



## Educational Services Quality Analysis

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**ABSTRACT:** The goal of this study was to determine gaps in perceptions and expectations of students in University of Tehran using Service Quality Model (SERVQUAL) in 2012 based on a descriptive-analytical study. Study population consisted of all students in various majors at Tehran University. The participants were selected based on a multistage sampling. In the first stage, participants were chosen from each school according to ratio-stratified sampling, and then subjects were selected randomly in each stratum. Sample size was given as 205 regarding 95% confidence, 0.8 standard deviation and 0.1 accuracy. SERVQUAL standard questionnaire was used for data collection. Data was analyzed via inferential statistical methods including Pearson Correlation coefficient, t-test and Wilcoxon Test using SPSS. The results showed a gap in all five educational service dimensions. The least gap average was seen in the tangibility dimensions (5.81) and the highest gap average was for confidence (9). There was a significant difference between students perceptions and expectations (quality gap) in all five service dimensions ( $P < 0.001$ ). Students' satisfaction played a significant role in the improved educational service quality, thus it should be attempted to eliminate or mitigate gaps in current and optimal statuses.

**Key words:** Educational service; Student University; Quality; Seroquel

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### INTRODUCTION

Quality of service is a major factor in the success of an organization in today's competitive environment, and any reduction in customer satisfaction is not acceptable (Ghobadian and Speller, 1994). Customer orientation is considered as good management in many efficient and effective organizations (Sharma and Gadenne, 2001) and quality is defined as customer's wants in the new methods of management (Sharma and Gadenne, 2001). In fact, the quality of service means compliance services with customer expectations (Van Duong et al., 2004). Customers or recipients of the service perceive the service quality by comparing their expectations and perceptions of services provided (Lim and Tang, 2000).

On the other hand, managers often do not have the same understanding about the real perceptions and expectations of service receivers, and this will damage the quality of service (Donnelly et al., 1995). One of the reasons may be lack of direct relationship between them and customers as well as lack of research about perceptions and expectations. Accordingly, decision makers will not be able to prioritize matters appropriately, and it causes that customer's demands are not met and thus quality gap is created (Sewell, 1997).

An important challenge for organizations in current competitive situation is awareness of customer's satisfaction and their opinions about organization performance, products and services. Capability of momentary customer satisfaction monitoring provides context for adopting proper policy in competitive environment (Noronesa et al., 2008) since customers of service organizations are the sole

reference to verify offered service quality due to major differences between service provision and product production processes (Sadeghi, 2008).

Understanding and evaluating customer's perceptions and expectations are a necessity which can be used to improve the quality of services in service provider organizations (Sadeghi, 2008). Parasuraman et al. (1985) define service quality gap as the degree of difference between customer's expectations and perceptions of service performance. The major step for compensating this gap is recognizing customers' perceptions and expectations of service quality and determining the gap level. Accordingly, not only are conscious prioritizing and strategic resource allocation facilitated, but also a basis is provided to improve service quality and increase customers' satisfaction so that they will be more encouraged to receive service (Karydis et al., 2001).

Previous studies indicated that quality gap varies in different demographic groups (Campbell et al., 2001). SERVQUAL has become one of the most popular service quality measures currently in use since its introduction in 1988. The instrument was developed in marketing by researchers who were investigating the gap between a consumer's expected and perceived level of service (Miller et al., 2011).

In 1988 Parasuraman, Zeithaml, and Berry developed a generic instrument called SERVQUAL to measure service quality based on input from focus groups. Although SERVQUAL was developed within the marketing sector, it also is used in a variety of organizational settings, including libraries and information centers. Since 1988 Parasuraman et al. have made numerous changes to SERVQUAL, some in

response to problems identified by other researchers. For instance, in 1994 they reported on three different SERVQUAL formats; they recommended that researchers use a format that separated customer expectation scores into tolerance zones.

Researchers have continued to use SERVQUAL instruments. In 1997, Van Dyke, Kappelman, and Prybutok employed SERVQUAL in an IS context, while in 2002 Banwet and Datta measured IT service quality in a library service, as did Landrum and Prybutok in 2004. Still, some researchers question the appropriateness of using SERVQUAL in an IS or IT context; others disagree about whether the service quality should be the difference between expected and perceived service. Parasuraman et al. (1988) stated that since service quality depends on the relationship of customer expectations with customer perceptions, it is appropriate to calculate service quality by subtracting expected from perceived service (Landrum et al., 2009).

In a study entitled "SERVQUAL dimensionality: an investigation of presentation order effect in 2011" Miller, Hardgrave, & Jones examined a potential issue in measuring service quality using the SERVQUAL instrument. Specifically, it is argued that SERVQUAL's dimensions are largely the product of presentation order effects. As such, the study conducted herein was designed to show that a simple change in the presentation of the instrument significantly alters the resulting dimensional structure. By comparing randomized and non-randomized questionnaires, it was shown that the factor structures were not congruent. From this result, it can be inferred that the dimensions commonly reported in SERVQUAL literature are more a product of item grouping than they are true representations of underlying service quality dimensions. As the first study to demonstrate the effect of presentation order on SERVQUAL's dimensional structure, this work made a significant contribution to the ongoing dimensionality debate. In addition to its examination of presentation effects, this work also made a contribution to expand service quality literature by showing that SERVQUAL's five dimensional structure produces a poor fit in a confirmatory factor analysis. (Miller et al., 2011).

SERVQUAL model is a model which is used to evaluate service quality through analyzing the gap of customer's expectations and perceptions. It is also called 'gap analysis model' developed by Parasuraman and Zint-Hamel (Brooks et al., 1958; Caruana and Ewing; 2000). Ultimate goal of this model is providing a guide to superior performance in organizations (Andaleeb, 2002; Bodvarsson; 2002).

In a study entitled "service quality evaluation in university-service sector outlook in 2007" by Smith and Cakerk using SERVQUAL, it was found that evaluating

customer perspective and voice is vital to service provision. It confirms the results of previous studies regarding difference in SERVQUAL dimensions in public and private sectors. In addition, it states that service quality gap is equally important for staff and students. Of course, there are some specific differences and variability that are regarded as the most important dimension of all customers with the highest impact on improved service quality (Smith et al., 2007).

Higher education system as a dynamic, smart and purposeful system that faces new challenges has qualitative and quantitative dimensions. Its sustainable development requires harmonious, balanced and parallel development in both qualitative and quantitative dimensions. Qualitative development in higher education system, regardless of the quality, has outcomes such as academic failure, academic affiliation, brain drain, lack of entrepreneurship, and weakness of knowledge production (Ashrafi and Rajabi, 2005).

Considering the importance of quality role in service organizations, educational centers should adopt a strategic and dynamic approach towards service quality management and regard quality as a source for prompting organization's service in comparison with other competitors.

On the other hand, students are the main customers of universities and determining their perception and expectations of the educational service quality can provide valuable insights for planners in order to promote educational service quality (Kebriaei and Roudbari, 2005). By understanding perceptions and expectations, not only are conscious prioritizing and strategic resource allocation facilitated, but also a basis is provided for service quality to be improved and service receivers' satisfaction to be increased and hence customers will be more encouraged to receive service from organizations (Karydis et al., 2001). Currently, students' views on all educational dimensions are investigated in educational institutes around the world and it is regarded as a necessary factor in university quality monitoring (Hill et al., 2003).

Quality management should be regarded different from service and manufacturing industries. These models should be fitted in educational sectors. Given well known methodologies in service quality, SERVQUAL is used commonly for evaluating educational service quality (Chua, 2006).

Providing trained and professional human resources in Iran is under responsibility of Ministry of Science, Research and Technology; however, other ministries and executive entities also participate in training professional human resources. Considering the fact that universities in Iran are being directed from quantitative stage towards qualitative one, it is

necessary to evaluate perceptions and expectations of students in order to analyze its gaps, plan to reduce or mitigate current shortcomings, compare current status with other competitors, review processes, and gain competitive advantages (Jorabchi, 2001).

Considering the importance of this issue due to the fact that there has been no study on educational service quality gap at University of Tehran, the present study attempted to investigate students' perceptions and expectations gap of educational service quality in five dimensions: empathy, reliability, assurance, accountability, physical and tangible dimensions in this university in 2012. The goal of this study was to determine gaps in perceptions and expectations of students in University of Tehran using Service Quality Model (SERVQUAL) in 2012 based on a descriptive-analytical study.

**MATERIAL AND METHODS**

This study was conducted as a descriptive-analytical study in 2012. Study population consisted of students in second year and above in University of Tehran-Iran who were studying in educational year of 2012 in Education, Psychology, Management, and Economy faculties. Sampling was done based on multistage sampling. First, sample of students was selected as ratio stratification from each school, and then subjects were selected randomly in each category. Inclusion criteria were students passing at least one semester. Regarding 95% confidence, 0.8 standard deviation, and 0.1 accuracy, given sample size was 205. Since the stratified sampling method has been used in this study, sample size in faculties is as follows: School of Education 85, School of Psychology 55, School of Management 42 and School of Economy 23.

Research tool was SERVQUAL standard questionnaire with 27 items which measure students' perception and expectations gap in five dimensions: empathy (6 items), reliability (7 items), assurance (5 items), accountability (5 items), and tangibility (4 items) all based on five points Likert scale. Validity and

reliability of this questionnaire has been reviewed and approved in University of Zahedan (Kebriaee, 2005). The questionnaire was distributed in two stages among sample groups. At the first stage, students were asked about educational service quality (perception of current situation) and in the second stage, they were asked that how educational service quality should be (expectation of optimal situation). Data were analyzed using SPSS software. Descriptive statistics like frequency, ratio, percentage, mean, variance and standard deviation were used for data statistical description. For data analysis, inferential statistical methods including Pearson Correlation test, t-test and Wilcoxon test were used to find out significant differences in perceptions and expectations of each questionnaire items.

**RESULTS**

The total 205 students who participated in the study are shown in Table 1. School of Education had the most students and School of Economy had the fewest. Table 2 gives average numbers for perceptions, expectations and gap in education service quality in items related to five dimensions. There was quality gap in all statements. The highest quality gap (easy access to the School of Management) was for accountability and the lowest gap (respectful treatment of instructors to students) and (recording and maintaining student academic records properly) was for empathy and reliability. As it is seen in Table 3, there is overall quality gap in all five educational services. Lowest gap average was in tangibility dimension (5.81) and the highest gap was in reliability dimension (9). Comparison of students' perceptions and expectations (quality gap) in all service dimensions showed significant difference at ( $P < 0.001$ ).

As it can be seen in Table 4, comparison of perceptions and expectations of students in different schools regarding current situation and optimal situation shows no significant statistical difference at ( $P > 0.05$ ).

**Table 1.** Number of students in study

Schools	Number
Education	85
Psychology	55
Management	42
Economy	23
Total	205

**Table 2.** Average numbers of perceptions and expectations and gap in service quality in terms of five dimensions

Variable	Description	Perceptions	Expectations	Gap
Assurance	Facilitating discussion and exchange of views	3.15	4.53	1.38
	Preparing students for future job	3.08	4.64	1.56
	Allocating time to response and explain by the faculty member.	3.21	4.44	1.23
	Adequate study resources	3.26	4.51	1.25

Responsiveness	The specializing knowledge of faculty members	3.06	4.62	1.56
	Availability of faculty members	2.86	4.52	1.66
	Availability of faculty managers	2.75	5.01	2.26
	The recommendation of students about educational issue	2.56	4.40	1.84
	Study resources for future study	3.11	4.45	1.34
Empathy	Allocating time for student to refer to the faculty member	2.80	4.37	1.57
	Offer appropriate assignment	2.87	4.30	1.43
	Faculty member flexibility	2.96	4.40	1.44
	Appropriateness of the time of classes	2.90	4.70	1.80
	Existence of quiet and appropriate place for study within the faculty	3.12	4.50	1.38
Reliability	The politeness of faculty education staffs	3.18	4.53	1.35
	The politeness of faculty members	3.43	4.57	1.14
	Presented course materials for each class session with regular manner	3.25	4.50	1.25
	Informing students of his/her homework evolution result	3.08	4.49	1.41
	Presenting content for the student with understandable manner	3.16	4.53	1.37
Tangibility	Student give Better Score if they more effort	3.24	4.51	1.27
	Faculty member keep academic records accurately	3.19	4.33	1.14
	Easy access to the study resource in the university	3.26	4.41	1.15
	The activity performed by faculty and staff when they were promised.	2.95	4.45	1.50
	The employees have well dressed and appear neat	2.93	4.33	1.40
	The facilities were visually appealing	2.61	4.37	1.76
	The equipment was up-to-date and efficient	2.77	4.45	1.68
	The faculty member use attractive equipment in training	3	4.33	1.33

**Table 3.** Average numbers of perceptions, expectations, and gap in quality based on 5-dimension model

Variable	Perceptions	Expectations	Gap	T-TEST	
				T	p-value
Assurance	4.5	3.01	7	22.00	0.001>
	15.68	22.68			
Responsiveness	4.6	6.57	8.57	17.35	0.001>
	14.07	22.64			
Empathy	5.17	5.21	8.62	19.73	0.001>
	18.34	26.96			
Reliability	6.97	4.89	9	16.93	0.001>
	22.04	31.04			
Tangibility	5.35	3.17	5.81	14.98	0.001>
	11.64	17.45			

**Table 4.** Service quality gap average in educational service quality dimensions in terms of schools of university

Variable	Education		Management		Economy		Psychology		ANOVA
	M	SD	M	SD	M	SD	M	SD	
Assurance	7.38	5.43	7.09	5.12	5.21	3.41	6.64	4.59	0.05
Responsiveness	9.50	9.80	7.69	5.20	7.95	4.97	7.33	5.50	0.05
Empathy	8.28	6.65	8.14	5.40	11.21	12.04	8.95	6.32	0.05
Reliability	9.10	8.17	9.93	6.41	5.65	14.49	9.04	7.69	0.05
Tangibility	5.90	5.49	6.31	4.66	3.39	12.61	6.07	4.83	0.05

## DISCUSSION

This study was conducted aiming at investigating the gap between expectations and perceptions of students in University of Tehran regarding educational service quality in this university. Results showed that the highest average of perceptions and the highest expectation average is for respectful treatment with students (empathy dimension) and easy access to the School of Management (accountability dimension),

respectively. However, overall, the lowest gap average was related to tangibility and the highest average gap was seen in reliability dimension. Findings of this study are in consistent with previous studies showing gap in all dimensions.

On the other hand, results of this study were in consistency with Jorabchi's study on midwifery students in University of Tabriz which indicated lack of high quality in provided educational service in students' view

(Jorabchi, 2001). The findings of the present study are in line with Agha-Mollaei's (2006) showing that according to students' opinion, there is quality gap in all five dimensions and their respective statements. The highest quality gap was seen in accountability dimension, and then came empathy, assurance, tangibility, and reliability dimensions. The difference observed between quality gaps in different dimensions of educational service was statistically significant (Aghamolaei and Zare, 2006). In the present study, the highest quality gap was related to reliability dimension, which is consistent with Agha-Mollaei's study.

In Ruby's (1998) study on educational service quality, there was a quality gap in reliability, accountability, assurance and empathy dimensions; however, there was a positive quality gap regarding tangibility dimensions, it means that students' perception of educational service quality in this dimension was beyond their expectations. In Ruby's (1998) study, the highest quality gap was seen in reliability dimension which is consistent with this study, then came accountability and empathy dimensions. The lowest quality gap was seen in assurance dimension (Ruby, 1998).

In a study done in the University of Zahedan in 2005, Kebriaei and Roudbari investigated opinion of students regarding current and optimal status. Results about the quality show that most students believed there was a quality gap. Accountability dimension showed the highest gap average and reliability had the lowest quality gap average, which was not consistent with this study. Difference in gaps in five dimensions of service was significant. Thus, the majority of students observed a quality gap in all five educational service dimensions, which is approved in this work.

Education is a service that is directly influenced by its providers. Higher educational institutes should put more emphasis on meeting demands and expectations of students so that universities can be directed towards students' centrality. Thus, perceptions of students on educational service and facilities will be considered more vital (Anci, 2006).

Inconsistent concept of education quality has led to adoption of different methods for measuring quality in higher levels of education especially at university level (Tam, 2001).

Most studies are focused on educational quality measurement and measurement of students' educational experiences. Emphasis put on these issues by most researchers indicated high tendency to measuring service quality. On the other hand, defining and measuring this concept is difficult somehow; however, SERVQUAL has solved the problem to some extent (Legčević, 2009).

Customer-oriented approach to students has created tensions in universities (Tan, 1986). Many universities have not yet recognized that students are regarded as their customers and they are bound to provide whatever students demand. Findings suggest that administrative staff of universities show more customer-centric view to students in comparison with academic staffs and hence their treatment is different; in addition, it is found that students are more satisfied with respectful treatment by professors and staffs, which is shown in this work.

Educational centers in service organizations should look at service quality management with a strategic and dynamic perspective and consider quality as a source for improving organization's service before their competitors. Students' satisfaction is very important in improving educational service quality; therefore, it should be attempted to reduce or eliminate the gap between current and optimal status.

On the other hand, universities in a country such as Iran are going to be directed towards qualitative from quantitative stage, hence, it is necessary to evaluate perceptions and expectations of students in order to analyze gaps, plan for reducing or mitigating current shortcomings, compare current status of the university with other universities, review processes, and gain competitive advantages (Jorabchi, 2001).

Considering results taken by previous and current studies, it is clear that there is a quality gap in all five educational service dimensions, i.e. expectations of students is beyond their perceptions of current status and their expectations are not met in any of dimensions of service. Quality gap in service dimensions should be used as guide for planning and allocating resources, thus, in planning for educational service quality improvement, it is necessary to meet students' expectations and put dimensions with highest gap in high priority.

Satisfaction of students plays a significant role in improved educational service quality, thus it should be attempted to eliminate or mitigate gaps in current status and optimal status.

In this paper, service quality and gaps were reviewed. SERVQUAL methodology as an

Analytical approach for evaluating the difference between customers' expectations and perceptions of quality was also studied.

In conclusion, knowing how customers perceive the service quality and being able to measure service quality can benefit industry professionals in quantitative and qualitative ways. The measurement of service quality can provide specific data that can be used in quality management; hence, service organizations would be able to monitor and maintain quality service. Assessing service quality and better

understanding how various dimensions affect overall service quality would enable educational organizations to efficiently design the service delivery process. By identifying strengths and weaknesses pertaining to the dimensions of service quality educational organizations can better allocate resources to provide better service and ultimately better service to external customers.

Generally speaking, the study of service quality is both important and challenging. Future efforts should continue to advance the understanding of the concept and the means to measure and improve Service quality.

**Recommendations:** Since it was found that the highest quality gap is related to accessibility to school management, it is suggested that some measures are taken to minimize gaps; thus, holding meetings monthly or during semester with school management may lead to reflect the educational weaknesses and strengths directly by students. It is a great step to improve educational service quality.

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