The Evaluation of Services Quality on the Basis of SERVQUAL Model and Its Relationship with the Clients Satisfaction

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Abstract: This research is going to investigate the evaluation of services' quality on the basis of SERVQUAL model in Central Library of Astan Quds Razavi and its relationship with the clients' satisfaction. The group under study is all the clients of Central Library of Astan Quds Razavi who use the services. In respect of its goal, this research is applied and is analytical survey in respect of its method. All the assessment stages of sample volume have been performed by the statistical PASS software, version 2004. Regarding the research's aims and the data concerning the initial sample about the research community, the correlation coefficient between services' quality and clienteles' satisfaction has been estimated with 95 percent assurance and minimum of 141 people as the sample volume. Data was analyzed after assembling and the first investigation by the SPSS software version 17 and then the research hypotheses have been tested. The results of testing the main hypothesis and its related hypotheses indicate that there is a positive and significant relationship between services' quality and clients satisfaction with 95 percent assurance. Additionally, there is a significant relationship between the priorities of services constituent factors.

Key words: Services quality · SERVQUAL model · Clients satisfaction

INTRODUCTION

Recently, the governments have given more attention to the services' quality which are offered to people. In the direction of placing more reliance on the governments and increasing social interests, the governments intend to give services which can satisfy clienteles and citizens and also improve their participation in social activities [1].

The most important challenge, which central organizations' managers have to deal with, is meeting clienteles' expectations in order to preserve their validity. It is in the direction of meeting these expectations that managers should investigate new methods of giving services and developing their quality. Nowadays, clienteles expect new programs from the central organizations' managers to improve services' quality and accessibility of information and supply their changing needs [2].

Today, the Iranian organizations give more attention to the methods of evaluating clienteles' satisfaction and their interpretations of services in the direction of quality management systems and appropriate feedbacks which are given on the organization's performance.

The government is improving services' quality and clienteles' satisfactions through some fundamental plans such as honoring the clienteles, but owing to the lack of an applied and scientific pattern, they could not have much success. This research aims to offer an applied and scientific pattern accompanied by investigating the clienteles' perceptions and interpretations of Astan Quds Razavi Library on the basis of SERVQUAL model.

Short Statement of the Problem: Clienteles' caring and gaining their satisfaction are significant principles in the new management theories. People's satisfaction from the governmental organizations' performance is one of the indexes of evaluating their development and competence in administrative and executive system of our country. It also provides public confidence which is the most essential element of administrative system.

The importance of clienteles and their satisfaction are concluded from the global competence [3]. In a way that 30% of the whole points was allocated to the customer's satisfaction in the quality national prize of Malcolm Baldridge [8].

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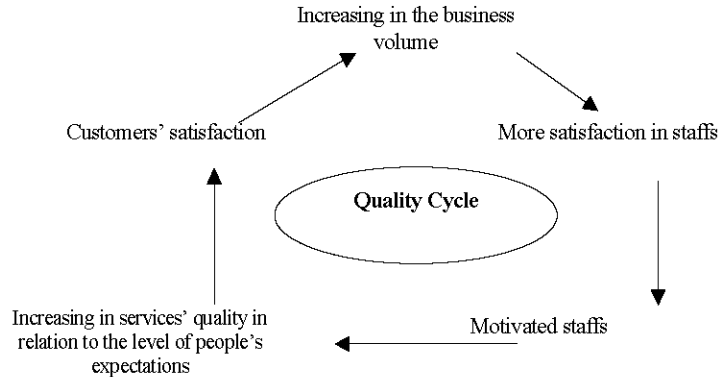Tel: +9809124780142, E-mail: s.ghayour@yahoo.com.

Fig. 1: The advantages of services' quality

As a matter of fact, the clienteles' expectations have been increased compared to the past. It may be as a result of their knowledge improvement, organizations' advertisements, competitors' performance and so forth. Clienteles evaluate the services' quality through observing physical proofs surrounding services and staffs' attitude towards them [4]. This research helps to determine the strong and weak points of Astan Quds Razavi Library about its services. This data is necessary in making appropriate plans in the organization.

Review of Literature: Considering services' quality is efficacious in prioritizing the organizations and giving "competitive advantage" to them [5]. Heskett classifies the advantages of services' quality in the following groups of staffs, customers, society [12].

Many researches indicate that giving services with high quality provides customers' satisfaction, loyalty and positive relations [6].

On the other hand, in order to gain the clienteles' satisfaction, public service organizations need to investigate clienteles' perceptions and expectations. Having knowledge about clienteles' expectations of services' quality is significant in the direction of understanding their fundamental indexes of evaluation [7]. In this connection, Zeithaml identifies the apparent aspects and the contact moment as the basic factors which affect on the clienteles' interpretations of quality and services' value [9].

Beside the clienteles, the staffs' interpretations and attitudes in the organizations (the suppliers of the services who deal with the clienteles directly) are important factors in clienteles' interpretation of services' quality [10].

The Relationship Between Quality and Satisfaction: About 6500 researches have been done in the field of services' quality from 2000 to 2006 and it indicates the emphatic importance of services' quality discussion throughout the world [11]. The concepts of services' quality and satisfaction have been emphasized in writings and business activities during recent decades and have been considered as the indexes of organizations' competitive advantage. Although there are no definite rules to identify the clienteles' judgments and relationship between services' quality and clienteles' satisfaction, some researchers believe that services' quality and clienteles' satisfaction are isolated factors through which there are three points of views:

- Some believe that satisfaction increases the interpreted services' quality.
- Second group believe that satisfaction is the offspring of services' quality.
- Third group believe in a contingent point of view which means there is no priority between these two concepts and the factors which prioritize them are physical environment, the field of giving services and so forth.

Although there is no theoretical consent about prioritizing these two concepts between researchers, most of them support the idea of priority of services' quality over clienteles' satisfaction [14].

Research Theoretical Framework: SERVQUAL is one of the popular models of services' quality evaluation. Founders of this model – Parasurman, Zeithaml and Berry- had a significant effect on the development and expansion of services' quality evaluation by publishing various compilations and researches. On the basis of SERVQUAL,

Table 1: definitions of five services' quality dimensions

Five dimensions	Dimensions' definitions
Physical appearances and facilities	Administrative equipment and instruments are new and modern.
	The appearance of equipment and facilities are appropriate and attractive.
	The environment of service organization is neat.
	The staffs' appearance is good.
confidence	Giving instantaneous services to the clienteles
	Staff's enthusiasm to give services and help clienteles
	Staffs allocate enough time to the clienteles.
	Defining the exact time of supplying services to the clienteles
Taking responsibility	Doing what has been pledged to the clienteles
	Being eager and interested in solving the clienteles' problems
	Giving appropriate services to the clienteles at the first time that they refer to the organization
	Giving appropriate services at the supposed time
guarantee	Staffs are reliable.
	Clienteles feel tranquility in their relation with the staffs
	Organization's staffs are polite and serious.
	Staffs are adequately skilled and knowledgeable
Unanimity (suitable attitude towards people)	Every clientele is given particular attention.
	Staffs are heartily concerned about the clienteles.
	Staffs understand the especial needs and demands of the clienteles.
	The times in which staffs give services are suitable for the clienteles.

there are ten factors which effect on the services' quality: communications, accountability, confidence, validity, competence, getting access, coutesy, security, understanding the clienteles' physical appearences [13].

After doing some researches in which the SERVQUAL model has been applied in the service-driven industries such as universities, databases, informediaries and communicative centers, the above ten factors have been summarized in five fundamental elements of physical appearance, confidence, taking responsibility, guarantee and unanimity. The average of these elements is considered as the services' quality.

SERVQUAL model has been widely applied by the managers and researchers to evaluate the clienteles' perception of services' quality. From the time that it has been introduced, it has been used in the management and marketing articles and also between researchers and managers to a large degree [15]. This model has some standard sections which are applied for evaluating clienteles' perceptions and expectations about quality dimensions. The model's sections and its 5 important dimensions have been mentioned in the below table:

Research Method: This research is applied. It is an analytical survey (A survey where the primary purpose of the design is the comparison between sectors or subgroups of the population sampled). The local areas which have been allocated in this research are different sections of Central Library of Astan Quds Razavi. The subject which has been concerned is services' quality and its relationship with the satisfaction of studied clienteles. This research has been done during the summer of 1389 and has based on the clienteles' references in this period.

Statistical PASS software, version 2004 has been applied to evaluate the sample volume. According to the research's aims and sample's data about the research community and coefficient correlation between services' quality and clienteles' satisfaction (0.272) with 95% assurance, minimum sample volume of 142 people have been randomly chosen.

Research Hypothesis

Main Hypothesis: There is a significant relationship between services' quality and clienteles' satisfaction in the Central Library of Astan Quds Razavi.

Minor Hypotheses:
- There is a positive and significant relationship between physical appearance and clienteles' satisfaction in the Central Library of Astan Quds Razavi.
- There is a positive and significant relationship between confidence and clienteles' satisfaction in the Central Library of Astan Quds Razavi.

- There is a positive and significant relationship between taking responsibility and clienteles' satisfaction in the Central Library of Astan Quds Razavi.
- There is a positive and significant relationship between guarantee and clienteles' satisfaction in the Central Library of Astan Quds Razavi.
- There is a positive and significant relationship between unanimity and clienteles' satisfaction in the Central Library of Astan Quds Razavi.
- There is a significant difference between the priorities of all dimensions of services' quality.

Evaluation questionnaires of services' quality and clienteles' satisfaction have been used to assemble the required data. A preliminary test has been given to 21 people to calculate the level of questionnaires' validity and its results have been analyzed. Findings indicate that the applied instruments of the research posses adequate validity and constancy. The constancy coefficient of services' quality questionnaire is 94% and the coefficient of clienteles' satisfaction questionnaire is 90%.

Data Analysis: The assembled information has been analyzed by statistical methods and SPSS software, version 17. Firstly, observations have been elaborated through descriptive statistics methods such as frequency and agreement tables, statistical histogram diagrams and measures of central tendency and distribution and then have been analyzed through inferential statistics methods such as significance test, the Pearson coefficient of linear correlation, analysis of repeated measurement plan, multiple linear regression, analysis of non-reciprocal variance and etc. All the structural hypotheses, which were related to the parameter test, have been investigated and their correctness has been asserted.

Frequency distribution of people's acceptance of services' quality and level of clienteles' satisfaction has been depicted in figure 1 and 2 which indicates the correlation between services' quality and clienteles' satisfaction. It will be thoroughly investigated in hypotheses testing chapter.

Hypotheses Testing
First Hypothesis: The significance test of the Pearson coefficient of linear correlation with the error range of 5% indicates that there is a significant and positive relationship between physical appearance and clienteles'
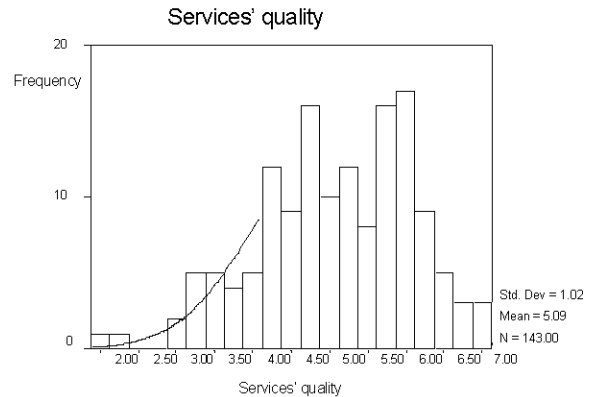

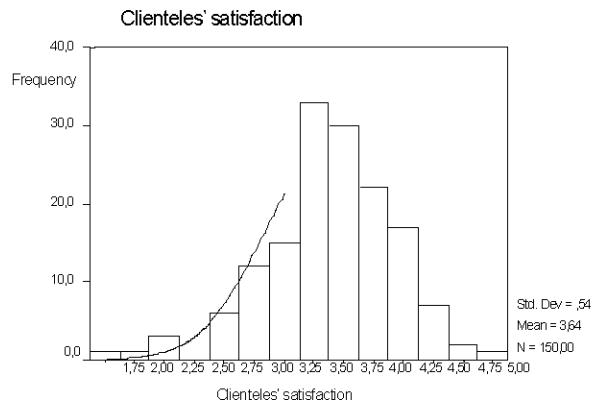Fig. 2: Frequency distribution of people's acceptance of services' quality

Fig. 3: Frequency distribution of clienteles' satisfaction

satisfaction with the coefficient of 43.7% ($P \leq 0/001$). In other words, the clienteles who refer to the Central Library of Astan Quds Razavi intend to see physical facilities, equipment, organization environment and staffs' appearance more attractive. The more these dimensions' quality improved, the more clienteles' satisfaction can be acquired.

Second Hypothesis: The significance test of the Pearson coefficient of linear correlation with the error range of 5% indicates that there is a significant and positive relationship between the dimensions of confidence and clienteles' satisfaction with the coefficient of 54.1% ($P \leq 0/001$). Clienteles who refer to the Central Library of Astan Quds Razavi expect the staffs to give them instantaneous services, to do whatever they have pledged in the supposed time, to offer services sympathetically and communicate with them appropriately. The more these dimensions' quality increases, the more clienteles' satisfaction in acquired.

Third Hypothesis: The significance test of the Pearson coefficient of linear correlation with the error range of 5% indicates that there is a significant and positive relationship between taking responsibility and clienteles' satisfaction with the coefficient of 57.5% ($P \leq 0/001$). The clienteles of Central Library of Astan Quds Razavi expect to be given the services which have been pledged to them. Honesty in giving services, enthusiasm to solve the clienteles' problems and also caring about clienteles' expectations are fundamental elements which can affect on the level of services' quality and the more these dimensions' quality get promoted, the more clienteles are satisfied.

Forth Hypothesis: The significance test of the Pearson coefficient of linear correlation with the error range of 5% indicates that there is a significant and positive relationship between guarantee and clienteles' satisfaction with the coefficient of 61.5% ($P \leq 0/001$). In other words, the clienteles who refer to the Central Library of Astan Quds Razavi expect the organization's staffs to be adequately skilled and expert, behave them politely and respectfully and care about them.

Fifth Hypothesis: The significance test of the Pearson coefficient of linear correlation with the error range of 5% indicates that there is a significant and positive relationship between unanimity and clienteles' satisfaction with the coefficient of 62.7% ($P \leq 0/001$). the clienteles of Central Library of Astan Quds Razavi expect the staffs to do their best to improve clienteles' knowledge and understanding and supply their requests.

The hypotheses testing of different dimensions of quality indicate that there is a positive and significant relationship between all the dimensions of quality and clienteles' satisfaction. Following table shows their findings in short.

Sixth Hypothesis: The analysis of repeated measurement plan and Bonferroni test of multiple comparisons have been applied to compare people's answer about prioritizing five factors of services' quality. (In the table 7, mean pairs which are significantly different with each other are defined with star) Using the above plan and test indicates that there is a significant difference, with the error range of 5%, between the priorities which were defined by the people who have

Table 2: measurement of their correlation and significance

Research hypotheses	Correlation coefficient	p-value	Results
First hypothesis: the relationship between physical appearance and clienteles' satisfaction	43.7	0.000	Exists
Second hypothesis: the relationship between confidence and clienteles' satisfaction	54.1	0.000	Exists
Third hypothesis: the relationship between taking responsibility and clienteles' satisfaction	57.5	0.000	Exists
Fourth hypothesis: the relationship between guarantee and clienteles' satisfaction	61.5	0.002	Exists
fifth hypothesis: the relationship between unanimity and clienteles' satisfaction	62.7	0.000	Exists

Table 3: multiple comparison of Bonferroni between different dimensions of services' quality

First group I second group J		Mean difference (I-J)	Standard error	Significance level	Assurance range of 95% High	low
Physical appearances and facilities	Confidence	-7,779 *	,805	0.000	-5,479	-10,078
	Takingresponsibility	-6,130 *	,740	0.000	-4,018	-8,242
	Guarantee	-6,122 *	,716	0.000	-4,077	-8,168
	Unanimity	-3,573 *	,736	0.000	-1,470	-5,675
Confidence	Physical appearances	7,779 *	,805	0.000	10,078	5,479
	Taking responsibility	1,649	,779	0.362	3,873	-,576
	Guarantee	1,656	,843	0.515	4,064	-,751
	Unanimity	4,206 *	,895	0.000	6,761	1,652
Taking responsibility	Physical appearances	6,130 *	,740	0.000	8,242	4,018
	Confidence	-1,649	,779	0.362	,576	-3,873
	Guarantee	,008	,695	1,000	1,993	-1,977
	Unanimity	2,557 *	,764	0.011	4,738	.376
Guarantee	Physical appearances	6,122 *	,716	0.000	8,168	4,077
	Confidence	-1,656	,843	0.515	,751	-4,064
	Taking responsibility	-,008	,695	1.000	1,977	-1,993
	Unanimity	2,550 *	1,00	0.014	4,785	.314
Unanimity	Physical appearances	3,573 *	.736	0.000	5,675	1,470
	Confidence	-4,206 *	,895	0.000	-1,652	-6,761
	Taking responsibility	-2,557 *	,764	0.011	-,376	-4,738
	Guarantee	-2,550 *	,783	0.014	-,314	-4,78

Table 4: measurement of their correlation and significance

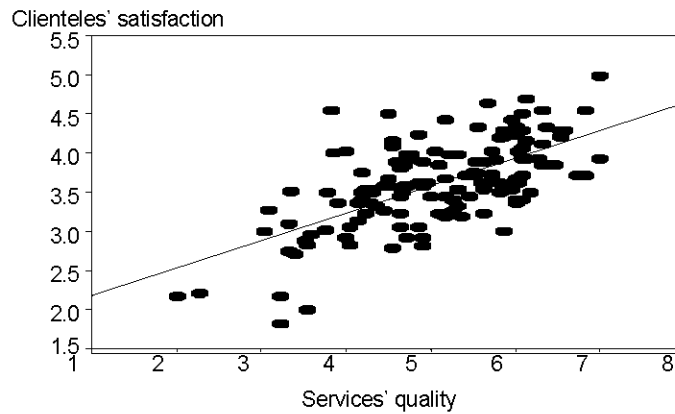| explanation		Satisfaction	Services' quality
Satisfaction	Correlation coefficient	1	64.7
	Significance	0	0
	Numbers	150	143
Services' quality	Correlation coefficient	64.7	1
	Significance	0	0
	Numbers	143	143

Fig. 4: Diffusion diagram of services' quality and clienteles' satisfaction

filled out the questionnaires about five dimensions of services' quality. Clienteles have given first priority respectively to the dimensions of confidence, taking responsibility and guarantee. In their point of view, the more these dimensions get promoted, the more clienteles can be satisfied. They have prioritized the dimensions of unanimity and physical appearance respectively as the second and third ones. (Table 3)

Main Hypothesis: The significance test of the Pearson coefficient of linear correlation with the error range of 5% indicates that there is a significant and positive relationship between services' quality and clienteles' satisfaction with the coefficient of 64.7%. In other words, the more services' quality of five mentioned dimensions gets promoted, the more clienteles will be satisfied. Services' quality affects clienteles' satisfaction. (Table 4)

Other findings of the research indicate that factors such as age, gender and education do not have any effect on the clienteles' evaluation of services' quality and satisfaction. But the way that they receive the services is effective in their satisfaction and evaluation of services' quality. Additionally, the analysis of Pesro multiple regression has been applied to investigate the effect of every dimension of services on the clienteles' satisfaction. This analysis, after 4 repeated stages with the error range of 5%, has shown that the dimensions of guarantee and unanimity have had great influence on the clienteles' satisfaction.

CONCLUSION AND SUGGESTIONS

This research has intended to investigate and evaluate the services' quality and its relationship with the clienteles' satisfaction of the Central Library of Astan Quds Razavi. The outcomes indicate that all dimension of quality have a significant relationship with the clienteles' satisfaction and it should be mentioned that from the clienteles' point of view, the dimension of physical appearance, in proportion to the other dimensions, has little importance in giving services and acquiring clienteles' satisfaction. Since there is a positive and significant relationship between the services' quality and clienteles' satisfaction with the coefficient of 64.7% and through promoting the services' quality of mentioned five dimensions, the clienteles' satisfaction will be increased. Based on the five mentioned dimensions and in the direction of promoting services' quality, following suggestions have been made:

- The staffs, who deal with the clienteles, should wear well-groomed uniforms which are designed based on the psychological principles and are appropriate for the library status.
- Inasmuch as the most important section of the organization, which affects services' quality and clienteles' satisfaction, is the operational section and these sections' staffs form the clienteles' perceptions at the time of giving services, we can promote staffs'

behavior and action at the contact moment through training them and making them informed of the importance of their duties.

- One of the characteristics of this research has been face-to-face visits; therefore, internet services have not been used in this research. Broader usage of information technology (IT) is suggested to improve the efficiency of these kinds of services in promoting quality, their effect on the clienteles' satisfaction and the effect of IT on the staffs' potentiality.

- Considering staffs' importance in the quality cycle, it is suggested to investigate staffs' interpretation of quality and its decisive factors in another independent research. Findings of such a research will show the concordances or discrepancies which exist between staffs' and clienteles' interpretations of different dimensions of services' quality. Based on this research's findings, the organization manager can program future plans in the field of services' quality.

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