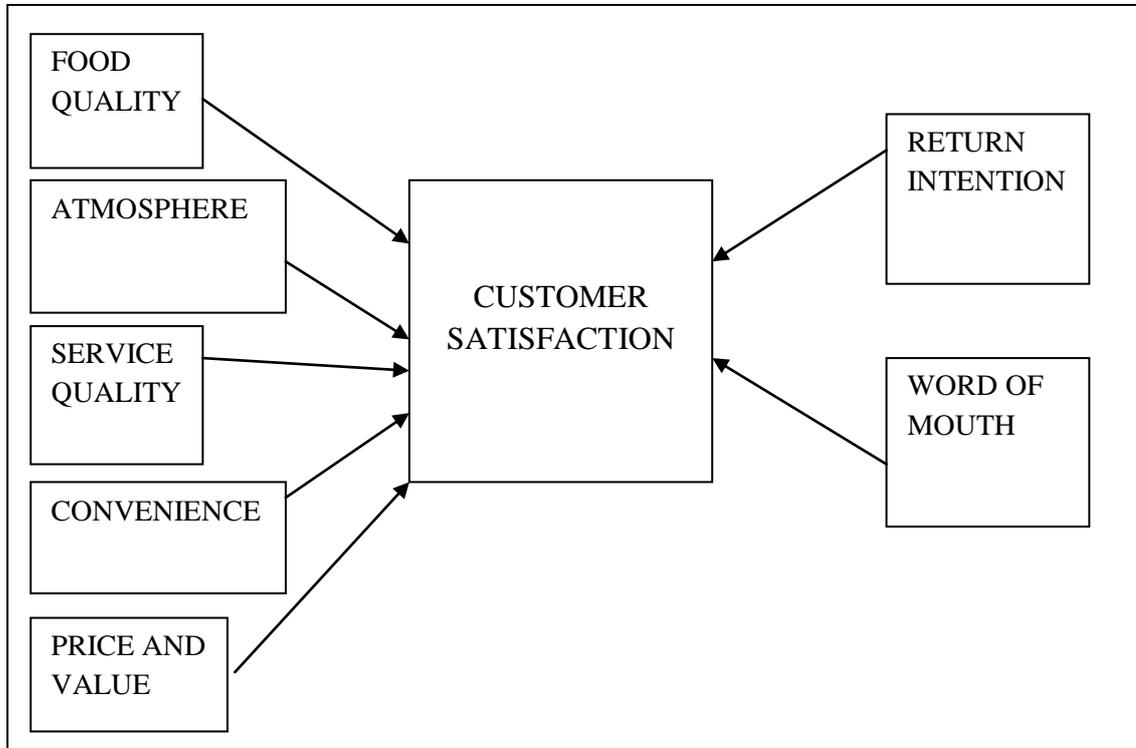
Understanding what customers consider when they evaluate a restaurant's cleanliness can improve store quality easier due to obtain the useful information from prospective customers (Seung, 2012). Cleanliness is also one of the key elements in customer deciding whether to eat at the restaurant or not. Restaurant cleanliness has been perceived as a key factor when customer evaluates the quality of dining area provided (Barber & Scarcelli, 2009; Liu et al., 2009). As at today competitive market, restaurateurs who ignore customers' opinion or do not

meet customers' standards of quality will result in lack of customers support (Steven et al., 1995). Alertness on the part of operators in customer's perceived cleanliness level is important. The important factor that influences the customers decision is the dining area of the restaurant must be clean (Sienny & Serli, 2010). Customers today demand a better hygiene food environment because eating safe food will allow people to stay away from food-borne illness (Miles, Braxton, & Frewer, 1999). Research by Duberg found out that a restaurant that lacks hygiene would give customers a horrible experience and ruined the appetite of customers. Furthermore, it can lead to negative impressions on the restaurant and damagingly affect the business.

Cleanliness has been perceived as a key factor when customer evaluates the quality of dining area provided (Barber & Scarcelli, 2009). According to Steven (1995), restaurateurs who ignore customer's feedback will result in lack customer's support. Restaurateur had to pay more attention towards cleanliness because it is becoming more of a crucial element in the restaurant industry. Wherever customer evaluates the quality of dining experience, they also t=rated the cleanliness level of the restaurant. Restaurant cleanliness has been perceived as a key factor when customer evaluates the quality of dining area provided (Barber & Scarcelli, 2009; Liu et al., 2009). Nowadays, customers are very smart and they know what they pay for so as they require the best possible outcomes from the money they spent. As at today competitive market, restaurateurs who ignore customers' opinion or do not meet customers' standards of quality will result in lack of customers support (Steven et al., 1995). Restaurateur must emphasize on cleanliness including overall appearance of the restaurant, parking lot, kitchen floor, staffs' uniforms, as well as the bathrooms.

## 2.11 Relevant Theoretical Model

Figure 2.2: DINESERV Model



(Source: Kim, Ng, Kim, 2009)

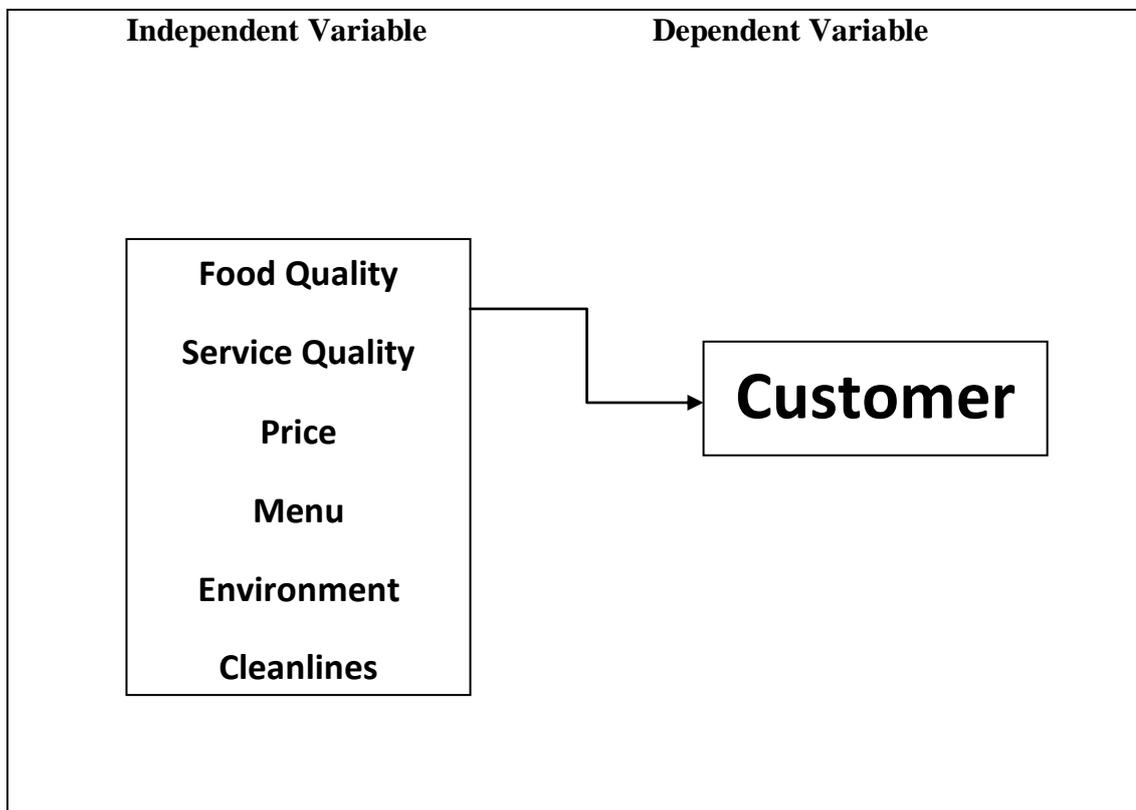
Figure 2.2 visualizes theory that shows institutional dineserv model including independent variables of food quality, atmosphere, service quality, convenience and price factor that affect customer satisfaction in university foodservice in United States. According to the researcher, it shows significant positive relationship towards customers' satisfaction.

## 2.12 Proposed Conceptual Framework

The Food Choice Process Model tries to represent the factors and processes involved in food choice. The model seeks to portray habitual and unconscious food practices

as well as more thoughtful decisions. It conceptualizes each new engagement with food as contributing to a person's life course experiences related to food, portraying the many factors and processes shaping a person's thoughts, feelings, and actions related to food and eating. Based on life course events and experiences and in the context of many types of influences, a person constructs a personal food system (cognitive processes to guide behaviours). Behaviours also shape the personal food system as well as the influences and the person's life course.

**Figure 2.3: Conceptual Framework for Food Choices**



(Source: Developed For The Research)

A lot of previous research has been done on the subject of measuring customer preferences on selecting a restaurant or cafeteria. A lot of researchers are looking at SERVISCAPE model by Bitner (1992) and SERVQUAL by Parasuraman, Zeithaml and Berry (1998). Serviscape is the overall atmosphere in cafeteria or foodservice facilities including ambience, space, layout, design and employee appearance.

Servqual on the other hand consists of five service dimensions which included tangibility, reliability, responsiveness, assurance, and empathy

Major influence for this concept also are from DINESERV by Kim (2009) and Leiwis (1981) that suggest five factors that influence restaurant selection including food quality, menu variety, price, atmosphere and convenience, hence it forms this conceptual framework where it attempts to access customers preferences on selecting a cafeteria. Independent variables are made up of previous research including the three mentions above.

For the purposes of this research, six(6) independent variables were formulated from previous research which are quality of product, quality of service, menu item, price, convenience and cleanliness by which will influence customers satisfaction.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

Chapter three detailed about the research methodology used for the study. This chapter details the measures used by this study, the research design, and the questionnaire design. Crucially, this chapter reports how the data will be collected, how and what is the research design, how the population & sampling is being done prior to the analysis in chapter four. This chapter also will be reporting about the pilot testing and internal reliability test done by the researcher prior to the distribution of the questionnaires.

Research methodology is used by researchers for collecting and analysing data that will be used for answering the hypotheses and research questions in a more systematic and organized way. Moreover, objectively this chapter is the to ensure the researcher was on the right track by using properly formatted and appropriate research procedures in order for future researcher to have better understanding and evaluating the outcome of the research.

The primary purpose of this study is to examine and establish the factors that make students to choose one cafeteria over another. Also to establish what is their priority in choosing the cafeteria between quality of food, quality of service, price, menu, convenience and surrounding & cleanliness. To achieve this purpose, this study will investigate the factors and items that will most likely to affect student's choices.

Basically in social research, there are four approaches may adopted by researcher to perform their research namely ideographic and homothetic explanation, inductive and deductive theory, quantitative and qualitative data, and pure and applied research. The selection of each approach is based on the availability of the literature on the research topic. Commonly, deductive technique is the most widely approach has been used by researcher. If high level of literature is widely accessible, then deductive approach definitely is the best to be used. Since this study formulated hypothesis to be tested and analysed, deductive approach has been adopted because it is the logical “model in which specific expectation of hypothesis are developed on the basis of general principle” (Babbie, 2011, p. 23).

This chapter discusses the research methods undertaken in this study to seek the improvement of services offered by the cafeteria throughout UUM campus. Since limited time to undergo this study is the major obstacle for researcher to go in depth in this research, only quantitative study has been employed. Quantitative research has been found appropriate and adequate to measure why students choose to have their meals at certain cafeteria over another. It also is able to explain the problems the students are having with the cafeteria thus making their lives in campus a better one since they are living in obscurity. The students also don't have much choice since they normally travel from one place s to another using bus services provided by the university.

In the process of primary data collection, questionnaires were being tested through pilot test to get reliability. Secondary data made available in websites, UUM Sultanah Bahiyah Library electronic resources. Books and journals completing the

list for literature review. The rest of methodologies involved are indentifying respondents, questionnaire distribution, collection, data analysis and lastly data interpretation.

### **3.2 Research Design**

Research design crucially required before further field study will be performed. By saying that, research design is the “detail plan of investigation” (G.L Ray & Sagar Mondal, 2004, p. 45). Specifically, research design is the detail process or procedure of testing the hypotheses and consequently analyse the all gathered data which is enable the researcher answering the research question constructively and accurately as possible, meanwhile guide the researcher undertake their research in the determined direction. Research design has to be well prepared as a complete guideline for researcher to scrutiny every single element contained in the research process.

According to Ghauri and Gronhaug (2005), depending on the nature of the problem the research could be exploratory, descriptive or casual.

***Exploratory research:*** it is used to identify and explain the nature of the problem. It enables manager to better understand the problem. According to Zinkmund (2000), the purpose of exploratory research include, diagnosing a situation, screening alternatives and discovering new ideas. Ghauri and Gronhaug (2005) stated that exploratory research is mostly used when the research problem is unstructured i.e. Badly understood, not well know or the other knowledge is not absolute. According to Yin (1994), interview is the best method when gathering information in an exploratory research.

***Descriptive research:*** according to Ghauri and Gronhaug (2005), descriptive research is used when the problem is structured i.e. it gives answers to who, where, what, how and when questions. It is used to make clear the distinctiveness of a population or an observed fact. According to Zinkmund (2000), “descriptive research studies are based on some previous understating of the nature of the research problem”.

***Casual research:*** according to Ghauri and Gronhaug (2005), in casual research, the problems are also structured. Causal research has to do with cause and effect relations. The main purpose in such research is to isolate cause(s) and tell whether and to what extent cause(s) result (s) in effect (s).

It has been pointed out in the literature that research design is the master plan that is prepared by the researcher to direct his steps in the undertaking of the research project through the data collection and data analysis stages (Zikmund, 2003). From the research methodology point of view, there are different research designs that can be deployed in doing research. As pointed out by Zikmund (2003), that there are four research methods for descriptive and causal research. These methods are survey, experiment, secondary data study and observation.

In this research project, the types of research used are quantitative research. Quantitative research is used to collect data and examine the hypotheses as well as to meet research objectives. According to Burns & Bush (2006), they defined quantitative research as involvement of the use of structural questions in which the respondents’ options have been predetermined and a large number of respondents

are involved. Therefore, through quantitative research, it can determine and examine the relationship between independent variables and dependent variables.

One of the main purposes of this study is to provide a valid and reliable framework for the factors that affect student's choice of cafeteria. According to Hair, Money, Page, and Samuel (2007), survey research design is one of the best and most commonly used approach for business studies to gather a primary data. This study employed a survey questionnaire research design to collect the data concerning the hypothesized relationships and hence can be classified as a field study with a quantitative orientation' or 'correlation research design' (Kerlinger & Lee, 2000). That is, to achieve the objectives of this study, a quantitative survey questionnaire research approach was employed through self-administered questionnaire to measure the variables under investigation.

### **3.3 Research Approach**

According to Saunder et al (2003), when deciding the research approach to use in a survey, a selection can be made between deductive and inductive approach.

- ***Deductive approach*** has to do with the building up of theory and hypothesis after reading literatures i.e. testing theory.
- ***Inductive approach*** has to do with development of theory from analysis of collected data i.e. building theory.

For the purpose of this research, deductive approach was used. From the theories, the research design was made, which we used when looking for answers to research question.

### **3.4 Pilot Test**

Pilot study or known as feasibility study is a small scale of study conducted before performing a larger version of study in the same field. It is required that researcher make pre-test for the research tools and data collection instrument like questionnaire. Pilot study also used to test an idea or hypothesis as well (Stachowiak, 2008). In the matter to get the validity of all questions whether it reached the high understandable level of respondents or vice versa, they have to be tested to small number of respondents. The respondent can be other related group with accepted number of ten. If they are not understand the meaning to be delivered in the questionnaire after pre-test has made, amendment have to be make upon those selected items or questions. Therefore, pre-test has been performed in this research and further report contents stated as follow.

Pilot study has been conducted prior to real research on 1<sup>st</sup> November 2014. 30 respondents selected randomly from students accommodation centre. The reliability of randomly selected dependent variables as showed by Cronbach's Alpha is 0.950. This is meant that questionnaires can be used for further research.

### **3.5 The Questionnaire**

A structured close-ended questionnaire was constructed to indicate the importance of student's selection of cafeteria. The questionnaire was constructed in two parts. Parts one consist five multi answer questions about gender, age, level of studies, times when students visit the cafeteria and how often they visited. Part two uses five points Likert scale has been used in this research with 1=strongly disagree and 5=strongly agree. Part two consisting of 63 questions. The questionnaires consists seven sections comprises section A, B, C, D, E, F and G.

Section A covers important information about the quality of food. It asked questions regarding the level of satisfaction of the students towards the food quality taste, appearance and ingredients.

Section B consists of fourteen questions regarding the quality of services. This section is the largest overall with fourteen questions about how well the customers are treated at the cafeteria. It is also to determined if the staffs are friendly and courteous towards the customer and if they are properly trained and knowledgeable..

Questions asked in section C is the price factor. It is the most important factor for the students simply because the cost of food is a major issue for them since not all of them can afford pricey items. Stressed are on the matter of value for money.

Furthermore, questions in section D asked ten questions about the menu planning. Important questions in this section are about the operations of the cafeteria in

providing healthy food items. Stressed are being made on the providing of speciality main course items for non Malay students.

Section E covers convenience factor for students such as the providing of internet hotspots and layout. This section also covers subject matter of ambience and seating arrangement to determine if they are to the customers' satisfaction.

Section F covers subject of cleanliness and surroundings. This is to distinguish whether the students find the cafeteria is clean or not.

Last section or in section G the students was asked about their overall satisfaction level. This is to ensure whether they are really satisfied with the cafeteria and whether they are willing to revisit or go somewhere else.

### **3.6 The Process of Data Collection**

The objective of quantitative research is to develop and employ mathematical model, theories and /or hypotheses pertaining to natural phenomena". It can also be used to correct and incorporate previous knowledge.

A quantitative research method uses a large number of subject and anything measurable. It enables one to establish conceptual models and frameworks and also to know some vital variables and analyse the connection between them. When using a quantitative research method, a literature review helps to get a better understanding of the research topic. Therefore, the most suitable method in this case, were the aim

of is to indicate the factors affecting choices of cafeteria will be a quantitative research method.

The whole process of distribution, explanation, and collection of all questionnaires took five days period commence of 15th until 18th of November 2014. Questionnaires are distributed throughout the student's community. Most of the questionnaires are distributed through the office of respective DPP (Students residential halls) with the help of the college manager. While part of it were distributed by researcher.

Altogether there are 16 people involved in the process including the researcher that is 15 college manager plus the researcher. Beginning that period a total number of 400 questionnaires were distributed to all the students attending the cafeteria. It was the best way to distribute the questionnaires through college manager because the college manager will be at the location DPP and can assists the students should there are any questions involved or if they are not sure of anything.

All the questionnaires were distributed by college manager except for students attending the students' accommodation centre which is distributed by researcher. All the respondents answered the questionnaires based on explanation given by researcher as a guide for them in completing of answering the questions. College Manager assistance went smoothly due to long period relationship that has exist between college manager and students of the respective DPP.

The college manager played an important role to assure all students answer all questionnaires completely as it can also help to improve the effectiveness of the cafeteria thus improving their self satisfaction while attending the cafeteria. The collecting of questionnaires process has been undertaken on 19<sup>th</sup> and 20<sup>th</sup> November 2014. A number of 120 questionnaires from all 15 DPP were collected on the 19<sup>th</sup> and the rest were collected at the next day.

### **3.7 Data Sources**

Using of past data, that is reviewing the literature on the topic of interest is important when conducting a research i.e. the researcher present past theory into his/her own area of concern as presented in the chapter two of this thesis. In other words, a clear description of our data gathering processes will be presented in this chapter.

There are two methods of data collection that can be considered when collecting data for research purpose. These data collection types include the following:

- Primary data
- Secondary data

Both the secondary and primary data was used in this thesis.

#### **3.7.1 Primary Data**

This can be referred to as first hand data because it is collected mainly for the set research purpose. This type of data often helps to give appropriate answers to research questions. According to Ghauri and Gronhaug (2005), people's behaviours can hardly be learnt about without asking questions directly of the people involved.

Hence, for the purpose of the thesis, primary data will be collected by communication via questionnaires which the researcher will administer personally. The researcher intend to rely more on primary data since the research is about students selection of cafeteria as this will also help the researcher to know more about the reason behind the selection process.

### **3.7.2 Secondary Data**

According to Ghauri and Gronhaug (2005, 91), this can be referred to as information collected by others for certain purposes that can be different from that of a researcher who intends to use the same information. These types of data can also be called second hand data due to the fact that they were not collected for a particular purpose but can be of importance to several researchers at different time. Ghauri and Gronhaug (2005, p.100) states that secondary data can be gathered from both internal and external sources. The internal sources are data's being collected from employees, suppliers etc. And the external sources include the collection of data from published articles, books, research reports etc. as well as commercial, panel research, reports etc. This type of data can also be gathered from online sources which may include web pages of government organizations, companies, symposium, seminar etc., Secondary data therefore saves time as well as money, it helps to better understand and explain our research problem, broaden the base from which scientific conclusion can be drawn etc. All these are because it is an already existing data that can be used almost at any time it is needed. For this study, secondary data were gathered from books, journal and articles using the university library as well as the through internet e.g. Google scholar.

The research methodology of the thesis work is a combination of secondary data and primary data. Secondary data were collected from journals, articles and books using the school library and internet. The primary data were gathered using communication with the use of questionnaires. Questionnaires were distributed personally. The researcher rely more on the primary data since the research work is about students cafeteria selection. The researcher hopes to know more about the reasons behind student's preference towards selecting the cafeteria.

### **3.8 Population & Sampling**

#### **3.8.1 Target Population**

The targeted population are male and female students of Universiti Utara Malaysia currently pursuing First Degree, Masters and PhD.

#### **3.8.2 Sampling Frame and Location**

Sampling frame is a complete list of all cases in the population from which the sample are drawn (Saunders et al., 2009). Target population is 180 students of Universiti Utara Malaysia living in-campus. For the purpose of this research, students living off-campus are not included because the variety of food outlets off-campus will make the data collected not appropriate to be used. The questionnaires are randomly distributed throughout the students' residential halls.

### 3.8.3 Sampling Elements

The data for the research was collected among students who are customers of the restaurants. The researcher decided to use mostly undergraduate students because they are most frequent in the cafeteria and also because of the fact that most postgraduate students who have their own means of transportation, will travel out of the campus. The samples of respondents used in this research are students living in campus at all the respective student's residential halls. Stressed are being put on the students attending first degree because they most probably will spend their time in campus.

### 3.8.4 Sampling Technique

According Ghauri and Gronhaug (2005) there are two types of sampling that is probability sampling and non probability sampling.

- ***Probability sampling***: in probability sampling, there is a known, non zero chances of including the entire unit in the sample and thus allows statistical inference to be made.
- ***Non probability sampling***: making a valid inference about the population is not possible. In other words the samples are not representative.

The sampling was done using non-probability sampling on the basis of convenience. Convenience sampling refers to the way of obtaining people who are the most conveniently available (Zikmund, 2003). Advantages of using this technique is research can be done very fast.

### **3.8.5 Sampling Size**

The subjects used are 172 students from the student's residential halls. Ample times were given to them to answer all the questions. Purposive sampling has been used because the number of respondent for each DPP is relatively small, purposive sampling is suited to be used to represent all respondents with high representative percentage.

### **3.9 Unit of Analysis**

Unit of analysis is what or whom being studied. In social science research, the most typical unit of analysis are individual people (Babbie, 2011 pg. 101) In this research, unit of analysis is individual as satisfaction study also measured on individual itself rather than generalization because “descriptive studies with individuals as their unit of analysis typically aim to describe the population to discover the social dynamism operating within that population” (Babbie, 2011, p. 95). Hence, individual level is selected as unit of analysis of this research.

### **3.10 Identifying Sample**

The information pertaining target population that is students living in students residential halls were gathered from the database available at the office of students' residential halls. Purposive non-probability sampling method has been adopted in this research.

### 3.11 Analytic Techniques

Data analysis is analysed using Statistical Package for the Social Science (SPSS) version 19.0. SPSS has been used to analyse the data because the prediction of confidence of thing may happen next. Thus, smart decision, problem solving, and future planning can be improved.

#### 3.11.1 Reliability analysis

In reliability analysis, Cronbach's alpha is one of the popular approaches. Cronbach's alpha was used to examine the internal reliability of the total items used to measure the constructs. The Cronbach's alpha varies from 0 to 1 and a value of 0.6 or less indicates unsatisfactory internal consistency reliability.

**Table 3.1: Reliability Test**

Item	Cronbach Alpha	Number of Items
Quality of food	.908	6
Quality of service	.896	14
Price	.911	8
Menu	.900	10
Convenience	.906	12
Surrounding & Cleanliness	.909	7
Customer Satisfaction	.905	6

Table 3.1 shows the results that all constructs exceeded 0.6. As referred to the table above, price shows the highest alpha coefficient of 0.911. Next is surrounding and cleanliness produced alpha coefficient 0.909. It followed by quality of food with alpha coefficient of 0.908. Convenience was measured with alpha coefficient of 0.906. Customer satisfaction produced alpha coefficient of

0.905. Menu produced alpha coefficient of 0.900. Finally, quality of service shows the lowest alpha coefficient of 0.896.

Reliability analysis was needed to test consistency of instruments. It was conducted using Cronbach Alpha reliability coefficient. This is because it was supposed to reflect the reliability of instruments. Coefficient of .60 by Nunnally & Bernstein (1994) was deemed efficient enough as indicators of internal consistency.

Reliability test is used to signify the internal consistency of the measurement in order to determine whether all the items in each variable in the questionnaire are highly related or reliable. In addition, the relationship between individual items in the scale can be determined significantly. The scale items in this research were assessed by using the reliability test, Cronbach's Coefficient Alpha is adopted to generate the data and its value tends to increase with an increase in the number of scale items. According to Malhotra (2007), the reliability coefficient varies from 0 to 1. If the value of Cronbach's Alpha is less than 0.60 has indicated that unsatisfactory internal consistency reliability whereas if the value of Cronbach's Alpha is more than 0.60 has indicated that satisfactory internal consistency reliability

### **3.11.2 Frequency distribution**

Frequency distribution was obtained in regards to all personal data classification. In this research it is the respondent's personal profile such as gender, age and level of studies. Frequency distribution is a mathematical division with the purpose of obtaining a count of the number of responses connected with different values if one variable and to express these count in term of percentage. The purpose of

frequency is to demonstrate the values such as numbers and percentages for different categories of a single categorical variable. Its measurement involves only one categorical variable, which is nominal or ordinal scale (Zikmund, 2003).

From this study, frequencies are generally obtained from nominal variables such as gender, level of education, and level of studies. Meanwhile, frequencies are also obtained from ordinal variables are frequency to visit cafeteria and so on. Hence, a frequency division for a variable would generate a table of frequency counts, percentages and cumulative percentages for all the values allied with that variable (Malhotra et al., 2006).

### **3.11.3 Descriptive statistics**

Descriptive statistics such as maximum, minimum, means, standard variations and variance were obtained for independent and dependent variables. Descriptive statistics are the methods used to organize, display, describe and explain a set of data with the use of table, graphs and summary measures (Norusis, 1999; Johnson & Christensen, 2000). In this study, descriptive statistic such as frequency, mean and standard deviation are used to describe the basic features of the overall data. Via the generation of report, it provides simple summaries pertaining to the sample of population and the measures. The additional of graphic extends the level of understanding as far as data interpretation is concerned.

#### **3.11.4 Pearson-Correlation**

Correlation is a measurement about the strength of the linear relationship between two variables. Pearson's correlation gives information about the linear relationship between two continuous variables. The value of this correlation coefficient ranges between -1 and +1. The magnitude of the coefficient shows the strength of the linear relationship exist between the two variables where the (+) and (-) sign shows the direction of the relationship example positive linear relationship or negative linear relationship (Fah & Hoon, 2009). Besides, the values of 0.00 represent a lack of correlation. The closer the measure is to 1.00, the more likely the relationship is statistically significant (Muchinsky, 1993).

#### **3.12 Conclusions**

This chapter thoroughly explained about the research methodology used consists of how the data are being collected, how the questionnaires are being distributed, population, secondary data, analytic technique, and pilot study employed. All the data from the questionnaires collected was then being transferred to Statistical Package for Social Science (SPSS) version 19.0. furthermore, to strengthen the research, secondary data also collected from books and journals that formed the literature review that have been described in chapter two.

## **CHAPTER 4: DATA ANALYSIS**

### **4.1 Introduction**

In this chapter, results of the questionnaires surveyed respondents' data will be analyzed. Data collected from 172 respondents were analyzed by using Statistical Package for Society Science (SPSS) Version 19.0 programme. In addition, the elements that will be covered in this chapter include descriptive analysis, descriptive statistic, scale measurement and inferential analysis of Pearson Correlation. To ensure a clearer picture, results obtained will be presented in charts and tables form. Lastly, this chapter is concluded with a summary on the hypothesis findings.

### **4.2 Descriptive Analysis**

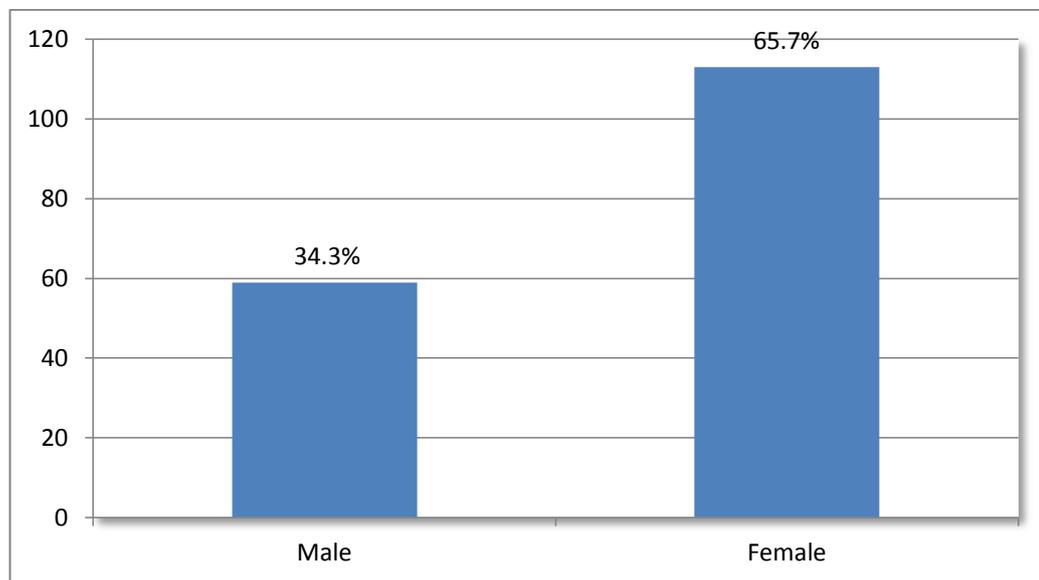
#### **4.2.1 Respondent Demographic Profile**

In this study, four questions were asked under respondents' demographic section such as gender, age, level of studies and frequencies of visiting the cafeteria.

**Table 4.1: Gender**

Gender	Frequency	Percentage
Male	59	34.3
Female	113	65.7
Total	172	100.0

**Figure 4.1: Gender**

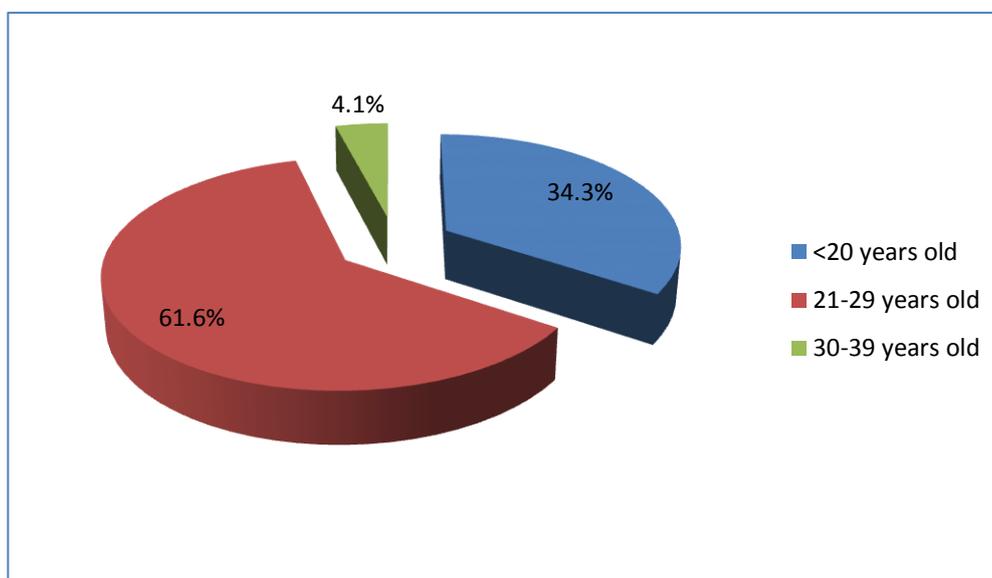


Respondents gender distribution as shown in Table 4.1 and Figure 4.1 describes the majority of the respondents are female which consist of 66% or 113 respondents, while male respondent which consist of 34% or 59 respondents.

**Table 4.2: Age**

Age	Frequency	Percent
Below 20 years old	59	34.3
21-29 years old	106	61.6
30-39 years old	7	4.1
Total	172	100.0

**Figure 4.2: Age**

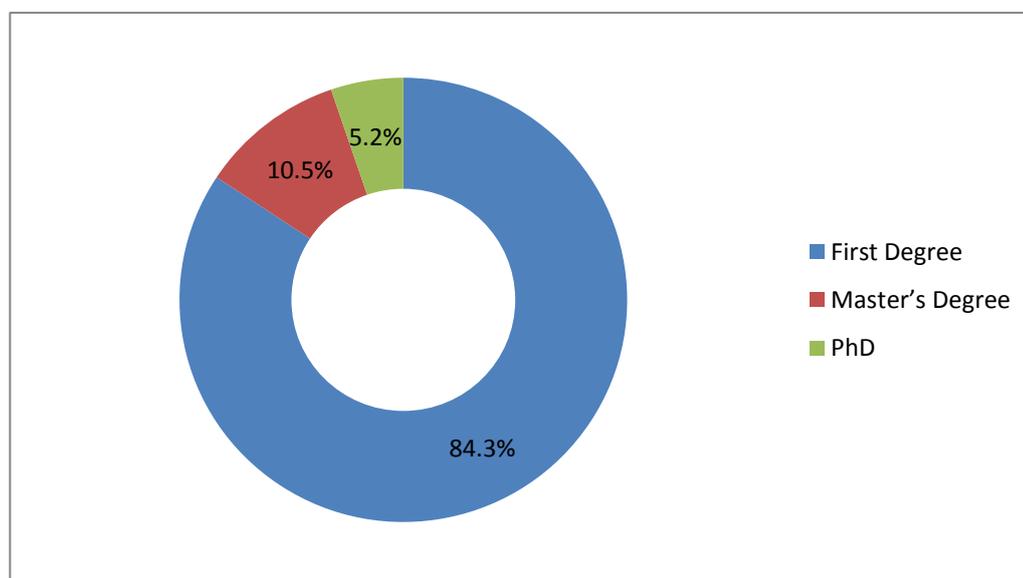


Based on Table 4.2 and Figure 4.2, three age categories are provided in the questionnaire. The age range between 21 to 29 years old is indeed the highest proportion among 172 respondents, consists about 61.6% or 106 respondents followed by respondents aged between 30 to 39 years old at 34.3% or 59 respondents. Respondents aged 20 years old or below consist of 4.1% or a total of 7 respondents.

**Table 4.3: Level of Studies**

Level Of Studies	Frequency	Percent
First Degree	145	84.3
Masters Degree	18	10.5
PhD	9	5.2
Total	172	100.0

**Figure 4.3: Level of Studies**

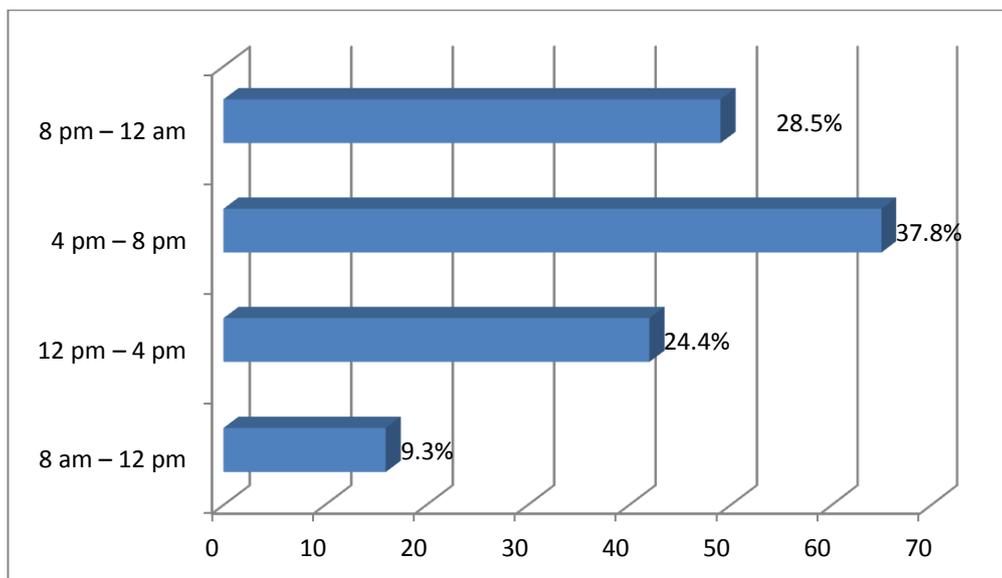


Referring to Table 4.3 and Figure 4.3, the results revealed that 84.3% or 145 of the respondents currently pursuing First Degree. It was then followed by the respondents who are pursuing Master's Degree at 10.5% or a total of 18 respondents. PhD students make up the list with only a meagre 5.2% or 9 respondents.

**Table 4.4: Time of Visits**

Time Of Visits	Frequency	Percent
8am-12pm	16	9.3
12pm-4pm	42	24.4
4pm-8pm	65	37.8
8pm-11pm	49	28.5
Total	172	100.0

**Figure 4.4: Time of Visits**



Based on Table 4.4 and Figure 4.4, majority of the respondents which are 65 of them choose to visit the cafeteria at dinner representing 37.8% of the total respondents. Meanwhile, a total of 49 of the respondents at 28.5% of total respondents prefer to have their supper at the cafeteria. According to the data at table 4.4, lunch time is the third highest frequency at 24.4% or 42 respondents altogether. As mention in chapter one, operators of the cafeteria are facing problem

with breakfast crowd and it is proven from the questionnaire that only 9.3% of total respondents which are 16 of them prefer to have their breakfast at the cafeteria.

### 4.3 Descriptive Statistics

**Table 4.5: Descriptive Statistics on Variables**

No	Variables	N	Mean	Standard Deviation	No. Of Items	Ranking
1	Quality of food	172	3.0707	.70550	6	4
2	Quality of service	172	3.1703	.61636	14	2
3	Price	172	3.1134	.57739	8	3
4	Menu	172	3.0145	.62133	10	7
5	Convenience	172	3.2786	.49987	12	1
6	Surrounding and cleanliness	172	3.0249	.72702	7	6
7	Customer satisfaction	172	3.0649	.67933	6	5

Table 4.5 shows the descriptive statistics for quality of food, quality of service, price, menu, convenience, cleanliness and customer satisfaction. Calculations are based on 1.00 minimum and 5.00 maximum which is using Likert scales 1 to 5. 1 being strongly disagrees and 5 strongly agree. The highest mean is 3.2786 which are for convenience. Quality of service and price mean value is 3.1703 and 3.1134 respectively followed by quality of food at 3.0707 and customer satisfaction at 3.0649. Surrounding and cleanliness was at 3.0249. Menu has the lowest mean which is 3.0145.

The Table 4.5 indicates that majority of the respondents agreed that convenience has the most impact on satisfaction whereas menu has the least impact on satisfaction.

Standard deviation indicates how far or how deviate is the data is to the mean. Looking at the table 4.5, it shows that surrounding and cleanliness has the highest standard deviation which is 0.72702 followed by quality of food which is 0.70550. Next, standard deviation for customer satisfaction is at 0.67933 while menu and quality of service was at 0.62133 and 0.61636 respectively. Next is price which is at 0.57739. Lastly, convenience has the lowest standard deviation which is only 0.49987.

#### 4.4 Inferential Analysis

##### 4.4.1 Pearson Correlation Analysis

**Table 4.6: Pearson Correlation Analysis**

Items		Quality of Food	Quality of Service	Price	Menu	Convenien.	Surr.& Clean.	Custo. Satis.
Quality of Food	Pearson Correlation	1	.713**	.629*	.635*	.586**	.533**	.554**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	172	172	172	172	172	172	172
Quality of Services	Pearson Correlation	.713**	1	.601	.726*	.670**	.690**	.672**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	172	172	172	172	172	172	172

Price	Pearson Correlation	.629**	.601**	1	.639*	.534**	.488**	.561**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	172	172	172	172	172	172	172
Menu	Pearson Correlation	.635	.726**	.639*	1	.669**	.616**	.656**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	172	172	172	172	172	172	172
Convenin.	Pearson Correlation	.586**	.670**	.534*	.669*	1	.638**	.668**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	172	172	172	172	172	172	172
Surr. & Clean.	Pearson Correlation	.533**	.690**	.488*	.616*	.638**	1	.640**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	172	172	172	172	172	172	172
Customer Satis.	Pearson Correlation	.554**	.672**	.561*	.656*	.668**	.640**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	172	172	172	172	172	172	172

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4.6 shows the correlation of independent variables (quality of food, quality of service, price, menu, convenience, cleanliness) with that of the dependent variables (customer satisfaction). Based on the table it shows significance between independent variables and dependent variables at 0.01 levels, two-tailed

toward customer satisfaction. Results shows relation between all the independent variables with customer satisfaction with quality of service shown a strongest relationship with customer satisfaction ( $r= 0.672$ ).

Convenience factor is second at 0.668 with customer satisfaction. The value between quality of food and customer satisfaction is 0.554. Value of price and customer satisfaction is 0.561 while menu was at 0.656. Convenience was at 0.668 while surrounding and cleanliness was at 0.640.

#### **4.4.2 Hypotheses Testing**

##### **Hypothesis 1: Students choices of cafeteria is affected by quality of food**

Table 4.5 shows that there is relation between quality of food and customer satisfaction at 0.554. Therefore, Hypothesis 1 is supported that student's choices of cafeteria is affected by quality of food.

##### **Hypothesis 2: Students choices of cafeteria is affected by quality of services**

Table 4.5 shows that there is relation between quality of services and customer satisfaction at 0.672. Therefore, Hypothesis 2 is supported that student's choices of cafeteria is affected by quality of services.

##### **Hypothesis 3: Students choices of cafeteria is affected by price**

Table 4.5 shows that there is relation between price and customer satisfaction at 0.554. Therefore, Hypothesis 1 is supported that student's choices of cafeteria is affected by price.

#### **Hypothesis 4: Students choices of cafeteria is affected by menu item**

Table 4.5 shows that there is relation between menu and customer satisfaction at 0.554. Therefore, Hypothesis 1 is supported that student's choices of cafeteria is affected by menu item.

#### **Hypothesis 5: Students choices of cafeteria is affected by convenience**

Table 4.5 shows that there is relation between convenience and customer satisfaction at 0.554. Therefore, Hypothesis 5 is supported that student's choices of cafeteria is affected by convenience.

#### **Hypothesis 6: Students choices of cafeteria is affected by surrounding & cleanliness**

Table 4.5 shows that there is relation between surrounding and cleanliness and customer satisfaction at 0.554. Therefore, Hypothesis 6 is supported that student's choices of cafeteria is affected by surrounding and cleanliness.

### **4.5 Conclusion**

Chapter four provides general information and description of respondents profile and analyzed using descriptive analysis. From the descriptive analysis, the researcher had found out that majority of students in UUM is female which consists 60% and male 40% that augurs well with the assumptions that it is indeed female students are far more in size than male students in UUM. Students in 21-29 years old age group are the highest at 61.6% attending the

cafeteria and most of them at 84% are currently pursuing first degree. From the frequency also, shows that most of UUM students visited the cafeteria during dinner which is 37.8% of them.

From the Pearson Correlation Analysis that was used to examine the association among the variables, all the independent variables quality of food, quality of service, price, menu, convenience, surrounding & cleanliness are significant to dependent variables customer satisfaction at 0.01 levels, two- tailed toward customer satisfaction.

Hypothesis testing was done using Pearson Correlation Analysis and it prove there is relation between all the independent variables quality of food, quality of service, price, menu, convenience, surrounding & cleanliness are significant to dependent variables customer satisfaction.

## **CHAPTER FIVE: DISCUSSION, SUMMARY, AND RECOMMENDATIONS**

### **5.1 Introduction**

The purpose of this study was to look and understand student's perspective on why they decide to choose one cafeteria over another one. Major questions asked was what makes the students attracted to certain cafeteria and what is their priority in choosing a place to eat. In order to provide empirical evidence for the questions, the study conducted questionnaires with five Likert scales answered to distinguished and verify all the factors.

Based on the research objective constructed in chapter one that is

- a) Identify if there are relation between student's choices and their satisfaction;
- b) Identify the main factors that affect student's choices of cafeteria.

Previous researches have concluded several factors that might affect customer or students choices of cafeteria. There are several factors that influence customers' decision to choose a restaurant. According to Lewis (1981) there are five factors that are food quality, menu variety, price, atmosphere and convenience.

June and Smith (1987) noted that there are five key criteria were used in their study of customer choice among restaurants: price, atmosphere, liquor license, service and quality. Surroundings, customer turnover, location, price, quality of food, quality

of service, and type of food are the factors that consumers consider in choosing restaurant. Jillian, Lester and Robert (1992) stated that the factors that influencing consumer to choose restaurant are prices of meal, past experience with similar types of restaurants, reputation of restaurant among people that respondent know and convenience of location. Martin and Frumkin (2005) stated that consumer's reasons for choosing a particular full-service restaurant, first is because of they like to be at that restaurant, convenience location, quality of food, good variety of food, and lastly price factor.

Based on previous research as discussed in chapter one and chapter two, the researcher came out with six independent variables that can affect customer satisfaction or students choices of cafeteria. The six independent variables or factors are quality of food, quality of service, price, menu, convenience and surrounding & cleanliness. Although supported by a vastly adequate previous research to suggest factors that could affect students choices, the researcher needed to see if there is relation to the factors mentioned by previous scholar with that of student's choices in UUM. One of the factors is that previously no such research had been done in UUM about the factors that will affect student's choices of foodservices or cafeteria. As the researcher also working with Food & Beverage Department of Universiti Utara Malaysia, the researcher felt it is essential to know if there is relation between all the variables with customer satisfaction.

Unsurprisingly, quality of service has the highest correlations value among other independent variables with 0.672. Looking at that, it shows and proves what is being said nowadays and the researcher own hypothesis that quality of service does have

relation and affect customer satisfaction while at the same time customer might revisit the cafeteria if the service is good. Service factors overcoming other factor including even quality of food which is comes last among other factors in the list of relations with 0.554.

Convenience factor like operating hours and location of the cafeteria comes second with 0.668 that is the relation to customer satisfaction almost equal to quality of service. That shows convenience is very important besides quality of service in determining choice of cafeteria among UUM students. Third highest relation is menu with 0.656 and fourth is surrounding & cleanliness with 0.640. Next is price factor with 0.561 and lastly quality of food at 0.554. Surprisingly to the researcher to found out that two of the more important assumptions that will affect student's choices come out last and second last that quality of food and price.

The research discovered that all other factors highly related to students choices but not necessarily quality of food. Customer does rate quality of service, convenience, menu item and surrounding & cleanliness very highly when deciding on which cafeteria to choose rather than concentrate on quality of food and price. Students preferred to have a good quality service in order to fulfil their needs, to feel good about the place with good location to them.

The research answered the research objectives stated in chapter one that there are factors that determine their choice of cafeteria that is quality of food, quality of services, price, menu, convenience and surrounding & cleanliness. Also the research

showed that all the factors stated as independent variables do have relations with customer satisfaction.

## **5.2 Managerial Implications**

The present study played a major contribution toward a better understanding of how students preferred choice of one cafeteria between another. It focused on basic principles in decision making of a certain outlets, certain characteristics that distinguish or differentiate one outlet from another.

This study will also provide researcher better insights into the situation with the cafeteria and provides information to the student's affairs to tackle. The university management will be better equipped to look in the matter of providing the best quality experience for students in terms of food outlets should the research being made available to them.

## **5.3 Limitation of the study**

As for every research, this research also found some limitations. There is some little concern regarding the effectiveness of the study since firstly, the limitation of time conducting the study lead to the scope of the study being limited. Therefore, should type of study will be more comprehensive using both quantitative and qualitative method, this study has being limited to quantitative research solely due to only limited of three months period given. The study period also being shorter for researcher because of time constraints for as the researcher was also working full

time. Concern about the respondent commitment in completing the questionnaires distributed even after asked by manager to complete them as soon as possible. This resulted a far more time factor for the researcher for data collection purposes.

Financial constraint or cost involved in undergone this research is crucial thing to take into account. The cost currently involved for questionnaires copy, hundred pieces of pen given together with questionnaires as a gift. Thus, additional period required for researcher to collect amount of sufficient fund to complete the study from the beginning until the end of the research process.

The population of the study was from students from different colleges in the university thus making it difficult to generalize to all students. Besides, this research assumed that all undergraduates in UUM are influenced by the six factors mentioned in this research. The variables other than these six factors may also influence customer satisfaction and revisit intention. Limited size of sample in conducting the questionnaires survey. There are only 200 questionnaires were distributed to undergraduates in Universiti Utara Malaysia. It is unable to conduct a survey that able to reach every undergraduate in UUM due to the time and resource constraints. Therefore, this research cannot used to generalize overall undergraduates' population in UUM.

Besides that, it has been another challenge to make sure the respondents fully understand the survey questionnaire especially it is conducted in English language. In fact, not every undergraduate have the same level of understanding on English language and this result in some the respondents misunderstood or misinterpret the

survey questionnaire. Thus, they may answer those questions depending on their intuition, feelings as well as guessing to complete the survey. Most of the respondents refuse to seek for clarification in order to provide accurate answer. This increases the possibility of inconsistency of the final results.

The last limitation is the use of a Likert-scale when rating importance. It is possible that customers are being subjective when they state something is important. Therefore, to minimize this problem, other methods such as experimental design and choice modelling may be useful.

#### **5.4 Suggestion on the Future Research**

Several further actions should take into consideration for conducting further research. The fore and important suggestion is the research is more suitable to be conducted in both qualitative and quantitative approaches. Thus, in-depth investigation of qualitative approach should be undertaken simultaneously with quantitative approach while quantitative approach itself indicates overall interrelated among variables in the data solely. This will lead to the intended result of exhibiting more dynamics and comprehensive relationship between variables.

Secondly, more in depth information should be given to the respondents through college manager in order for them to better understand the questions. This is because not all respondents are familiar with the real on site situation about the running of food outlets thus resulting in questions answered not accurately enough..

Furthermore, future research could look into other factors that influence decision making that was not considered in this study like purpose of dining. Future research also can have a look at the atmospheric factors as independent variables alone to distinguish whether it is the most important factors to consider when choosing a restaurant as nowadays Gen-Y type of people tends to give more concern about the place rather than the food itself.

As there are only 180 questionnaires survey are distributed for this research, thus to increase the accuracy of the results of factors affecting choice of cafeteria, researchers should increase the sample size. In addition, the questionnaires were only distributed to UUM students. Thus, it is advisable to include all of the undergraduates within Malaysia for future research. This allowed future researchers to obtain greater responses as well as wider perspectives.

Moreover, it is also suggested that all of the variables (if available) to be included in future research. Although this will take longer time but this allow future researcher to have a better understanding on the demand and requirement of students. Thus, the research will provide wider perspective and improve the scope of research in understanding customer satisfaction. Some common variables such as brand can also included as moderator in the framework in order to investigate whether customer get influenced by these factors. Therefore, future researchers who wish to conduct similar research should consider all these factors to obtain more accurate and reliable results.

Besides that, multi-lingual questionnaire can be used to reduce the language barrier faced by some respondents. Researchers should not only emphasize on English but also other languages such as Malays, Tamil and Chinese for them to have better understanding since most of the respondents prefer their own native languages. Thus, it is not only can obtain accurate response from respondents, but also reduce the need for the researcher to further explain the meaning of the questions. By the end of the day, this impedes the speed to which data could be collected. More simple words used in questionnaires is better instead of using original English word for certain words and official or standard word.

## **5.5 Research Contribution**

This research will contribute for better understanding of student's behaviour on the current trends in making cafeteria selection. This research contributed solely by making the quality of life of the students in terms of food intake was at the best. By making this research available for the administrator, hopefully they can be a key element in transforming the overall cafeteria quality in UUM from the not so popular 80-ish conservative ones to a more modern Gen Y type.

The information through this research also can be scrutinised by policy makers itself for their immediate information and action. This research also is be useful to be a one of the reference item once it placed in the school, university, and other public library student's benefit.

Secondly, this research methodology may suit to be employed in other future-related research by next researcher when they referred to it. In a certain circumstance, research method employed in this research also may generate more idea of doing better and in depth study comprehensively and constructively by any researcher at the next future. Thus, it has possibility of being one of the reference sources by research rather than public, administrators, and academicians.

All in all, this research will provide data for the current trends in cafeteria industry on what the students really wanted. It may also be benefitting to owners in providing better facilities, better environment and infrastructure.

This research also will contribute for better understanding of customer behaviour on the operators or food premises owners themselves. With shift of students and current lifestyles in Malaysia, owners will have to modified their target market that is nowadays are more matured than their brothers and sisters.

The benefits for the students is they might receive satisfactory level while dining in the cafeteria and having more food item placed on the menu rather than having the same menu year in year out.

## **5.6 Conclusion**

Why some people ate at some place or another is very debatable. There is not one definite answer that can really describe the whole thing. It is more than choice that made up people's minds sometimes like laziness or just don't care. Primary barriers for the students though are time and location. Results do indicate that category students do have their own preferences towards what they really want but since they don't travel so easily like us as their mode of transportation are bus services for most of them.

Food choices potentially influenced by various criteria. The importance of cafeteria selection lies on the students themselves. They are the ones who knows what they are looking for whether they prefers cheap items rather than having quality ones with better services.

The subject on why the students eat at the same cafeteria can be answered rather easily. It is simply because travelling from one place to another is quite difficult for them since they rely heavily on the bus services provided by the University. Without the bus services only a small portion of them do travel throughout the campuses to choose whatever place they like to dine in.

There are some rather important factor that bus services do take the students out of the campuses with shuttle buses from the University to Changlun which is a small town located about 10 kilometres from the University. These buses have round trip provided for the students from 8 p.m. until 11 p.m. every day. With that the students

do have some selection of food. There are lots of interesting restaurant at Changlun town such as Blackwood, Pizza Hut and KFC.

This study was conducted to have better understanding student's preferences in choosing cafeteria by clarifying the factors of food quality, service quality, menu, price, convenience and restaurant cleanliness. This research project has fulfilled its objectives to identify the relationship of the six variables towards customer satisfaction.

After testing the Pearson Correlation Analysis and Internal Reliability Analysis Test, result showed that all of the six independent variables include quality of food, quality of service, menu, price, convenience and surrounding & cleanliness have positive significant relationship with the customer satisfaction. In addition, this chapter also states the usefulness for foodservice operators to make some necessary improvements.

In addition, this study has provided some limitations that have been met and recommendations for future researcher. Thus, this study provides information for those who may want to investigate more on the factors influencing dining experience on customer satisfaction.

This study also revealed that the customer satisfaction was among the critical factors of foodservice operations. Therefore, all the operators' efforts should be based on an appropriate knowledge of the customers' needs and requirements to gain their trust and acquire high level of satisfaction. This implies that there should be a reliable

system of information regarding the customers' feedback and complaints. In addition to that Universiti Utara Malaysia should regularly conduct survey to measure the customer's level of satisfaction on the service provided and get suggestions how to improve them.

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