Gap between the Expectations and Perceptions of Students regarding the Educational Services Offered in a School of Nursing and Midwifery

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## ABSTRACT

Education Section

**Introduction:** Awareness of students' opinions about the various aspects of training provided is an essential factor to evaluate the quality of education.

**Aim:** The aim of this study was to determine the gap between the students' expectations and perceptions from the educational services provided to them in the School of Nursing and Midwifery in Shahrekord University of Medical Sciences.

**Materials and Methods:** In this cross-sectional study, 320 students were selected by stratified random sampling method and data were collected by SERVQUAL questionnaire to examine the areas of assurance, responsiveness, empathy, tangibles and confidence. Data analysis was conducted by descriptive (frequency, percentage, mean±SD) and analytical (paired t-test, independent t-test and One-Way ANOVA) statistics in SPSS 20.

**Results:** The mean scores of the students' expectations and perceptions of the educational services delivered to them were  $4.34\pm0.63$  and  $3.56\pm0.68$ , respectively, with a significant, negative gap ( $-0.77\pm0.77$ , p<0.001). The lowest gap of quality was derived for assurance (-0.65) followed by reliability (-0.69), accountability (-0.74), and empathy (-0.81), and the greatest gap observed in tangibles (-0.96).

**Conclusion:** A negative gap was observed between the students' expectations and perceptions of the quality of educational services delivered to them. This means that the quality of services delivered to students was less than what they expected. The highest gap was related to the tangibles. In order to improve the educational services, paying attention to different areas of quality of educational services, especially, the tangibles, is necessary.

### INTRODUCTION

Higher education is an important type of investment in human resources which provides the knowledge, attitudes and skills required for students. The higher education plays a very critical role in the development of societies [1], and the educational services must be provided so that the students feel they are in a safe environment and thus providing more mental preparation for learning [2]. The educational institutions should teach the people who are responsible to take care of health in future generations and any neglect of duty, will create problems for societies [3].

The universities have many clients whose consent depends on to student satisfaction [4], including their parents as the clients paying cost for the students' education, the companies as the clients employing them, and the faculty members as the clients teaching the students what they need for employing [5]. Among these clients, the students have attracted the most attention as the main customers of higher education and during the higher education they receive a variety of services including registration, course selection and other related services [6]. Therefore, the students' viewpoints toward the offered educational services can be considered a quality index of universities [7]. Knowing the students views about the educational services provided, is the essential factor for assessment of academic education quality [8]. Determination of what the students perceive and expect can provide valuable information for planners to promote the quality of educational services [9]. If the education officials are not aware of the students' expectations, it can cause dissatisfaction for them [10], besides, the lack of a direct relationship with the students makes the decision-makers fail to set the right priorities and the educational services are unable to meet

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the expectations of students and therefore, a gap in quality can be created. The lower gap between the expectations of students and education provided services represents the high quality of educational services provided.

By determining the gap between the students' expectations and perceptions from the educational provided services, the planners can improve the quality of service and meet the students' needs [9].

Several studies have examined the attitudes of students from the educational services. The studies which conducted in other countries, have reported that there is a negative gap between the students' expectations and perceptions from the quality of educational services, and the highest gap has been related to the assurance area [11]. A study in Iran reported that the students' expectations from the provided educational services were not met [12]. Another study of Iran reported that the students' expectations from the educational services were higher than their perceptions of these conditions. This study recommended that workshops on customer services, communication skills and personnel's technical skills development must be planned for and held. Moreover, allocating more resources to improve educational facilities and physical environment is recommended [13].

Since, the university is responsible for promoting the scientific and cultural levels in a country, and in the current study setting, the students have expressed dissatisfaction with the educational services delivered to them, and the gap between the students' expectations and perception from the quality of delivered educational services, so far has not been studied in Shahrekord University of Medical Sciences, thus this study was conducted to determine the gap between the students' expectations and perceptions from the educational services delivered in the school of Nursing and Midwifery in Shahrekord University of Medical Sciences.

#### **MATERIALS AND METHODS**

The study population of this descriptive-analytical study consisted of all students of nursing, midwifery, operating room, and medical emergency studying in the school of Nursing and Midwifery in Shahrekord University of Medical Sciences, Ilam, Iran, in the first semester of the academic year 2015-2016. The students were studying in bachelor's degree programs. The study protocol was approved by the university's Ethics Committee (no. 1718) and the students signed a consent form to participate in the study. Sampling was conducted according to stratified randomization. By determining the proportion of students in each course and semesters, systematic sampling was carried out on 320 students, of whom 313 filled out the questionnaire and hence were studied. The inclusion criterion was students who have finished at least one semester, and transferred and quest students were excluded from the study. Data were gathered using SERVQUAL questionnaire in Persian language [14] which is freely accessible and has been used in several studies with confirmed validity and reliability [9,12]. This questionnaire has been developed to investigate five areas of quality of educational services in university, and consists of three sections. The first section is concerned with demographic characteristics of the students and the other two sections consist of the questions regarding the measurement of educational guality in terms of expectations and perceptions, scored by five-point Likert scale. Regarding the perceptions, the students were asked to express their perceptions of educational services by ticking an option, ranging from very good (scored as 5) to very poor (scored as 1). Next, the students expressed their expectations on desirable status of each item through ticking an option in the five-point Likert scale, ranging from very important (scored as 5) to relatively unimportant (scored as 1) in the same questionnaire. The five-area quality of educational services was assessed by the students using 27 items, consisting of four items on the tangibles, seven items on confidence, six items on empathy, five items on accountability, and five items on assurance. To determine the gap in educational services, the scores of the students' expectations were deducted from those of their perceptions. A negative score was considered as negative gap if the current situation was distant from the desired situation, a positive score considered a positive gap if the services had been reported to be delivered in an ideal, higher than expected manner, and zero represented no gap. It is noteworthy that there is no reference (cut off) point in this regard and the scores of expectations and perceptions are determined by the students' viewpoints and the gap is derived by subtraction of the expectations' score from the perceptions'.

# **STATISTICAL ANALYSIS**

Data were analysed by SPSS using descriptive statistics {frequency, percentage, mean (SD)} and analytical statistics (Paired t-test to compare the mean scores of expectations and perceptions, Independent t-test to compare the mean scores of quality gap according to gender (male or female), marital status (married or unmarried), One-Way ANOVA to compare the mean scores of quality gap according to academic years of study, course, and place of residence. A p-value of less than 0.05 was considered to be statistically significant.

## RESULTS

Of total 313 participants were included in the present study, 71% were female and 29% male. Mean age of the students was 22.8±4.03 years. The highest number (37.9%) of students studied in nursing and the lowest (8.4%) in medical emergency. Regarding grades, the highest number (89.6%) of the students studied in bachelor's degree

programs and the lowest (8.4%) at associate degree programs. Regarding semesters, the highest number (33.1%) of the students studied at the fifth semester and the lowest (8.1%) at the eighth. Nearly 61% of the students lived in dormitory, 35% with family, and 4% in rented houses. About 75% of the students were single and the rest married.

The findings indicated a negative significant gap between the students' expectations and perceptions of all five areas of the educational services' quality (p<0.001). This means that the quality of educational services did not meet the students' expectations and the scores of their expectations were greater than those of their perceptions. The lowest mean gap of quality was derived for assurance area (-65%) and the highest for tangible domain (-96%) [Table/Fig-1]. Overall, the mean values of the students' expectations from and perceptions of quality of educational services were above the average level [Table/Fig-1]. There was not a significant difference in the mean scores of quality gap according to gender (p=0.82), academic years (p=0.42), marital status (p=0.07), course (p=0.78), and place of residence (p=0.16).

#### DISCUSSION

The findings of current study showed a negative gap between the students' expectations and perceptions for all areas of educational services' quality. This means that quality of the delivered educational services was lower than what the students expected. The lowest mean gap of quality was derived for assurance followed by reliability, accountability, and empathy, and the greatest gap wain the tangibles. This means that the physical facilities including building, classroom, and equipments used by the teachers did not have sufficient attractiveness. In this regard, a study reported that the physical aspects of the environment such as room colour, lighting, ventilation and equipments might improve the quality of the delivered services [15]. Another study reported that the provision of appropriate educational spaces and optimization of available spaces can be effective in increasing the students' satisfaction [16].

The other gap in the present study was related to empathy area. Although the authorities of the studied faculty have attempted to provide fast and convenient services to the students, they were not satisfied and believed that the time of holding classroom sessions was not appropriate, the teachers did not exhibit flexibility in the specific situations happened to the students, the assignments given to the students was not compatible with the content taught to them, the school environment was not suitable for study and the teachers and staff did not treat the students respectfully. Similar findings have been reported in empathy area in different studies [12, 13]. Another gap between the students' expectations and perception of the quality of educational services was related to accountability. In this area, the negative gap indicates that the advisors are less available and the students have inadequate access to university authorities to transfer their comments and suggestions, training references for further reading are not introduced to students, student-teacher meeting times to solve the educational problems are unspecified, the students' opinions and suggestions about educational planning are neglected. However, in this area, there was a gap between the students' expectations and perceptions. This area has been reported with the highest negative gap in some studies [9,17], which is inconsistent with the present study. This inconsistency in the findings can be attributed to the efforts of school officials to specify the weekly visiting hours with students and visibility of teachers' daily program.

In assurance area, with the fourth mean value, there was a gap between the students' expectations and perceptions. This area has been reported with the lowest gap in some studies [18-20] which is partly similar to present study. The smallest gap in this study was related to the assurance which is in line with the findings of several other studies [21,22].

Service dimensions	Items	Expectations	Perceptions	Quality gap	р
Assurance	To facilitate discussing and debating on the subject in class.	4.35±0.86	3.68±0.91	-0.48±1.11	0.001*
	Adequate training and preparing the students for future job.	4.47±0.78	3.68±0.91	- 0.79±1.12	0.001*
	Allocating the time outside of class hours to answer the students' questions.	4.14±0.89	3.58±0.97	-0.56±1.21	0.001*
	Availability of research resources to increase student's expertise.	4.35±0.88	3.62±0.93	-0.73±1.14	0.001*
	Professors have sufficient specialized knowledge.	4.51±0.79	3.83±0.86	-0.67±1.1	0.001*
	Total	4.36±0.66	3.72±0.73	-0.65±0.84	0.001*
Accountability	Student access to faculty advisers if necessary.	4.32±0.91	3.61±0.99	-0.74±1.26	0.001*
	Student access to school administrators to transfer their training offers.	4.27±0.86	3.42±1.03	-0.85±1.24	0.001*
	Implementing the suggestions of students in educational programs.	4.33±0.84	3.33±1.11	-1.00±1.33	0.001*
	Providing appropriate research resources to students for further study.	4.23±0.89	3.69±0.94	-0.54±1.19	0.001*
	Given the hours of weekly meetings between students and teachers to meet the educational problems.	4.19±0.93	3.57±1.01	-0.62±1.28	0.001*
	Total	4.27±0.73	3.52±.79	-0.74±0.94	0.001*
Empathy	Relevance of the assignments given by teachers with relevant lessons.	4.1±1.06	3.6±0.91	-0.49±1.23	0.001*
	To be flexible in dealing with the specific circumstances of each student.	4.37±0.91	3.37±1/04	-1.00±1.35	0.001*
	The suitability of the formation of classes.	4.47±0.81	3.44±1.09	-1.03±1.36	0.001*
	Being a quiet place at school for studying the students.	4.37±0.85	3.45±1.07	-0.92±1.37	0.001*
	Appropriateness of the education deputy personnel's dealings with students.	4.41±0.81	3.67±0.97	-0.74±1.18	0.001*
	Respectful behaviour of teachers with the students.	4.49±0.79	3.81±0.84	-0.68±1.07	0.001*
	Total	4.37±0.66	3.56±0.73	-0.81±0.88	0.001*
Reliability	Presenting the lessons related to each other on a regular basis.	4.46±0.79	3.78±0.86	-0.68±1.04	0.001*
	Informing students of the results of evaluations carried out.	4.30±0.78	3.62±0.93	-0.69±1.2	0.001*
	To present course material in comprehensible ways for students.	4.48±0.8	3.67±0.95	-0.81±1.14	0.001*
	To obtain a better score if the students make further efforts.	4.37±0.84	3.6±0.97	-0.77±1.18	0.001*
	Proper keeping of the academic records of the students.	4.27±0.9	3.77±0.89	-0.51±1.08	0.001*
	Easy access to research resources available in university.	0.86±4.32	3.7±0.9	-0.61±1.1	0.001*
	Committed teachers and school staff in the performance of their duties.	0.84±4.36	3.61±0.94	-0.75±1.13	0.001*
	Total	4.37±0.68	3.68±0.7	-0.69±0.8	0.001*
Tangible	Adornment appearance of teachers and staff.	4.24±0.89	3.78±0.97	-0.46±1.18	0.001*
	Attractive appearance of the building, seats and classes.	4.31±0.87	3.07±1.2	-1.24±1.4	0.001*
	Being new and more efficient equipment and materials.	4.35±0.89	3.21±1.14	-1.14±1.39	0.001*
	Attractive appearance of teaching aids.	4.24±0.92	3.24±1.13	-1.01±1.39	0.001*
	Total	4.28±0.76	3.32±0.93	-0.96±1.09	0.001*
Total	Total score of five dimensions	4.34±0.63	3.56±0.68	-0.77±0.77	0.001*

Many researchers have investigated the quality of educational services using the SERVQUAL questionnaire [23-26]. SERVQUAL has greatly contributed to determining the strategies to identify and measure critical areas influencing the students' satisfaction in service sector organizations [15]. The findings of these studies have shown a negative gap in all areas in most universities. What differentiates the quality of different universities is the difference in the students' attitudes that determine the largest and smallest gap. This variety of attitudes may be due to various equipment and training spaces, difference in number of students and faculty members, the experience and skills of education staff, and difference in the training courses and scientific level of staff. In order to reduce the gap between the students' expectations from and perceptions of the quality of educational services delivered to them, university authorities need to consider the appropriate time for classes. Teachers should adjust the assignments given to students according to teaching content, teachers and staff should treat the students respectfully, faculty advisors should be available to talk with students about the educational problems, training references should be introduced to the students, student-teacher meeting hours should be clearly specified, and in educational planning, the comments and suggestions of the students should be considered seriously.

## LIMITATION

The present study had limitations. The implementation of the study only in one university which limits the generalizability of the results, was one of these limitations. Another limitation was lack of completion the questionnaire by some of the students. Obviously, the number of these students was low and this limitation does not undermine the study significance.

#### CONCLUSION

In the five domains of quality of educational services, there was a negative gap between the students' expectations and perceptions from the offered educational services in School of Nursing and Midwifery. This means that the quality of the delivered services was lower than what the students expected. Therefore, educational authorities should seek to eliminate the gap between the students' expectations and perceptions.

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