Service delivery in Higher Education (HE): A comparative study between public and private universities

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Abstract: This study seeks to find out the effectiveness of service delivery between the public and the private HEIs as perceived by the students; investigating the differences in four areas and the relationship between the management and the administration indicators and other three indicators in the admission, facilities and teaching. Descriptive and linear regression analyses were used to analyse the data. Total 400 students from four different universities were the respondents of the study. The findings reveal that private higher education institutions have fared significantly better in all areas except in the academic teaching aspect in comparison to their public counterparts. With regards to admission, the private HEIs have fared better where students highly rate the website effectiveness and the use of social media as offered by these private education institutions, as to be highly informative to them. The public education institutions view facilities as a mere addition, whereas the private education institutions see them as an initial sizeable investment outlay. In the teaching sector of excellence, however, the findings skewed more positively towards public education institutions. This study recommends public universities to be lenient in the areas of admission procedures and infrastructure facilities and private universities to be attentive to ensure quality teaching.

1. Introduction

A higher education institution (HEI) has long been termed as an 'ivory tower' – too aloof and unblemished to be of any practical and relevant use in the real world. However, in this competitive age, HEI, like any other business organizations needs to transform itself to meet the market demands and forces. The main beneficiaries of education are students and parents who are constantly looking for the best options as they are making huge investments in their children's lives. Universities whether private or public are essentially social organizations which are unique with their own missions and responsibilities that differ from business organizations with the sole purpose of making profits.

In today's ubiquitous use of technology and social media, a good or bad word regarding a service or place can go viral in seconds. HEI, whether private or public universities are essentially social organizations which are unique with their own mission, vision and responsibilities that differ from business organizations with the sole purpose of making profits. This poses a greater complexity in examining what constitutes a good university as there are so many indicators and some are not measurable in the short term, such as, employability skills of the graduates. A public HEI is state-owned but a private HEI is owned either by an individual or a business enterprise which will be the definition to distinguish between the public and the private HEI being used in

this study.

The monastery and market metaphor was coined (Balzer, 2010) to describe the two extremes of the HEI. The monastery metaphor is an internally focused enterprise where the faculty (academia) determines the academic degree, curriculum and requirements based on their expertise. Sometimes, these standards are at odds with the recommendations or demands from employers, accredited agencies and university administrations. The market metaphor presumes the power of the market place in co-determining the values and expectations of the HE, and what academic degrees are offered, curriculum and requirements for graduation. The changes to curriculum are considered on a regular basis in response to the ever-changing market demands and decisions which are quickly made and implemented.

Almost all HE institutions will have a mix of both metaphors but in different proportions. An example of change in the HE in the last decade is the distance learning programme which has become very popular to cater for working adults wanting academic credit for their work and experience. Many public and private universities are offering this programme with different features to vie with each other for enrolment and revenue. While it is not possible to design an organization so perfectly that satisfies everyone, efforts can be made to change the status quo.

The implementation of the Private HE

Institutions Act 1996 which is "to provide for the establishment, registration, management and regulation, and the quality control of education offered by the private institutions of higher learning" has seen the mushrooming of private HEI which gives rise to competition with the public HEI.According to Lee (1987), mass private education sector evolves when the state either cannot or chooses not to expand the public sector, even in the face of rapidly growing demand for higher education. In Malaysia, statistical analyses reported that the Malaysian government allocated a high percentage of the government budget at 16.1% to education, especially HE (UNESCO, 1995).

The needs for a change in the HE in Malaysia are many folds similarly as in the western countries, namely:

1. Many university processes are perceived to be extremely slow.
2. Many university processes are failing to meet the needs of those they serve.
3. Many university processes involve multiple hierarchies or each department works on its own with no single owner being held responsible.
4. The typical response to complaints requires individuals with authority to intervene and to handle the complaints on outside the normal official process.
5. The documentation is poor for many university processes; there are no standardized written instructions or employee training programme.
6. Many universities have not established a climate that helps transform the institution into a learning organization that regularly improves itself to serve the individuals and organizations that are beneficiaries of their work.   (Balzer, 2010).

The success of a university will result in better quality students, higher retention and higher graduation rates, higher-ranked academic programmes , increased level of giving and support and better reputation with employers among many others. Universities which have lagged behind will remain as white elephants. Indeed, no organization in the twenty-first century would boast about its sameness as stability is interpreted more often as stagnation than steadiness and organizations that are not in the business of change are generally viewed as stagnant establishjments (Cameron & Quinn, 2006). Currently, there is education quantity in Malaysia but there is a concern for a higher education quality. This concern, together with the lack of empirical research on service delivery in HEI forms the basis of this study.Following the background, this study has formulated the following objectives to find the effectiveness of service delivery between the public and the private HEIs as perceived by the students;

1.1. Objectives

1. To assess students' perceptions on service delivery in admission in public and private HEI.
2. To assess students' perceptions on different facilities in public and private HEIs.
3. To assess students' perceptions on service delivery in management and administration in public and private HEIs.
4. To assess students' perception on content delivery (teaching) in public and private HEIs.
5. To determine whether there are differences between the service deliveries in the public and the private HE institutions in the four areas: Admission, Facilities, Management and Administration and Teaching
6. To determine whether there is a relationship between the Management and the Administration and services in admission, facilities and teaching.

2. Literature review
2.1 Higher education in Malaysia

In Malaysia, higher learning institutions offer various courses leading to awards of certificates, diplomas, bachelor degrees, master degrees and doctorate qualifications. Professional and technical qualification certificates are also inclusive. The Ministry of Higher Education (MOHE) categorizes higher education providers into both the public and the private sectors.

Yilmaz(2010) stated that between the years 2001-2006, higher education enrolment in Malaysia increased approximately by 6.7 % annually. This increase was attributed to the liberalization of higher education; that is in lowering the barriers to gain entry into higher learning institutions.

The MOHE reported in 2005 that the government of Malaysia had linked the development of the higher education sector to the requirements of the country's economic growth by articulating the following complementary policy objectives of; (i) establishing a world class university system; (ii) making Malaysia a regional education hub, and (iii) transforming Malaysia into a knowledge-based economy (Retrieved from www.mohe.gov.my).

Although all higher learning institutions operate within the same confines of offering undergraduate, postgraduate and professional programmes, Hashim andMahmood(2011) state that the main distinction between the private and the public institutions are in the acquisition of funds.

2.2 Public Higher Education Providers

Public universities are categorized as being funded by the Government and are generally

governed as self managed institutions. Public institutions of higher learning can include universities, polytechnics, community colleges and teacher training institutes. According to the Ministry of Higher Education (Malaysia), government-funded education institutions constitute approximately 60% of tertiary education providers.

Since the corporatization of public universities, these institutions have become less financially dependent on the Government funds and have to seek their own sources of revenue from private sources, such as, offering consultancy services, research and expert services (Morshidi, 2006). Leaders of these institutions are called upon to have an "entrepreneurial mindset" by being innovative, creative and willing to take risks, hence, these public institutions need to be concerned about profits which are comparable to their private university counterparts (Hashim&Mahmood, 2011).

Majumdar(2004) emphasizes that mere teaching and research will not suffice even though they represent what accounts to be the main roles of these public universities; but rather these public institutions need to place an equal importance in promoting institutional service quality. The academic leaders of these institutions are then faced with the challenge of empowering both academic and administrative staffs to provide the best customer service to meet students' expectations as being practiced and emphasized all this time by their private counterparts (Emery & Barker, 2007).

2.3 Private Higher Education Providers

Arokiasamyet al.(2009) states that private universities in Malaysia vary from institutions that are supported by government business agencies as opposed to that of those supported by political parties in the present alliance. The Ministry of Higher Education adds that private funded higher learning institutions include universities, university colleges, foreign branch campus universities and private colleges. These institutions, similar to that of public institutions, offer programmes ranging from certificates to professional courses, diplomas, and bachelor, master and doctorate degrees.

The role of private higher learning institutions have become more significant in recent years as found by Arokiasamy et al. (2009), where in line with the Ninth Malaysian Plan, student enrolment in higher education is expected to peak to above 2 million by 2020. The current established public institutions are unable to fulfill this aim and thus giving rise to the establishment of private institutions to achieve this mission.

The emergence of private higher education institutions also has helped reduce the total public subsidy to higher education as well as protecting foreign exchange by limiting the outflow of students for overseas education (Wilkinson &Yussof, 2005).

In line with the government's efforts in ensuring that the best quality is delivered in the higher education sector, the Ministry of Higher Education (MOHE) and the Malaysian Qualification Agency (MQA) were established to develop and monitor all education and quality assurance matters of higher learning institutions.

Hashim and Mahmood (2011) researched that private institutions were less bound by governmental and bureaucratic regulations but rather were often faced by severe financial constraints to which they added that these institutions had to be creative in seeking their own funds by enhancing quality programmes, thus providing the delivery of high service quality and to actively seek out opportunities to export education services to targeted countries.

2.4 Service delivery in higher education

In general, service quality is often associated with service delivery. The concept of quality by itself is subjective as it depends on the personal assessment of the user of a particular service. Rowley (1996) states that peoples' perception of quality can also be seen as an attitude; where it is related to and resulting from a comparison of expectations with perceptions of performance.

Service quality particularly in higher education has become a fundamental aspect of educational excellence. Service delivery can reflect the quality in higher education that is complex and multifaceted. Alridge and Rowley (2001) states that when students perceive the institutions' quality and standardized learning environment facilitated with intellectual faculty as well as appropriate facilities of learning and infrastructure, their interest in the institution will explicitly be retained wherein their motivation reflects both the academic and administrative efficiency of the particular institution.

Malik, Danish, &Usmal(2009) found that service quality was mostly recognized by the cooperation between the administrative and the academic staffs as well as the students of an institution. They add that for quality assurance, an institution must train its staff members in a way that it may create a sense of facilitation by means of coordination, cooperation, compassion, empathy and accountability.

When assessing service quality, it is important to recognize that stakeholders, in this case students, are the core element in ensuring the success of education service delivery. Institutes of higher learning must now condition their internal processes to align themselves towards realizing a more "customer-oriented" system (Botha, Farshid, & Pitt,

2001; Human &Naude, 2010).   In   short,   the factors of admission, facilities, teaching and management and administration play a complementary role for higher education institutions in achieving outstanding service delivery quality.

3. Methodology

This study mainly aims at understanding the differences in the students' perceptions towards service quality rendered to them. Moreover, it discusses the conceptual basis of the students' perceptions and the perceived quality of four variables, namely, management, admission, teaching and facilities. It also explores the relationship of management with the other three variables.

3.1. Sampling

The sample of the study was 400 students from four different universities. For the public universities, the researchers chose University X which was situated in Kota Kinabalu and University Y which was situated in Kuching. Meanwhile, for the private universities, the researchers chose Universities R and S which were located in Klang Valley and Bandar Sunway. Only postgraduate and under-graduate students were chosen for this study.

The researchers sent 120 questionnaires to the representative of each university, attached with a follow-up letter to the participants. The researchers received 400 (83 %) returned responses altogether from four universities with as the questionnaires were administered by their own contacts.

About sampling, Gay (1996) says for a correlational, causal comparative and experimental research, some experts consider the 'general guideline' to be 30 respondents. For this correlational study, the researchers needed at least 30 subjects and the researchers had 400 respondents which justified the representation of the population of this study.

3.2. Instrument: Validity and reliability

This study used quantitative questionnaires as the medium to obtain the needed data. The questionnaire consisted of five parts. Part one was intended to obtain the background information. It comprised four questions, gender of students, their age, their year level, and course. Part two measured the students' perceptions towards the admission quality at the university. Part three measured the students' perceptions on the facilities meanwhile part four measured the students' perceptions on the management and administration. Finally, part five measured the students' perceptions on the teaching. Each part comprised 10 items.

A seven-point Likert scale, ranging from "strongly disagree", with a scoring scale of 1, to "strongly agree", with a scoring scale of 7, which was used for this study and all questions were phrased positively.

Exploratory factor analysis and reliability analysis were also done to determine the dimensionality of this study. To verify the convergence validity of the instrument used for this study, multi-items were analysed based on principal component analyses with varimax rotation.

The results of factor analyses for the admission process came up with two factors with factor loadings ranging from 0.870 to 0.983 at 86.94% of total variance (Table 3.1). Factor analyses for facilities came up with two factors with the factor loadings ranging from 0.669 to 0.990. This factor cumulatively captained 69.53% of the variance in the data, with explanatory power as expressed by the eigenvalue 6.953 (Table 3.2). Factor analyses for the management came up with only one factor with the factor loadings ranging from 0.088 to 0.989. This factor cumulatively captained 88.91% of the variance in the data, with an explanatory power as expressed by the eigenvalue of 8.891 (Table 3.3). The results of the factor analyses for teaching came up with two factors with factor loadings ranging from 0.448 to 0.962 at 94.12% of total variance (Table 3.4). Items 2, 3, 4 and 5 for teaching were omitted from the statistical analyses as they were found not valid.

The reliability of the scale was tested using the Cronbach alpha. A coefficient alpha higher than 0.7 was considered to be good (Nunnaly,1978). Table 3.5, below shows the Cronbach alpha values for all seven dimensions; this confirms the internal consistency of the instrument (Nunnaly, 1978).

Table 3.1 Exploratory factor analyses for admission

No.	Item	FactorLoadings
	Factor 1: Application and Information (Cronbach Alpha=0.971)	
1	The university website was clear, informative, up-to-date	0.870
2	Information on enrolment was clear and easily obtained	0.927
3	Application form was easily obtained online	0.983
5	Application process was efficient	0.919
7	Information on graduation requirement and exam was clear	0.931
8	Information on courses and how to choose them was detailed	0.922
9	Registration procedure and directions on first day were clear	0.964
10	Orientation was informative and organized	0.939

	Factor 2: Payment and Enrolment (Cronbach Alpha=0.787)	
6	It was easy to enroll and re-enroll for courses	0.915
4	Fee structure and payment procedure was clear	0.915
	Eigenvalue	6.955
	Percentage of variance explained	86.938

Table 3.2 Exploratory factor analyses for facilities

No.	Item	FactorLoadings
	Factor 1: Resources (Cronbach Alpha=0.980)	
1	Library resource, books and facilities were good	0.965
2	IT resources were sufficient, modern with WiFi	0.973
5	Spacious, sufficient study facilities	0.949
6	Comfortable place to relax and socialize	0.958
7	Canteen was hygienic with variety of food stalls	0.990
8	Transportation convenient, regular and punctual	0.961
2	IT resources are sufficient, modern with WiFi	0.973
	Factor 2: Physical Condition (Cronbach Alpha=0.710)	
3	ICT resources were available in the classrooms	0.876
4	Classrooms were clean, comfortable and well-lighted	0.819
9	Good and convenient accommodation for non-locals	0.669
	Eigenvalue	6.953
	Percentage of variance explained	69.532

Table 3.3 Exploratory factor analyses for management and administration

No.	Item	FactorLoadings
	Factor 1: Resources (Cronbach Alpha=0.977)	
1	Supporting staffs were courteous and friendly	0.902
2	Queries and complaints were attended to promptly	0.989
3	Career guidance and counseling services were good	0.981
4	Students' welfare services were good	0.985
5	Support from academic staffs was good	0.802
6	Staffs had good knowledge of procedures and policy	0.962
7	Effective communication between management and students	0.974
8	Courses and timetable were well-organized	0.088
9	Staffs were helpful and sincere in solving problems	0.893
10	Staffs demonstrated expertise and professionalism	0.936
	Eigenvalue	8.891
	Percentage of variance explained	88.909

Table 3.4 Exploratory factor analyses for teaching

No.	Item	FactorLoadings
	Factor 1: Knowledge (Cronbach Alpha=0.758)	
1	Lecturers were good in explaining subject matter	0.575
8	My knowledge had increased from the courses	0.962
9	Recommended books, materials and hand-outs were useful	0.964
10	I could apply skills and knowledge learnt from the courses	0.448
	Eigenvalue	2.389
	Percentage of variance explained	59.724
	Factor 2: Assignments and feedback (Cronbach Alpha=0.926)	
6	Lecturers marked and returned assignments promptly	0.939
7	Lecturer provided feedback for students to improve	0.939
	Eigenvalue	1.882
	Percentage of variance explained	94.123

Table 3.5 Cronbach alpha values for all measurement scales

	Variables	Number of items in Questionnaire	Reliability
Admission	Application and Information	8	0.971
	Payment and Enrolment	2	0.787
Facilities	Resources	7	0.980
	Physical Condition	3	0.710
Management & Administration	Resources	10	0.977
Teaching	Knowledge	4	0.758
	Assignments and feedback	3	0.928

4. Data Analysis

The data analyses for this study was conducted through the use of software called the Statistical Package for Social Science (SPSS) version 18 to test the independent objectives. Descriptive analysis was usedfor the objectives 1-5to determine whether the scores for the service delivery would vary between the public and the private HEI. T-test was also taken to test whether there is a significant difference between the deliveries of services of the universities. Linear regression was used for 0bjective 6 taking the admission, facilities and teaching as the independent variable and management as the dependent variable. This analysis was to examine the relationship between a set of independent variables and a dependent variable, after controlling other independent variables on the dependent variable.

5. Findings and discussion
5.1 Respondents' Demographic

The demographic information is represented in Table 4.1 based on the frequency distributions and percentages. From the 400 respondents in this study, 170 (42.5%) were male and 230 (57.5%) were females. Hence, female students were more than the male students. The highest respondents are from science (31.90%) and management (50%) faculty for public and private universities respectively.

Table 4.1 Background of the participants

	Total (n)		Percentage (%)	
	Public	Private	Public	Private
Gender				
Male	88	82	22.50	21.25
Female	122	108	27.50	28.75
Faculty				
Education	28	20	13.33	10.53
Social Sciences	38	22	18.09	11.58
Management	52	95	24.76	50.00
Economics	25	20	11.90	10.53
Science	67	33	31.90	17.37

5.2 Service delivery in admission in public and private HEI

Table 4.2 Descriptive Statistics of Admission

Items	Variable	Public University		Private University	
		M	*SD*	*M*	*SD*
1	The university website was clear, informative, up-to-date	4.2500	1.31559	6.9250	0.2275
2	Information on enrolment was clear and easily obtained	4.2500	0.43853	6.2000	0.40510
3	Application form was easily obtained online	3.5000	0.50637	6.0000	0.0000
4	Fee structure and payment procedure is clear	5.6250	0.49029	5.5250	0.50574
5	Application process was efficient	2.6250	0.49029	5.7000	0.75786
6	It was easy to enrol and re-enrol for courses	5.3750	0.49029	5.7000	0.50574
7	Information on graduation requirement and exam was clear	3.4000	0.49614	5.3250	0.47434
8	Information on courses and how to choose them was detailed	2.6500	0.48305	5.6750	0.72986
9	Registration procedure and directions on first day were clear	2.8000	0.40510	6.8750	0.33493
10	Orientation was informative and well organized	1.9250	0.72986	5.1500	0.36162

Note. M = mean; SD = standard deviation

The highest mean value for the public university is 5.6250, with a standard deviation of 0.49029 and the lowest mean of 1.9250. Meanwhile for the private university, the highest mean is 6.9250, with the standard deviation of 0.2275 and the lowest mean of 5.1500. In retrospection, it can be clearly seen that private universities have a higher mean and a lower standard deviation.

5.3 Service delivery in different facilities

The highest mean of the public university is 5.5000, with the standard deviation of 0.50637 and the lowest mean of 1.1250. As for the private university, the highest mean is 7.0000, with the standard deviation of 0.0000 and the lowest mean of 4.0000 for items 6, 7 and 9. For items 6 and 7, the standard deviations are 1.00766 and 0.50064 respectively whereas in item 8, the standard deviation is 0.64410. Once again it is shown here that private universities have a higher mean and lower standard deviation.

5.4 Service delivery in the management and the administration

The highest mean for the public university is 4.6250, with the standard deviation of 0.49029. and the lowest mean of 1.0500. As for the private university, the highest mean is 7.0000, with the standard deviation of 0.0000 and the lowest mean of 4.8000. From the table above, it is clear that private universities have a higher mean and a lower standard deviation for all items.

Table 4.3 Descriptive Statistics of Facilities

Items	Variable	Public University		Private University	
		M	SD	M	SD
1	Library resource, books and facilities were good	2.7250	0.45220	7.0000	0.0000
2	IT resources were sufficient, modern with WiFi	2.4250	0.50064	6.0000	0.43853
3	ICT resources were available in the classrooms	4.7500	0.98058	5.5000	1.51911
4	Classrooms were clean, comfortable and well-lighted	5.5000	0.50637	4.5000	0.83972
5	Spacious, sufficient study facilities	2.4250	0.50064	4.5000	0.50637
6	Comfortable place to relax and socialize	1.5500	0.50383	4.0000	1.00766
7	Canteen was hygienic with a variety of food stalls	1.1250	0.33493	4.0000	0.50064
8	Transportation convenient, regular and punctual	2.5250	0.50574	5.5000	0.50637
9	Good and convenient accommodation for non-locals	4.5750	0.50064	4.0000	0.64410
10	Building had easy accessibility and disabled-friendly	1.3750	0.49029	5.5000	0.50637

Note. M = mean; SD = standard deviation

Table 4.4 Descriptive Statistics of Management and Administration

Items	Variable	Public University		Private University	
		M	SD	M	SD
1	Supporting staffs were courteous and friendly	3.5000	0.50637	6.1000	1.00766
2	Queries and complaints were attended to promptly	1.2000	0.40510	6.95000	0.22072
3	Career guidance and counselling services were good	1.0500	0.22072	5.7750	0.42290
4	Students' welfare services were good	1.8000	0.40510	6.3750	0.49029
5	Support from academic staffs was good	4.6250	0.49029	5.8500	0.36162
6	Staffs had good knowledge of procedures and policy	1.5250	0.50574	4.8000	0.40510
7	Effective communication between management and students	1.3250	0.47434	5.6750	0.76418
8	Courses and timetable were well-organized	2.5500	0.50383	7.0000	0.0000
9	Staffs were helpful and sincere in solving problems	3.4750	0.50574	5.3750	0.49029
10	Staffs demonstrated expertise and professionalism	2.2000	0.99228	5.5250	0.50574

Note. M = mean; SD = standard deviation

5.5 Content delivery (teaching)

The highest mean for the public university is 6.8750, with a standard deviation of 0.33494. Meanwhile, the lowest mean is 2.1250 with a standard deviation of 0.79057. As for the private university, the highest mean is 5.8500, and a standard deviation value of 0.38481 and the lowest mean is 4.1750. Here, the public university has the higher mean value as compared to the private university for most items.

Table 4.5 Descriptive Statistics of Teaching

Items	Variable	Public University		Private University	
		M	*SD*	*M*	*SD*
1	Lecturers were good in explaining subject matter	5.4250	0.50064	4.8500	0.36162
2	Lecturers made the course interesting	3.6500	0.48305	4.4000	0.49614
3	Lecturers were enthusiastic	4.6250	0.49029	5.1500	1.00128
4	Courses stimulated my thinking	5.6000	0.49614	4.1750	0.38481
5	Criteria for assignment and exams were clear	5.3500	0.48305	5.4500	0.50383
6	Lecturer marked and returned assignments	3.3500	0.48305	5.8500	0.36162
7	Lecturer provided feedback for students to improve	2.1250	0.79057	5.0500	0.71432
8	My knowledge has increased from the courses	6.8750	0.33493	5.4750	0.50574
9	Recommended books, materials and hand-outs were useful	6.6750	0.47434	5.3750	0.49029
10	I could apply the skills and knowledge learnt from the courses	5.9250	0.82858	5.4750	0.50574

Note. M = mean; SD = standard deviation

5.6 Overall Scenario in the areas of admission, facilities, management and administration, and teaching

Table 4.6 Overall Mean and Standard Deviation

Dimension	Public University		Private University	
	M	*SD*	*M*	*SD*
Admission	36.4000	1.00766	57.9000	2.37292
Facilities	28.9750	2.15416	52.6250	5.76322
Management	23.250	1.94475	59.4250	2.38465
Teaching	30.3750	1.46213	32.0750	1.42122

Note. M = mean; SD = standard deviation

5.7 Differences between service delivery in the public and the private HE institutions in the four areas: Admission, Facilities, Management and Administration and Teaching

Table 4.7T-test comparison between service delivery in public and private HEI

Areas	*T*	p < 0.5
Admission	-52.745	Sig 0.000
Facilities	-24.311	Sig 0.000
Management & Administration	-74.353	Sig 0.023
Teaching	-5.273	Sig 0.0525

Based on table 4.7, there is a significant difference between the public and the private universities in all the areas. The largest difference is admission (t = -52.75, $p < 0.5$) and the smallest difference is teaching (t = -5.27, $p < 0.05$).

5.8 Relationship between the management and administration and the services in admission, facilities and teaching

Table 4.8 Relationship between management and administration and services in admission, facilities and teaching

Variable	R^2	β	F	*t*	p < 0.05
Management & Admission	0.990	0.995	7710.93	87.812	0.01
Management & Facilities	0.936	0.968	1146.54	33.861	0.002
Management & Teaching	0.260	0.510	27.40	5.235	0.04

The R^2 value shows that 99.0% of the variation in the management and the admission can be made by the predictor variable. It shows a very significant relationship between the management and the admission (β=0.995, p<0.05). The results also show 93.6% of the variation in facilities can be made by the predictor variable of the management. It shows a very significant relationship between the management and the facilities (β=0.968, p<0.05). The results show 26.0% of the variation in teaching can be made by the predictor variable of the management where it shows a

very significant relationship between the management and the teaching (β=0.510, p<0.05).

6. Discussion

6.1 Admission

Our findings show that students rate favourably in admission procedure for private higher education institutions. The websites of the respective universities are up to date and quite informative; hence, even international students can obtain first hand information accurately. Our findings concur with some other findings (Tan, 2002, Reuben, 2011, Anderson,

2007) that found that the competition and the growth of the media industry in promoting private universities have become rampant in the global scenario The numerous local online newspapers and the respective institution's websites are publishing education lift-outs and pamphlets regularly, thus, it is evidently clear that the marketing strategies conducted by the private education institutions are more pragmatically effective.

Our findings also show that the students' perception on the fee structure and payment for public education institutions is higher than private education institutions among all the items in admission aspect.This is mainly due to the low tuition fees and clear breakdown learning items as compared to private education institutions. The public education institutions' fees are rather affordable as it is government funded. Besides, there are various modes of payment, such as, e-payment, which is widely used in the public education institutions. A statistic from the World Bank (2007) showed that the fee for private universities is 8 times higher than that of public universities in Malaysia over a period of 10 months. Therefore, it is evident that an affordable public education institution caters for all students from different economic backgrounds.

6.2. Facilities

It is widely recognised that the availability and the quality of facilities portray the indication of the efficiency and quality of an education institution (Hussin, Soon and Sidin, 2000, Botha at el. 2001). From our findings, it shows that students rated facilities for private education institution higher. The findings also show the students' positive perceptions of library resources, IT sources, comfortable and spacious lecture classrooms and the disabled-friendly buildings are among the items rated higher in private universities. This finding differs from Wilkinson and Yussof(2005) that found that about 87% of the public universities' expenditures went on classrooms and library facilities as compared to 20% in the private colleges in 1997/1998. Furthermore, due to variious programmes offered by the private education institutions, the usage of online database to obtain information is proactively rampant (Teow & Zainab, 2003). This allows students to gain access to information at their finger tips and able to do their own computing at their respective locations.

6.3. Management and administration

Students' satisfactions towards the service quality of their colleges can be determined by their perceptions towards the quality of the teaching staffs, learning processes, support system, resources, and its operational management (Hill, Lomas, &MacGregor, 2003, Burgess, 2011). From the perspective of management and administration, it can be safely inferred that a professional academic consultant is vital in the holistic establishment of a service quality. Our

findings show that students rated management and administration performance for the private HEI as higher than expected. Staff members that are knowledgeable and demonstrating good public relationships have, to a large extent, contributed to a positive feedback on the perception from the students. Moreover our findings also concur with a case study done by Sohail et al.(2003) whereby the implementation of a quality system has enabled them to measure the progress and to establish a reference benchmark upon which it can assess the performance to further improve the management and administration of the institution.

6.4. Content delivery (Teaching)

Our findings show that students highly rated teaching in the public education institutions. Students perceive enthusiastic lecturers in the public HEI can explicitly explain the subject matter better and to make the course interestingly challenging. Moreover, the resources made available, such as, books and reading materials given were useful. In return, students could comfortably comprehend what is being taught, thus, the skills and knowledge learnt from the courses can be made more pragmatically applicable in one form or another.Lecturers in the public HEI are much more knowledgeable in their individual sphere of discipline and are expert in their field of knowledge; hence, most professors and doctorate holders are employed in the public education institutions. This finding is aligned with Arora (1986) and Wilkinson &Yussof, (2005) where they reported that retrospectively speaking, private colleges and universities have fewer professors and associate professors or senior lecturers of high academic calibers as compared with the public universities.).

7. Conclusion and implications

This study has consciously devoted itself to study the effectiveness of the service delivery between the public and the private higher education institutions in Malaysia. The study has diligently looked at the service delivery from the four areas of admission, facilities, management and administration; and teaching from the students' perspectives and their respective points of view. The findings reveal that private higher education institutions have fared significantly better in all areas except in the academic teaching aspect in comparison to their public counterparts.

In short, when providing service delivery in higher education, no exceptions in any area must be made regardless of whether the provider is public or private. In this case, the public education providers need to recognize the need and urgency in improving their service delivery quality and making it their top priority and at the same time for the private education providers to pay a greater emphasis on academic staff

quality to ensure that both these education providers remain relevant and competitive in providing higher education services in the ever-changing and fast moving higher education industry of Malaysia.

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