Australian Journal of Business and Management Research
New South Wales Research Centre Australia *(NSWRCA)*

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

MEASURING THE QUALITY OF DELIVERY OF SERVICES BASED ON SERVQUAL AND GRONROOS SERVICE QUALITY MODEL
CASE STUDY: OSVE SMART ELEMENTARY SCHOOL

Faezeh Rezaei Ghaleh
Master of Business Administration, Sari
Mazandaran province, Iran

Homa Rezaei Ghaleh (Corresponding Author**)**[1]
Department of management
University of Industries and Mines
Branch of Mazandaran, Iran
mirzajanihassan@yahoo.com

Seyd Ebrahim Sadati
DBA Doctorate in Strategic of Management,Sari
Mazandaran Province,Iran

ABSTRACT

Measuring is the key element in efficiency cycle and acts as the control system for the other elements of the operating cycle, on the other hand service quality is a very important success in educational organizations. The main objective of this study was to assess the level of quality of service in Osve Smart School in the scale of SERVQUAL and Gronroos service quality model the functional quality of Gronroos model. The population of this research includes smart school parents and students (103) and the statistical sample size is 88 people. By implementing a combination of SERVQUAL and Gronroos standard questionnaire and its reliability in expectations dimension is 0.972 and in perception dimension is 0.967. The results showed that the level of each of the models used; (functional quality, technical quality and image) perceived image quality is in the first place and the functional and technical quality are in the second and third place. Estimates of the overall results suggest that the negative gap between the expectations and perceptions of all sizes, shows that the quality of services in Osve smart school, is not consistent with the expectations of parents.

Keywords: *quality of service, Gronroos, SERVQUAL, functional quality, technical quality, image and gap*

INTRODUCTION

In today's competitive and turbulent environment those organizations will be more successful in the field of competition that outstrip meeting the needs and wants of customers from the other competitors in market. Today customer satisfaction is one of the most common terms in the workplace, but no doubt developing customer satisfaction and even joy to them will be possible by providing quality products and services, in accordance with or beyond their expectations. Therefore, the quality is the most important factor in global competition so the organizations are forced to deliver quality goods or services to compete successfully in the market (Stafford, et al., 2011).

In recent decades, social, cultural and economic changes of world has led to the development of high-speed services, so that based on the available information, nearly 70% of the labor force in the world are working in the service sectors. This reflects the importance of the services sector in developing countries. So improving the quality of services is an important and challenging topic. Each Organization is forced to improve the quality service for the possibility of competitive services and getting more market share. This has caused the controversy and attention to customer needs and tastes according to the requirements introduced in the organization. (Kumar, et al., 2008)

[1] Homa Rezaei Ghaleh, Department of Management University of Industries and Mines Branch of Mazandaran, Iran

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

The quality of any product or service is a part of its nature. The truth is that the exact definition of the word "quality" is very difficult. From the perspective of the 2000quality system, quality is defined as all the features that meet customer needs, so that the product which meets the needs of customers is quality product (Al Bassam, & Al Shawi, 2011). Defining and assessing the quality of products is not a hard job since they possesses physical nature and their quality can be determined by quantitative standards. According to The new theories of management quality is defined by customer needs and client has a central role in guiding the activities of organization (Rahman, Khan, & Haque, 2012). Global movement in developed and developing countries is emerged to change the structure of education, with the transformation of society from traditional societies to knowledge-based societies and taking advantage of the new communication conditions. Officials are well aware about the value of the knowledge-based society, science and knowledge (Zeithaml, 2000).

Smart schools can be considered as educational opportunities that will make possible the realization of the knowledge-based society. Based on what was mentioned smart schools as one of the service organizations must try to identify the expectations and needs of customers and provide them with quality services in order to maintain customers, attract their loyalty and competitive advantage. Therefore the basis for the definition of service quality is the expectation and customer perception of service. Expected service is the same as good and ideal service that indicates a level of service that customers expect to receive and customer perceptions indicates the quality of service that the customer is received.

PROBLEM OF THE STATEMENT

The information age and the introduction of web-based technologies lead to the formation of the new jobs that will need computer knowledge and skills. This field needs a new type of training that is inconsistent with traditional education in Today's general schools. Furthermore, the other countries have been established electronic schools that is called the "Smart School". The original model of these schools comes from UK in 1996, and Malaysia is one of the leaders in developing these school. Computers affect teaching and evaluation in Smart schools, and change lesson plans to some extent. But at the same time functions of schools continue to exist, because it can help students in social relations. Smart school students learn to process a lot of information and use this information to learn more. Students can also communicate world literature, schools, teachers and other students. In smart schools teachers can have their students find the answers of the questions and tell the rest to rather than answer by their own (Ghavifekr, Hussin, & Ghani, 2011).

Today, e-Learning provides a new picture of the education system. In general, the information technology is a huge revolution in the process of teaching-learning, so the concept of ICT should be removed completely from the approach tool and considered as the development of human resources. And human resources development is an important element in the development of information technology. If the culture of learning-teaching does not change in the educational system, not only ICT will not change but also strengthen traditions of conservative education since the ICT cannot change alone, but also people are the main factor for change and human resources is the most important element in promoting the development of human resources and information technology. Stability, preservation, conservation and development of new teaching-learning process, i.e. the e-learning in smart schools is possible only by addressing the problems in the best way (Omidinia, Masrom, & Selamat, 2011).

Smart School are working as a small part of the community service organizations. These schools as one of the service organizations to survive, overtaking their competitors in the market competition and development, have to resolve and take action in the shortest time in order to identify issues and problems (Ong, 2006). In this context, the best way to accomplish this in the organization, is knowing the interests, needs, desires and knowledge of the ideas, suggestions and criticisms of staff (because the services and the activities carried out by them and have a direct relationship with activities in organization so have a full and better knowledge of problems) and people (customers) who benefits from the services of organization and the purchase of services, leads to survival of the organization. According to research done in about four to five years ago, training in the city of Sari was running "quite traditional", even non-public schools had the same traditional framework as public schools.

The difference was only in the number of students and in the non-educational field (Mirzajani, & Bayekolaei, 2013). Despite this small difference, non-public schools have also attracted parents. Among the non-governmental schools, school were more concerned that the standards of care and attention, both in training and the side issues, were at a higher level. At the same time in less than five years ago smart schools set foot in the field of education and side issues and one hundred percent use of technology and computers in both areas, so that the percentage of interest, confidence and sense of security for parents and students have increased largely.

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

However, a school that will meet the criteria further, is attracted more by parents. So the investigated school should also maintain and increase its market share. In the present study in order to measure customer satisfaction (students and parents) from smart schools, SERVQUAL measurement model combining with Gronroos service quality model are used.

THE IMPORTANCE AND NEED FOR RESEARCH

A Review of developments in recent years shows that the services are widely spread and this trend is spreading faster in the coming years. Industry becomes small and service becomes large, the managers of manufacturing and service organizations in all sectors of state, cooperative and private sectors gradually realizing that product quality cannot differentiate them from others, but they should change the focus from market-oriented to customer-oriented issues (Horwitz, 1994). Since the Organizations have variety in number of customers and the customers themselves, they should not only meet customers' expectations, but also try to understand their customers' attitude towards service towards organization and the way of delivering the services.

This requirement has led the organization sought to measure the quality of services in this sector over the past years. A serious problem that organizations face is how to measure issues that their size, type and delivery are different (Carman, 1990). Given that services are vaguer than goods and as they are considered as an integral part of service providers, makes customer's assessing of services. Therefore, organizations need defined models to measure quality, the model should be capable of proving proper measuring of service quality and provide a useful framework to measure the level of customers' satisfaction.

Given the importance of quality in the fields of competition in describing the importance of the research, quality of service is considered as one of the key elements of competition, therefore the smart schools must learn new ways to enhance their quality assessment. The smart schools could increase its share in the market by increasing customer satisfaction and reducing complaints, the main question of the research is that: how much is the quality of services at the smart schools in the dimension of SERVQUAL and Gronroos?

RESEARCH HYPOTHESES:

Hypothesis 1: the quality of school physical factors in the functional quality dimension is in accordance with the expectations of parents.

Hypothesis 2: the quality of schools in the assurance factors regarding functional quality is in accordance with the expectations of parents.

Hypothesis 3: the quality of schools assurance factors in functional quality is in accordance with the expectations of parents.

Hypothesis 4: the quality of school accountability in the functional quality is in accordance with the expectations of parents.

Hypothesis 5: the quality of empathy of the school in functional quality is in accordance with the expectations of parents.

Hypothesis 6: the quality of technical quality of the school is in accordance with the expectations of parents.

Hypothesis 7: the quality of the image of school is in accordance with the expectations of parents.

Hypothesis 8: the quality of school services is in accordance with the expectations of customers.

Hypothesis 9: the quality of quality functioning of school is in accordance with the expectations of parents.

Hypothesis 10: there is a significant difference in parents' perception of the five dimensions (SERVQUAL) of functional quality.

Hypothesis 11: there is a significant difference in parents' perception of the three dimensions (Gronroos) in providing quality services.

Australian Journal of Business and Management Research
New South Wales Research Centre Australia *(NSWRCA)*
Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

Theoretical Framework and Conceptual Model of Research:

A. Serquval Model

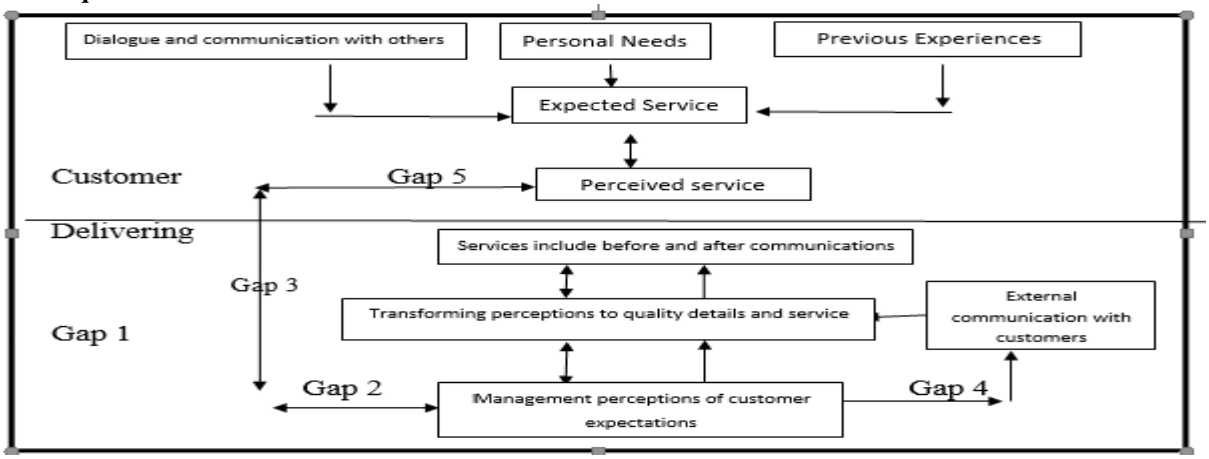

Figure 2. Conceptual Model of Quality / Source: Parasuraman et al., 1990, p. 46.

B. Gronroos Quality of services Conceptual Model

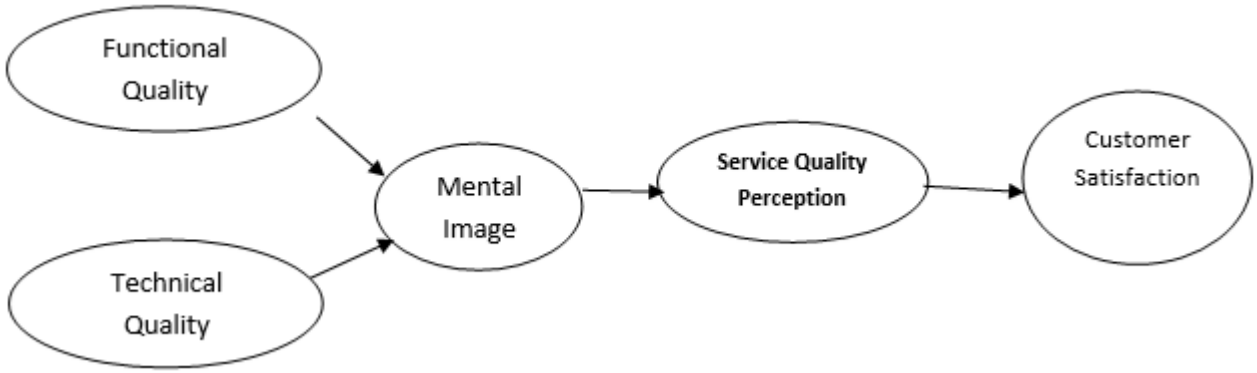

Figure 3. Gronroos Quality of services Conceptual Model/ kang & james , 2004,266-277 /

C. SERQUVAL-Gronroos Quality Services Model

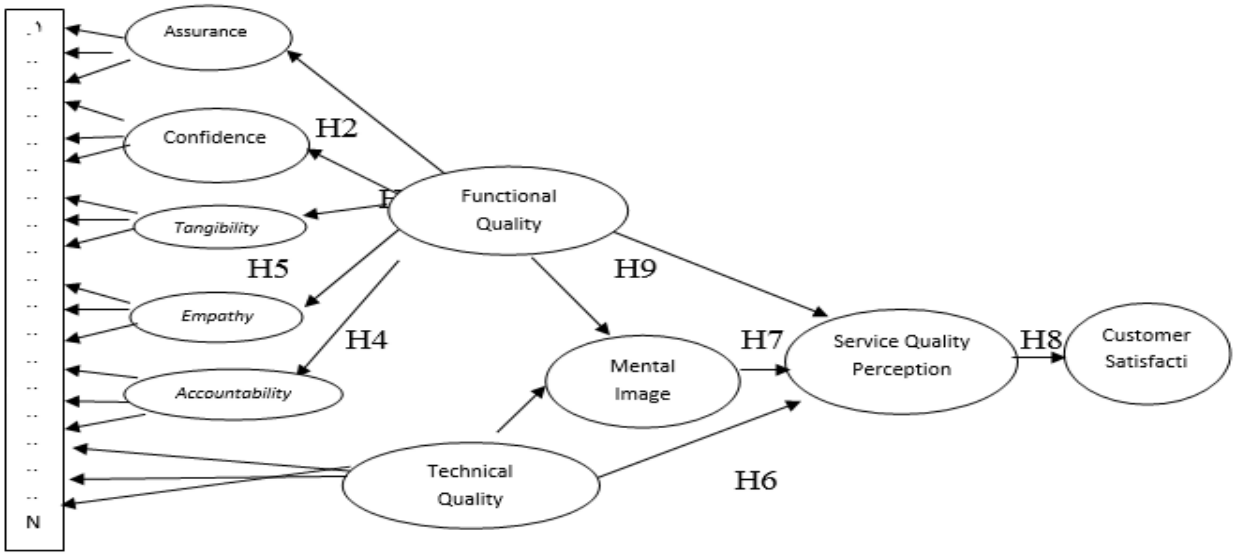

Figure 4. SERQUVAL-Gronroos Quality Services Model

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

RESEARCH METHODOLOGY:

This study covers the first semester of 91-92 school year and in terms of location it is limited to smart elementary school in the city of Sari in Mazandaran Province. However, it noted that the dimensions of quality that we use in this study come from the SERVQUAL and Gronroos, so parents may consider some aspects of quality that might be neglected

.

Furthermore, this study is based on the purpose of application because the results in the decision-making and planning are used by the Principal and staff. The data collection style is descriptive survey. Population refers to all members, objects or phenomena that the researcher wants to investigate them and to generalize his findings to them. It is most appropriate to examine the entire population i.e. the census, in which the population will be the equivalent to the entire population. But usually time and credit (expense), accuracy in data collection and control, manpower and equipment is the reason for the use of sampling for the census. Sampling is placed on the principle that if the relationship is statistically true, it is possible to generalize the results and data obtained from studies' samples to the community. According to this principle in the study random sampling based on krejcie-Morgan table is used. Based on the krejcie and Morgan decision making model and N = 103population in the study, a sample size of 88 is suitable for this method.

FINDINGS

According to variables and data from measurement, to describe the data, descriptive statistics such as frequency and percentage, sizes and levels of variability tends to be used. Finally, to test the research hypothesis fits with the assumptions of the statistical methods, Ylkaksvn and Friedman non-parametric tests were used.

2. HYPOTHESES TEST (THE ANALYSIS)

In order to achieve the objectives of the research and evaluation of research hypotheses (accept or reject) statistical tests are used. To use Parametric or nonparametric tests at first indicators, the distribution of data and the way of it are made.

1.2. THE FIRST SUB-STUDY HYPOTHESIS TEST

H0: there is no significant difference between parental expectations of tangible factors and their perceptions.
H1: there is significant difference between parental expectations of tangible factors and their perceptions.

To evaluate and compare parents' expectations and perceptions of concrete factors, nonparametric Wilcoxon test was used. The results of this study have been reported in Table 2. The findings show that the average level of parental expectations of tangible factors (36.82) is more than their perception (21.05). Also according to Z (-5.965) that is significant in the level of error smaller than 0.01, statistically the expectations and perceptions of tangible factors are 99% true. This result confirms the assumption H1 that the difference between the amount of expectations and perceptions of tangible factors against the rejection of the hypothesis H0 of no difference between the expectations and perceptions in this aspect.

Table 2: the results of Comparison of the level of expectations and perception in tangible factors by Wilcoxon test.

Indexes	Number	Average of Ratings	Sum of Ratings	Z	Level of significance (2 domains)
Negative Ratings	58	36/82	2135/50	-5/965	0/000
Positive Ratings	10	21/05	21/05		
Equal	19				
Total	87				

2.2. THE SECOND SUB-STUDY HYPOTHESIS TEST

H0: there is no significant difference between parental expectations of confidence factors and their perceptions.
H1: there is significant difference between parental expectations of confidence factors and their perceptions.

As the findings set out in Table 3 show the average level of parental expectations of the confidence factors (35.09) is more than their perception (30.61). According to the Z (-5/500) that is significant in the level of error smaller than 0.01, it must be said that statistically 99% of the expectations and perceptions of tangible factors is different. This result confirms the assumption H1 that there is difference between the amount of expectations and perceptions of confidence factors against the rejection of the hypothesis H0.

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

Table 3. The results of the survey of expectations and perceptions of confidence by the Wilcoxon test.

Indexes	Number	Average of Ratings	Sum of Ratings	Z	Level of significance (2 domains)
Negative Ratings	59	35/09	2070/50	-5/500	0/000
Positive Ratings	9	30/61	275/50		
Equal	15				
Total	83				

3.2. THE THIRD SUB-STUDY HYPOTHESIS TEST

H0: there is no significant difference between parental expectations of assurance factors and their perceptions.
H1: there is significant difference between parental expectations of assurance factors and their perceptions.

As the findings set out in Table 4 show the average level of parental expectations of the assurance factors (33.43) is more than their perception (16.36). According to the Z (-6.116) that is significant in the level of error smaller than 0.01, it must be said that statistically 99% of the expectations and perceptions of assurance factors is different. This result confirms the assumption H1 that there is difference between the amount of expectations and perceptions of assurance factors against the rejection of the hypothesis H0.

Table 4: The results of the comparison of the level of expectation and perception of assurance by Wilcoxon test

Indexes	Number	Average of Ratings	Sum of Ratings	Z	Level of significance (2 domains)
Negative Ratings	55	33/44	1838/50	-6/116	0/000
Positive Ratings	7	16/36	114/50		
Equal	25				
Total	87				

4.2. THE FOURTH SUB-STUDY HYPOTHESIS TEST

H0: there is no significant difference between parental expectations of accountability factors and their perceptions.
H1: there is significant difference between parental expectations of accountability factors and their perceptions.

As the findings set out in Table 5 shows the average level of parental expectations of the accountability factors (32.09) is more than their perception (31.68). According to the Z (-3.892) that is significant in the level of error smaller than 0.01, it must be said that statistically 99% of the expectations and perceptions of accountability factors is different. This result confirms the assumption H1 that there is difference between the amount of expectations and perceptions of accountability factors against the rejection of the hypothesis H0.

Table 5. The results of the expectation and perception in accountability by Wilcoxon test

Indexes	**Number**	**Average of Ratings**	**Sum of Ratings**	**Z**	**Level of significance (2 domains)**
Negative Ratings	49	32/09	1572/50	-3/892	0/000
Positive Ratings	14	31/68	443/50		
Equal	23				
Total	86				

5.2. THE FIFTH SUB-STUDY HYPOTHESIS TEST

H0: there is no significant difference between parental expectations of empathy factors and their perceptions.
H1: there is significant difference between parental expectations of empathy factors and their perceptions.

As the findings set out in Table 6 shows the average level of parental expectations of the empathy factors (40.23) is more than their perception (21.61). According to the Z (-6.513) that is significant in the level of error

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

smaller than 0.01, it must be said that statistically 99% of the expectations and perceptions of empathy factors is different. This result confirms the assumption H1 that there is difference between the amount of expectations and perceptions of empathy factors against the rejection of the hypothesis H0.

Table 6. The results of the expectation and perception in empathy by Wilcoxon test

Indexes	**Number**	**Average of Ratings**	**Sum of Ratings**	**Z**	**Level of significance (2 domains)**
Negative Ratings	66	40/23	2655/50	-6/513	0/000
Positive Ratings	9	21/61	194/50		
Equal	12				
Total	87				

6.2. THE SIXTH SUB-STUDY HYPOTHESIS TEST

H0: there is no significant difference between parental expectations of technical quality factors and their perceptions.

H1: there is significant difference between parental expectations of technical quality factors and their perceptions.

As the findings set out in Table 7 shows, the average level of parental expectations of the technical quality factors (35.93) is more than their perception (25.11). According to the Z (-5.802) that is significant in the level of error smaller than 0.01, it must be said that statistically 99% of the expectations and perceptions of technical quality factors is different. This result confirms the assumption H1 that there is difference between the amount of expectations and perceptions of technical quality factors against the rejection of the hypothesis H0.

Table 7. The results of the expectation and perception in technical quality by Wilcoxon test

Indexes	Number	Average of Ratings	Sum of Ratings	Z	Level of significance (2 domains)
Negative Ratings	59	35/93	2120/00	-5/802	0/000
Positive Ratings	19	25/11	226/00		
Equal	16				
Total	84				

7.2. THE SEVENTH SUB-STUDY HYPOTHESIS TEST

H0: there is no significant difference between parental expectations of mental image factors and their perceptions.

H1: there is significant difference between parental expectations of mental image factors and their perceptions.

As the findings set out in Table 8 shows, the average level of parental expectations of the mental image factors (31.50) is more than their perception (34.65). According to the Z (-5.802) that is significant in the level of error smaller than 0.01, it must be said that statistically 99% of the expectations and perceptions of mental image factors is different. This result confirms the assumption H1 that there is difference between the amount of expectations and perceptions of mental image factors against the rejection of the hypothesis H0.

Table 8. The results of the expectation and perception in mental image by Wilcoxon test

Indexes	Number	Average of Ratings	Sum of Ratings	Z	Level of significance (2 domains)
Negative Ratings	53	31/50	1669/50	-4/539	0/000
Positive Ratings	10	34/65	346/50		
Equal	23				
Total	86				

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

8.2. THE FIRST MAIN-STUDY HYPOTHESIS TEST

H0: there is no significant difference between the level of quality of services and customer expectations (parents).

H1: there is significant difference between the level of quality of services and customer expectations (parents).

As the findings set out in Table 9 shows, the average level of expectations (37.95) is more than perception (19.45). According to the Z (-5.940) that is significant in the level of error smaller than 0.01, it must be said that statistically 99% of the expectations and perceptions of service delivery is different. This result confirms the assumption H1 that there is difference between the amount of expectations and perceptions of services quality against the rejection of the hypothesis H0.

Table 9. The results of the expectation and perception in service quality by Wilcoxon test

Indexes	Number	Average of Ratings	Sum of Ratings	Z	Level of significance (2 domains)
Negative Ratings	58	37/95	2201/00	-5/940	0/000
Positive Ratings	10	19/45	214/00		
Equal	4				
Total	73				

9.2. THE SECOND MAIN-STUDY HYPOTHESIS TEST

H0: there is no significant difference in the perception of the five dimensions of functional quality of the parents.

H1: there is significant difference in the perception of the five dimensions of functional quality of the parents.

As the findings set out in Table 10 shows, there is difference among the average level of the five dimensions of functional quality. This difference indicates the priority of perception is as folllows: the dimensions of accountability, confidence, assurance, tangibility and empathy. The amount of test 611/40 X2=40.611, degrees of freedom df=4 and level of significant sig=0.00. The null hypothesis is rejected with 99% confidence, and hypothesis H1 based on non-uniformity of the average of all dimensions, is confirmed.

Table 10. The priorities of the five functional quality perception using Friedman Test

Indexes / Dimension	Average Rating	Rating	Number	Statistics	Degree of Freedom	Significance level
Tangability	2/63	4	79	40/611	4	0/00
Confidence	3/51	2				
Assurance	3/02	3				
Accountability	3/54	1				
Empathy	2/31	5				

10.2. THE THIRD MAIN-STUDY HYPOTHESIS TEST

H0: there is no significant difference in the perception of Service Quality among the parents.

H1: there is significant difference in the perception of Service Quality among the parents.

As the findings set out in Table 11 shows, there is difference among the average level of the elements. This difference indicates the priority of perception is as folllows: the mental image, functional quality, and technical quality. X2=22.143, degrees of freedom df=2 and level of significant sig=0.00. The null hypothesis is rejected with 99% confidence, and hypothesis H1 based on Lack of quality of the three elements, is confirmed.

Table 11. The priorities of service quality perception using Friedman Test

Indexes / Dimension	Average Rating	Rating	Number	Statistics	Degree of Freedom	Significance level
Technical Quality Perception	1/59	3	73	22/143	2	0/00
Mental Image Perception	2/34	1				
Functional Quality Perception	2/07	2				

Australian Journal of Business and Management Research
New South Wales Research Centre Australia *(NSWRCA)*
Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

DETERMINING THE QUALITY GAP IN FIVE DIMENSIONS OF FUNCTIONAL QUALITY, TECHNICAL QUALITY AND MENTAL IMAGE:

The Average expectations, perceptions, and the gap between them is calculated in table 12. As mentioned results show the gap in empathy and technical quality is more (Gap = 0.376) and the least gap in the functional quality is the Gap = 0.213.

Table 12. The average of expectations, perceptions and the gap of service quality elements

Elements / Indexes	Mean Expectations (ME)	Mean Perception (MP)	Gap
Tangibility	4/459	4/146	-0/313
Confidence	4/596	4/353	-0/243
Assurance	4/531	4/192	-0/339
Accountability	4/575	4/362	-0/213
Empathy	4/493	4/117	-0/376
Technical Quality	4/432	4/056	-0/376
Mental Image	4/614	4/329	-0/285
Functional Quality	4/536	4/243	-0/293
Service Quality	4/525	4/211	-0/314

THE RESULTS INCLUDE ASSUMPTIONS ON THE MODEL:

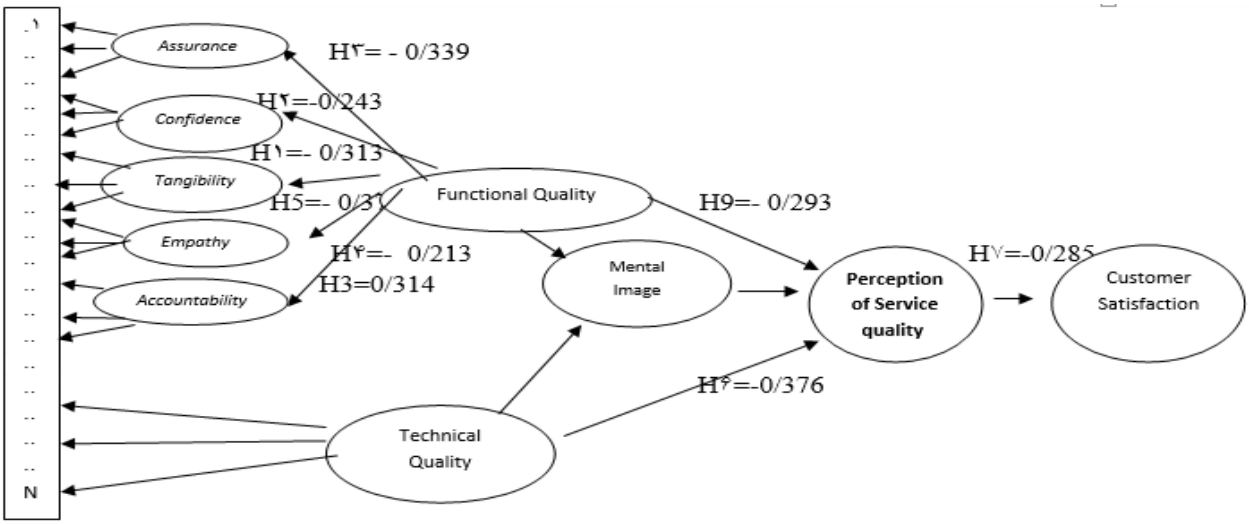

Figure 5. SERQUVAL-Gronroos Service Quality Model / kang & james , 2004,266-277

CONCLUSION AND DISCUSSION

In this study, three main hypotheses have been proposed the results of each are explained below:

1. First main hypothesis: there is/ isn't significant difference between the quality of servicing and customer expectations.Results of the first main hypothesis: the results of the difference between the quality of services and customer expectations suggest that the average level of expectations (37.95) is more than their perception (19.45).2. The second main hypothesis: there is/ isn't difference in the level of perception of the five components of the functional quality of the parents. (Non-uniformity of the average of all dimensions).Results of the second major hypothesis: there is difference in the ordering of the results in the five dimensions of perception of the functional quality (dimensions of SERVQUAL model). This difference indicates that the priority in level of perception is accountability, assurance, confidence, tangibility and empathy, so the non-uniformity of the average of all aspects of this hypothesis is confirmed.3. The third main hypothesis: there is/ isn't significant difference in perception of the quality of service components (overall perception of functional quality, technical quality and mental image) for parents and students.

Results of the third major hypothesis: the results show there is a significant difference in the ranking of each of the main aspects of the model (Gronroos: functional quality, technical quality and mental image). The difference

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

shows the first priority is mental image perception, the second is functional quality and the third is technical quality.

The main issue in the research is quality assessment of Osve smart school in general and in detail defining the level of Gronroos service quality (functional quality, technical quality and mental image) dimensions and in functional quality SERVQUAL model dimensions (tangibility, confidence, accountability, assurance and empathy) are assessed. The results of this study are presented below. Also, by examining the gap between expectations and perceptions, the factors affecting parental consent are prioritized. The main results of the satisfaction or non-satisfaction of the parents arise from of the gap between expectations and perceptions of each dimension, therefore we first turn to say a brief explanation in this regard. In SERQUVAL model (gaps model), 5 gaps are measured:
1: between perceptions and expectations of the management of the Customers' expectations and their real expectations.2: differences between management perception and the characteristics of service quality (quality service standards). 3: the difference between service quality specifications and actual service delivery. Have the standards consistently been met? 4: the difference between the service delivery and what is out of the organization. Do they have commitments? 5: The difference between what customers expect a service and what they actually receive. The first four gaps are major ones in the quality of service and the customer may not understand them, but the gap type 5 is the basis for a user-defined definition on the quality of services.In the present study, based on SERVQUAL model in the functional quality as well as in the dimension of Gronroos model the size of the gap type 5 is measured. After determining the gap in the quality Gronroos functional model, the main aspects of Gronroos model has been studied as well as the size of the gap in the dimension is measured. Gronroos has defined service quality as discrepancies between perception of customer about service and his expectations. According to Gronroos service quality model, the level of perception about service quality of the mental image due to the functional quality and technical quality is marked, then the level of customer satisfaction is measured.

According to the description of gaps and interpretation of the model used in this study, managers have to narrow the fifth gap in order to provide better services. In this research gap is defined as the difference between the average expectations of perceptions, so negative numbers derived from research findings indicate that the level of parental expectations is higher than their perceptions. According to numbers obtained by empathy and technical quality the gap is 0.376 and minimum gap in accountability is 0.213. according to the values obtained from the fifth gap in each dimension, the dimension of empathy and technical quality, parents' expectation have received much more than what the school is doing.

The reasons why Parents have chosen Osve smart school in technical quality model are as follows:

- Generating educational content by teachers and students
- The use of e-mail continuously
- Contact by cell-phone and the Internet
- The use of CMS outside school
- Existence of the uninterruptible power supply when necessary
- Controlling children by CCTV,
- The use of pdf books
- Having a system of wireless (in the technical quality of the model)

The reasons why Parents have chosen Osve smart school in empathy model are as follows:

- The appropriateness of reform in updates with their own opinions
- Effective behavior towards special personalities
- Having time for a meeting
- Considering the value and internal emotions of students
- Non-discrimination
- Non-academic side activities
- The development of children's skills
- Enough time to use the software

According to the obtained findings what the parents have received, are so much lower than previously thought and was awaiting them. Most of the gap by -0.376 is indicative of this. Also -0213 gap shows lower level of expectation in comparison to perception, but the gap in this dimension has lesser amount than the other gaps. The school almost achieved parents' expectation in this dimension. About the services that are provided by the

Vol.05 No.01 | May-2015 ISSN: 1839 - 0846

school like informing parents, school personnel's passion has always been in communication with parents and children, the school calendar, progress of academic results in comparison to the previous month. It is noteworthy that the above still the level of perception is lower than expectations.

It is noteworthy in terms of the average level that parents have chosen in the questionnaire, almost the same level in most dimensions, the average expectations rate is more than the average perception rate. The only difference is in the mental image including higher confidence, better services, higher-level technology, higher reputation, higher levels of education, science and culture, having more intimate relationships and placing top priority in the integrity of school relative to other schools, which Average Rating Expectations are lower than perceptions.

REFERENCES

1. Al Bassam, T., & Al Shawi, S. (2011). Analysing the Use of the SERVQUAL Model to Measure Service Quality in Specific-Industry Contexts. In Proceedings of 14th International Business Research Conference.
2. Carman, J.M. (1990), "Customer perceptions of service quality: an assessment of the SERVQUAL dimensions", Journal of Retailing, 66(1), 33
3. Ghavifekr, S., Hussin, S., & Ghani, M. F. A. (2011). The process of Malaysian smart school policy cycle: A qualitative analysis. Journal of Research, 5(2), 83-104.
4. Horowitz. L. M. (1994). Pschemas, psychopathology, and psychotherapy research. Psychotherapy Research, 4, 1-19.
5. Kang, G. D., & James, J. (2004). Service quality dimensions: an examination of Grönroos's service quality model. Managing Service Quality: An International Journal, 14(4), 266-277.
6. Kumar, V., Smart, P. A., Maddern, H., & Maull, R. S.(2008). Alternative Perspective on Service Quality and Customer Satisfaction: the Role of BPM. International Journal of Service Industry Management, 19(2). http://dx.doi.org/10.1108/09564230810869720
7. Mirzajani, H., & Bayekolaei, M. D. (2013). Emotional Intelligence of Students in Smart School. Middle-East Journal of Scientific Research, 18(9), 1322-1329.
8. Omidinia, S., Masrom, M., & Selamat, H. (2011). Review of e-learning and ICT infrastructure in developing countries (case study of Iran). American Journal of Economics and Business Administration, 3(1), 120.
9. Ong, E. T. (2006). The Malaysian smart schools project: an innovation to address sustainability. In 10th UNESCO-APEID International Conference on Education "Learning Together for Tomorrow: Education for Sustainable Development (pp. 6-8).
10. Rahman, M. S., Khan, A. H., & Haque, M. M. (2012). A conceptual study on the relationship between service quality towards customer satisfaction: Servqual and Gronroos's service quality model perspective. Asian Social Science, 8(13), p201.
11. Stafford, M. R., Prybutok, V., Wells, B. P. and Kappelman, L. (2011). Assessing the fit and stability of alternative measures of service quality. Journal of Applied Business Research, 15 (2): 13-30.
12. Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). Delivering quality service: Balancing customer perceptions and expectations. Simon and Schuster.
13. Zeithaml, V.A. (2000), "Service quality, profitability and the economic worth of customers: what we know and what we need to learn", Journal of the Academy of Marketing Science, Vol.28 .No. 1, pp. 67-85.