

Student's satisfaction on education system - A case study on A Malaysia university college

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ARTICLE INFO

ABSTRACT

Article history:

Received 20 September 2017
Received in revised form 20 November 2017
Accepted 22 November 2017
Available online 7 December 2017

Educational service quality is getting important nowadays especially with the arising of various technology that could assist the education services. This study explores the relationship between five education service quality dimensions (Tangibility, Responsiveness, Reliability, Assurance and Empathy) and students' satisfaction on a local private university college's education services through an online questionnaire. The result shows that students are satisfied with most of the services provided by the university college. It is interesting to find out that students agreed that technology could help in improving one of the service dimensions that scored the lowest satisfaction among students (Empathy). This result shows that technology could possibly improve an institution educational services satisfaction among students.

Keywords:

Education service quality, tangibility,
responsiveness, reliability, assurance,
empathy

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1. Introduction

In a competitive academic environment, students have been given many options to choose from various educational institutions. To attract students, educational institutions need to meet students' expectations in term of services provided. Many organizations realized that quality service is the key to distinct from competitors and guarantee long term sustainability [6, 9]. According to Annamdevula and Bellamkonda [1], students are the internal customers of the educational services in an institution and hence their opinion has a significant role in evaluating the institution's service quality. On the other hand, quality in teaching and learning can only be enhanced if the faculty members are satisfied [5].

What are the possible service qualities that will affect college students' satisfaction in the current education system in Malaysia? According to Hasan *et al.* [3], there are five main dimensions of services satisfaction which are: Tangibility, Reliability, Responsiveness, Assurance and Empathy. Tangible means "the appearance of physical facilities, equipment, personnel, and communications

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materials". Reliability refers to "the ability to perform the promised service dependably and accurately". Responsiveness refers to the "willingness of lecturer or staff to help student". Assurance is "the competence of the system and its credibility in providing a courteous and secure service". Meanwhile, Empathy means "the approachability, ease of access and effort taken to understand what student needs" [3]. In the meantime, Butt and Rehman [2] revealed that teachers' expertise is the main factor that affect student's satisfaction compared to courses offered, learning environment and classroom facilities in Pakistan. Vrana *et al.* [7] defined service quality as the "degree of excellence for meeting the customer's requirements, and control over the variability in achieving that excellence".

Can the educational services be improved by Information and Communication Technology (ICT)? Kim and Bonk [4] in the study of online e-learning reveals that faculty training and support is a crucial component for student satisfaction. Online e-learning can provide same level of satisfaction as traditional classroom. Other technology such as multimedia and WiFi could improve e-learning experience. Therefore, ICT could be an alternative to improve educational services be it online or offline. It is crucial to explore an institution's service quality as this will improve student retention [8].

2. Research Hypotheses and Methodology

2.1 Research Hypothesis

The objectives of this study is to explore the five service quality dimensions (tangibility, responsiveness, reliability, assurance, empathy and overall service quality) and their relationship with student's satisfaction and the possibility of ICT in improving the five service quality dimensions. The hypotheses are as follow.

H1: Students are satisfied with educational services in all five service quality dimensions.

H2: ICT is perceived by students in improving the five service quality dimensions.

2.2 Methodology

A set of online questionnaire is edited based on Hasan *et al.* [3] research. Before the questionnaire is distributed, reliability test is carried using Cronbach's Alpha analysis. This online questionnaire is then distributed to students in Tunku Abdul Rahman University College (TAR UC) in Kuala Lumpur. This questionnaire includes open-ended questions with explanations, and 5-point Likert scales questions (1 for strong satisfied and 5 for strongly dissatisfied). There are five different sections in the questionnaire which are: 1. Satisfaction in Tangible, 2. Satisfaction in Reliability, 3. Satisfaction in Responsiveness, 4. Satisfaction in Assurance, and 5. Satisfaction in Empathy. Average mean is calculated on each sections to conclude the study based on the hypotheses.

3. Results and Discussion

The reliability Cronbach's Alpha test for the questionnaire is firstly presented for 30 samples. Table 1 shows that Cronbach's Alpha analysis is 0.825 which indicates a high level of internal consistency of the questionnaire. A total of 300 samples are collected from TAR UC students. The following sections will discuss the result based on the hypotheses.

Table 1
Reliability Statistic

Cronbach's Alpha	Cronbach's Alpha Based on Standardized items	N of items
0.825	0.825	25

3.1 Students' Satisfaction according to Five Service Dimensions

Table 2 reveals that most of the students are satisfied with all the five dimensions of educational services. The sequence of satisfaction among five dimensions of educational service is 1. Assurance (average mean = 2.64), 2. Tangible and Responsiveness (average mean = 2.69), 3. Reliability (average mean = 2.72), 4. Empathy (average mean = 2.74). H1 is accepted in which TAR UC students are satisfied with all the five dimensions of educational services. The five service dimensions score almost same means with slight difference only. This also means that TAR UC provides quality service consistently in five dimensions.

Table 2
Service dimensions and students' satisfaction

Dimension	Scale	Number of Respondents	Percentage of respondents	Mean	
Tangible	Appearance of Lecturer	Strongly Satisfied	71	23.7%	2.42
		Satisfied	77	25.7%	
		Neutral	118	39.3%	
		Dissatisfied	23	7.7%	
		Strongly Dissatisfied	11	3.7%	
	Lighting in Classroom	Strongly Satisfied	36	12.0%	2.60
		Satisfied	112	37.3%	
		Neutral	100	33.3%	
		Dissatisfied	40	13.3%	
		Strongly Dissatisfied	12	4.0%	
	Classroom Cleanness	Strongly Satisfied	38	12.7%	2.71
		Satisfied	100	33.3%	
		Neutral	95	31.7%	
		Dissatisfied	46	15.3%	
		Strongly Dissatisfied	21	7.0%	
	Computers Adequacy Provided in the Lab	Strongly Satisfied	35	11.7%	2.82
		Satisfied	76	25.3%	
		Neutral	123	41.0%	
		Dissatisfied	41	13.7%	
		Strongly Dissatisfied	25	8.3%	
Access to the internet/email	Strongly Satisfied	32	10.7%	2.90	
	Satisfied	76	25.3%		
	Neutral	107	35.7%		
	Dissatisfied	59	19.7%		
	Strongly Dissatisfied	26	8.7%		
Average Mean				2.69	
Assurance	Friendly and courteous university staff	Strongly Satisfied	56	18.6%	2.58
		Satisfied	84	28.0%	
		Neutral	110	36.7%	
		Dissatisfied	30	10.0%	
		Strongly Dissatisfied	20	6.7%	
	Friendly and	Strongly Satisfied	42	14.0%	2.54

	courteous lecturers	Satisfied	105	35.0%	
		Neutral	112	37.3%	
		Dissatisfied	30	10.0%	
		Strongly Dissatisfied	11	3.7%	
	Lecturers research efficiency/ productivity	Strongly Satisfied	47	15.6%	2.67
		Satisfied	86	28.7%	
		Neutral	107	35.7%	
		Dissatisfied	39	13.0%	
		Strongly Dissatisfied	21	7.0%	
	Lecturers are innovative and agents of change	Strongly Satisfied	37	12.3%	2.72
		Satisfied	88	29.3%	
		Neutral	114	38.0%	
		Dissatisfied	44	14.7%	
		Strongly Dissatisfied	17	5.7%	
	Communication skills: courses are well taught by the lecturers in this university	Strongly Satisfied	43	14.3%	2.68
		Satisfied	94	31.3%	
		Neutral	99	33.0%	
		Dissatisfied	43	14.3%	
		Strongly Dissatisfied	21	7.0%	
				Average Mean	2.64
Reliability	This university keeps its records accurately	Strongly Satisfied	51	17.0%	2.49
		Satisfied	105	35.0%	
		Neutral	103	34.3%	
		Dissatisfied	29	9.7%	
		Strongly Dissatisfied	12	4.0%	
	This university provides its services at a time it promises to do so	Strongly Satisfied	38	12.7%	2.69
		Satisfied	87	29.0%	
		Neutral	118	39.3%	
		Dissatisfied	43	14.3%	
		Strongly Dissatisfied	14	4.7%	
	Teaching capability of lecturers/ proficiency	Strongly Satisfied	38	12.6%	2.74
		Satisfied	87	29.0%	
		Neutral	113	37.7%	
		Dissatisfied	40	13.3%	
		Strongly Dissatisfied	22	7.3%	
	Lecturers sincere interest in solving student's problem	Strongly Satisfied	34	11.4%	2.82
		Satisfied	77	25.7%	
		Neutral	121	40.3%	
		Dissatisfied	44	14.7%	
		Strongly Dissatisfied	24	8.0%	
	Staff sincere interest in solving student's problem	Strongly Satisfied	31	10.3%	2.88
		Satisfied	73	24.3%	
		Neutral	122	40.7%	
		Dissatisfied	48	16.0%	
		Strongly Dissatisfied	26	8.7%	
				Average Mean	2.72
Responsiveness	Availability of lecturers to assist you	Strongly Satisfied	59	19.6%	2.42
		Satisfied	103	34.3%	
		Neutral	101	33.7%	
		Dissatisfied	27	9.0%	
		Strongly Dissatisfied	10	3.3%	
	Lecturers capacity to solve problems when they arise	Strongly Satisfied	39	13.0%	2.66
		Satisfied	91	30.3%	
		Neutral	117	39.0%	

		Dissatisfied	39	13.0%	
		Strongly Dissatisfied	14	4.7%	
Availability of personnel to assist you		Strongly Satisfied	43	14.4%	2.70
		Satisfied	81	27.0%	
		Neutral	117	39.0%	
		Dissatisfied	42	14.0%	
		Strongly Dissatisfied	17	5.7%	
Staffs capacity to solve problems when they arise		Strongly Satisfied	34	11.3%	2.81
		Satisfied	80	26.7%	
		Neutral	114	38.0%	
		Dissatisfied	53	17.7%	
		Strongly Dissatisfied	19	6.3%	
Queries are dealt with efficiently and promptly		Strongly Satisfied	33	11.0%	2.84
		Satisfied	71	23.7%	
		Neutral	129	43.0%	
		Dissatisfied	44	14.7%	
		Strongly Dissatisfied	23	7.7%	
				Average Mean	2.69
Empathy	Access to computer facilities is accommodate with students convenient	Strongly Satisfied	64	21.3%	2.50
		Satisfied	82	27.3%	
		Neutral	107	35.7%	
		Dissatisfied	34	11.3%	
		Strongly Dissatisfied	13	4.3%	
	Staff are willing to give students individual attention	Strongly Satisfied	34	11.3%	2.79
		Satisfied	85	28.3%	
		Neutral	112	37.3%	
		Dissatisfied	49	16.3%	
		Strongly Dissatisfied	20	6.7%	
	The extent to which lecturers are sympathetic and supportive to the needs of students	Strongly Satisfied	37	12.3%	2.66
		Satisfied	87	29.0%	
		Neutral	124	41.3%	
		Dissatisfied	44	14.7%	
		Strongly Dissatisfied	8	2.7%	
	Opening hour of computer rooms to the students	Strongly Satisfied	35	11.7%	2.89
		Satisfied	79	26.3%	
		Neutral	102	34.0%	
		Dissatisfied	52	17.3%	
		Strongly Dissatisfied	32	10.7%	
University are fair and unbiased in their treatment of individuals student	Strongly Satisfied	32	10.7%	2.84	
	Satisfied	75	25.0%		
	Neutral	126	42.0%		
	Dissatisfied	43	14.3%		
	Strongly Dissatisfied	24	8.0%		
				Average Mean	2.74

3.2 Service Dimensions that can be improved by ICT

Table 3 reveals that students agree that Empathy can be improved by ICT (56%). Meanwhile, Tangible, Assurance, Reliability, and Responsiveness are not possible to be improved by ICT. Therefore, H2 is rejected as not all service dimensions can be improved by ICT according to students' opinions (No = 55.33%). Nevertheless, Table 2 shows that students have lowest satisfaction on Empathy and this dimension is believed by students that ICT could help in improving this dimension. This reveals that students has the inherent opinion that the educational services

could be improved by ICT. Further research could be carried out to explore different educational ICT tools that can be used to improve different dimensions of educational services.

Table 3
Service dimensions and possibility to be improved by ICT

Dimension	Scale	Number of Respondents	Percentage of respondents
Tangible	Yes	149	49.67%
	No	151	50.33%
Assurance	Yes	108	36%
	No	192	64%
Reliability	Yes	134	44.67%
	No	166	55.33%
Responsiveness	Yes	131	43.67%
	No	169	56.33%
Empathy	Yes	168	56%
	No	132	44%

4. Conclusion

TAR UC students are satisfied with the college's services in terms of Tangible, Assurance, Reliability, Responsiveness and Empathy. Although Empathy scores the lowest satisfaction among the five dimensions, this study reveals that the students believed that there is a possibility that this dimension could be improved by ICT. This provides an insight to the researchers and educators that more educational ICT tools should be explored to improve education systems. However, for the other four satisfied dimensions (Tangible, Assurance, Reliability and Responsiveness), most of the students rated that these dimensions could not be improved by ICT anymore. This could be due to the reason that students think that it is not necessarily to add ICT into these dimensions as the existing technology is suffice to cater their needs. The reason behind the phenomena could be further explored in the future work. Besides that, this research can be further extended to other private colleges and public universities to generalize the finding and test different educational tools to find out suitable ICT tools that could improve institutions' educational services quality.

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