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## Study of Factors Affecting Measurement of Perceived Quality of Educational Services Using the Gap Analysis Model- SERVQUAL

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### Abstract

This study aimed at examining the factors that led to the emergence of a negative gap between the students' perception and their expectations. It focused on measuring the four gaps, identified by the model (SERVQUAL), as the cause of the fifth gap. The study tackled the staff of the administrative and financial Sciences department as well as the other departments that have a direct relationship with the students in the second semester (2014-2015) at the University College of Applied Sciences (UCAS). The study found out statistically disappearance of the four gaps although there are some relative differences between the gaps' variables. The study also showed that there is a difference between the management perception and the staff perception of the students' needs. Additionally, the study showed that there is a discrepancy between the quality parameters in terms of strengths and weaknesses. Finally, the study recommended the need to exert efforts to achieve the highest match between the expectations of the students and recognition of the institution to these expectations. It also recommended the need for employees to be aware of the available information to raise the students' awareness.

**Keywords:** SERVQUAL, University College of Applied Sciences (UCAS), Service Quality

### دراسة العوامل المؤثرة في تحديد الجودة المدركة للخدمات التعليمية باستخدام نموذج (تحليل الفجوات - SERVQUAL)

هدفت هذه الدراسة الى دراسة العوامل التي أدت الى ظهور فجوة سالبة بين إدراك الطلبة وتوقعاتهم ، حيث اهتمت هذه الدراسة بقياس الفجوات الأربع التي حددها نموذج تحليل الفجوات (SERVQUAL) كمسبب للفجوة الخامسة ، وطبقت الدراسة على العاملين في قسم العلوم الإدارية والمالية بالكلية الجامعية للعلوم التطبيقية والإدارات ذات العلاقة المباشرة بالطلبة للفصل الدراسي الثاني (2014-2015) في الكلية الجامعية للعلوم التطبيقية ( UCAS ) ، وتوصلت الدراسة الى عدم ظهور أي من الفجوات الأربعة من ناحية إحصائية رغم وجود بعض الفروق النسبية بين متغيرات كل فجوة ، كما أظهرت الدراسة وجود اختلاف بين ادراك الإدارة وادراك الموظفين لاحتياجات الطلبة و بينت الدراسة ان هناك تفاوت بين محددات الجودة من حيث القوة والضعف ، وفي الختام قدمت الدراسة عددا من التوصيات تمثلت في ضرورة زيادة بذل الجهود من أجل تحقيق تطابق أعلى بين توقعات الطلبة وادراك المؤسسة لهذه التوقعات كما اوصت الدراسة بضرورة اطلاع الموظفين على المعلومات المتوفرة لديها لتوفير المعرفة الكاملة بتوقعات الطلبة.

**كلمات مفتاحية:** نموذج تحليل الفجوات، الكلية الجامعية للعلوم التطبيقية (UCAS)، جودة الخدمة.

## Introduction:

It is clear to all that the services sector is developing day after day, especially in more developed and prosperous societies. The demand for many types of services is increasing in these societies and these services could be of less demand in quantity or quality in the developing societies. (Alttai & Aleilaq, 2009) revealed statistics, published by the Guardian newspaper in its education appendix in January 2006, to figure out that approximately (27368) individuals, in European Union countries alone, of CEOs involved in training programs, and undergraduate and postgraduate studies in the area of services marketing (including banking, insurance, finance, administration, technical consultations, and travel and tourism. This is an indication of the size of the services sector and the anticipated future for this sector. Moreover, the size of the services sector is amplified by the fact that the production of tangible products requires many different types of services. This implies that services production is essential whether in the services sector or in the production of goods.

Many statistics show the various sizes of different services sectors. (AL falih, 2013) reveals that "the Palestinian economy is characterized by being a services based economy to a large extent. For example, in 2012, the services sector contributed to 57% of the local GDP and 62% of the laboring sector. Geographically, data shows that the Gaza Strip is more reliable on services activities. These activities contribute to 62% of local GDP while they contribute to 56% of the West Bank's GDP. Also, the services sector employs 77% of Gaza laborers, whereas, it employs 55% of laborers in the West Bank. This all indicates the size of the services sector and its expected future.

The report of the Palestinian economy (2015) performance prepared by the Palestinian Central Bureau of Statistics (PCBS) showed that the discrepancy in growth affected the contribution of economic activities to the gross domestic product (GDP) in Palestine in 2015. The contributions of agriculture and industry have decreased while the contributions of construction, transport, warehousing, services and other branches have increased, whereas the contributions of wholesale and retail trade, information and communication activities have not changed

The contribution of other service activities and other branches to (GDP) increased to 49.5% compared to 48.8% in 2014. The increase in the contribution of service activities and other branches is due to the rapid growth of these activities during the year 2015, compared to other activities that have grown slowly or decreased and thus the services and other branches became dominant over about half of the GDP.

This is because other services and branches have a wide range of sub-activities, including financial activities, insurance activities, accommodation services, and real estate services in addition to rental, professional, scientific, technical, administrative and supportive services as well as education, health, social work and others.

The structure of economic activities varied between the West Bank and the Gaza Strip during 2015, but service activities and other branches remained dominant in each. The contribution of these activities to the GDP of the Gaza Strip reached 59.1% while the contribution to GDP of the West Bank was 46.6% (PCBS, 2016).

It is worth mentioning that the education sector is one of the service sectors that traced the same steps, based on the statistics published by the Ministry of Education and Higher Education in 2014. It is very clear that the Gaza Strip has been witnessing a large expansion in the size of educational services during the past few years regarding the number of academic institutions operating in the Gaza Strip and which are providing their services to a limited number of students (MOHE, 2015). Accordingly, an atmosphere of large competition among these institutions is existed to provide the best possible services. There is no doubt that quality, especially service quality, is one of the most important competitive strong points of any institution. This is where this study stems from. This study focuses on educational quality in general and on determining and measuring the factors affecting perceived quality in particular.

It should be worth mentioning that this current study is a completion of another study carried out by the same researcher. The first study was titled: "Measuring the Quality of the Educational Services offered to Diploma Students at the Department of Administrative and Financial Sciences at the University College of Applied Sciences". It was concerned about measuring the quality of perceived services (Al Abadlah, 2016). However, this current study is concerned in studying the other half of the same topic. Therefore, the theoretical background of both studies shall not differ

largely and some theory will be cited from the first study. Also, some additions will be made to suit the topic of the current study.

### **Study Problem:**

The problem of the study arises from the presence of a gap between the students' perceptions, in the Department of Administrative and Financial Sciences, and their expectations about the educational services provided to them i.e. the fifth gap, taking into account that Expectations=5.42 and Perceptions=5.06. This gap has been highlighted in a previous study conducted by the researcher, using the "SERVQUAL" model (Al Abadlah, 2016). According to the literature of the applied model, that study showed that there was a drop in the quality that accounted for 93.4%, compared to the expectations.

This current study attempts to identify the reasons behind the appearance of this gap according to the mechanism provided by the model used in this study. This mechanism involves the study of the remaining four gaps which caused the emergence of the fifth gap in accordance with the study model's vision.

### **Study Objectives:**

The study aimed at answering the following main question:

What is the reason or reasons for the emergence of the fifth gap "the difference between the students' perceptions and expectations of the level of services provided to them?"

The following sub-questions stem from this main question of the study:

- 1- Is there a difference between the expectations of the students and the administration's perception of these expectations (first gap)?
- 2- Is there a difference between the ability of the administration to perceive the expectations of the students and its ability to set standards (second gap)?
- 3- Is there a difference between the set standards and the ability of the employees to work according to these standards (third gap)?
- 4- Is there a difference between the promises made to the students and the ability of the employees to fulfill these promises (fourth gap)?

### **Study Importance:**

The importance of the study lies in the importance of its results. The study explains to the officials whether the gaps determined by the model are the factors behind the emergence of a fifth negative gap between the

expectations and perceptions of the students of the services provided to them or not. This would help officials to diagnose weak points and work on eliminating them. This would also contribute to enabling the officials to improve the level of quality of services provided to the students and would, therefore, enhance the ability of the institution to provide better services and to achieve a higher competitive potential within the society.

### **Theoretical Background of the Study:**

Marketing books contain many definitions for quality. Most of these definitions are pivoted around one main idea which is that quality is a human activity that provides an intangible benefit which can neither be possessed nor owned. For example, Kotlar (2000) defined it as: "any activity, achievement or benefit provided by one party to another party. It is originally intangible and no possession results from it. Its production or provision could or could not be related to a material product" (Alddumur, Marketing Services, 2008). Haddad's definition of quality states that it is: "a group of behaviors, activities or a single performance provided from one party to another. These activities are intangible and do not incur the transfer of any sort of possession. Also, the provision of the service can or cannot be related to a tangible material product". (Alhadad, 1999).

Quality is considered a very important subject which producers are keen on providing whether they be producers of goods or producers of services. Quality has a special nature and characteristics in the services sector that distinguish it from other products. Quality, like most other humanitarian terms, has many definitions and even entrances for definitions due to the special nature of the characteristics of services which distinguish it from other products. This nature differs from one person to another and from one condition to the other. Quality that could be accepted in a certain situation can be unaccepted in another. Also, it is natural for the quality of services to differ clearly from the quality of tangible goods where measurement, inspection and specification standards can be easily determined. These processes are much more difficult when dealing with services. Therefore, the process of judging the quality of a service is difficult to determine or to generalize. Among the definitions of quality that coincide with the study instrument used in this study is that of (Parasuraman, Zeithaml, & Berry, SERVQUAL: a Multi - Item Scale for Measuring Consumer Perceptions of Service Quality, 1988) which defines

quality as: "the difference between the customer's expectations of a service and their perceptions of its actual performance". Another definition that is related to the current study is that of (Bani Hamdan, 2012) which defines quality as: "the extent to which the quality of a service can meet or surpass the expectations of the beneficiaries".

Regarding the concept of quality in education, it can be said that quality here is related to all the traits and characteristics connected to the educational field. This type of quality reveals the level of distinction and accomplishment of the results meant to be achieved. It also transforms the requirements and expectations of the students into defined properties which are the base for providing educational service that suit their expectations. Universities are among service institutions that compete hard to achieve long term success. Also, according to the new marketing concept which focuses on achieving customer satisfaction, which is represented in the educational sector by student satisfaction, universities nowadays are concerned in raising the quality of their services in the aim of achieving student satisfaction. Student satisfaction is a basic area of distinction on the long run (Alrrabiei, Alnnueaymi, & Qdura, 2010).

This study tries to define the reasons behind the emergence of a negative gap between the expectations and perceptions of the students of the Department of Administrative and Financial Sciences at the University College of Applied Sciences of the provided services (fifth gap). The study relies on the concepts and foundations on which the (SERVQUAL) model was built on. The model provides a clear mechanism to study the level of quality (by measuring the fifth gap in the sample). This was carried out by the researcher in a previous study. The results of that study showed that there was a gap between perception and expectation. The model provides four other gaps which it considers as reasons for the fifth gap. This study measures these four gaps and determines the reason or reasons behind the difference in the fifth gap.

#### **Following is a simple explanation of the applied model (SERVQUAL):**

(Parasuraman et al, 1985) carried out an extensive study to clarify the concept of service quality. As a result of his study, he formed his famous model (SERVQUAL) which is based on the fact that:

"Service quality is a measure of how well the service level delivered matches customer expectations"

The model consists of five gaps measured according to a determined mechanism consisting of five parameters. Each parameter has its own causes and manner of measurement. Following is an explanation of these gaps from the point of view of the model designers:

**1- First Gap:** It is named the "research gap" and deals with:

(The difference between the management perception of consumer expectations and the expectations of the consumers themselves).

This means the level to which the management knows or perceives the consumers' expectations. Therefore, if the managers know what the consumers expect, they will be able to provide services that meet these expectations and the services will be satisfactory to the consumers as they fulfill their expectations.

This gap has several causes of which are:

- a- Shortage of marketing research.
- b- External communication is insufficient.
- c- The presence of a large number of managerial levels.

**2- Second Gap:** It is named the 'design gap' and deals with:

(The difference between the management perception of the students' expectations and the ability of the management to transform these expectations into standards).

This means that the management's perception of the students' expectations only is not enough but this perception has to be transformed into standards and determinants that ensure the provision of a service that meets the standards of the students' expectations.

This gap has its causes which are:

- a- Failing to commit to quality criteria.
- b- Failure to correctly perceive consumer requirements.
- c- Incorrect procedures of setting standards.
- d- Failing to determine precise objectives.

**3- Third Gap:** This is named the "delivery gap" and deals with:

(The difference between the set standards and the service delivered itself).

This means that the presence of suitable quality standards only is insufficient. The service providers must be committed to providing the service according to these standards to ensure the provision of services in accordance with correct set standards and, therefore, to meet consumer expectations.

This gap also has a number of causes of which are:

- a- Unclear roles.

- b- Conflicting roles.
- c- Weakness of employees.
- d- Poor technology used.
- e- Poor monitoring system.
- f- Failure to work as a team.

4- **Fourth Gap:** It is named the “communication gap” and deals with:

(The difference between the service delivery and the promises made by the institution during external communication).

This means that the institution may provide the consumers with exaggerated information regarding the service quality and the way it is provided. This leads to raising levels of expectations to the highest degrees and the result is that however high the level of perception, it is usually lower than the formed expectations. This leads to a decrease in student satisfaction of the delivered quality of service.

This gap has its causes which are:

- a- Unsuitable external communication.
- b- Making exaggerated promises.

The previous gaps were all evident when investigating managers, meaning that they are all concerned with the management and are part of it. However, the fifth and final gap was evident when investigating consumers only.

5- **Fifth Gap:** It is named the “reality gap” and deals with:

(The difference between the consumers’ perceived service and the expected service).

The study conducted on consumers (Parasuraman et al, 1985) revealed that consumers evaluate service quality by comparing expectation with perception.

The causes for this gap are as follows:

There is no doubt that the fifth gap results naturally from the emergence of one or all of the previous gaps. The presence of any of the previous gaps means that the service was not delivered according to the consumers’ expectations. Therefore, treatment of the four previous gaps will lead to the fifth gap not emerging which leads to a high evaluation of quality from the consumers’ point of view.

To summarize:

$$\text{Gap 5} = f \{ \text{gap1, gap2, gap3, gap4} \}$$

The study is also based on the fact that consumers evaluate services according to general determinants regardless of the type of service. Ten determinants were placed for service quality but the formulators of

this model later reduced them into five determinants only which are:

- 1- **Tangibles:** It includes all the tangible elements of the institution providing the service such as equipment, devices, buildings, employees’ appearance and the tangible parts that constitute part of the service itself.
- 2- **Reliability:** This means relying on the institution’s ability to provide the service with certain quality standards required from it. In other words, providing the correct service from the first time.
- 3- **Responsiveness:** This means the desire and preparedness of the institution’s employees to provide the services, to respond to the enquiries of the customers and to meet their requirements within the determined time.
- 4- **Assurance:** The customer’s feeling of comfort and assurance to the information he receives while not using terms or words un-understood by the customer. Also, the customer’s feeling of being safe from the dangers he may face due to poor service and his feeling of confidence. The customer also ought to feel that the workers are qualified to deliver this service. This all gives the customer a feeling of assurance.
- 5- **Empathy:** The customer’s feeling that he is the employee’s center of attention and that his interest is vital. He also must feel that he can communicate and enquire about things at any time and that the institution understands his needs and interacts with them.

The definition of quality which states that it is: “the extent to which service quality can meet or exceed the expectations of customers” (Bani Hamdan, 2012) gives large space for competition among institutions. This drove many specialists to conduct many studies using many mechanisms concentrating on study of quality in service providing institutions. Following is an attempt to shed light on some of these studies concerned with the topic of this study (quality of educational services). These studies applied the same method and manner of measurement in the educational field or other fields. Researchers and specialists carried out many studies in various fields, especially with the direction towards service quality and the availability of models that facilitate quality measurement such as the “gap analysis model” (SERVQUAL) which was used extensively in this field.

Ford et al (1993) used this model to conduct a study comparing postgraduate students in each of New Zealand and the United States. He applied the study on a sample of Business Administration students in both countries. The aim of the study was to compare between the students on the basis of the model's quality determinants. The study revealed differences between the two countries. In his study, he also excluded three questions from the model questionnaire due to their unsuitability to the educational field.

(Oliveira & Ferreria, 2009) also used this model in a study he carried out in Sao Paulo State University titled: "Adaptation and application of the SERVQUAL scale in higher education". His study showed that the (promptness) determinant revealed the highest negative gap at a rate of (-0.961). It was followed by the determinants: empathy, reliability, assurance and finally tangibles. Barakat (2010) also used this model to measure "the gap between perceptions and expectations of services provided by the Quds Open University (Tulkarem branch) from the point of view of its students". His study showed positive differences for some determinants and negative ones for other determinants. Also, Ashour and Al Abadlah (2004) measured the quality of educational services provided to postgraduate students (MBA program) in the Islamic University of Gaza. Their study aimed at measuring the difference between the students' expectations and perceptions of the services provided to them. The study applied the (SERVQUAL) model and revealed that the university was able to meet the expectations of the students to a degree of (83%).

AL-Fara & AL awdi,(2013) carried out a study "measuring the quality of educational services provided by Palestinian universities in light of global contemporary changes" from the point of view of the students. They took all branches of the Quds Open University in Gaza as a sample for their field study. The main results of the study were the low level of service provided to the students, especially in the material and reliability determinants, whereas, quality was average for the remaining determinants. Also, Alrrabiei, Alnnueaymi, & Qdura, (2010) carried out a study involving "the impact of educational service quality and supervision quality on the postgraduate students' satisfaction in private Jordanian universities". The study was applied to three universities: (Middle East University, Amman Arab University and Jadara University). The main result of the study was the presence of low quality of service provided in all the

studied universities and in all of the model's quality determinants.

Meanwhile, Khalid Dehleez (2015) studied the relationship between the quality of internal services and the quality of customer service in the academic institutions in the Gaza Strip. He relied on the (SERVQUAL) model and the results showed the presence of a direct positive relationship between some of the internal quality determinants and the quality of external services. However, there was no relationship between the other determinants and the quality of external services.

A number of other researchers used the same model to measure the quality of others services. For example, Al Sahn Mohammed Farid (1995) used it to judge whether the gaps determined by the model were present in the banking sector (commercial banks in the city of Alexandria). Also, Kaldebenrg et al. (1997) used it to measure satisfaction in the dental practice, whereas, it was used by Baker(1997) to examine service quality among three stakeholder groups involved in the tourism service: (visitors, employees and managers). Xie et al (1998) used the model to evaluate the services delivered by information search engines.

Bin Rashid, 2008 used the model to measure the quality of banking services taking (Al Rajhi Bank) as an example, whereas, Abu Abdullah Saleh (2010) was interested in determining the quality dimensions of postal services in the Algerian environment relying on the same model.

Also (Alealul, 2011) conducted a study of the quality of telecommunications provided by Jawwal Company to around (700,000) customers in the Gaza Strip relying on the same model. Al Ddumur et al (2012) also studied the effect of quality of health services on the loyalty of patients in the Jordanian University Hospital (case study) by applying the (SERVQUAL) model.

Salah Dhiab (2012) conducted a study measuring the dimensions of health service quality provided by Jordanian governmental hospitals from the perspective of patients and employees. His study revealed that the hospitals provide all quality dimensions except (responsiveness).

Others measured the quality of educational services by relying on other models. For example, Hamdan (2012) conducted a study at the University of Applied Sciences in Jordan where he measured the quality of educational services and its impact on student satisfaction. For this purpose, he designed a questionnaire consisting of (28

questions). Abu amr (2008) studied the status of administrative quality and means of developing it in Palestinian universities (Al Azhar University, Islamic University of Gaza, Al Aqsa University and Al Quds Open University) from the point of view of the administration. She designed a questionnaire consisting of (71 questions) distributed among 7 axes.

Prof. Salem Hilles (2015) also studied the impact of quality of educational services on the satisfaction of postgraduate students of the Faculty of Commerce at the Islamic University of Gaza. His study revealed the presence of satisfaction of some elements and less satisfaction of other elements such as external services. It is clear that most of the previous studies except few used the (SERVQUAL) model as a study instrument. The subject of these studies was mostly the quality of educational services, whereas, some were related to postal services, communication, banking services, health services etc. but with the use of the same instrument. Most of these studies were limited to studying the fifth gap, comparing customer perception and expectation, although the model provides the opportunity to study the other gaps too. Al Sahn's study 1995 studied the whole five gaps.

This current study is similar to the (Ford study1993) in that it uses the same instrument. It is also similar to the (Ashour et al, 2007) study in using 19 questions only instead of 22 determined by the model. It also intersects with the (Al Sahn study 1995) in that its measures the five gaps and is similar to most of the previous studies in many areas, most importantly: the general method of the study concerning the model and its determinants, using the questionnaire and sample method and some of the statistical analysis methods.

**Study Methodology:**

The researcher used the descriptive analytical method. This method suits the nature of this case as no previous information about this subject is available and the aim is to collect and analyze primary data. To achieve this objective, the researcher relied on the (SERVQUAL) model which is widespread in this field. It is an abbreviation for "Service Quality Model" and is also known as the "Gap Analysis" model. It was designed by Parasuraman et al (1985) to be suitable to measure the quality of any type of service. The model relies on measuring five gaps and the relationship between them is as follows:

$$\text{Gap 5} = f \{ \text{gap1, gap2, gap3, gap4} \}$$

**Study Population and Sample:**

The nature of the study implies that the researcher has to deal with two study populations: customers (students) and service providers (employees and managers). The study was applied to the Department of Administrative and Financial Sciences at the University College of Applied Sciences. The study included the academic employees and managers at the Department of Administrative and Financial Sciences as well as the administrators and managers of the other departments which the students strongly interact with (from the point of view of the researcher). These other departments are: the Admissions Department, Student Affairs Department, Financial Department, Library, Administrative Affairs, Academic Affairs and the Presidency. The study population was limited to the students of the Administrative and Financial Department registered for the second semester of the academic year 2014/2015. Their number is 824 male and female students. The size of the student sample was 205 individuals viable for analysis out of 215 original individuals originally chosen from the student population. Refer to (table 1). This part was conducted in a previous study as mentioned earlier.

Table 1

Distribution of the Sample according to Gender, Specialization, and Academic level

Gender	Level		Total	Gender	Specialization		Total
	1st	2nd			Secretariat	Accounting	
Males	47	72	119	Males	25	94	119
Females	28	58	86	Females	49	37	86
Total	75	130	205	Total	74	131	205
Specialization	Academic level		Total				
Secretariat	1st	2nd					
Secretariat	13	61	74				
Accounting	62	69	131				
Total	75	130	205				

The comprehensive survey method was used for the employees due to their relatively small number. The total number of questionnaires received from the institution population was 51 divided as follows: (41 academic and administrative employees comprising 80.4% of the size of received sample and 10 managers "managers or assistant managers" comprising 19.6% of

the size of received sample) (Table 2). It can be noted that the study population of employees consists of around (16 managers, 22 administrative employees and 30 academic employees).

#### **Measurement Instrument:**

The researcher used three questionnaires related to the (SERVQUAL) model which was amended by (Ford and Joseph) in 1993 to suit educational services. Three questions were discarded from the questionnaire which originally consisted of (22) questions measuring both perception and expectation; whereas, the other parts remained as they were originally.

- 1- The first questionnaire is related to the students and was used in a previous study (Talal Alabadlah, 2016). Its results are used in this study.
- 2- The second questionnaire is related to the employees and consists of three parts (employee perception of student expectations- the ability of employees to work according to standards- the ability of employees to stick to their promises).
- 3- The third questionnaire is related to the managers and consists of three parts (manager perception of student expectation- the ability of the management to transform perception into standard- knowledge of the importance of communication from the point of view of the management).

#### **Measurement Method:**

The questionnaires were handed out to all categories by hand so as to absorb the subject and to ensure a high rate of replies. The questionnaires measure quality determinants from various angles. These determinants are: (tangibles, reliability, responsiveness assurance and empathy)

According to the model literature, the gaps are measured by subtracting the first step from the one following it as follows:

All gaps are measured according to the equation:

$$Q = P - E$$

Where (Q= Quality, P= Perception and E= Expectation) Perception is considered the first step, whereas, expectation is the second step. This applies to the measurement of all gaps which are measured through analyzing the questionnaire data related to them according to the following mechanism:

#### **Measurement of Gap (1)**

Management perception of student expectation- student service perception

#### **Measurement of Gap (2)**

The management's ability to transform its perception into standards- the management's ability to perceive student expectation

#### **Measurement of Gap (3)**

The employees' ability to work according to standard- the management's ability to transform perception into standards

#### **Measurement of Gap (4)**

Employees' ability to abide by their promises- employees' ability to work according to standards

#### **Measurement of Gap (5)**

Student service expectation- student service perception

#### **Validity and Reliability Tests:**

The test results showed that the instrument revealed high internal integrity as the coefficient between each of the questions of the questionnaire and the total degree of the determinant which each belongs to show a positive and statistically significant relationship at a level of 0.05. This assures the researcher that the questionnaire enjoys valid internal integrity and can be applied to the study sample. The test results also showed that the Cronbach's alpha coefficients were all above 80% and that in general, the instrument questions achieved a coefficient of 96.0% for all questions. This indicates that the questionnaire enjoys a high level of stability which reassures the researcher to apply it to the study sample.

#### **Hypotheses:**

- 1- There are no statistically significant differences between student expectations of the quality of provided services and the perception of the management of these expectations.
- 2- There are no statistically significant differences between the perception of the management of student expectation and the ability of the management to transform this expectation into standards.
- 3- There are no statistically significant differences between the set standards (the ability of the management to transform its perception into standards) and the ability of employees to provide service according to these standards.
- 4- There are no statistically significant differences between the service actually

delivered (the ability of employees to work according to standards) and the promises the institution made to the students.

**Study Parameters:**

According to the study model, a number of parameters shall be measured in the study:

- Student expectations of the level of quality of services delivered.
- Management perception of student expectation.
- The ability of the management to transform its perception of expectations into standards.
- The ability of the institution employees to work according to the set standards.
- The ability of the employees to abide by the promises they made to the customers (students).

**Study Determinants:**

**Time Determinant:** Second semester of the academic year (2014/2015).

**Human Determinant:** Students of the Department of Administrative and Financial Sciences at the University College of Applied Sciences.

**Place Determinant:** University College of Applied Sciences- Gaza Strip.

**Data Analysis and Discussion of Results:**

**1- Analysis of Demographic Factors:**

**a- Employees of the Institution:**

Table (2) below shows the distribution of employee numbers. The number of questionnaires collected from the employees was 41 including 17 from administrative employees and 24 from academic employees. It is clear that the number of males is larger than the number of females and that the number of academic employees is larger than the number of administrative employees. This conforms to the actual size of the population.

Table (2): Distribution of Employees according to Gender and nature of Job (Academic/Administrative)

Employees	Academic		Administrative		Total	
	No.	%	No.	%	No.	%
Males	21	87.5	13	76.5	34	82.9
Females	3	12.5	4	23.5	7	17.1
<b>Total</b>	<b>24</b>	<b>100.0</b>	<b>17</b>	<b>100.0</b>	<b>41</b>	<b>100.0</b>

**b- Managers:**

The number of managers was 10 individuals only and they included managers, deputy managers and assistant managers. Therefore, they were dealt with as

one sector without the need to categorize them according to traditional demographic parameters due to their small number. Therefore, the total number of questioned employees is 51 individuals.

**c- Students**

The total number of students was (205) male and female students distributed as in table (1).

**Hypothesis Testing:**

First Hypothesis:

“There are statistically significant differences between the management perception of student expectations and student expectations themselves”.

In order to test this hypothesis, the difference between management perception of student expectations and student expectations themselves were studied as in table (3). Negative differences appeared meaning that student expectations were higher than management perception of these expectations. The largest difference was in the assurance determinant which means it has the lowest quality, whereas, the lowest difference was in the responsiveness determinant which means it has the highest quality. However, from the statistical point of view, all of these differences are statistically insignificant, meaning: the rejection of the first hypothesis or that the management, from a statistical point of view was able to understand the expectations and requirements of the students. The analysis reveals the need for more precision and concentrated study to determine student needs more accurately.

Table (3) Student Expectation and Management Perception of the Student Expectation

Variable	Description	Management Perception of Student Expectations		Student Expectations		Relative Difference	T-test	
		Mean	%	Mean	%		value	Sig
B100	Tangibles	5.43	77.6	5.63	80.4	2.8-	0.648	.518
B200	Reliability	5.18	74.0	5.37	76.7	2.7-	0.513	.609
B300	Responsiveness	5.15	73.6	5.19	74.1	0.5-	0.093	.926
B400	Assurance	5.40	77.1	5.65	80.7	3.6-	0.681	.497
B500	Empathy	5.05	72.1	5.20	74.3	2.2-	0.347	.729
BBB	Total	5.24	74.9	5.41	77.3	2.4-	0.533	.594

**All relationships are statistically insignificant**

However, when studying the same points concerning the employees (Table 3), it was found that the differences in general were higher than those between the management and the students and that some of these differences were statistically significant. The largest of these differences was for the empathy determinant meaning it had the lowest quality, whereas, the lowest of these differences was for the assurance determinant meaning it had the highest quality. Assurance had the lowest quality concerning the management.

The analysis reveals that the management perception of student needs and expectations was better than the employee perception of these needs and expectations. There is no doubt that this affects employees' abilities to provide the service according to standards. This implies that the management must raise the awareness of the employees and inform them of the student expectations to enable them to provide services according to these expectations, especially regarding empathy and reliability determinants.

Table (4) Students' Expectations and Employees Perception of the Student Expectations

variable	Description	Employee's Perception of Student Expectations		Student Expectations		Relative difference	T-test	
		Mean	%	Mean	%		value	Sig
B100	Tangibles	5.20	74.3	5.63	80.4	6.1-	2.546	.012
B200	Reliability	4.92	70.3	5.37	76.7	6.4-	2.251	.025
B300	Responsiveness	5.00	71.4	5.19	74.1	2.7-	0.817	.415
B400	Assurance	5.60	80.0	5.65	80.7	0.7-	0.274	.784
B500	Empathy	4.60	65.7	5.20	74.3	8.6-	2.621	.009
BBB	Total	5.07	72.4	5.41	77.3	4.9-	2.048	.042

**Uncoloured relationships are statistically significant at a level of significance of 0.05**

**Second Hypothesis:**

"There are statistically significant differences between the ability of the management to set standards and the management perception of student expectation".

The analysis in table (5) shows that the differences between the management's ability to set standards and the management perception of student expectations are

small and even positive sometimes. The largest differences were in tangibles. Also, all of these differences were statistically insignificant meaning the rejection of the second hypothesis. This indicates that the management was able to transform its perception into applicable standard. However, there is space for improvement so that all data of perception and ability to set standards can match or be positive, especially in the tangibles determinant.

Table (5) The management Perception of the Students' Expectations and the Ability of the Management to Set Performance Standards

Management' Ability to Set Standards				Management Perception of Student Expectations				Relative difference	T-test	
Variable	Description	Mean	%	Variable	Description	Mean	%		Value	Sig
V2001	Tangibles	4.80	68.6	B100	Tangibles	5.43	77.6	-9.0	1.148	.280
V2002	Reliability	4.90	70.0	B200	Reliability	5.18	74.0	-4.0	0.934	.375
V2003	Responsiveness	5.50	78.6	B300	Responsiveness	5.15	73.6	5.0	1.164	.274
V2004	Assurance	5.40	77.1	B400	Assurance	5.40	77.1	0.0	0.000	1.000
V2005	Empathy	5.30	75.7	B500	Empathy	5.05	72.1	3.6	0.785	.453
V2000	Total	5.18	74.0	BB	Total	5.24	74.9	-0.9	0.265	.777

**All relationships are statistically insignificant**

**Third Hypothesis:**

"There are statistically significant differences between the ability of the employees to provide the service according to standards and the ability of the administration to set standard".

When studying the differences between this gap's determinants regarding the ability of employees to work according to standards and the ability of the management to set standards, it appears from table (6) that all of the differences are statistically insignificant. Moreover, all of the differences were positive meaning the rejection of the third hypothesis. This also means that the employees have a high ability to provide services according to set standards and that this is a positive indication of the quality of provided services.

Table (6) The Ability of Employees to Provide Services According to the Standards and the Ability of the administration to Set Standards

Employee's ability to	Administration's ability	Rela	T- Test
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provide service according to standards				to set standards				tive Difference		
Variable	Description	Mean	%	variable	Description	Mean	%		Value	Sig
V2001	Tangibles	5.56	79.4	V2001	Tangibles	4.80	68.6	10.8	1.8097	.077
V2002	Reliability	5.12	73.1	V2002	Reliability	4.90	70.0	3.1	0.5926	.556
V2003	Responsiveness	5.54	79.1	V2003	Responsiveness	5.50	78.6	0.5	0.0834	.934
V2004	Assurance	5.41	77.3	V2004	Assurance	5.40	77.1	0.2	0.0241	.981
V2005	Empathy	5.30	75.7	V2005	Empathy	5.30	75.7	0.0	0	1
V2000	Total	5.38	76.9	V2000	Total	5.18	74.0	2.9	0.6188	.539

All relationships are statistically insignificant

#### Fourth Hypothesis:

“There are statistically significant differences between the service provided by the employees and the promises made to the students”.

By referring to table (7) it is found that all of the differences between the ability of employees to provide services according to standards and the ability of the employees to meet their promises to the students were statistically insignificant differences. This implies the rejection of the fourth hypothesis and that the employees are able to meet the promises they made to the students. However, some determinants showed negative differences such as tangibles and assurance meaning that there is more space for improvement of the quality of these determinants.

Table (7) Ability of the Employees to Provide Services According to the Standards and the Ability to Meet Promises Made to the Students

Ability to Meet Promises Made to Students				Employees' Ability to Provide Services According to Standards				Relative Difference	T-test	
	Description	mean	%	Variable	Description	Mean	%		value	Sig
V2001	Tangibles	5.32	76.0	V3001	Tangibles	5.56	79.4	-3.4	1.3020	.200
V2002	Reliability	5.24	74.9	V3002	Reliability	5.12	73.1	1.7	0.7413	.463
V2003	Responsiveness	5.68	81.1	V3003	Responsiveness	5.54	79.1	2.0	0.7583	.453

V2004	Assurance	5.21	74.4	V3004	Assurance	5.41	77.3	-2.9	0.9042	.372
V2005	Empathy	5.48	78.3	V3005	Empathy	5.30	75.7	2.6	0.8662	.399
V2000	Total	5.38	76.9	V3000	Total	5.38	76.9	0.0	0.0155	.988

All relationships are statistically insignificant

#### Comment on the Analysis:

It is clear from the results of the statistical analysis that none of the four gaps which are supposed to be causes for the fifth gap were revealed in the first study. This raises a number of probabilities: either there are other reasons other than those determined by the model which led to the presence of the fifth gap. Should this be the case, the subject would need a serious study to find out these reasons. The second probability is the presence of a problem in implementing this study. However, this is unlikely as the researcher has conducted a number of other studies in the past in the same field.

#### Results and Recommendations:

##### The Main Results of the Study:

1. The sample analysis confirmed that the sample was actually representative of the staff community since the number of academics is greater than the administrative level. This is in line with the actual reality. The distribution of students according to specialization and gender is consistent with the actual number of students.
2. In terms of statistics, none of the four gaps showed despite the negative differences between the values of some gap variables, i.e. the reasons for the emergence of the gap of the students (the fifth gap) and their absence in the other gaps may be due to other reasons not tackled in the model. Similar results have been shown in a number of studies that measured all the gaps in the model and this necessitates studying the reasons that lead to the emergence of each gap, especially the fifth one, as well as studying the assumptions of the model itself.
3. Awareness and understanding of the management of the students' needs is higher than employees' awareness and understanding of the students' needs, and this contradicts the fact that the staff is closer students due to dealing with them, but this can be interpreted, from the researcher point of view, as the

management has information that is not available to the employees for some reason and this needs special study.

4. In terms of managers, the strongest determinants is that of the respondents and the weakest one is the "safety" determinants. The employees considered that the best determinants are the safety determinants and the weakest ones are "sympathy". This indicates that there is no common understanding between management and employees towards the students which that requires thoroughly studying the reasons.
5. From the students' point of view, in the first study carried out by the researcher, it showed that the best determinants are the "contactor" determinants and the weakest is the "sympathy" ones.
- 6.
7. The study refers to the ability of the administration to set standards for work. The best standards are safety standards and the weakest ones are "contactor" criteria. This indicates that there are differences between students.
8. The study shows that employees have the ability to work according to the established standards and that they do not exaggerate the promises they make to students and that they provide the service according to what becomes understanding between the college and students.

#### **Most Important Recommendations:**

Through the obtained results, some recommendations can be suggested to improve quality from the point of view of the students.

1. The need to exert more efforts to understand accurately the students' aspirations regarding all quality determinants and to work on meeting their expectations by carrying out more specialized studies.
2. The need for employees to be informed of the information and data available to the administration to enable employees to understand and be aware of the student requirements and expectations.
3. The need to provide more attention to transforming the students' expectations into

standards in provided services and to make sure service is provided according to standards.

4. The information delivered to the public about service standards and quality must be well studied to ensure no exaggeration.

#### **Future Studies:**

5. A study on the causes of the difference between the abilities of the administration and employees to understand and perceive student expectations.
6. A study on the reasons behind the presence of negative differences in the fifth gap when no negative gaps appear in any of the other four gaps.

#### **References:**

- Dhiab, S. (2012, January). Measurement of the quality of medical services provided in Jordanian public hospitals from the perspective of patients and employees. *the Islamic University Journal for Economic and Administrative Studies*, pp. 69-104.
- Abu amr, A. (2008). The Reality of Administrative Quality in the Palestinian Universities from the perspective of administrators & ways of developing. *MA Thesis, Islamic University- Gaza(In Arabic)*.
- Al Abadlah, T. (2016, July 27). Measuring the Quality of the Educational Services offered to Diploma Students at the Department of Administrative and Financial Sciences at the University College of Applied Sciences. *International Journal of Innovation and Applied Studies*, pp. 587-601.
- Al falih, B. (2013). Palestinian Services Sector - its Structure and Economic Impact. *Palestinian Economic Policy Research Institute(MAS) Jerusalem & Ramallah(In Arabic)*.
- Al- tai, H., & Others. (2007). *Scientific Foundations for Modern Marketing*. Jordan-Amman : Al Yazouri Scientific library for Publishing and Distribution( In Arabic).
- Alawamra, M. (2012). *Marketing Research between Theory& Application*. Jordan -Amman: Alhamed library for publishing & Distribution( In Arabic).
- Alddumur, H. (2008). *Marketing Services*. Jordan-Amman: Wael library for publishing & Distribution(In Arabic).
- Alddumur, H., & Buqjani, J. (2012). The Impact of the Quality of Health Services in the Degree of Loyalty of patients in the University of Jordan Hospital (case study). *Muta for Research and Studies- A series of Humanities & Social Sciences*, pp. 69-122(In Arabic).
- Alealul, E. (2011). Measure the Quality of services provided by the Mobile Company from the standpoint of customers in the provinces of Gaza Strip. *MA Thesis, Al-Azhar University-Gaza( In Arabic)*.
- AL-Fara, E., & AL awdi, R. (2013, March). Measuring the Quality of Educational Services provided by the Palestinian Universities in the light of Contemporary

- Changes. *Unpublished Research, Al-Quds Open University, Gaza Branches of learning( In Arabic)*.
- Alhadad, A. (1999). *Marketing of Banking Services*. Egypt: Albian library for publishing & Distribution( In arabic).
- Alnnusur, E. (2008). *The Foundations of Tourism Marketing & Therapeutic Services: Conceptual Approach*. Amman: Safaa library for publishing & Distribution( In Arabic).
- Alrrabiei, L., Alnnueaymi, M., & Qdura, R. (2010). The Impact of the Quality Educational Services & the Quality of Supervision of the Satisfaction of Graduate Students in private Jordanian Universities. *Unpublished Research, Middle East University*.
- Alsahn, M. (1995, September). Service Quality Management: A study to identify factors affecting the perceived quality of services using a form: Gap Analysis. *Journal of the Faculty of Commerce for Scientific Research*, p. 67(In arabic).
- Alssamidei, M., & Yusuf, R. (2010). *Marketing Services*. Amman: Almassira Library for publishing Distribution& printing( In arabic).
- Alttaiy, H., & Aleilaq, B. (2009). *Marketing Services: Strategic Functional & Applied Approach*. Jordan-Amman. Arabic Edition: Al yazouri Scientific library for Publishing & Distribution( In arabic) .
- Ashur, N., & Awda, R. (2006). *Principles of Marketing*. Jordan-Amman. Arabic Edition: Al yazouri Scientific library for publishing & Distribution( In arabic) .
- Assur, Y., & Al abadlah, T. (2007, January). Measuring the Quality of Educational Services at the Post Grade :(MBA)status programme in Islamic University in Gaza, MBA status Programme in Islamic University in Gaza. *Journal of Al- Aqsa University*, pp. 98-128(In arabic).
- Baker, D., & Fesenmaie, R. (1997, summer). Effects of service climate on managers and employees rating of visitors service quality expectation (using servqual). *Journal of travel research*, pp. 15-22.
- Bani Hamdan, K. (2012). Quality& its Impact on Students Educational Service Satisfaction- A study on the applied science private university students. *2nd International Arab Conference for Quality Assurance in Higher Education*, pp. 917-929(In arabic).
- Barakat, Z. (2010). perceptions& expectations for measuring the Quality of services provided by the Al-Quds Open University, from the viewpoint of the students. *Unpublished Research, Al-Quds Open University, Tulkarem Educational Zone( In arabic)* .
- Bin Rashid, A. (2008, May). Measure the Quality of Service Business expenses Arabia- A survey of the views of al Rajhi Bank Clients in Riyadh. *MA thesis , Naif Arab University for Security Sciences(In arabic)*.
- Bu Abdallah, S. (2010). Measure the Dimensions of Quality of Service: Empirical Study on Algeria Mail. *Journal of Economic Sciences & Management Sciences*, pp. 89-108(In Arabic).
- Dahleez, k. (2015, June). Examining the Relationship between Internal Service Quality and Customer Service Quality in Academic Institutions in Gaza Strip. *Journal Of Islamic Universityfor Economic and managerial studies( IUGJEBIS)*, pp. 1-17.
- Ford, J., & Joseph, B. (19893, January). Service Quality in higher Education: A comparison of Universities in United States and Newzealand Using SERVQUAL". *Knowledge development in Marketing: AMA Educators, Proceeding*, pp. 75-81.
- Hellas, S. (2015, (January). The Effect of Quality of Educational Services on Student Satisfaction; Applied Study on Master Students of the Faculty of Commerce at the Islamic University. *the Islamic University Journal for Economic and Administrative Studies*, pp. 98-122.
- Hesain, E. (2011). Mesuring electronic Service quality By Servqual Model Appling Study in Communication sector in Jurdon. *MA Thesis , Al shaeg al awsat university( In arabic)* .
- Kaldenber, Y., & et al. (1997). Identifying service quality strength and weaknesses using SERVQUAL : A study of dental services. . *Health marketing quarterly(HMQ)s*, pp. 69-86.
- Kotler, P. (2012). *Marketing Mangement* (Vol. 14th). USA: Prentice Hall INC.N.S.
- Ministry of Education and Higher Education. (2014/2015). *The annual statistical guide for Palestinian higher education institutions*. Ramallah, Palestine: Ministry of Education and Higher Education.
- Mustafa, M. (2010). *Strategic Marketing Services*. Jordan-Amman: Almnahij for publishing & Distribution.
- Oliveira, O., & Ferreria, E. (2009, May 9). Adaptation and application of the SERVQUAL scale in higher education. *POMS 20th Annual Conference Orlando, Florida, U.S.A.* .
- Parasuraman, A., Berry, L., & Zeithaml, V. (1990). *Delivering Quality Service*. Free press: Division of Macmillan,inc.
- Parasuraman, A., Zeithaml, V., & Berry, L. (1985, Feb). "A conceptual Model of Service Qualityand its implications for Future Research". *Journal of Marketing*,, pp. 44-50.
- Parasuraman, A., Zeithaml, V., & Berry, L. (1988, January). SERVQUAL: aMulti – Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*.
- The Palestinian Central Bureau of Statistics. (2016). *Performance of Palestinian economy 2015*. . Ramallah - Palestine: The Palestinian Central Bureau of Statistics.
- Xie, M., wang, H., & Goh, T. (1998). Quality dimension of Internet Search engines. *Journal of information science*, pp. 365-372.