

Evaluating the Quality of Educational Services from the Viewpoints of Radiology Students of Ahvaz Jundishapur University of Medical Sciences, in Southwest of Iran

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Abstract

Introduction: One of the important criteria for assessing the quality of educational services in any university is the students' opinions. In this regard, this study aimed to assess the quality of educational services from the viewpoints of radiology students of the School of Paramedicine of Ahvaz Jundishapur University of Medical Sciences based on the SERVQUAL evaluation model.

Method: The statistical population of this descriptive and analytical study was all the 120 undergraduate students of radiology in Ahvaz Jundishapur University of Medical Sciences in southwest of Iran, of whom 115 were selected by census method. A standard questionnaire was used to collect data which were analyzed by SPSS version 22.

Findings: This study showed that there was a negative gap in all dimensions of the model. The corresponding gaps for each dimension are as follows (from highest to lowest): the assurance dimension (mean = 1.26), empathy dimension (mean = 1.16), reliability dimension (mean = 1.0), responsiveness dimension (mean = 1.09) and tangibles dimension (mean = 0.98). Also, there was no statistically significant difference between age, sex and academic year of the students and the percentage of the gap.

Discussion and Conclusion: Students' expectations were beyond their perception of the status quo, and none of the five dimensions of the quality of educational services met their expectations. Therefore, it is necessary for the university to narrow the existing gap according to its type and severity.

Key words: Quality of Educational Services, Students, Radiology, Ahvaz, Iran.

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Introduction

Universities are responsible for training specialized and committed forces of the community (1). It is said that the first world medical university, Gondi Shapur, was founded in Iran 1800 years ago (2-3). The quality of services is now recognized as the main explanation for the success of an organization in today's competitive environment, and any reduction in customer satisfaction due to poor service quality compromises its success. (4) In fact, the quality of services is the degree of compliance of services provided with customer expectations. Understanding and measuring customers' perceptions and expectations is an essential component that can be used to improve the quality of service-providing organizations (5). Over the past two decades, socioeconomic changes, rapid information development, and technological innovations and economic globalization on the one hand, and the disproportionate content of educational programs in relation to the needs of society and lack of knowledge and skills of college graduates on the other, have introduced higher education systems into a new era in which "competition" and "quality" are considered as the main determining factors (6). In the midst of the turmoil and competition of today's world, those organizations which care for meeting their customers' needs and wants will succeed and overcome other market competitors. In other words, according to the new philosophy of marketing, namely customer orientation, organizations align their individual and team objectives around satisfying and retaining customers. Today, customer satisfaction is one of the most commonly used terms in the workplace, and it undoubtedly involves creating quality products and services, in line with, or even beyond their expectations. Therefore, quality is the most important factor in global competition, and organizations have to offer high quality goods or services in order to survive successfully in the marketplace (7). Educational and research services, particularly those provided by universities and institutes of higher education, are one of the most important service areas in the community, which play an unparalleled role in the development of societies. Therefore, continuously paying attention to improving the quality of educational and research services is necessary (8). The higher education system of Iran has undergone various ups and downs in its history, and it has experienced tremendous changes during the last decade. A large number of new educational institutions have been established lately and the rate of their enrollment has increased accordingly, and with their overemphasis on the quantitative growth in the student population, they have obviously gone into extremes, resulting in a decline in the quality indices of higher education institutions in the country. Of course, the increasing rate of enrollment is not by itself a reason for the quality of higher education, but what counts as the main duties of a university is proper administration, retention and satisfaction of students (9). This is because in a competitive market, what creates distinction is service satisfaction, so student satisfaction is a decisive factor for the evaluation of higher education institutions (10). However, considering that many intangible factors affect customer service satisfaction, quality assessment remains a challenge (11). Studies conducted at some Iranian medical universities

show that there is a gap between students' expectations and perceptions about the quality of educational services, and higher education institutions have not yet been able to meet the expectations of students (4-11), and this may reduce student motivation and increase their dissatisfaction. Now that in Iran, the expansion of universities is moving from a quantitative stage to a qualitative level, and medical and paramedical sciences are among the most popular fields of study in Iran, (12) the need for such research is felt more than ever. In this regard, this study aimed to assess the quality of educational services from the viewpoints of radiology students of the School of Paramedicine of Ahvaz Jundishapur University of Medical Sciences based on the SERVQUAL evaluation model.

Materials and Methods

In this cross-sectional descriptive-analytical study, a total of 105 radiology students at the School of Paramedicine of Ahvaz Jundishapur University of Medical Sciences in southwest of Iran, were evaluated based on the SERVQUAL evaluation model in 2017. The statistical population included all the 120 students studying radiology at the School of Paramedicine. Sampling was done by census method and by distributing questionnaires among all of the students. All students were enrolled in the study. Out of the 120 distributed questionnaires, 105 questionnaires were completed and returned (response rate was 87.5%). Data were collected using a standard SERVQUAL questionnaire. The questionnaire consisted of two parts: personal characteristics of students and five dimensions of the quality of educational services (i.e., tangibles, assurance, responsiveness, reliability, and empathy). The validity of the questionnaire was confirmed, and its reliability was confirmed by Cronbach's alpha of 88%. In the tangibles or physical dimension, the students were asked about the physical environment of the service delivery including facilities, equipment, staff and communication channels, while in the dimension of assurance, they were supposed to answer questions regarding the competence and ability of the staff to inspire confidence in the service recipient. Questions relating to the responsiveness dimension, dealt with the willingness to cooperate and help the customer, whereas those in the reliability dimension were about the ability to serve in a reliable manner. Finally in the empathy dimension, the sense of belonging and commitment of the university staff towards students was the main concern. The questionnaire consisted of 26 items which were evaluated based on a five-choice scale (very low, low, moderate, high and very high). The students were asked about the ideal or desirable situation in the expectation component, and in the perceptions component, they answered questions about the status quo or what was available. Introduced by Parasuman et al in the early 1930s, the SERVQUAL model measures customer satisfaction based on the quality of the services provided, and the gap between the customer's expectations of the service provided and their perceptions of those services is determined. According to Parasuraman et al, this framework covers all dimensions of service quality. Perceptions focus on "how it is" while expectations deal with "how it should be" (13). Also, in this research, all the necessary ethical considerations were observed.

Findings

Table 1 shows the demographic information of the students. According to this table, 30.1% were male, 69.9% female, 97.7% single, 2.7 % married, and 64.4% were satisfied with choosing radiology as their field of study while 35.6% were not satisfied. Also, 38.2% of the students were freshmen, 22.8% sophomores, 20.4% juniors and 18.6% last year. As regards their age, 55.2. % were under age 34.8% between 21 and 25, and 10 % over 26. Table 2 also shows the scores of expectations and perceptions and their gap. This study showed that the expectations of students were beyond their perception of the status quo, and none of the five dimensions of the quality of educational services met their expectations. The description of the dimensions are as follows: assurance (mean = 1.26), empathy (mean = 1.16), reliability (mean = 1.10), responsiveness (mean =1.119) and tangibles (mean =0.98) had respectively the widest gaps. Also, the difference between men and women in the average gap and quality gap in the five dimensions of educational services was not statistically significant. There was no significant difference in the average gap in the five dimensions of the quality of educational services in terms of age and academic year of the students. Table 3 shows the Cronbach's alpha coefficient of the questionnaire in terms of the five dimensions of the quality of educational services.

Table 1. The demographic information of the participants

Variables	Percentage of individuals
Gender	
Male	30.1%
Female	69.1%
Total	100%(105)
Marital status	
Single	97.3%
Married	2.7%
Total	100%(105)
School year	
1	38.2%
2	22.8%
3	20.4%
4	18.6%
Total	100%(105)
Age	
Under 20 years old	55.2%
21-25	34.8%
26-30	6.5%
31-35	3.5%
Total	100%(105)
Satisfied with choosing radiology as their field of study	
Yes	64.4%
No	35.6%

Table 2. Average scores of expectations, perceptions and quality gaps in each dimension of the quality of educational services

Quality gap	Perceptions	Expectations	Items	Quality dimension
-0.71	3.30	4.01	Modern equipment	Tangibles
-0.97	3.08	4.05	Decoration	
-0.62	3.23	3.85	Class capacity	
-1.1	2.99	4.00	Hygienic and catering services	
-1.45	2.60	4.05	Greenery and relaxing places	
-1.04	2.99	4.03	Location of the educational institution	
-0.98	3.03	4.01	Total	
-0.88	3.05	3.93	Timely offering of the program	Reliability
-1.32	2.73	4.05	Offering flawless services	
-1.38	2.92	4.03	Timely information	
-1.09	2.88	3.97	Presence of the staff and faculty members at the designated times	
-1.1	2.95	4.05	Sufficient and up-to-date information of the staff and faculty members	
-1.1	2.90	4.00	Total	
-1.31	2.77	4.08	Responding to the students' complaints	Responsiveness
-1.03	2.93	3.96	Meeting the students' needs	
-1.21	2.82	4.03	Offering consultation by experts	
-0.81	3.08	3.89	Sufficient personnel in each section	
-1.04	2.78	3.82	Automated information	
-1.09	2.87	3.96	Total	
-1.41	2.58	3.99	Instilling in the students the confidence to continue learning	Assurance
-1.3	2.74	4.04	Creating trust in the student	
-1.48	2.56	4.04	The importance of personal student demands	
-1.1	2.82	3.92	Having sufficient knowledge for solving the students' problems	
-1.26	2.75	4.01	Feeling secure in interacting with the university	
-1.31	2.69	4.00	Total	
-1.38	2.67	4.05	Perception of the students' needs and problems	Empathy
-1.15	2.86	4.01	Service delivery without creating any stress	
-0.97	2.88	3.85	Designing curricula according to the students' needs and problems	
-1.21	2.78	3.99	Feeling relaxed and comfortable in interacting with the university	
-1.15	2.77	3.92	Willingness in solving the students' problems	
-1.16	2.80	3.96	Total	

Table 3. Cronbach's alpha coefficient of the questionnaire according to five dimensions of service quality

Cronbach's alpha coefficient		Dimensions of service quality
Perceptions	Expectations	
0.83	0.90	Tangibles
0.83	0.85	Responsiveness
0.80	0.84	Reliability
0.88	0.93	Empathy
0.86	0.90	Assurance

Discussion and Conclusion

The results of this study showed that there is a gap in all dimensions of the SEVQUAL evaluation model, and the expectations of students are beyond their perception of the status quo; in other words, in none of the five dimensions of the quality of educational services, the students' expectations were met. In this study, the widest gaps were respectively related to assurance, empathy, reliability, responsiveness and tangibles. In the studies of Kavousi et al (9), Enayti et al (8), Haresabadi et al. (4), Changizi Ashtiani et al. (10) in Iran, as well as Barnes in China (14), Chu in Canada (15), and Richard and Adams in the United States (16), the assurance dimension had the highest negative gap, which is consistent with our study. Determining the quality service gap can be a good basis for planning, prioritizing and deciding on resource allocation (17). A look at the results of research carried out inside and outside Iran reveals a quality gap in all or some of the five dimensions of services. The results of the present study are similar to some of these studies, while inconsistent with some others. It seems that due to differences in the courses and level of education, facilities, equipment, staff and faculty members in universities, as well as cultural, social and other characteristics in different societies, the views of service recipients on the quality of services and their perceptions and expectations could be different. Therefore, the results of this study cannot be generalized to other universities. Therefore, it is recommended that such studies be conducted in each university so that a model with a higher degree of conformity for each university could be obtained and the quality of educational services in that university could be improved by a better and more basic planning.

The existence of a quality gap suggests that in terms of fulfilling commitments and satisfying students' expectations, no effective planning and implementation has taken place. Considering the fact that there is a quality gap in terms of all the five dimensions of educational services, it is suggested that all year long the staff could be provided with courses on effective ways of offering educational services and on effective communication with students. As far as faculty members are concerned, using new teaching methods, counseling skills, and student communication skills could also be held in the form of workshops. In addition, providing students with adequate information and proper

planning for faculty classes, dedicating appropriate hours for the students to refer to their supervisors and advisors are other options that can be taken into account. Also, the managers and officials of the university should assign specific hours to answer the students' questions and try to solve their problems, and finally take advantage of the students' constructive views in educational planning.

Given that the expectations of the students were beyond their perception of the status quo, none of the dimensions of the educational services met their expectations. In order to improve the quality of educational services, all dimensions, especially the dimension of assurance and the dimension of empathy, should be taken into consideration.

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