



UNIVERSITI PUTRA MALAYSIA

***INTERNATIONAL STUDENTS' SATISFACTION WITH UNIVERSITY
FOODSERVICE AND ITS INFLUENCE ON WORD-OF-MOUTH
COMMUNICATION IN RESEARCH UNIVERSITIES IN MALAYSIA***

ANISA ZAHWA AKBARA

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By

ANISA ZAHWA AKBARA

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfilment of the Requirements for the Degree of
Master of Science**

November 2019

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

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Chair : Chua Bee Lia, PhD

Faculty : Food Science and Technology

Malaysia aims to host 250,000 overseas students by the year 2025 as international student admissions are important for establishing Malaysia as an advanced education center in the world. Apart from economic advantages, efforts are also made to attract foreign students to improve the universities' reputation. It is therefore critical to evaluate the international students' perception of their university experience in Malaysia including their experience with on-campus dining. As foodservice is a fundamental factor influencing student satisfaction, students would be disappointed if the on-campus foodservice dining facilities do not meet their needs and wants. A satisfied student population is a source of favorable outcomes, such as in spreading positive word of mouth (WOM) and recommending the university to others. Consequently, this study attempted to measure the effect of university foodservice attributes satisfaction on word of mouth behavior among international university students. In addition, this study also aimed to examine student satisfaction with on-campus foodservice using the importance-performance analysis (IPA) technique. A quantitative research approach using survey research design was employed in this study. A total of 620 international students who were studying in Malaysian research universities (MRU) in Malaysia were selected as the sample of this study. A structured questionnaire was designed. Using the structural equation modeling (SEM) technique, this study revealed that interactional quality, atmospheric quality, price fairness, and food selection significantly explained customer satisfaction by 50.4%. Moreover, 43.7% of variance in word of mouth behavior was significantly explained by food quality and customer satisfaction. Customer satisfaction was found to mediate the relationship between all foodservice attributes (except food quality) and word of mouth behavior. The results of IPA matrix showed that food price was the key driver of customer satisfaction and the management's job was to ensure that the university foodservice "keeps up the good work". Nonetheless, food quality was considered to be underperforming and as such, represented the product's major weakness. This study has examined the factors that can boost the market share for colleges and education service providers, with enduring impacts on the campus and its students. Theoretically, the findings shed light on international students' satisfaction with

Malaysian public universities' foodservice. From a practical perspective, the findings provide a framework in developing an effective marketing strategy for universities. If on-campus foodservice fulfills students' needs and wants, it could trigger positive word of mouth when they return to their home country and become advocates for the university.



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**KEPUASAN PELAJAR ANTARABANGSA DENGAN PERKHIDMATAN
MAKANAN UNIVERSITI DAN PENGARUHNYA TERHADAP KOMUNIKASI
PERCAKAPAN DI UNIVERSITI PENYELIDIKAN MALAYSIA**

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Malaysia berhasrat untuk menampung 250,000 pelajar luar negara menjelang tahun 2025 kerana kemasukan pelajar antarabangsa adalah penting untuk mendorong penubuhan Malaysia untuk menjadi pendidikan lanjutan di seluruh dunia dan dengan mengambil kira kelebihan ekonomi. Usaha harus dilakukan untuk menarik pelajar asing dengan meningkatkan reputasi universiti. Oleh itu, adalah penting untuk menilai persepsi pelajar antarabangsa mengenai pengalaman universiti mereka di Malaysia termasuk pengalaman mereka dengan makan di kampus. Oleh kerana perkhidmatan makanan adalah faktor asas yang mempengaruhi kepuasan pelajar, pelajar akan kecewa jika kemudahan makan makanan di kampus tidak memenuhi keperluan dan keinginan mereka. Penduduk pelajar yang berpuas hati adalah sumber hasil yang menggalakkan, seperti menyebarkan kata mulut positif (WOM) dan mengesyorkan universiti kepada orang lain. Akibatnya, kajian ini cuba untuk mengukur kesan kepuasan perkhidmatan makanan universiti terhadap kelakuan mulut di kalangan pelajar universiti antarabangsa. Di samping itu, kajian ini bertujuan untuk mengkaji kepuasan pelajar dengan perkhidmatan makanan di kampus menggunakan teknik analisis prestasi penting (IPA). Satu pendekatan penyelidikan kuantitatif menggunakan reka bentuk kajian tinjauan telah digunakan dalam kajian ini. Sejumlah 620 pelajar antarabangsa yang belajar di universiti penyelidikan di Malaysia telah dikenalpasti sebagai sampel kajian ini. Satu soal selidik berstruktur dirancang. Dengan menggunakan teknik pemodelan persamaan struktur (SEM), kajian ini mendedahkan bahawa kualiti interaksi, kualiti atmosfera, harga adil, dan pemilihan makanan jelas menjelaskan kepuasan pelanggan sebanyak 50.4%. Lebih-lebih lagi, 43.7% varians dalam perilaku mulut dikatakan dengan jelas oleh kualiti makanan dan kepuasan pelanggan. Kepuasan pelanggan didapati untuk memeterai hubungan antara semua atribut perkhidmatan makanan (kecuali kualiti makanan) dan perkataan daripada mulut ke mulut. Hasil matrik IPA menunjukkan harga makanan adalah pemacu utama kepuasan pelanggan dan tugas pengurusanannya adalah untuk memastikan khidmat makanan universiti terus berfungsi dengan baik. Walaupun, kualiti makanan dianggap kurang baik, oleh itu, mewakili kelemahan utama produk. Ia adalah untuk memastikan bahawa "menumpukan perhatian di sini". Kajian ini menunjukkan pemboleh ubah untuk

meningkatkan bahagian pasaran kolej dan penyedia perkhidmatan, dengan kesan berterusan di kampus dan pelajarnya. Secara teorinya, penemuan ini memberi penerangan mengenai kepuasan pelajar antarabangsa dengan perkhidmatan makanan universiti tempatan. Dari perspektif praktikal, penemuan menyediakan rangka kerja dalam membangun strategi pemasaran berkesan untuk universiti tempatan. Sekiranya perkhidmatan makanan di kampus memenuhi keperluan dan keinginan pelajar, ia boleh mencetuskan mulut positif apabila mereka kembali ke negara asal mereka.



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LIST OF ABBREVIATIONS

AQ	Atmospheric Quality
AVE	Average Variance
CA	Cronbach's Alpha
CFA	Confirmatory Factor Analysis
CR	Composite Reliability
CS	Customer Satisfaction
FP	Food Price
FQ	Food Quality
FS	Food Selection
IQ	Interactional Quality
LV/LVs	Latent Variable/Latent Variables
IPA	Importance Performance Analysis
MRU/RU	Malaysian Research University/ Research University
PLS	Partial Least Squares
SEM	Structural Equation Modeling
WOM/WOMB	Word of Mouth/Word of Mouth Behavior

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter provides a brief background of international student university and the current issues. Problem statements covers the gaps which are addressed by past research. This chapter also discusses research objectives, scope and significance of the study, outline of the thesis, and operational definitions of variables.

1.2 Background of the Study

International students are defined for people traveling to another country for tertiary education. Thus, international student in Malaysia is the foreigner who comes from other country outside Malaysia for study purpose (Hughes, 2015). International student admissions are important to the higher education sector in Malaysia. According to UNESCO Institute for Statistics (2016) in Institute of International Education, by the year 2025, Malaysia has set the target of hosting 250,000 students abroad. The international students from inside and outside Asia have successfully established a global education hub for recent years. The various scholar and worldwide viewpoint cultivated by an inclusion of global ability is a critical part in encouraging establish Malaysia as an advanced education leader not only in Asia but also through the world (Hughes, 2015).

According to Mamiseishvili (2012), international students are necessary because the campus has contributed to intercultural education and enhanced the diversity knowledge of local countries and worldwide issues. Hence, understanding of foreigner's culture would be disclosed by Malaysian students between each other. Moreover, foreign students also generate international business possibilities and ties to world trade, become diplomatic allies, and encourage the interest of foreign policy (Schneider, 2000).

There are two process that regularly considered for the decision of study destination, the potential students select which country destination first and then the educational institution. It tends to be independently selected between country destination and educational institution. The country's socio-economic and environmental aspects such as life-style, security, support or living costs, travel, racism, visas and immigration potential, friends and family, climate and culture have been combined with the choosing of a country as a destination for studies, while individual elements, such as study and training program, tuition charges, facilities and support, have been included in the choice (Veloutsou, 2005).

The global education market has become extremely appealing for colleges with regard to the economic advantages for the corresponding organizations and countries. Therefore, like many other organizations, colleges concern their customers with their market shares, productivity, return on investment, and quality of service (Ali & Ahmed, 2018). Maintaining students in this competitive setting, significant efforts are needed. Superior service to meet student needs and expectations, and keep student satisfaction and loyalty to study destinations, have become a core objectives of college. (Arambewela & Hall, 2009).

Therefore, Malaysia Research Universities (MRU) can be an ideal platform for leading the way. Since the MRU program has provided Malaysian universities and research institutions with an awareness of the research culture. According to Sheriff and Abdullah (2017), the advantages of research university is to encourage creativity and innovation, also preserve and disseminate fresh understanding. It also encourages individual management skills, works within a professional environment, and meets the particular requirements of non-university professional organizations. Efforts were produced to attract foreign student by improving Malaysian higher education institutions' reputation. Among the initiatives are: (1) targeting to have global students; (2) improving Malaysian universities' world ranking; (3) creating more 'Malaysian chairs' at universities overseas; and (4) collaborating and cooperating on research and educational issues with world-renowned universities (Khairani & Razak, 2013).

In evaluating the quality of higher education, the platform can also be the catalyst to pioneer a revolution. To be a study destination for international students, evaluating the role on-campus dining service becomes critically important. According to Ezeokoli and Ayodele (2014), the quality of foodservice is acknowledged as a main academic excellence metric and a significant strategic variable to boost the market share of colleges and service providers, with enduring impacts on the organization and its students. Also, foodservice is a fundamental factor that influences student satisfaction. Furthermore, previous studies have shown various foodservice attributes, such as food quality, price fairness, hygiene, food variety, service quality, food price, and ambience that could predominantly influence university students' satisfaction (Bilgin, 2017; Kumar & Bhatnagar, 2017; Amelia & Garg, 2016; Al-Tit, 2015; El-Said & Fathy, 2015; Abdullah & Rozario, 2009; Terry & Vincent, 2008; Andaleeb & Caskey, 2007; Shanka & Taylor, 2007).

In general, dissatisfaction of the customer happens when the real product / service output is below customer expectations. Thus, it is worthy to investigate how university foodservice is evaluated by international students. A satisfied student population is a source of favorable outcomes, such as spreading positive word of mouth (WOM), and recommending the university to others. Positive word of mouth (WOM) communication is the outcomes of merit competitive resource. Word of mouth communication is well documented in shaping service expectations. It has a specific weight as a source of information as it is viewed as impartial. Word of mouth is often very important in services which are difficult to evaluate before purchase and before direct experience of them

The critical variables that determine satisfaction are important to define. However, the

resources available to each university are restricted. The best way of deploying scarce resources to attain the greatest level of fulfillment therefore needs to be decided. Importance performance analysis (IPA) is an effective way to set priorities. IPA is in practice regarded as an easy but effective tool (Hansen & Bush, 1999). To maximize fulfillment, IPA is very helpful to decide how best to allot scarce resources.

1.3 Problem Statement

The Ministry of Higher Education (MOHE) is targeting to appeal at least 250,000 foreign students to educational institutions in Malaysia by 2025, in Malaysia's bid to improve edu-tourism. The Malaysian Government emphasizes on educational tourism as part of its tourism development plan to bring more foreign students to study locally (Zainol & Seladorai, 2016). Consequently, the student population of colleges is increasingly internationalized with some universities with a significant population of international students (Nabavi, 2014). In order to get more international students to study locally, the Malaysian government is concerning to the tourism of education. Apart from gaining education, a significant fragment in students' life is the well-being of students in terms of food intake (Zainol & Seladorai, 2016).

When it comes to students at the university, food has become extremely important. Drummond and Brefere (2001) said food can make them better focus on academic studies and become outstanding in their performance by helping them alert their brains. Foodservice outlet is the primary form for student foodservice in colleges (Liang & Zhang, 2009). Afterwards, foodservice is a critical part that influences student satisfaction at campuses (Klassen, Trybus, & Kumar, 2005). University food service is one of the amenities that must be taken into consideration in order to accommodate students by supplying food in university (Zainol & Seladorai, 2016). Andaleeb and Caskey (2007) said that one of the major segments of the food service sector is university food service. There is also a university cafeteria where students spend about five hours a week. Therefore, for food operators, it is important to fully understand student needs and satisfy their needs to increasing their expectations of their overall dining experience on campus.

However, university foodservice operators in Malaysia have the hardest job of serving a community of people who are multicultural, aggressive, and confined to universities (Nadzirah et al., 2013). Abdullah, Mansor, and Naba (2012) stated that the university food service management in Malaysia is facing crisis as students are dissatisfied with the food quality and price offered by the university food operators. This is similar to a study conducted by Xi and Shuai (2009) which found that the key factors contributing to student dissatisfaction when patronizing the university cafeteria are food quality, price, and value. Poor ambience, lack of resources, price, poor food options and low food quality are the most common foreign student concerns about university food service (Klassen et al., 2005).

Zainol and Seladorai (2016) also found that majority of international students were dissatisfied with the taste, nutrition, hygiene, temperature, freshness and price of the food

served by the cafeterias in Universiti Utara Malaysia (UUM). In line with this, international students are unhappy with the current cafeteria service offered by food operators at UUM. Furthermore, according to Lee et al. (2016), the majority of foreign students at Sunway University Malaysia are dissatisfied with the university cafeteria. The study found that the food options offered in the university cafeteria are minimal and the vending machine frequently experiences running out of stock, which frustrates the international students and thus causes dissatisfaction. Also, international students agreed that the university cafeteria has poor ambience and environment which causes student dissatisfaction. Lee et al. (2016) therefore suggested future research should investigate to other universities to enable identify the student's perception of the university cafeteria in Malaysia thoroughly.

The significance of the role of foodservice in attaining international student satisfaction should not be underestimated by campus providers. (Nield, Kozak, & LeGrys, 2000). In general, researches on the international university student foodservice satisfaction are rare in Malaysia. Most researches on university foodservice satisfaction use Malaysian students or overall college students as their main focus (Chang & Suki, 2018; Raman & Chinniah, 2018; Garg & Kumar, 2017). Therefore, this study was made to complement previous researches by using international students as the main subject in this study.

Furthermore, a satisfied student population is a source of favorable outcomes, such as spreading positive word of mouth and recommending the university to others. It will be difficult to achieve overall satisfaction if a negative attitude is formed and could result in complaints, decreasing loyalty and negative promotion of WOM (Kau & Loh, 2006). To address these issues, this study tried to assess the impacts of overall international student foodservice satisfaction on their word of mouth behavior. Other than that, this study would analyze the importance and satisfaction of foodservice factors according to international students. Importance performance analysis (IPA) would be addressed in this research. This method is popular for evaluating service quality in a multitude of areas. IPA examines the 'importance' customers place on any given product/service attribute. IPA was also employed in designing corporate marketing strategies, in guiding government planning choices, and in evaluating the organization and management of events and programs. In addition, there have been lack of studies examine the importance and satisfaction attributes among the international students in Malaysia research universities foodservice. The present study aims to bridge this gap in the current literature.

1.4 Research Objectives

The objectives of this study were as below:

1. To identify the relative impact of interactional quality, food quality, atmospheric quality, price fairness, and food selection on overall satisfaction.
2. To assess the relative impact of interactional quality, food quality, atmospheric quality, price fairness, and food selection on WOM behavior.
3. To verify the mediating role of overall satisfaction in the relationships between university foodservice attributes and WOM behavior.

4. To identify international students' perceived importance of on-campus dining attributes.
5. To examine international students' perceived performance of on-campus dining attributes.

1.5 Research Question

This study attempted to answer the following questions:

1. To what extent do the service, food, atmosphere, price, and food selection attributes of university foodservice influence overall satisfaction of on-campus dining experience? How do the foodservice attributes satisfaction affect international students' word of mouth behavior?
2. How do international students perceive the importance and performance of university foodservice attributes in Malaysian research universities?

1.6 Significance of Study

In this study, perceptions of different foodservice attributes that have an impact on international university students' overall satisfaction were examined. Hence, this study arranges to measure the effect of food quality, interactional quality, atmospheric quality, price fairness, and food selection satisfaction on word of mouth among international university students in five Malaysia Research Universities (MRU) which are Universiti of Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Universiti Sains Malaysia (USM), Universiti Putra Malaysia (UPM), and Universiti Teknologi Malaysia (UTM). So that, this would provide valuable feedback and measurement to the universities and manager facilities toward university foodservice.

Academically, the findings of this study offer important factors for university promoters to consider when developing a customized marketing strategy for this segment of market (international students). University dining providers need to be more conscious of the comparative impact of the multiple characteristics of foodservices in determining international students' satisfaction. Hence, the findings might shed light on international student satisfaction with university foodservice as importance performance analysis (IPA) technique would be examined student satisfaction with on-campus foodservice.

Other than that, in practical perspective, the results of this research would provide better understanding about the international students' satisfaction with on-campus foodservice. This research proves which foodservice attributes significantly affect the satisfaction of international students and that could be used to promote higher education institutions. The contribution of this research supports and assists foodservice operators in devising a comprehensive strategic marketing plan that focuses on the internationalization market. If on-campus foodservice fulfills students' needs and wants, it might trigger positive word of mouth when they return to their home country.

However, what makes it new is the finding of indicators from food quality, interactional quality that expected and perceived by the international students, indicators of food price fairness perception from international students, the atmospheric quality and food selection factors in university foodservice area that influence international student's satisfaction. The researcher hopes that this study would help the university foodservice operators deliver best practices and contribute to the information that is helpful to education destinations. These advantages in terms of interactional quality, food quality, atmospheric quality, food price, and food selection, are to be promoted in this study.

1.7 Outline of the Thesis

This research thesis consists of five chapters. Chapter 2 is presenting a literature review along with the hypotheses and the conceptual framework employed in the research. The methodology is explained in Chapter 3 and followed by the presentation of the results and analysis of pilot study. Analyzing data, the discussion and the results in Chapter 4. The last section, Chapter 5 summaries the study, addresses both theoretical and managerial implications, highlights the limitations of the research, and finally offers recommendations for future research.

1.8 Operational Definitions of Variables

The following terms are to provide the meaning of terminology used for this study:

Student Satisfaction: The state felt by a student who witnessed and perceived an achievement which met his/her expectations.

Food Quality: Quality of food means consumption of the whole spectrum of ingredients (i.e. vegetables, fruits, cereals, meat, fish and milk) in a combination which should be consumed.

Interactional Quality: Interactional quality represents the quality of the relationship of a student with a university foodservice staff.

Atmospheric Quality: Ambience is another word for atmospheric quality, is the sense of the mood a place or setting has.

Food Price Fairness: The role of food price in the selection of food and the attitudes of customers to food prices.

Food Selection: The selection of foods for consumption resulting from competing, strengthening and interacting influences of a variety of factors, such as consumers sensory, culture, religious, etc.

Word of Mouth (WOM): Oral personal communication with a receiver regarding a brand, product or service provided for distribution between an experienced non-commercial communicator and a recipient.

Importance-Performance Analysis (IPA) Technique: Importance-performance analysis (IPA) is considered a useful tool in examining customer satisfaction and management strategies.



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