The Measurement of Customer's Satisfaction in Education Services Marketing

[1]M. Emin Akkilic and [2]Certin Semeric
Vocational School of Havran Balikesir University, Balikesir, Turkey
Faculty of Education, Fırat University, Elazığ, Turkey

Abstract: Through a number of researchar have defined the different ways of customer's (student) satisfaction concept, in general, it can be defined as gap between services costumer's expectations and perceptions. In this study, the satisfaction level of students in the faculties of Firat University was measured. A questionnaire survey was carried out on 369 last class students. The data were collected as two separate sections. The data in the first is related to expectations before entire their Faculties or Departments of students. The data in the second is related to services perceived during their studing. Paired t-test was employed to test significant difference between the two means of expectations and perceptions. The results shows that there were difference regarding student's satisfactin level among faculties statistically. However, relation between the satisfaction level and income, gender and preference was not determined significant differenece statistically.

Key words: Service quality, education, satisfaction level

INTRODUCTION

The concept of service can be defined as actions presented for sale directly or ensured together goods' sale, although it isn't a definite discriminate between goods and services. However, services can more comprehend due to feature such as undurable, untouchable, no accumulate and not to be owner[1].

The main aim of all organizatisons is to present service to their customer. For success of organizations requires activities such as customers' satisfaction and continuousness to respond customers' need and expects. As the organizations can carry on its existence with customers, it is an important subject be aware that they are very important for them[2].

Quality is an ambigous concept. Though a number of authors have contributed to classifications and definitions of the the concept of quality there is still considerable confusion about application of quality. Quality as adaption to expectations is based on the customer's own assessment of quality but also include the producer's criteria via the expectations that tyey seek to market with their product or service. Therefore, quality as adaption to expectations has been placed slightly to the right of the perceived quality of the consumer[3,4].

Hayes state that knowledge of customer expectation and requirements is essential for two reasons. Firstly, it provides understanding of how the customer defines quality of service and products. Furthmore, customer satisfaction is recognized as of great importance to all commercial firms because of its influence on repetition of purchases.

Customer satisfaction is a psychological concept that involves the feelingi of well-being and pleasure that results from obtaining what one hopes for and expectations from an appealing product and/or service .The Satisfaction, reinforces positive attitudes toward the brand, they will be more likely to continue to purchase and use it and to tell other of their favorable experience with it[5].

Customer satisfaction has been defined as how well a customer's needs are met and how well the service delivered meets the customer's expectations[6]. Gronoos, indicated that the perceived quality of service is dependent on a comparison between expected and perceived service and is thus the outcome of a comparative evaluation process. Parasuraman, et al.[7] defined service quality as the degree and direction of discrepancy between a customer's perceptions and expectations, whereas perceived service quality is the gap between a customer's expectations and perceptions as a measurement of sercice quality. The smaller the gap, the better the quality of service and greater the customer satisfaction.

There are several ways to assess the quality of service and customer satisfaction through subjective, or objective criteria. These soft measures include customer satisfaction through subjective surveys and questionnaires to determine customer attitudes and perceptions of the quality of the service they are receiving.

From University's point of view customer (student) can be defined as o person used to realize of own ai and received service which is presented by university.

Corresponding Author: [1]M. Emin Akkilic, Vocational School of Havran Balikesir University, Balikesir, Turkey

Customer satisfaction is to compare the difference its expect from service and its receive from one. If customer'sperceptions exceed its expectations, it is mean that his/her satisfaction.

In the literature on quality, the quality gap appears when there is an inconsistency between the expectation of quality and the perception of quality (Zeithaml and Devlin). Perceived quality is a result of the customer's subjective assesment of the quality on presented product[8].

Within the last 15-20 years especially, research and practitioners have increasingly focused their attention on the determinats of service quality and how to improve this determinants . For example, Parasuraman *et al.*[9] provided a list of ten determinants of service quality as a result of their focus group studies with service providers and: reliability, access, communication, credibility, courtsy, competence understanding, tangibles and responsiveness. In the next phase of their research, Berry *et al.*[10] found a high degree of correlation between communication, competence, courtesy, credibility and securityy and on the other, between access and understanding and so they created two broad dimensions of assurance and empathy, that is, five consolidated dimensions. They then used the five dimensions-tangibles, reliability, responsiveness, assurance and empathy- as the bassis for their service quality measurement instrument, SERVQUAL[7,11,14].

It is generally agreed that the service quality is an attitude or global judgement about the superiority of the service, although the exact nature of this attitude is not agreed. It is also agreed that service quality is distinct from customer satisfaction, although the exact nature of this distinction seems to be somewhat blurred. Some argue that, while service quality is an overall attitude towards the service firm, customer satisfaction is specific to an individual service encounter[7,15] . For instance, a student may be very satisfacted with respond received from a staff for his/her question but all the students may not be satisfacted from this one.

Literature about quality showed that the individual perception of quality is ifluenced by a number of factors (prior experience, purpose of use, quality consiousness etc.). The dimensions of the product that influence the perception of quality are dependent on the given product[16].

Customers's satisfaction level in service sector is known as gap between the services that they expectation and perception. Accordingly, in this study, gap between customer' received services during their reading and expected before entering to their departments was investigated.

MATERIALS AND METHODS

This study was carried out on the last class students reading in faculties of Firat University. It was made only with the last class students since they received all of services in faculties. A questionnaire survey was carried out on 369 last class students.

A descriptive research design and a cross-sectional survey were used in this study. A self-administered survey questionnaire was used to collect data from the targeted samples. The structured questionnaire contained two parts. The first part was designed to assess customers' expectations before begining to her/his faculty or department. The second part relates to the last class students' received services during their reading. The response is asked to rate his/her expectations and receives of services on a five-point Likert scale ranging from 1 (very bad) to 5 (very good). The results of the survey are used to identify positive and negative gaps in the students' satisfaction level on the service quality dimensions.

Statistic analysis of study were carried out by using Analysis Of Variance and t-test technical in package program of SPSS for Windows. Cronbach' Alpha value to test reliability of scale in study was used. The reliability cofficient is 0.9037.

Variables and model of study: As convenience to the aim of the study, the probability relations and the model improved. In this study, model was formed to determine students' satisfaction level the result of perceived services from your faculty or department entered with preferences made by considering their expectations. This model contained five main factor of quality dimensions affected customer's satisfaction level. It was tested by used statictical technical effect on students' satisfaction of each factor.

Variables of study: The concept of service quality is difficult to quantify because of the nature of service itself. But most author agree that customers' expectations are rarely concerned with a single aspect of the service package but rather with many aspectts[17]. It was used as dimensions of service quality such as reliability, responsiveness, competence, access, commununication, courtesy, assurance and tangibles in this study.

Reliability: This dimension reflects the probability of a product malfunctioning or failing within a specified time period. Besides, the reliability and consistency of performance of service facilities, goods and staff.

Responsiveness: Responsiveness is speed and timeliness of service delivery. This dimension reflects the willingnessto help customers and provide prompt service. As a example, the help and concern for student of teachers and assistant personels can be shown.

Competence: Competence is known as required information and talent to service. This includes the carrying out of correct procedures, correct execution of customer instructions, degree of product or service knowledge exhibited by contact staff, the rendering of good, sound advice and the general ability to do a good job. In this study reflects teachers' number, level of information,and conditions of accomodation.

Access: The physical approachability of service location, including the ease of finding one's way around the service environment and the clarity of route. In study this dimension reflects access to service, teacher, internet, authorized and library of studenst in faculty.

Communication: The ability of the service providers to communicate with the customer in a way he or she will understand. This includes the clarity, completeness and accuracy of both verbal and written information communicated to the customer and the ability of staff to listen and understand the customer. This dimensioon of quality in study deals with situation regarding communication of students in faculty.

Courtesy: The politeness, respect and propriety shown by the service, usually contact staff, in dealing with the customer and his or her property. This includes the ability of staff to be unobtrusive and uninterfering when appropriate. This dimension in study reflects the respect, friendship, courtesy with student of staff.

Assurance: Personel safety of the customer and his or her pos while participating in or benefiting from th process. This dimension in study reflects stusafety laboratories, in faculty and in campus.

Tangibles: The appearance of physical facilities, equipment, personnel and communication materials, appearance of laborotovary, canteen and general clean of faculty as tangibles were considered in this study.

Model of study: The students take decisions after taking some factors such as their competence, their materiality, employing and social statute. These are based to draw a model as appropriate for aim of study.
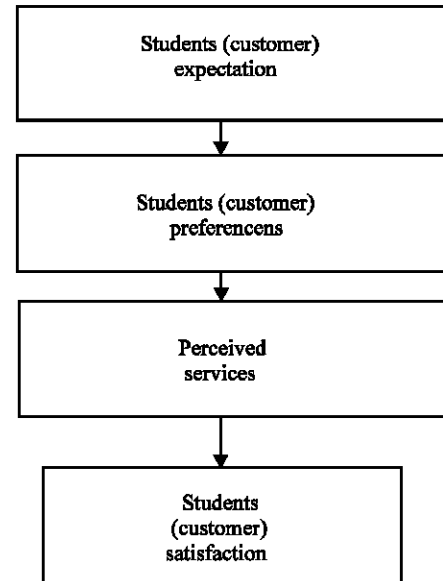

Fig. 1: The model of satisfaction level fomed for customer (student) the result of expectations and perceptations

As shown in fig. 1, this model will beusedtodetermine gap difference between the two means of students' expectations and perceptions. The model includes four phase. The first is customers' expectatinos. The second is customer's is preference.Because the customers is prefer by considering their expectatinos. The third is customer's perceptions. The fourth measures the customer's satisfaction by detecting the difference between customer's expection and perception.

RESULTS AND DISCUSSION

The 133 (36%) of the 369 questionnaires were female and 236 (64%) of them were male. The Table 1 shows the results of expectations regarding five factor of customers' service quality.The results showed that customers had the highest expectation reliability-assurance in service quality dimensions.It can be explained that its caused by the customers' aim to have a job.

Faculties; 1; Aquatic sciences 2; Engineering 3; Education 4; Divinity 5; Medicine 6; Veterinary 7; Arts and sciences 8; Technical education

Table 2 Shows the results of perceptions regarding five factor of customers' service quality. The results showed that customers had high perception responsiveness-competence while lower access-communication in service quality dimensions. The lower value is determinated as the cuortes-estemm.

Table 1: Determining of customers' expectations from their Departments or Faculties

		Tangibles		Responsiveness-competence		Access-communication		Courtesy-esteem		Reliability-assurance	
Facultied	N	X		SD		SD		SD		SD	SD
1	19	3.83	0.64	3.72	0.60	3.51	0.72	3.63	0.59	3.66	0.76
2	123	3.80	0.57	3.73	0.64	3.65	0.66	3.57	0.68	3.74	0.79
3	26	4.00	0.67	4.05	0.65	4.01	0.45	3.91	0.62	4.20	0.53
4	15	3.96	0.51	3.98	0.56	3.78	0.67	3.90	0.60	3.40	0.62
5	22	3.76	0.48	3.72	0.59	3.61	0.68	3.66	0.59	3.95	0.54
6	31	3.91	0.58	3.89	0.68	3.99	0.61	3.94	0.71	4.00	0.67
7	96	3.88	0.55	3.79	0.53	3.85	0.53	3.82	0.63	4.02	0.59
8	37	4.11	0.51	4.12	0.48	4.16	0.50	3.99	0.56	4.14	0.60
Total	369	3.88	0.56	3.83	0.60	3.80	0.62	3.75	0.66	3.90	0.70

$\overline{X}$:Mean, SD: Standard Deviation

Faculties; 1; Aquatic sciences, 2; Engineering, 3; Education, 4; Divinity, 5; Medicine, 6; Veterinary, 7; Arts and Sciences, 8; Technical Education

Table 2: Determining of customers' perceptions from your Departments or Faculties

		Tangibles		Responsiveness-competence		Access-communication		Courtesy-esteem		Reliability-assurance	
Faculty	N	X		SD		SD	SD	X		SD	SD
1	19	2.54	0.55	2.97	0.71	2.26	0.67	2.98	0.85	2.51	0.88
2	123	2.54	0.59	3.06	0.74	2.43	0.67	2.77	0.80	2.58	0.71
3	26	2.17	0.53	3.05	0.56	2.49	0.63	2.83	0.67	3.17	0.60
4	15	2.44	0.59	3.36	0.72	2.75	0.41	3.42	0.68	2.79	0.86
5	22	3.42	0.48	2.57	0.43	2.26	0.49	2.84	0.54	3.12	0.54
6	31	2.87	0.76	2.92	0.75	2.36	0.77	2.74	0.85	2.86	0.73
7	96	2.77	0.58	2.96	0.74	2.51	0.60	3.07	0.75	2.60	0.62
8	37	2.75	0.57	2.56	0.60	2.40	0.56	3.29	0.77	2.50	0.70
Total	369	2.67	0.64	2.95	0.72	2.44	0.63	2.85	0.80	2.68	0.71

Faculties; 1; Aquatic Sciences, 2; Engineering, 3; Education, 4; Divinity, 5; Medicine, 6; Veterinary, 7; Arts and Sciences, 8; Technical Education

Table 3: Comparison of customer'expectatiion and perception services (n=369)

	Expectaions		Perceptions		Gap score	
Factor	Mean(SD)	Rank	Mean(SD)	Rank	Mean(SD)	Rank
Tangibles	3.88(0.57)	2	2.67(0.64)	4	-1.21(0.82)	3
Responsiveness-Competence	3.83(0.60)	3	2.95(0.72)	1	-0.88(0.82)	1
Acess-Communication	3.80(0.62)	4	2.44(0.63)	5	-1.36(0.86)	5
Courtesy-Esteem	3.75(0.66)	5	2.85(0.80)	2	-0.90(0.94)	2
Reliability-Assurance	3.90(0.70)	1	2.68(0.71)	3	-1.22(0.94)	4

Note: SD;Standard DeviationGap mean score is defined as perception mean-expectation mean

Table 4: Comparison of customers' satisfaction level among faculties

Faculties	N	Gap mean (perceptions-expectations) (SD)	Rank
Aquatic Sciences	19	-1.02(0.53)[ab]	3
Engineering	123	-1.03(0.67)[ab]	4
Education	26	-1.30(0.54)[ab]	6
Divinity	15	-0.85(0.47)[b]	1
Medicine	22	-0.90(0.51)[b]	2
Veterinary	31	-1.20(0.63)[ab]	7
Arts and Sciences	96	-1.08(0.61)[ab]	5
Technical Education	37	-1.60(0.64)[a]	8
	F = 4.88	P = 0.00	

Mean in the line with superscirps differ significantly

Table 3 shows the gap means difference among service quality dimensions from customers'expectations viewpoint. As shown (Table 4) the highest value of quality dimension is belonging to reliaability-assurance (3.90), while the lowest is courtesy-estemm (3.75). From customers' perceptions viewpoint, the highest vaule is belonging to responsiveness-competence (-0.88), while the lowest is access-communication (-1.36).

Table 4 shows the gap mean among faculties regarding customer' satisfaction level. According to the results shown in (Table 4), the paired-samples t-test between the respective expectation means and perception means were significantly different (p<0.01). It was determined the lowest (-1.60) technical education faculty,

while the highest (-0.85) Divinity faculty. This is followed by medicine faculty (-0.90).For example, it can be explanationed regarding no response of their expectations having a job before going to faculty or department that satisfaction level is thelowest in faculty of technical education. Still, the satisfaction level is good, faculty of medicine for example, it is result from the possibility of finding a job. Furthmore, possibility to find a job before begining faculty, some law arrangement cause the decreasing satisfaction level of them.

The result of correlation analysis of the income, gender and preference as independet variables with overall satisfaction as the dependent varibable, Table 5. The p-values of all independent were more than the significant level of 0.05.

Table 5: Relation between customers' satisfaction level and income, gender and preference

FACTORS	N	Pearson's R	P
Satisfaction to income	369	-0,013	0.93
Satisfaction to gender	369	0,043	0.51
Satisfaction to preference	369	0,039	0.74

It should be noted that all the perception scores in relation to the service attributes in this study were lower than the expectation scores. The negative gap means indicated that the perceived service quality provided by faculties did not meet customers' expectations.

CONCLUSIONS

This study investigated customers' satisfaction level in faculties. The study findings revealed that there was a gap between customer expectations and perceptions, it terms of the quality of the service provided by faculties, meaning that customers' expectations of service quality were not met.

As it was looked to results of customers' satisfaction level among faculties the highest means were determined Faculty of Divinity (-0.85), Medicine (-0.90), Aquatic Sciences (-1.02), Engineering (-1.03), Arts and Sciences (-1,08), Education (-1, 30), Veterinary (-1.20) and Techical Education (-1.60). Besides, this differences were determined the result of analysis make as statistical (p<0.01). Especially, the gap other faculties and faculty of technical connects with no teaching deserves of some departmens in faculty of technical education.

As it was looked to results of customers' expectations with respect to service quality dimensions the highest means were determined as Reliability-Assurence (3.90). Tangibles (3.88). Responsiveness-Competence (3.83). Access-Communication (3.80) and Courtesy-Esteem (3.75). As for customers' perceptions the highest means were determined as Responsiveness-Competence (2.95). Courtesy-Estemm (2.85). Reliability-Assurance (2.68). Tangibles (2.67). and Access-Communication (2.44).

In this study it has been observed affected as negative customers' satisfaction level when expectations is lower than perceptions. While universities are make their advertisement. they should present to potential customer by considering a real their situation and necessity of era. Customer must make the choice after taking all the conditions of university. In this way, the difference between expectation and the perception can be reduce to the minimum level. And so, the customer' satisfaction level can be affected positively.

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