EVALUATION OF THE SERVICE QUALITY AND SATISFACTION IN THE TURKISH HIGHER EDUCATION IN TERMS OF INTERNATIONAL STUDENTS

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Abstract

Purpose- The purpose of the study is to explore the service quality of Turkish higher education, the satisfaction level of international students and the critical SERVQUAL dimensions in terms of international students' satisfaction

Research Methodology- A questionnaire was designed and applied by using SERVQUAL model to collect data from international students. The survey was conducted with 198 international students from different nationality, sexes and ages.

Findings- The results reveal that international students are poorly satisfied in general. They find the service quality of higher education poor. They are at most satisfied in tangible and reliable sense from their universities while the least satisfied area is assurance. The significant SERVQUAL dimensions for satisfaction were reliability, empathy and tangibility. Responsiveness and assurance were not significant.

Research limitations- Survey was implemented via internet. Face to face interview might be beter to make sure respondents understand the questions correctly.

Practical implications- The number of international mobile students was reached 5 million in 2016 and is estimated that will exceed 7 million by 2020. The expenditures of foreign students is around 30 thousand US dollars annually on average. Economically, 7 million international students will create a \$210 billion total market in 2020. The quality of education is the first element considered by foreign students in determining the country and university to study. Therefore, the service quality of higher education and the resultant satisfaction levels of international students must be determined consistently to attract international students.

Originality/Value- This study is one of the few studies regarding the service quality and satisfaction especially in the context of international students in the Turkish higher education.

Keywords: Higher Education, Service Quality, International Students, Satisfaction, Turkey

Jel Classification: 123, 014, 121, L8

Introduction

According to UNESCO Institute for Statistics, the number of international mobile students was 2.1 million in 2000, reached 3 million in 2005, 4.1 million in 2012 and 5 million in 2016. It is estimated that this number will exceed 7 million by 2020. Around one third of the international students in the world were studying in North America and one third in European countries. The first five countries that accept the most international students are USA, UK, France, Australia and Germany. Nearly half of international students are in English-speaking countries, including Canada and New Zealand (http://data.uis.unesco.org). Turkey is one of the major sources of countries that send students abroad.

In recent years Turkey has witnessed an enormous expansion in higher education. The capacities of universities have increased and consequently the enrollment rate in higher education has risen dramatically. Parallel to these important developments, the internationalization dimension of the Turkish universities could not be neglected. The number of international students in Turkey has increased recently. Students who come to study in a country provide economic and social benefits to that country. Foreign students spend on different items such as accommodation, health, nutrition, entertainment, and tuition fees. The expenditures can vary by countries and universities, but briefly the sum on average is around 30 thousand US dollars annually. Therefore, from an economic point of view, 7 million international students will create a total market of \$210 billion in 2020.

According to the US Department of Commerce in 2000, the contribution of foreign students in higher education to the US economy increased to the fifth rank in the service sector (Stephenson, 2004).

Hosting international students makes significant contributions to a country not only economically but in many different ways. International students helps to improve the quality of education, increase international project partnerships, contributes to culture and art as well as the economy. After graduation when students return to their home country they create commercial partnerships and they become volunteer advertisers of host countries. The satisfaction of foreign students is important for these reasons. The quality of education is the first factor considered by foreign students in determining the country and university to study (Becker & Kolster, 2012). Therefore the service quality

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of higher education and the resultant satisfaction levels of international students must be determined consistently to attract international students. However, academic researches on service quality in the Turkish higher education and satisfaction are few. International students in those studies were ignored. Some of the researches in Turkish higher education are as follows:

Tayyar and Dilseker (2012), studied the effects of service quality and image on students satisfaction. Isik (2012) examined the relations between demographic features and students satisfaction. Cevher (2015) investigated the perception of quality considering the service quality factors. Rahim Uddin et al. (2017) investigate how students perceive the environment, quality, and services that they are offered at a Turkish university and how satisfied they are with them. Ozturk and Cankaya (2015) and Cevher (2016), determines the level of satisfaction of foreign students in a university. Kondakci (2011), examines the rationales of inbounding student mobility in Turkey.

To improve the satisfaction level of international students their problems must be clearly determined and solved. Studies have shown that the most important problem experienced by foreign students is economical (Deressa and Beavers, 1988). But, all of the problems of international students are not economical. International students have experienced loneliness, psychological maladjustment, shyness, cultural shock and psychological problems (Biggs, 1999; Furnham, 1997). Yang (2006) in a qualitative study with 12 Chinese students in the UK, found out that sociocultural adaptation was the most important problem of Chinese students. Mori (2000) and Sandhu (1995) found that cultural differences and being homesick are important sources of stress for foreign students. In addition, there are many studies in the literature showing that students' prejudices about foreign students complicate the situation and cultural cohesion (Yoon ve Portman, 2004; Winkelman, 1994).

Unlike the previous studies in the Turkish Higher Education this study focuses on international students. There are three aims of the present study: the first one is to determine the perceived service quality of the Turkish higher education of international students by using SERVQUAL model. The second one is to determine the satisfaction level of international students with the Turkish higher education and the third aim is to examine the critical dimensions of SERVQUAL model in terms of international students' satisfaction in the Turkish Higher Education.

1. Service Quality

Quality has recently become one of the most important factors in global competition. Intensifying global competition and the demand for better quality products by customers have made more companies aware that they need to provide quality products and services to compete successfully in the marketplace. Quality concept is as old as the production activity of human beings. It has been developed and expanded in time according to technological advancement, increase of consciousness of the consumer and increase in competition conditions. The concept of quality control is initially assumed as sense of eligibility of design and producing product considering standards that determined during the design phase. The objective of quality control has been detecting the quality of final products and preventing defective products before customers. Nowadays, the concept of quality control focuses on control of production process instead of control of products. In process control, the process is monitored during the production for making corrections by necessary interventions to prevent producing defective products. Quality control techniques have been developed in order to achieve the goals and aims of quality. Statistical quality control techniques which are collecting, monitoring, evaluating and commenting data are very important in measurement and evaluation of the product quality. Statistical quality control techniques differentiate of manufacturing and service sectors.

Advances in information, technology and communication with globalization, the importance of service sector has increased in time. Proportionally, as the level of development of countries rise up, the share of service sector also increases in economy. Service is defined as a valuable action, deed, or effort performed to satisfy a need or to fulfill a demand. It is not measured numerically. In service sectors such as fields of health, education, banking, insurance and etc., quality is assessed by perception of consumers. That's why different techniques have been developed for measuring the perception of the service quality.

Service differentiates from products in terms of 4 basic features which are accepted most commonly (Fitzsimmons and Fitzsimmons, 2004):

Intangibility: service cannot be seen, tasted, or touched in the same manner as we can sense tangible goods.

Inseparability: service is produced and consumed at the same time

Heterogeneity: since services are performances, frequently produced by human beings, no two services are precisely the same.

Perishability: service cannot be saved, stored, resold or returned

Researches have shown that customers perceive the quality from many different perspectives such as features, reliability, performance, durability, conformance, service ability, aesthetics etc. (Kenyon, G., & Sen, K., 2012) . Therefore, quality cannot be completely assessed from one dimension. Service quality is an area that many researchers, particularly academicians and industry practitioners have worked and payed attention on forming service quality measurement models. Some of the main and mostly accepted and implemented service quality models in the field of service quality measurement are listed below.

Gronroos model, technical and functional model (Gronroos, 1984), Gap model (Parasuraman et al., 1985), Service quality - SERVQUAL (Parasuraman, et al., 1988), Servperf (Cronin and Taylor, 1992), Hierarchical model (Dabholkar et al., 1996), E-service quality model (Santos, 2003), HedPerf model (Firdaus, 2005-2006), E-S-QUAL model (Parasuraman, 2005)

Among these models, service quality model of Parasuraman (1988) has served as a framework for researchers in service industry for many years. The SERVQUAL model has been popular among researchers and used by numerous researches in measuring service quality due to easy application and detached simple theory. The model can be worked out by both quantitative and qualitative method. Parasuraman et al. (1988) has identified five basic key factors of service quality which were adopted and implemented for most of services. These dimensions of service quality and their perspective components are defined as follows:

Tangibles: Representing the service physically, are defined as the appearance of physical facilities, equipment, staff appearance, and communication materials that are used to provide the service.

Reliability: Ability to perform the service dependably and accurately. This means that organization delivers on its promises regarding delivery, service provision, and problem solution (i.e. a firm performs the service right the first time and honors its promises over a period of time).

Responsiveness: Willingness to help customers and provide prompt service. It is defined as willingness or readiness of employees to help customers and to provide prompt service. This dimension emphasizes attentiveness and promptness in dealing with customer requests, questions, complaints, and problems.

Assurance: Employees' knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence.

Empathy: Treating customers as individuals is defined as caring, individualized attention that the firm provides to its customers. The customers need to feel understood by and important to, firms that provide service for them.

2. Foreign Students In Turkish Universities

In recent years, Turkey has witnessed an enormous expansion in higher education. The capacities of universities have been increased and consequently the rate of schooling in higher education has risen dramatically. In parallel with these important progresses, the internationalization dimension of the universities could not be neglected. According to the Turkish Higher Education Council (YOK), the number of foreign students in the Turkish universities was 7661 in 1990, 16 thousand in 2000, 43 thousand in 2012, 55 thousand in 2014 and reached 110 thousand in 2017 (https://istatistik.yok.gov.tr/).

Turkish (https://istatistik.yok.gov.tr). However, universities which contain only 1,7 percent (by 2016, http://data.uis.unesco.org) of the international students that circulate all over the world, have not reached the desired level in terms of internationalization yet. But, Turkey's higher education has significant advantages in terms of internationalization to achieve the desired level. It has 206 higher educational institutions, over 163 thousand teaching staff serving 7,5 million university students. Turkey is the most attractive country in terms of the quality of education in the region. The major source countries sending their students to Turkish universities are Azerbaijan with around 15000 students, Syria with 15000. Turkmenistan with 10000, Iran with 6000, and Iraq with 5000. The potential that Turkey has in higher education can increase the number of international students in its universities.

3. The Methodology And Data Analysis

This study aims to determine the service quality and satisfaction level of international students in the Turkish universities and the critical factors of SERVQUAL dimension in the Turkish higher education in terms of international students' satisfaction. A questionnaire which was designed by using SERVQUAL dimensions by Oliveira (2009), was applied in this research to collect data from foreign students. In the survey, there are 25 questions (table 2) and they were exhibited via internet platform in two languages, English and Turkish to make foreign students to understand questions well.

The survey was conducted with 198 international students from different nationality, sexes and ages (table 1). 113 of the students were males, 85 were females. Survey includes 176 bachelor and 22 graduate students. 70 students in the survey were between 18 to 21 years old, 95 of them were 22-25 age group, 31 students were 26-30 range and 2 students were older than 31. The questionnaire was applied to the students via internet platform. A 5 point Likert scale is employed to measure students perceived quality on the service attributes, ranging from 1 (strongly disagree) to 5 (strongly agree).

		Frequency	Percent
	Male	113	57,1
Sex	Female	85	42,9
	Bachelor	176	88,9
Program	Graduate	22	11,1
	18-21	70	35,4
	22-25	95	48,0
	26-30	31	15,7
Age	31+	2	1,0
	Total	198	100,0

Table 1: Demographic factors

4. The Results

The completed questionnaires were checked for accuracy before entering the data processing software. Based on the tests done on the five dimensions of SERVQUAL in many industries and countries indicate that they are reliable and valid (Brysland & Curry, 2001; Lee, Kim, & Ahn, 2011; Naik, Krishna, & Gantasala, 2010).

In the table 2 the applied SERVQUAL questionnaire to the students and the results can be found. The SERVQUAL scale uses 22 questions to measure the five dimensions of service quality: reliability, tangibility, assurance, empathy and responsibility and 3 questions to measure the satisfaction. Questions 1 to 4 refer to the tangibility dimension, which obtained an overall average of 3,46. The reliability dimension is analyzed in questions 5 to 9, which obtained an overall average of 3,46. Questions 10 to 13 of the questionnaire refer to the responsiveness dimension and its overall average was 3,40. Questions 14 to 17 in the adapted SERVQUAL scale refer to the assurance dimension, which obtained an overall average of 3,28. The next five questions, 18 to 22, refer to the empathy dimension, which obtained an overall average of 3,33. The final 3 questions refer to satisfaction and its overall average was 3,36. Tangibility and reliability dimensions have the highest scores on average while assurance has the lowest average score.

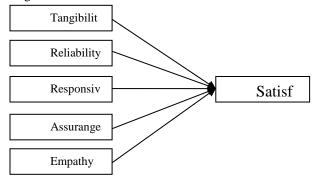


Figure 1: Theoretical model of study

According to the results of survey, foreign students are poorly satisfied with overall service quality of institutions. The mean scores of satisfaction and all SERVQUAL dimensions are under 4. While the area that foreign students are mostly satisfied with universities among others are that when something is promised by a certain time, it is always provided by staff, staff is well dressed and neat in appearance and the teaching staff respects lecture and exams schedules. International students are at least satisfied with the service of non academic faculty members such as faculty staff is friendly and polite, the behavior of faculty staff instills confidence in you and students are able to trust the faculty staff. Foreign students gave the lowest scores to the behavior of non academic staffs. Generally, they are mostly satisfied in tangible and reliable sense from their universities while the least satisfied area in their universities is behavior, trust sand friendship of staff.

		Mean	Std. Dev.
	The faculty has modern and latest equipment		1,165
	The appearance of the physical facilities of the faculty is attractive	3,47	1,237
Tangibility	Staff is well dressed and neat in appearance	3,53	1,116
	Library has the latest literature in your area of interest	3,43	1,215
	When something is promised by a certain time, it always is provided by staff	3,57	1,034
Reliability	When student have problem, staff is courteous, even if not able to help	3,41	1,099
	Courses are taught by highly knowledgeable professors	3,45	1,133
	The teaching staff respects lecture and exams schedules	3,52	1,102
	Faculty staff keeps accurate records	3,33	1,046
Responsiveness	Students are informed of schedules and changes in schedules in advance	3,46	1,125
	Service hours of learning facilities accommodate all students	3,48	1,06
	Faculty staff is always willing to help you	3,3	1,007
	Administrative staff are never too busy respond to student requests promptly	3,35	1,083
	The behavior of faculty staff instills confidence in you	3,21	1,091
Assurance	Students are able to trust the faculty staff	3,21	1,083
	Faculty staff is friendly and polite	3,21	1,141
	Teaching staff is dependable	3,49	1,098
	Faculty provided personal attention to every student	3,3	1,121
	Professors have convenient office-hours to advice student	3,43	1,043
	Staff member give students individual attention	3,25	1,026
Empathy	Faculty has students best interest as a major objective	3,38	1,078
	Faculty understands the special needs of students	3,31	1,104

I am satisfied with my decision to attend this University

If have a choice to do it all over again, I still will enroll in this University

I am happy that I enrolled in this University

Table 2: Descriptive statistics of SERVQUAL dimensions

The next aim of the study is to determine the critical factors of SERVQUAL dimensions for students' satisfaction in Turkish higher education. For this reason the following linear model was run.

Satisfaction

 $\begin{array}{l} Satisfaction = \beta 0 + \beta 1 \ Tangibility + \beta 2 \ Reliability \\ + \ \beta 3 \ Responsiveness + \beta 4 \ Assurance + \ \beta 5 \ Empathy + u \end{array}$

The results show that (table 3) the model fits as the f-value = 30,13 and p-value < 0,001. Moreover the

R-square is 0,44 which translates that 44% variance of the dependent variable (international students satisfaction) can be explained by the 5 SERVQUAL dimensions. Multi collinearity statistics results from table 3 show that there are no serious multi collinearity among SERVQUAL dimensions VIF of all variables are within the acceptable level, VIF<5

3,47

3,35

3,26

1,084

1,12

1,157

		В	Std. Error	t	Sig.	VIF
	(Constant)	,361	,252	1,434	,153	
	Tangibility	,138	,079	1,745	,083	2,095
	Reliability	,342	,104	3,296	,001	2,565
	Responsiveness	,043	,109	,398	,691	3,081
	Assurance	,114	,097	1,180	,240	2,755
	Empaty	,246	,093	2,630	,009	2,154

Table 3: Effects of SERVQUAL dimension on student satisfaction

Dependent variable: Satisfaction, R-square=0,44 F=30,13 Sig=0,000

The most important SERVQUAL dimensions are reliability and empathy which are significant at 1% level. One unit increase in their values increases international student's satisfaction by 0,342 and 0,246 units respectively. The third significant SERVQUAL dimension is tangibility and it is significant at 10% level. Responsiveness and assurance seem not statistically significant at an acceptable level. For high level of international student's satisfaction university administrations must consider the 3 important dimensions at most.

Conclusion

As a result of globalization, advances in information, technology and communication have resulted in a significant increase in service sector. The developments that have taken place in these areas have shown that the period we live in is called information age and in this age learning should be continuous and lifelong. One of the most important institutions in the information age is the educational institutions. From this point of view, the quality of the service that is provided by educational institutions becomes important. Therefore, studies have carried out on the measurement and development of the service quality in the educational sector has an important place in the service industry. As the result of this survey, the quality dimensions which are adopted from SERVQUAL, had taken medium scores from international students. Even the highest scores taken by reliability and tangibility of these institutions they are still low (3,46 both and under 4: agree or satisfied). International students gave the lowest scores to assurance dimension of service quality. International students satisfaction level is also low (overall average is 3,36 which is under 4: satisfied). The most important SERVQUAL dimensions which are affecting satisfaction are reliability, empathy and tangibility. Therefore university administrations should take care on these dimensions to improve satisfaction and attract foreign students. Responsiveness and assurance were not found significant for satisfaction at an acceptable level in this study.

International students spend on different items such as accommodation, health, nutrition, entertainment, and tuition fees. The expenditures can vary by countries and universities, but briefly the sum is around 30 thousand US dollars annually on average. Therefore, from an economic point of view, 7 million international students will create a total market of \$210 billion in 2020. Turkey has 206 higher education institutions, 7,5 million university students and over 163 thousand teaching staff. Therefore, Turkey's higher education has significant advantages in terms of internationalization. However, it is seen that the Turkish universities, which contain only 1,7 percent (by 2016) of the international students circulating all over the world, have not reached the desired level in terms of internationalization yet and are the steps to be taken in this regard. Hosting international students has significant benefits for a country not only economically but in many different ways such as improvement the quality of education, increasing international project partnerships, contribution to culture, art, peace and commercial partnerships.

Since the quality of education is the key element that is considered by foreign students when determining the country and university to study (Becker & Kolster, 2012), the most important point that needs to be developed is to improve the quality of education and to increase the number of researches carried out in universities to increase the number of international students. Universities can increase their chances of competition in the globalized education area by obtaining quality certificates from international organizations. The number of undergraduate and graduate programs providing education in foreign languages for international students should also be increased. Education ministries and higher education councils should organize exchange programs with countries. Universities should provide sports, music, and talent scholarships as well as achievement grants for attracting qualified students. Dormitory facilities for international students should be increased. Foreign students should be provided expedite and ease with bureaucratic issues such as visas, residence permits and work permits. International student office websites should be well structured and kept up-to-date with all the information and documents required by the students in multi-language. Since foreign students usually face with nonacademic staffs in the universities such as student affairs to solve their problems, nonacademic staffs should also know foreign language. There must be psychological units in the universities for

international students to support them in case of their psychological problems.

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