

Quality assessment of Physical Education in Shahriar city based on SERVQUAL model

Evaluación de la calidad de la Educación Física en la ciudad de Shahriar según el modelo SERVQUAL

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Abstract: The objective was to assess the quality of Physical Education in secondary schools of Shahriar city using the SERVQUAL model. The sample consisted of 336 (217 males and 119 females) secondary school students of Shahriar in 2019-2020. The distribution of the students was: 166 students (49.4%) of tenth grade, 132 students (39.5%) of eleventh grade and 38 students (11.1%) of twelfth grade. An adaptation of SERVQUAL questionnaire was the instrument used, with the title "Quality of Service in Physical Education" (Cronbach's alpha=0.949). Data were analyzed with SPSS 16. The quality of the desirable educational services was significantly ($p<0.01$) higher than the quality of the available educational services in all the dimensions studied: Tangibles, Reliability, Responsiveness, Assurance, Empathy. For tenth grade students, the most important dimension was tangibles and the least important was responsiveness. For eleventh grade students, the most important dimension was assurance and the least important was responsiveness. For twelfth grade students, the most important dimension was assurance and the least important was empathy. The findings of this study can be used to improve education quality in schools, particularly in Physical Education.

Keywords: Physical Education, Shahriar, Iran, SERVQUAL.

Resumen: El objetivo fue evaluar la calidad de la educación física en las escuelas secundarias de la ciudad de Shahriar utilizando el modelo SERVQUAL. La muestra consistió en 336 (217 hombres y 119 mujeres) estudiantes de secundaria de Shahriar en 2019-2020. La distribución de los alumnos fue: 166 alumnos (49.4%) de décimo grado, 132 alumnos (39.5%) de undécimo grado y 38 alumnos (11.1%) de duodécimo grado. El instrumento utilizado fue una adaptación del cuestionario SERVQUAL, con el título "Calidad de servicio en educación física" (alfa de Cronbach=0.949). Los datos se analizaron con SPSS 16. La calidad de los servicios educativos deseables fue significativamente ($p<0.01$) mayor que la calidad de los servicios educativos disponibles en todas las dimensiones estudiadas: elementos tangibles, fiabilidad, sensibilidad, seguridad, empatía. Para los estudiantes de décimo grado, la dimensión más importante fue la de elementos tangibles y la menos importante fue la de sensibilidad. Para los estudiantes de undécimo grado, la dimensión más importante fue la de seguridad y la menos importante la sensibilidad. Para los estudiantes de duodécimo grado, la dimensión más importante fue la de seguridad y la menos importante fue la de empatía. Los resultados de este estudio pueden usarse para mejorar la calidad de la educación en los centros educativos, particularmente en Educación Física.

Palabras clave: Educación Física, Shahriar, Irán, SERVQUAL.

1. Introduction

The Iranian Ministry of Education is recognized as the most important formal education organization in Iranian society. The education system is responsible for teaching and facilitating learning in the course of pre-set goals. It also has the task of guiding and nurturing the growth of its learners, so they can gain knowledge and understanding of accepted social norms and it also helps them to flourish their talents (Mohammadi, 2009).

If the development planning is at the core of improving human life and building a knowledge-based society, it is important to recognize that education, especially school education, plays an important role in advancing the goals of society and in the achievement of sustainable development. The quality of teaching and research is one of the main concerns of the education system in Iran. In consequence, education in

schools requires the implementation of services of acceptable quality (Fathi, 2004).

Considering the important role of the education system in the training of specialized human resources that can accelerate the movement of society towards universal development, the importance of the qualitative aspect of education becomes more and more evident (Aghamolaei & Zare, 2008). An education system that disregards the demand for skills leads to a quantitative growth of unproductive workforce and, in consequence, to the appearance of unemployment.

This issue concerns all the developing countries, not only Iran. Therefore, it is necessary to pay special attention to the quality of education services in order to avoid wasting resources and investments and in order to promote community growth and development. The services of the educational institutions offered to their students are no exception to the fundamental principle of quality and the opinion of the students can be crucial for the proper evaluation of the quality

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of services and for the further investments and improvements in educational facilities (Sofizadeh, Farahani, Keshavarz, & Abbasi, 2011).

The interest, awareness and commitment of school staff, especially teachers, in enhancing and implementing comprehensive quality management and providing desirable educational services are also very important (Craft, 2018). The new methods of worldwide education systems have been introduced as a necessity and educational need of learners of different backgrounds and cultures, with the aim of creating opportunities for study in different areas (Hosseini, 1997).

It is worth noting that each new method is evaluated and applied according to the characteristics and changes that it brings to the education system. Also, there are many differences between the concepts of quality in education and they can be categorized into several perspectives: continuity, production-services, monetary value, efficiency and effectiveness, and entrepreneurial transformation (Sahney, Banwet, & Karunes, 2004).

Accordingly, the quality of service provided can play an important role in the efficiency and effectiveness of an organization. Parasuraman, Zeithaml & Berry (1985) considered service quality as a function of the difference between customer expectations and perceptions of service performance. They presented a model based on a gap analysis. The model was called SERVQUAL (Parasuraman, Zeithaml & Berry, 1988). SERVQUAL is a model in which the quality of service provided can be enhanced by reducing the gap between customer expectations and perceptions, thereby achieving significant competitive advantages. The main basis of SERVQUAL is to identify and measure the gaps in the service delivery model. Based on this model, Parasuraman et al. (1985) identified five dimensions of service quality:

1. Tangibles: Physical facilities, organizational equipment and staff appearance.
2. Reliability: Ability to provide accurate and reliable services.
3. Responsiveness: Desire to help customers and provide a fast service.
4. Assurance: Knowledge and courtesy of employees and their ability to convey confidence.
5. Empathy: Providing personal attention to each customer.

As providers of educational services, schools should devote all their efforts to provide students with the desired educational services. The most important purpose of school education is to provide educational services to the community. To date, most of the studies in this field have focused on the perspectives about these services of parents, teachers and administrators. Therefore, the objective of this study was to assess the quality of Physical Education in secondary schools of

Shahriar city using the SERVQUAL model, from the perspective of the students, as they are the specific audience of the educational system and the main recipients of educational services. With this purpose, this study compares the quality of the desirable and available educational services and analyzes the perceptions of quality of educational services by student's grades (tenth grade, eleventh grade and twelfth grade).

2. Methods

2.1. Participants

The sample of the study consisted of 336 (217 males and 119 females) secondary school students of public and non-public schools of Shahriar in 2019-2020. The distribution of the students was: 166 students (49.4%) of tenth grade, 132 students (39.5%) of eleventh grade and 38 students (11.1%) of twelfth grade. Regarding the field of study, 139 students (41.6%) studied sciences, 70 students (20.6%) studied humanities and 127 students (37.8%) studied mathematics. With regard to sports, 147 students (43.6%) had no sports background, 90 students (27%) were members of school teams and 99 students (29.4%) were members of urban sports clubs.

2.2. Instruments

An adaptation of SERVQUAL questionnaire (<https://en.wikipedia.org/wiki/SERVQUAL>) was the instrument used in this study. The SERVQUAL is an instrument consisting of two parts: 1) Customer expectations section (22 questions). 2) Customer perception section (22 questions). According to the dimensions of SERVQUAL, an adaptation for the present study was developed with the title "Quality of Service in Physical Education". The validity and reliability of this new questionnaire were confirmed by sport management experts (Cronbach's alpha = $\alpha = 0.949$).

2.3. Data analysis

Data were analyzed using Kolmogorov-Smirnov test, paired sample t-test and analysis of variance (ANOVA). The statistical analysis was performed with the software SPSS 16. Levels of significance were set at $P < 0.05$.

3. Results

The quality of the desirable educational services was significantly ($p < 0.01$) higher than the quality of the available educational services in all the dimensions studied: Tangibles, Reliability, Responsiveness, Assurance, Empathy. (Table 1).

Table 1. Comparison of the quality of the desirable and available educational services.

Dimensions of quality of educational services		M	SD	T	DF	Sig.
Tangibles	Desirable	3.2390	1.50572	12.576	320	0.001*
	Available	2.4910	0.74397			
Reliability	Desirable	3.5686	0.76098	13.590	326	0.001*
	Available	2.8383	0.76609			
Responsiveness	Desirable	3.4934	0.73663	12.676	323	0.001*
	Available	2.9274	0.75044			
Assurance	Desirable	3.8237	0.70723	15.149	328	0.001*
	Available	3.0623	0.92311			
Empathy	Desirable	3.5335	0.85979	10.938	320	0.001*
	Available	2.9937	0.91585			

M=Mean. SD=Standard Deviation. DF=Degrees of Freedom. * $p < 0.01$

There were significant ($p < 0.05$) differences in the perceptions of the quality of the educational services by student's grades (tenth, eleventh and twelfth) in four of the five dimensions studied: Tangibles, Responsiveness, Assurance, Empathy. (Table 2).

Table 2. Differences in perceptions of quality of educational services by student's grades

Dimensions of quality of educational services	DF	Sig.
Tangibles	335	0.004*
Reliability	335	0.084
Responsiveness	335	0.013*
Assurance	335	0.010*
Empathy	335	0.002*

DF=Degrees of Freedom. * $p < 0.05$

For tenth grade students, the most important dimension was tangibles and the least important was responsiveness. For eleventh grade students, the most important dimension was assurance and the least important was responsiveness. For twelfth grade students, the most important dimension was assurance and the least important was empathy. (Table 3).

Table 3. Comparison of perceptions of quality of educational services by student's grades.

Grades	Dimensions of quality of educational services	Averages (from highest to lowest)
Tenth grade	Tangibles	5.61
	Reliability	4.94
	Empathy	4.84
	Assurance	4.43
	Responsiveness	4.23

Grades	Dimensions of quality of educational services	Averages (from highest to lowest)
Eleventh Grade	Assurance	5.56
	Empathy	5.32
	Reliability	5.24
	Tangibles	4.87
	Responsiveness	4.42
Twelfth Grade	Assurance	7.63
	Reliability	6.21
	Responsiveness	4.54
	Tangibles	4.27
	Empathy	4.21

4. Discussion

The results showed that there was a significant difference between the desired and the available physical education quality ($p < 0.05$). This difference was significant in all dimensions of quality of physical education: Tangibles, Reliability, Responsiveness, Assurance, Empathy. Therefore, the perspective of the students analyzed was that the physical education they received was worse than the physical education that they expected and, in consequence, they might lose their initial motivation for physical education lessons.

These results are similar to those of previous studies that evaluated also the quality of educational services using the SERVQUAL model (Khatibi et al., 2011; Soita, 2012; Warren, 2011). Furthermore, an education system that do not provide good services to its students cannot expect good human resources and workforce in the future. This is why the authorities should do as much as possible to improve the quality of the educational services provided to students.

We also found that there were significant ($p < 0.05$) differences in the perceptions of the quality of the educational services by student's grades (tenth, eleventh and twelfth) in four of the five dimensions studied: Tangibles, Responsiveness, Assurance, Empathy. These results are in line with the re-

sults of Cheng Lim & Tang (2000), Parasurman et al. (1988) and Sewell (1997). One possible reason for this result is that twelfth-graders were less likely influenced by external factors (tangibles) than tenth-graders, because twelfth-graders were preparing the college entrance exams. Also, students of different grades may have different demands due to different educational environments, and younger students might be more likely to interact with teachers.

Thus, schools need to adopt conditions that minimize these gaps and meet students' expectations. It is generally considered that teachers of physical education are honest and trustworthy and that they are willing to assist students and resolve their problems and provide them with the new and up-to-date information. Furthermore, schools should respond to the requests and complaints made by students and parents as far as educational services are concerned. Schools should provide relevant information on the educational servi-

ces available to students and meet the deadlines. Also, school authorities and teachers should provide educational services that support students' progress. This will assure the adequate development of the country.

In conclusion, the results of this study showed that there is a growing need for people who can provide high quality educational services to students, especially in physical education. The findings of this study can be used to improve education quality in schools, particularly in physical education. As the main weaknesses detected in this study were lack of educational facilities and problems with reliability and empathy, it is recommended that schools and teachers try to solve these specific issues. Finally, it is suggested that schools implement suggestion boxes to follow students' feedback on quality of educational services and try to improve all the weaknesses detected.

5. References

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