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The Effects of Service Quality Dimensions on Students' Satisfaction: Hedperf Model Adoption

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ABSTRACT

Service quality has become one of the greatest imperative factors of students' satisfaction in higher education industry these days. As the education sector is primarily considered service providing establishment, the service quality aspects are the key to sustainable competitive advantage. This study aims to determine the relationship between service quality aspects namely academic aspects, non- academic aspects and reputation towards students' satisfaction. The HEDPERF model was used as a research framework. A set of 265 questionnaires were distributed to the undergraduate students in a public university in the East Coast of Malaysia by using stratified random sampling. A total of 260 of the questionnaires were returned equivalent to 95.84%. The data were analyzed using descriptive statistical analysis, Pearson Correlation and Multiple Regression. The findings revealed that all three dimensions of service quality have a positive relationship with the students' satisfaction. Academic aspect revealed to be the most significant influence towards the students' satisfaction. Suggestion to the management of higher education also been made particularly in the areas where improvement is required.

Keywords: *Service quality, satisfaction, HEDPERF model, Students'*

INTRODUCTION

To date, every higher education institution faced one common challenge which is how to facilitate its students' well. In order for the institution to succeed and sustain, bringing excellent quality services is imperative. At present, students have an extensive range of services to select from and good service quality certainly effects a university's competitive advantage (Saravanam, 2018, Euraydice, 2017). Thus, understanding how students observe service quality is required.

To ensure quality is vital to the higher education setting, efforts to monitor both local and international initiatives are needed. In the pursuit for internationalization of quality in education, service quality guarantee takes center point. Besides, service quality boosts a university's image as well (Sultan and Ho, 2012). Satisfied students' not only will convey constant benefit for the universities through their positive word of mouth but also offer better position for the universities to deal with other competitors.

Being involved in the commercial competitiveness, the universities require special attention not only how students perceive their education involvement with the institution but also the educational and teaching quality they provide to their students in terms of capabilities and talent (Munteanu, Ceobanu, Claudia & Auton, 2010).

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HEdPERF model was constructed specifically for measuring service quality in the higher education setting and was considered a new instrument shaped by Abdullah (2006). HEdPERF proposed six dimensions namely academic aspects, non-academic aspects, reputation, access, program issues as well as understanding (Abdullah, 2006). However, this research focuses on only three dimensions (academic aspects, non-academic aspects, and reputation). The authors recognized the three dimensions of the service quality concept; (i) Academic aspects: responsibilities of the instructors or academicians; (ii) Non-academic aspects: matters that are important to allow students to accomplish their study obligations and relate to duties passed out by non-academic staff (iii) Reputation: it is imperative for higher education institution in projecting a professional image. To support the HEdPERF dimensions concerning student's judgement in Malaysian public higher education institution, this paper intends to determine the outcome of the service quality dimensions on the students' satisfaction.

LITERATURE REVIEW

Academic Aspects

Learning of formal education especially at a university or college can be defined as academic. As mention by Cho, et al., (2016), a university is known as a place of creating, utilizing and sharing knowledge. Expectation of students towards instructor or lecturer when delivering the service with their competency or information is also a perspective of academic aspects (Mindano, 2016).

Factors influencing students' satisfaction can be split into institutional factors and individual factors (Reeves, 2017). As further stated by Plant, 2017, teaching quality, lecturer's response and promptness, style of teaching as well as the class size are among the elements in institutional satisfaction. When conveying the knowledge service, lecturers play an essential role to make sure the excellence service can build elevated education performance (Akareem & Hossain, 2016).

Non-Academic Aspects

Aspects in non-academic suggests any activity that excludes academic action (Muhonen, et al., 2017). Great service counter to the students will be given good accomplishment by fulfilling the students' satisfaction (Danilo, et al., 2017). The manner of staff while entertaining the client in university also represents the non-academic qualities. Staff should be well mannered, skilled and helpful when coping with students (Danilo, et al., 2017). Staff's commitment to assist students, capability in conveying the service when needed and fast service delivery can affect students' reaction and satisfaction (Muhonen, et al., 2017).

Reputation

Reputation can be described as corporate image and at the same time it can be perceived as different factors like product values, promotion strategies and customer service fulfillment (Cho, et al., 2016). Image and reputation are regularly seen equal to each other (Danilo, et al. (2017). With respect to the quality in advanced education, reputation is associated with efficiency, soaring expectations, excellence, value for cash and customer focused (Khawaja, et al., 2017). Students' fulfillment is not defined exclusively by the students' teaching and learning experience but instead by their general confronts as a patron of a specific institution (Muhonen, et al., 2017). In any business or institutions, nothing is more valuable than its reputation

Service Quality and Students' Satisfaction

Not all students are satisfied with the service provided by the university. Due to unfulfilled service, various complaints and comments have been received (Satpathy, Patnik & Kumar, 2017). Dissatisfaction can be viewed as an undesirable emotion subsequent from the evaluation of one's experiences (Reeves, 2017). Since the new generation of students have more impact, better awareness as customers, becoming more interactive and demanding about their forthcoming, service quality seems to be more significant to attract students (Cho, Kim & Kwak, 2016).

Perceived quality and effectiveness are directed from satisfaction (Asif, Merceron, Ali & Haider, 2017). In understanding behavioral intentions or consequences at the individual student level, student's satisfaction is believed to be a vital construct (Asif, et al., 2017). It is also a necessity to consider approaches that may be used to attract and hold students for future programs at the institutional level (Barlybayey, Sharipbay, Klyukoya, Sabyroy and Kuzenbayey, 2016). Positive insights of service quality have a substantial influence on student satisfaction (Sardar, Amjad & Ali, 2016).

Numerous studies have been led to identify the influence of satisfaction, whether by service quality or vice versa (Kashif, Ramayah & Sarifuddin, 2016). Consequently, more individual develop awareness concerning service quality and adapt into long term and faithful customers (Gonzalez, Fernandez, Fuentes & Clavel, 2016). İn the higher education setting, service quality is considered the sole most important capability for survival, sustainability and development (Mustaffa, et al., 2016).

Providing high quality service benefits not only in retaining the present customers but also to attract new ones because of encouraging recommendations to another service provider such as potential students, employers, guardians, sponsors and regulators (Rebecca, Shing & William, 2017). This requires universities which work in a competitive environment to be aware of how to bring high-quality service to meet the student's needs (Asif, et al., 2017).

CONCEPTUAL FRAMEWORK

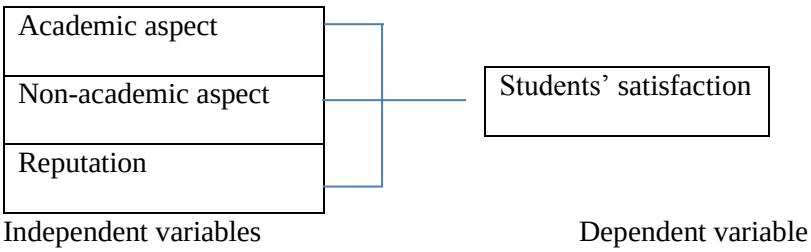

Figure 1: Conceptual Framework of the relationship between independent and dependent variables

HYPOTHESES DEVELOPMENT

H1: There is a positive relationship between academic aspects with students' satisfaction.
H^2: There is a positive relationship between non-academic aspects with students' satisfaction.
H^3: There is a positive relationship between reputations with students' satisfaction

METHODOLOGY

There were 260 respondents selected from undergraduate students in a public higher education in East Coast of Malaysia by using stratified random sampling technique. The questionnaire was used as a survey instrument for this study. In order to measure each variable, a five-point likert scale questionnaire was used ranging from strongly disagree to strongly agree.

FINDINGS

Table 1: Items for Questionnaires

Dimension	Items	Source
Academic aspect	8	Faizan, et al. (2016)
Non-academic aspect	8	Faizan, et al. (2016)
Reputation	8	Faizan et al. (2016)
Students' satisfaction	8	Faizan, et al. (2016)

Survey Return Rate

254 set of questionnaires were returned out of 265, equivalent to 95.84 percent.

Descriptive analysis

Descriptive analysis discovered the findings specified in the table 2 in term of gender, age, semester of study, CGPA and program of study

Table 2: Demographic information (n=254)

Variable	Option	Frequency	%
Gender	Male	52	20.5
	Female	202	79.5
Age	18-20	58	22.8
	21-23	169	66.5
	24 and above	27	10.6
Semester of study	Semester 1	48	18.9
	Semester 2	27	10.6
	Semester 3	72	28.3
	Semester 4	68	26.8
	Semester 5	39	15.4
CGPA	2.5 or below	21	8.3
	2.5 – 2.99	65	25.6
	3.00 – 3.49	122	48
	3.5 – 4.00	46	18.1
Program	Bachelor of Finance Management (BM242)	72	28.3
	Bachelor of Operation Management (BM244)	27	10.6
	Bachelor Hotel and Tourism Management (HM240)	92	36.2
	Bachelor Foodservice Management (HM242)	63	24.8

Table 2 shows majority of the respondents were female (79.5%) and the remaining were male (20.5%). In term of age of the respondents, more than half of them were from the age group of 21-23 years old. Respondents participated mainly from semester 3 (28.3%) and 4 (26.8%). As per CGPA, almost half (48%) of the respondents obtained pointer ranging from 3-3.49. Respondents from HM240 were representing 36.2% of the sample and the least were from BM244.

Reliability Analysis

The reliability analysis was established in order to test whether the items grouped under a factor are internally reliable and constant. According to Sekaran (2010), reliabilities less than 0.6 are poor, those in the 0.7 is acceptable and over 0.8 considered good. Table 3 presented the result of this analysis. The Cronbach's for students' satisfaction, academic aspects, non-academic aspects and reputation ranges from 0.7-0.9 which is acceptable and good.

Table 3: Reliability analysis table

Variables	Number of items	Cronbach alpha
B(Students' Satisfaction)	8	0.839
C (Academic Aspects)	8	0.981
D (Non-Academic Aspects)	8	0.955
E (Reputation)	8	0.940

Correlation Analysis

To assess the relationship between independent variables (academic aspects, non-academic aspects, and reputation) and the dependent variable (students' satisfaction), Pearson Product Moment Correlation Coefficient was used.

Table 4: Correlation Analysis (n=254)

Variables	Pearson Correlation
Academic Aspect	.663**
Non-Academic Aspect	.602**
Reputation	.502**
Students' Satisfaction	-

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

Table 4 indicates that the overall correlation value of the variables is between 0.663-0.502. The relationships between academic aspects, non-academic aspects, reputation and students' satisfaction display strong, positive correlation among the variables.

Table 5: Pearson Correlation Matrix Table

Pearson Correlation	Strength of relationship
0.8 and 1.0	Very Strong
0.6 and 0.8 0.4 and 0.6	Strong Moderate
0.2 and 0.4 0 and 0.2	Weak Very Weak

*Sources: Salkind (2012)

Regression Analysis

In order to examine the effect of academic aspect, non-academic aspect and reputation on students' satisfaction. Table 6 summarized the result of regression analysis.
Table 6: The relationship between academic aspect, non-academic aspect and reputation on students' satisfaction

Table 6: Regression Analysis

Independent variables	Beta	T-Value	Sig.Value
Academic aspect	.604	.196	0.000
Non-academic aspect	.246	3.89	0.000
Reputation R R^2 Sig. F value	.090 .756 .572 0.000	.145	0.147

This value indicates that 57.2% of the variance in students' satisfaction can be predicted from the variables of academic aspects, non-academic aspects and reputation. The remaining 42.8% of the model will be explained by other factors. Further analysis through regression produces standardized measures (Beta Weights) of the strength of each dimension association with students' satisfaction. ß is the values for the regression equation for predicting the dependent variable from the independent variables. The results of the three independent variables are academic aspects (0.604, $p<0.000$), non-academic aspects (0.246, $p<0.000$) and reputation (0.090, $p<0.147$). These results indicate that academic aspects have higher Beta value that provides a strong evidence of being the factor that influence students' satisfaction. Thus, all hypothesis is accepted with the most influence factor is academic aspects toward students' satisfaction.

CONCLUSON

In conclusion, all the three predictors namely academic aspect, non-academic aspect and reputation impacted students' satisfaction directly. Hence, the result shows that the research findings support all the hypothesis. Academic aspect has more positive and strongest relationship with the students' satisfaction. As supported by Eric (2014), academic aspects are crucial and has direct consequence on students' satisfaction. Faizan et al. (2016) further concluded that overall students' satisfaction in public universities in Malaysia were contributed by aspects in academic presented by the institution. Consequently, academic aspects had influenced students' satisfaction positively in utilizing the service. Hence, based on the results, students' satisfaction will be increased as a result from increasing the quality of those aspects. Subsequently,

providing good quality to the students is important for the higher education's managers and educators to consider. The process of developing educational plans and strengthening university programs should be remained to upsurge the service provided by the institution.

Since this study is limited within one public university in East Coast of Malaysia and only involved undergraduate students, so the finding cannot be generalized to all public universities in Malaysia. The sample size of 254 is also considered small. Thus, further studies should focus on larger sample size in order to achieve more concluding data.

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