

GADING BUSINESS AND MANAGEMENT JOURNAL
Volume 18, Number 1, 41-59, 2014

Investigating Students' Satisfaction Level on Implicit Services of Malaysian Public Higher Education Institutions

¹Wan Nurashikin Mahmood, ²Mohamad Ridhuan Mat Dangi &

³Khairul Anuar Mohd Ali

¹Faculty of Business Management
Universiti Teknologi MARA Pahang
26400, Bandar Pusat Jengka, Pahang, Malaysia

²Faculty of Accountancy
Universiti Teknologi MARA Shah Alam
42300, Bandar Puncak Alam, Selangor, Malaysia

³Graduate School of Business (GSB)
Universiti Kebangsaan Malaysia, (UKM)
43600, Bangi Selangor, Malaysia

¹wnurashikin@pahang.uitm.edu.my, ²ridhuan@salam.uitm.edu.my,
³kabma@ukm.my

Abstract This paper attempts to assess the factors that influence the students' satisfaction level towards higher learning education system. By adopting simple random sampling technique, this study was participated by 401 respondents from a university in the East Coast region of Malaysia. This study emphasizes on the implicit services provided by the university which include admission and registration; the student affairs services; and teaching, learning and assessment. The findings indicated that majority of the respondents were satisfied with the teaching, learning and assessment aspects. Nevertheless, some factors need more attention and improvement as they indicate a lower level of satisfaction.

Keywords Higher education institutions; quality services; student satisfaction.

1 Introduction

Higher educations in Malaysia are graced with the increasing number of public higher education institutions (IPTA) and private higher education institutions (IPTS). Both higher educational institutions aim at producing excellent quality and competitive products at a

higher level to meet the domestic and global demand in the job market. By offering a favorable learning environment that covers various aspects of facilities, this can help the university to achieve that goal.

Satisfaction is a well-researched topic in both academic and non-academic (workplace) settings. In academic settings, students' satisfaction data help colleges and universities to be more responsive to the needs of a changing marketplace. Students' satisfaction is an important element in determining the quality services offered by the Higher Education Institutions (HEIs). The emphasis on students' satisfaction is very important to gain a good image and develop positive perceptions towards the services provided. Therefore, to ensure improvement in the quality of the given services, HEIs should take into account the needs of users as the key to succeed in the educational sector.

Furthermore, the factors that influence students' perceptions in determining the performance of many higher education services have implications on the staff and lecturers in higher learning institutions in general. It is the duty of HEIs to provide good services to satisfy their students who are also their customers. It must be noted that the increasing number of students and higher education institutions in Malaysia has caused a fierce competition among HEIs in their effort to attract students to pursue studies at a higher level. It cannot be denied that students are an important asset for HEIs. Thus, these factors would cause each of the universities in Malaysia to compete among each other to produce more quality students. Therefore, the quality of services provided by each university must satisfy all students. It is believed that establishing the conditions for facilitating and enhancing the capacity for sustained and enduring learning environment is necessary. These notions become the essence in this research in order to examine the extent to which performance of services and the provision of facilities available at a university that can ensure the quality of services, as well as security to attract more students to study in that particular university.

2 Literature Review

In general terms, higher education is the process of advanced studies and learning activities after one has graduated from a secondary school. Higher education basically includes colleges or universities

that serve as the learning centers and provide facilities for students to attain higher educational qualification. According to the Austrian Development Agency (2009), higher education is the formal education provided by the higher education institution offering the qualification such as diploma, bachelor, masters or doctorate program. This is the level where an individual will expand his or her learning progress through in-depth knowledge and understanding (Mishra, 2006). Therefore, higher education plays a function to promote a wider perspective of an individual to face the world and his future. According to Barnett (1992), there are four major concepts covered in the context of higher educations. These four concepts view higher education as the production of qualified human resources; serves as training for a research career; as the efficient management for teaching provision; and as a matter of extending life chances (Mishra, 2006). Obviously, higher education serves as the gatekeeper for the opportunity and the path for career or professions. From its functions, higher education is seen as a critical factor for the development of human capital and the socioeconomic improvement. Higher education institutions in Malaysia have kept the pace to align the quality perceptions in parallel with the achievement especially among the students. According to Sohail et al. (2003), higher education institutions in Malaysia have put an endeavor to adopt the quality management system in order to gain competitive advantage. For the purpose to measure quality, the 'Lembaga Akreditasi Negara' (National Accreditation Board) was established in 1997 for the quality assurance of programs in the private higher education sector. Subsequently, in 2002, the Quality Assurance Division was established under MOHE which is responsible for managing and coordinating the quality assurance system of public universities. These two bodies then merged to become the Malaysian Qualification Agency (MQA) in 2007 that provides a common quality assurance platform. According to MQA (2009), the role of this agency is to be the guardian of the Malaysian qualification framework which serves as the reference point for national qualifications, to oversee quality assurance practices and accreditation of national higher education. The establishment of this agency aims to become a credible and internationally recognized higher education quality assurance body that encourages the confidence of its stakeholders especially the students through competent, responsible, accountable and transparent good practices (MQA, 2009).

As asserted by MQA (2009), there are nine areas of quality assurance standards for the higher educational institution which are (1) vision, mission and objectives; (2) design and delivery program; (3) student assessment system; (4) student selection and support; (5) academic staff or faculty; (6) education resources; (7) monitoring and review programme; (8) leadership, governance and administration and (9) total continuous quality improvement. These assurance standards serve as the guarantee for the higher educational institute to deliver their services at a most favorable level. The accreditation process is seen as the justification medium for quality assurance in strengthening and sustaining the quality and integrity of higher education to make it worthy and add the confidence level in the eyes of the public. According to Parri (2006), quality assurance in higher education aims to guarantee the improvement and standard of quality of higher education in order to meet the needs of students, employers and financiers. Another factor that must not be overlooked is the performance of the institution itself. A high performance educational institution will create a psychological perception of students. Students interpret a high performance university as an institution that will be able to provide high quality services and consequently satisfy their needs. According to Tessema, Ready and William (2012), a way to view the institutional performance is by analyzing the students' outcomes such as retention, attrition and graduation rates. Thus, if the higher education institutions recorded high failure rates of students it gives the view that such institutions are unable to deliver good services. Hence, higher educational institutions should have to define and identify the link between the performances of a specific service quality dimension and the level of satisfaction among students (Munteanu, Ceobanu, Bobalca & Anton, 2010). It is noticeable that the image of higher educational institutions have a latent effect on students' satisfaction level. If the performance or the reputation of the institutions is poor, it will fail to attract students to enrol to those universities and may deprive or ruin the students' satisfaction. It is imperative to maintain the students' satisfaction level at best possibly through various dimensions.

Previous literature has reviewed satisfaction in various perspectives, for example, Kotler and Clarke (1987) stated that, a satisfaction can be identified when a person has experienced performance or an outcome that fulfil his or her expectation. It is supported by Hanaysha, Abdullah and Warokka (2011) who expressed satisfaction as a function or relative level of expectations and its performance. While Ham (2003) mentioned that an individual

is able to achieve satisfaction when the perceived quality services exceed the expectation. Quality is an important factor that will become one of the criteria that will influence students to select the higher educational institutions of their choice. This is supported by Kee (2011) who stated that the students' selection of a university was mainly determined by types of academic programs available, quality of education, administration standards, faculty qualification, and convenient and accessible location. Tessema et al. (2012) assessed the extent to which 11 academically related factors affect the overall satisfaction with major curriculum at a mid-sized public university. They also stated that in making the curriculum more effective and responsive, it is important to evaluate the effectiveness measures concerning the curriculum of each college, department and program. The effectiveness of a curriculum can be evaluated using direct performance measures, for example, comprehensive exams, projects and presentations, and by indirect performance measures such as students' satisfaction with the curriculum.

Thus, it is crucial for the higher educational institutions to ensure the sustainability in providing their services to meet the expectations of students regarding the quality services. On the other hand, Parri (2006) stated that quality assessment in higher education should conclude on how the quality is defined, set the assessment standards, compare the assessment standards with the real outcome and decide to what extent the standards are met. Quality in higher education services not only focuses on individuals, but also on the educational program which enables the students to be employed and recognized by others as well as to ensure a bright future (Sein, Khoon & Tan, 2012).

In the measurement of student satisfaction towards higher educational institutions, several researchers such as Barnes (2007); Hanaysha et al. (2011); and Sein et al., (2012) use the service quality dimension utilized from the study of Parasuraman, Berry and Zeithaml (1991) namely SERVQUAL that comprises five dimensions which are tangibility, reliability, responsiveness, assurance and empathy. This service quality dimension provides a basic framework to measure the customer satisfaction for the services provided by the institution. On the other hand, Che Din, Rajadurai and Daud (2007) explain the explicit and implicit services that could have affected the student's satisfaction level. The explicit service includes the knowledge levels of staff, staff teaching ability, the consistency of teaching quality irrespective of personnel, ease of

making appointments with staff, the level of difficulty of the subject content and the workload. Meanwhile the implicit service includes the treatment of students by staff, friendliness and approachability, concern shown if the student has a problem, respect for feelings and opinions, availability of staff, capability and competence of staff. Therefore, it is critical to understand which of these factors will lead to students' satisfaction and also to find out their weaknesses which can be improved in the future.

3 Research Objectives

The objective of this study is to analyze students' satisfaction level whether it is delivered in an efficient and effective manner to fulfil the students' needs. For example, the admission and registration process should be able to provide useful information, cooperative staff and the valuable procedures for the student enrolment process. Apart from that, the teaching, learning and assessment will provide an overview about the effectiveness in lessons and the knowledge transfer environment since the university's main service is to nurture students in becoming quality graduates aligned with the current local and global job employment market. This study also intends to investigate the issues that are viewed as important from the students' perspective regarding teaching, assessment and other facilities provided. In brief, the objectives of this study are presented as follows:

- i. To investigate the effectiveness of the implicit services provided by the university.
- ii. To examine students' satisfaction level regarding the academic experience in the university which includes the admission and registration, student affairs services and teaching, learning and assessment.

4 Research Methodology

For the purpose of gathering the data and information used in this study, several methods are used to examine the students' satisfaction level towards the services provided in this university. In this study, several key services in the university are taken into consideration to be used as items in measuring the students' satisfaction level. The selection of sample is based on simple random sampling among

various diploma students. This technique is chosen as the nature of this study is to investigate the students' satisfaction level and all students in the selected population have the chance to be the sample for this study. The respondents for this study are Social Sciences students from various semesters and programs such as Diploma in Accountancy, Diploma in Business Studies, Diploma in Banking, and Diploma in Office Management. The questionnaires were designed in a Likert scale format indicated by 1 for Strongly Disagree until 5 for Strongly Agree.

Before distributing the questionnaires, a pilot study was conducted among 20 respondents from different Diploma programs such as Diploma in Accountancy, Diploma in Business Studies, Diploma in Banking, and Diploma in Office Management. This is to ensure the reliability and validity of the questionnaire since it was designed by referring to the study of Che Din et al. (2007). The population used in this study was selected based on the calculation of 15% from the total population. The total population is 2,564, thus 15% out of this value is 385 respondents. This figure is supported by Bartlett, Kortlik, and Higgins (2001) who stated that for a population of 1,679, the required sample size is 118. Therefore, based on this calculation, a sample size of 385 respondents is regarded as sufficient and reliable for the study. However, for this study, a total of 401 questionnaires was distributed which is more than the needed amount of adequate respondents and all the 401 distributed questionnaires were returned.

5 Data Analysis

In this study, the reliability results are tabulated in Table 1. The findings about the demographic profile are shown in Table 2 consisting of information such as gender, current semester, program, studies experience and respondents' intention of recommending others to study in this university. Data analysis and findings in this section are classified into two sections which are demographic and the implicit elements to assess students' satisfaction. The implicit elements are classified into three main categories, namely, admission and registration; student affairs services; and teaching, learning and assessment. Students' satisfaction on the admission and registration process and also the student affairs services are shown in Table 3 and Table 4. Meanwhile, the data in Table 5 emphasize on the knowledge levels of staff, staff teaching ability, the consistency of

teaching quality irrespective of personnel, ease of making appointments with staff, the level of difficulty of the subject content and the workload.

All constructed questions in the questionnaire were checked for their reliability. Reliability of scales was calculated using Cronbach's α . The Cronbach's values of all items are shown in Table 1. According to DeVellis (2003), if the Cronbach's α value is 0.6, it is "acceptable", whereas if the Cronbach's α value is 0.7, it is "respectable". Nunnally (1978) suggests that reliability coefficients (Cronbach's α) around 0.90 are considered as "excellent", values around 0.80 for "basic research" and values between 0.5 and 0.60 for "exploratory research". Thus, by accepting Nunnally's (1978) suggestion on reliability, it means that students' satisfaction towards admission and registration ($\alpha = 0.947$), teaching, learning and assessment ($\alpha = 0.917$) and student affairs services ($\alpha = 0.949$) can be regarded as "excellent". The reliability results indicate that all the instruments used for this study have internal consistency with the factors that measure the students' satisfaction.

Table 1: Reliability Results for Cronbach's Alpha (Goodness of the Data)

Reliability Results (Cronbach's Alpha)	α	No. of Items
Admission and Registration	0.947	9
Teaching, Learning & Assessment	0.917	9
Student Affairs Services	0.949	8

Table 2 shows the respondents' demographic data collected from 401 respondents. Based on the gender, there are 107 (26.8%) male respondents and 293 (73.2%) of the respondents are female. The respondents are from different parts with five respondents from Part 1 (1.3%), 76 respondents from Part 2 (19.0%), two respondents from Part 3 (0.5%), 71 respondents from Part 4 (17.8%), 103 respondents from Part 5 (25.8%), 141 respondents from Part 6 (35.3%) and one respondent from Part 7(0.3%). Since this research uses simple random sampling, the number of respondents for each part is relatively different and does not show an even pattern. The results show that majority of the respondents (368 (92%) out of 401 respondents) do not have any experience of studying at other

universities or colleges before they registered as students in this university while the rest of respondents (32 (8%) respondents) have experience of studying at other universities or colleges previously.

Table 2: Respondents' Demographic Data

Demographic		Frequency	Percentage (%)
Gender	Male	107	26.8
	Female	293	73.2
	Part 1	5	1.3
	Part 2	76	19.0
	Part 3	2	0.5
Part	Part 4	71	17.8
	Part 5	103	25.8
	Part 6	141	35.3
	Others	1	0.3
Have you studied at other universities/colleges before?	Yes	32	8
	No	368	92

Table 3 shows students' satisfaction towards the services offered during student admission and registration. 57.4% of the respondents agreed that they were satisfied with procedures for the college registration. This is followed by the general arrangements for orientation and welcome (56.9%), the clarity of bills and payment requirements (56.4%), the usefulness of information provided during the orientation week (55.6%) and the information received by the students from the university before their registration (50.6%). Only 12.7% of respondents strongly agreed that they were satisfied with the information received from the university before the registration day. Apart from that, there were only 1.3% of the respondents who strongly disagreed that they were satisfied with the services regarding the arrangements for providing student accommodation and 1.5% with the helpfulness and politeness of staff involved in the registration process and also with the helpfulness and politeness of staff involved in the Collection/Treasury. For the overall students' satisfaction towards admission and registration services, most of the respondents agreed that they were satisfied with the services offered with the highest mean for the satisfaction in the usefulness of information provided during the orientation week.

Table 4 indicates the level of students' satisfaction towards student affairs services. From the table, most of the respondents (47.9%) chose the "neutral" response regarding the activities organized by the student affairs division for the students. 191 respondents (47.6%) agreed that they were satisfied with the college's commitment to ensure that students will be treated equally among all the students, followed by 190 respondents (47.7%) felt satisfied with the space or area for study and social activities provided for them. Furthermore, 46.3% of the respondents felt "neutral" in terms of their satisfaction on the provision of student clubs and societies provided by the student affairs department. There were no expressions of "strongly disagreed" when it comes to the satisfaction with the services of activities organized by the student affairs division and provision of student clubs and societies. On the other hand, only one respondent stated "strongly disagreed" with the services of student affair in providing space or area for study and social activities, the availability of careers, counselling and advising, how college department respond to the interests and concerns of students and college's commitment to ensure equal treatment among students. The table also shows that the highest mean is the space or area for study and social activities (3.67) which indicates that this service received a high rate of satisfaction level as compared to the other services.

Table 3: Students' Satisfaction Level towards the University's Admission and Registration

Admission and Registration	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean
	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	
The information received from the university before your registration	7	1.7	11	2.7	129	32.2	203	50.6	51	12.7	3.70
The procedures for your registration with the college	1	0.2	12	3.0	116	28.9	230	57.4	42	10.5	3.75
The usefulness of information provided during the orientation week	1	0.2	17	4.2	105	26.2	223	55.6	55	13.7	3.78
The general arrangements for orientation and welcome	1	0.3	21	5.3	109	27.5	226	56.9	40	10.1	3.71
The helpfulness and politeness of staff involved in registration process	6	1.5	27	6.7	144	35.9	176	43.9	48	12	3.58
The helpfulness and politeness of staff involved in the Collection/ Treasury	6	1.5	30	7.5	157	39.2	178	44.4	30	7.5	3.49
The helpfulness and politeness of staff involved in the Sponsor Unit	8	2.0	20	5.0	163	40.6	178	44.4	32	8.0	3.51
The clarity of bills and payment requirements	1	0.3	13	3.3	115	28.8	225	56.4	45	11.3	3.75
The arrangements for providing student accommodation	5	1.3	19	4.8	143	35.8	198	49.5	35	8.8	3.60

Table 5 shows the students' satisfaction regarding services in teaching, learning and assessment. The service that recorded the highest students' satisfaction level is the "the lecturer's feedback on assessment within the reasonable time span" in which 64.3% of respondents agreed that they were satisfied with it. Next is the lecturer's presentation skill (60.6%), followed by "the lecturer comes to class on time" (58.6%) and teaching aids such as Lab, computers, LCD, etc. (57.1%). Meanwhile, 33.8% of the respondents strongly agreed that they were satisfied with the lecturer's knowledge on the subject matter and 26.3% of them also strongly agreed that they were satisfied with the fact that their lecturer follows the course outline well. On the other hand, none of the students chose the "strongly disagreed" response regarding the service quality of lecturer's availability when they are needed; lecturer's willingness to provide additional assistance; lecturer's knowledge on the subject matter; lecturer's feedback on assessment within the reasonable time span; lecturer's presentation skill; lecturer follows the course outline well and also the invigilation of the exam hall was secure and fair. The most satisfied service presented in terms of teaching, learning and assessment is "the lecturers are very knowledgeable on the subject matter" with the highest mean of 4.20.

Table 4: Students' Satisfaction Level towards the University's Student Affairs Services

Student Affairs Services	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean
	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	
The activities organized by the student affairs	0	0	10	2.5	192	47.9	163	40.6	36	9.0	3.56
The provision of student clubs and societies	0	0	14	3.5	185	46.3	174	43.5	27	6.8	3.54
The sports and recreational facilities	6	1.5	24	6.0	172	42.9	170	42.4	29	7.2	3.48
The space/area for study and social activities	1	0.3	14	3.5	146	36.7	190	47.7	47	11.8	3.67
The availability of careers counseling and advising	1	0.2	20	5.0	172	42.9	177	44.1	31	7.7	3.54
The quality of the personal counseling given by the counselor	3	0.7	25	6.2	167	41.6	178	44.4	28	7.0	3.51
The college response to the interests and concerns of students	1	0.2	38	9.5	154	38.4	178	44.4	30	7.5	3.49
The college's commitment to ensure equality	1	0.2	41	10.2	134	33.4	191	47.6	34	8.5	3.54

6 Discussion

This study provides empirical findings on the students' satisfaction level regarding services provided by the higher education institution. This study assesses three main service areas which are the admission and registration; student affairs services; and the teaching, learning and assessment. The results suggest that, on average, the students are satisfied with the services provided by this university. This is reflected by their responses that are more on "agree" and "strongly agree" rather than "disagree" and "strongly disagree". In terms of learning, teaching and assessment, the results indicate that students do receive higher satisfaction as compared to their satisfaction level towards student affairs services and the admission and registration.

The findings of this study provide universities with information on which areas to focus on for improvement purposes. Furthermore, the areas that have significantly lower satisfaction levels require further attention. Both public higher education institutions (IPTA) and private higher education institutions (IPTS) also need to determine the factors that will influence students' satisfaction or dissatisfaction in some ways that will give a positive or negative effect on their studies and student development as a whole. Thus, it helps the universities to identify the source of dissatisfaction and develop suitable action plans for improvement.

Table 5: Students' Satisfaction Level towards the University's Teaching, Learning and Assessment

Teaching, Learning And Assessment	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean
	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	
The lecturer comes to class on time	1	0.2	8	2.0	102	25.4	235	58.6	55	13.7	3.84
The lecturer's availability when needed	0	0	6	1.5	101	25.2	223	55.6	71	17.7	3.90
The lecturer's willingness to provide additional assistance	0	0	2	0.5	100	25.1	225	56.4	72	18.0	3.92
The lecturer's knowledge on the subject matter	0	0	1	0.3	53	13.3	211	52.8	135	33.8	4.20
The lecturer's feedback on assessment within the reasonable time span	0	0	3	0.8	70	17.5	257	64.3	70	17.5	3.99
The lecturer's presentation skill	0	0	3	0.7	67	16.7	243	60.6	88	21.9	4.04
The lecturer follows the course outline well	0	0	9	2.3	66	16.5	220	55.0	105	26.3	4.05
The teaching aids (e.g. Lab, computers, LCD, etc)	1	0.2	11	2.7	99	24.7	229	57.1	61	15.2	3.84
The invigilation of the exam hall was secure and fair	0	0	15	3.8	91	22.8	213	53.3	81	20.3	3.90

7 Conclusion

The findings of implicit services indicated that majority of the respondents are satisfied with the services provided. As this study focuses on the admission and registration; the student affairs services; and the teaching learning and assessment, it replicates the students' acceptance upon these services as offered by the university. The recorded mean values shown in the data analysis demonstrated that the respondents were satisfied with the treatment they received from the services and the staff. This is supported by majority of the respondents who were satisfied with the usefulness of information provided during the orientation week in the admission and registration process as shown by the highest mean. This process is the initial phase for the students' enrolment in the university, hence, their satisfaction and acceptance level towards the learning environment and other services provided by the university somehow will be affected by this primary process. Furthermore, majority of the students were also satisfied with the space or area for study and social activities provided by the university. This is portrayed through their satisfaction level on the facilities and this shows that the university is able to provide the convenient learning environment for the students. A satisfied student provides a positive word of mouth reflected from his satisfactory fulfilment and he potentially would spread and express his feelings in recommending the institution to prospective students (Hanaysha et al., 2011).

The lecturers' role in the university is very important as they are the persons who educate the students and responsible for the skills and knowledge transfer in the learning environment. Lecturers are not only required to teach the subject but must also be able to develop and polish soft skills and generate human capital in Malaysia. Other than the explicit facilities, the action of rendering quality also includes the improvement in learning and teaching process and also other services being offered (Konting, Kamaruddin & Man, 2009). Since lectures and tutorials are the core services provided by the HEIs, this study provides preliminary overview on understanding the students' satisfaction or their acceptance towards the implicit services. The findings from this study have a propensity to confirm that the respondents are satisfied with the knowledge of the lecturer on the subject matter.

Students have their rights to obtain a quality learning environment from the university because this is likely to have the

tendency to affect their satisfaction level. From this study, the results gathered revealed that the students were satisfied with the presentation skills of the lecturer as well as the effort of the lecturers in following the course outline during the learning process. When their lecturers are knowledgeable regarding the subjects, it will be easier for the students to understand the subject and apply the knowledge in the future.

Consequently, the satisfaction of students towards higher education can be varied and determined by various factors. Therefore, the university's management should take serious consideration on these factors in order to improve the level of satisfaction of the students. The satisfaction of the students will be revealed by the output that the university can produce through the production of high quality students and this will portray a good image of the university. As for the limitations of this study, the survey questionnaires were only distributed to 401 respondents. Therefore, in future research, the total respondents could be expanded to large population so that other factors might be discovered to identify students' satisfaction levels towards the services of a university.

8 References

- Austrian Development Agency. (2009). *Higher education and scientific cooperation: Strategy*. The Operational Unit of the Austrian Development Cooperation.
- Barnes, B. R. (2007). Analyzing service quality: The case of post-graduate Chinese students. *Total Quality Management*, 18(3), 313-331.
- Barnett, R. (1992). *Improving higher education: Total quality care*. Buckingham: SRHE & OU.
- Bartlett, J., Kortlik, J. W., & Higgins C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43-50.

- Che Din, R., Rajadurai, J., & Daud, S. (2007). *Establishing a student satisfaction index – A Malaysian case study*. The 5th ASEAN Symposium on Educational Management and Leadership (ASEMAL 5).
- DeVellis, R. F. (2003). *Scale development: Theory and applications*, 2nd Edition. Newbury Park, CA: Sage Publications.
- Ham, C. L. (2003). *Service quality, customer satisfaction, and customer behavioral intentions in higher education*. Retrieved from www.cmr-journal.org/article/viewFile/1101/6151
- Hanaysha, J. R. M., Abdullah, H. H., & Warokka, A. (2011). Service quality and students' satisfaction at higher learning institutions: the competing dimensions of Malaysian universities' competitiveness. *Journal of Southeast Asian Research*, 1-10. DOI: 10.5171/2011.855931
- Kee, M. J. S. (2011). A model of higher education institutions choice in Malaysia – A conceptual approach. *Proceedings of 2010 International Conference on Business and Economics Research* (pp. 142-146). IACSIT Press.
- Konting, M. M., Kamaruddin, N., & Man, N. A. (2009). Quality assurance in higher education institutions: Exist survey among Universiti Putra Malaysia graduating students. *International Education Studies*, 2(1), 25-31.
- Kotler, P., & Clarke, R.N. (1987). *Marketing for health care organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Malaysian Qualifications Agency (MQA). (2009). *Quality assuring higher education in Malaysia: The Malaysian qualifications agency (MQA)*. Retrieved from http://www.asean-qa.de/media/asean-qa.de/BKK_Conference/Day_2/Group_B/The_Quality_Assurance_System_of_Malaysian_Higher_Education_by_Malaysian_Qualifications_Agency.pdf
- Mishra, S. (2006). *Quality assurance in higher education: An introduction*. National Assessment and Accreditation Council in collaboration with Commonwealth of Learning. Retrieved

from http://www.col.org/sitecollectiondocuments/pub_qahe_intro.pdf

- Munteanu, C., Ceobanu, C., Bobalca, C., & Anton, O. (2010). An analysis of customer satisfaction in a higher education context. *International Journal of Public Sector Management*, 23(2), 124-140.
- Nunnally, J. C. (1978). *Psychometric theory*. 2nd Edition. New York: McGraw-Hill.
- Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 4(67), 420-450.
- Parri, J. (2006). Quality in higher education. *VADYBA / Management*, 11(2), 107-111.
- Sein, M., Khoon, C. C., & Tan, B. L. (2012). Motives, expectations, perceptions and satisfaction of international students pursuing private higher education in Singapore. *International Journal of Marketing Studies*, 4(6), 122-138.
- Sohail, M. S., Rajadural, J., & Abdul Rahman, N. A. (2003). Managing quality in higher education: a Malaysian case study. *The International Journal of Educational Management*, 17(4), 141-146.
- Tessema, M. T., Ready, K., & William, Y.W.C. (2012). Factors affecting college students' satisfaction with major curriculum: evidence from nine years of data. *International Journal of Humanities and Social Science*, 2(2), 34-44

