The gap between perceptions and expectations for measuring the quality of services provided by the Higher Technological Institute in Matrouh from the viewpoint of the students

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Abstract

The main aim of the current study is to detect the gap between the perceptions of the Higher Technological Institute (Matrouh branch) students and their expectations for the level of service offered by the institute in different fields, then a stratified random sample of students (82 students 36 females and 46 males) were chosen. SERVQUAL gap scale which was prepared by Parasuraman and his colleagues (Parasuraman et al., 1980), was used to measure the quality of service at the Institute. The results showed that there is a negative gap statistically significant between the perceptions of students and their expectations for the total score for the level of service provided by the Institute, a decrease in the service provided by the Institute for learners level indicator, and the results showed the existence of a positive difference and is statistically significant in two dimensions: Reliability and Empathy, respectively while scholars showed a negative and statistically significant difference in the dimensions: Tangibles, Responsiveness and Assurance. The results showed the existence of significant differences between students perceived gap in the estimates and the expected level of service offered by the university back to the variables of sex and school year.

1. Introduction

processes, especially due to their intangible nature and the direct participation In the current socioeconomic context, the service sector has become increasingly more important, revealing the need to know and study the particularities of its operations and to institute specific management methodologies that fit its context and specificity. But it is necessary to understand that service processes are different from manufacturing of clients.

Aiming to make clients loyal, companies have made every effort to meet their needs and exceed their expectations. The SERVQUAL scale is one of the tools that can help in this sense.

According to Oliver (apud SALOMI and MIGUEL, 2005), SERVQUAL is the method that assesses client satisfaction as a result of the difference between expectation and the performance obtained. According to Zeithaml, Parasuraman and Berry (1990), SERVQUAL is universal and can be applied to any service organization to assess the quality of services provided.

Higher education institutions are also in search of improvements in teaching service quality to satisfy the expectations of their students and the market. However, since education services have very particular characteristics, the SERVQUAL model must be adapted according to the most important determining factors: reliability, angibility, responsibility, security and empathy, as proposed by Parasuraman, Zeithaml and erry (1985).

Thus, the survey question that guided the elaboration of this study was: how is it possible to adapt quality tools, more specifically the SERVQUAL scale, to measure quality in Higher education service activities?

The main objective of this paper is to adapt the SERVQUAL scale to the Higher education service activity and to present the results of its application in an institution for teaching Business Management.

2. Importance of the Study

1-This research is considered an addition and completion to other related researches concerned with quality because of its significant results for the people who are interested in quality management.

2- This research deals with the higher education sector, which occupies great importance from the country, because it provides qualified scientific cadres ready for work.

3. Objective of the Study

The current study seeks to achieve the following objectives:

1- To know the fundamental differences between students' perceptions and their expectations for the level of service elements provided in Higher Technological Institute at Matrouh.

2- To know the fundamental differences between students' perceptions and their expectations for the level of service elements provided in Higher Technological Institute at Matrouh according to gender.

3- To be aware of the fundamental differences between the perceptions of students to the level of the service elements provided at the Higher Technological Institute at Matrouh according to specialization.

4- To know the fundamental differences between the expectations of the students to the level of the elements of services provided at the Higher Technological Institute in Matrouh according to years of study.

4. The Research Problem

Higher Technological Institute in Matrouh established Business Management Division and Information Technology (IT) to provide educational services in the field of technology business areas and to satisfy individual and society needs. It was noted that there was a continuous increase in the number of students. Thus, a pressing necessity for increasing qualitative need to meet the quantitative target increasing number of

students. It is the quality of the various services provided by the Institute, and to verify the nature and quality of these services have emerged the idea of this study, which focused its problem in their quest to identify the perceptions of students and their expectations for measuring the quality of services provided by the Higher Technological Institute in Matrouh level and its relation to variable school year and variable sex.

The problem of this study is to find answer for the following questions:

1-Are there any differences between the perceptions of students and their expectations for the level of service elements provided in, Higher Technological Institute in Matrouh?

2-Are there any differences between the perceptions of students and their expectations for the level of service provided in the Higher Technological Institute in Matrouh according to gender variable?

3-Are there any differences between the perceptions of students and their expectations for the level of service provided in the Higher Technological Institute in Matrouh according to specialization variable?

4-Are there any differences between the perceptions of students and their expectations for the level of service provided in the Higher Technological Institute in Matrouh according to years of study variable?

5. Hypotheses of the Study

Research hypotheses

1-There are significant differences between the perceptions of students and their expectations for the level of service elements provided in Higher Technological Institute in Matrouh.

2-There are substantial differences between the perceptions of students and their expectations for the level of service

provided in the Higher Technological Institute in Matrouh according to gender variable.

3- There are substantial differences between the perceptions of students and their expectations for the level of service provided in the Higher Technological Institute in Matrouh according to years of study variable.

4 - There are substantial differences between the perceptions of students and their expectations for the level of service provided in the Higher Technological Institute in Matrouh according to years of study variable.

6. Integrating quality assurance and strategic management at higher education institutions

Although strategic management and quality assurance in higher education are disciplines which have been developing independently of each other, contemporary higher education institutions management approaches should integrate both of these approaches. The assessment of quality at higher education institutions is in the heart of the quality assurance system. Based on the results of this assessment, an improvement plan should be made. These plans are usually devised for longer periods of time since they include human resources, infrastructure improvement etc. and they can be considered strategic goals for higher education institutions.

The results of service quality assessment should be used as inputs in planning and defining a strategy. Since quality improvement can include improvement in various areas such as human resource management, finance and budget, infrastructure, ICT infrastructure, administrative processes etc. a strategic plan is necessary in order to meet the goals. Quality assessment and quality management should become tools for strategic development of higher education institutions. According to Kettunen (2012), the quality assurance system supplements strategic management, because the purpose of quality assurance is to ensure that higher education institutions meet their strategic objectives. We would argue that vice versa results of quality assessment are used to define strategic objectives of higher

education institutions. Quality evaluation is the basis for a quality policy and institutional strategy. Quality assessment and quality assurance at higher education institutions within a strategic context should incorporate means by which the university itself undertakes activities to implement changes and improvements.

For higher education institutions it is crucial to apply the stakeholder approach to strategic management due to the variety of stakeholders which are important for internal and external evaluations, quality assurance, study program development, etc. This approach to strategic management is all about understaning demands of stakeholders and stakeholders relationships in order to achieve institutional development objectives.

7. Students as stakeholders of higher education institutions

Higher education institutions have been urged with the need to evaluate their role in the society and identify their stakeholders. We believe that the success of a higher education institution is to some extent determined by its capability to identify its stakeholders and manage their demands and interests. Higher education institutions need to meet the demands and expectations of different stakeholders. For quality assurance to be achieved, managing relations with stakeholders is crucial because they are involved in internal and external evaluations of higher education institutions. The quality of services provided by higher education institutions must be continuously improved in order to keep up with the demands and interests of their stakeholders.

Various categories of stakeholders are involved in the higher education system. However, for a higher education institution it is important to identify its key stakeholders and their needs, demands, interests. There are different approaches to identifying stakeholders for higher education institutions by different authors depending on the characteristics of the higher education system in a specific country. For example, according to Kasetwar (2008) key stakeholder categories of higher

education institutions are: students, educationalists, parents, faculties, institutional management, industry, statutory bodies, trainers, education loan providers, researchers and academics, society, politicians, judiciary. In another research, conducted by Marić (2013), stakeholder categories and constitutive groups for higher education institutions are: government entities, administration, employees, clientele, suppliers, competitors, donors, communities, government regulators, non-government regulators, financial intermediaries, etc.

Based on the theoretical framework for stakeholder analysis, key stakeholder categories for higher education institutions are proposed (Figure 1). For a higher education institution, students are an important category of stakeholders and they need to deliver value to this stakeholder category. The recognition of students as stakeholders was introduced in the literature in the mid-1970s (Douglas et al., 1993) and the importance of students as a stakeholder category has been growing and universities are expected to provide accountability, quality, effectiveness and efficiency (Jongbloed et al. 2008). Higher education institutions need to identify their needs and demands as students as stakeholders are seen as customers and customer satisfaction is related to service quality.

Understanding the needs of students as stakeholders is important in creating and providing a higher education service. Students are interested in quality education, adequate academic environment, employability skills, active participation, etc. It is up to the higher education institution to satisfy those needs with the infrastructure and service it provides to students.

Leisyte et al. (2011) state that students as stakeholders need to be involved in quality management and internal quality assurance processes at higher education institutions as equal partners which is also written in the European Standards and Guidelines for Quality Assurance. The SERVQUAL model enables higher education institutions to assess the satisfaction of students as their primary stakeholders with the service that the higher education institution provides. Assessing higher education service quality by measuring expectations and

perceptions of students is a valuable tool for institutional management in order to improve the quality of the service and focus on the resources needed in order to improve it.

8. Service Management

According to Lovelock (2001), services are economic activities that create value and provide benefits to the client at specific times and in specific places as a result of a desired change in, or on behalf of, the one that receives the service.

According to Meirelles (2006), a service is essentially intangible and only assessed when combined with other functions, that is, with other tangible productive processes and products. This intangible nature is associated with this process, which à priori cannot be touched. In other words, the providing of a service tends to occur imultaneously with consumption. Production occurs starting the moment the service is ordered and it finishes as soon as the demand is met.

Services have some specific characteristics that differentiate them from the manufactured good. Gianesi and Corrêa (2004) say the following special characteristics of service operations are the main ones: intangibility, client participation and simultaneous production and consumption. According to Coelho (2004, p. 36), "in service management it is important to understand how clients assess the quality of the service provided, that is, how quality is perceived by the client".

9. Higher Education Service

The quality of Higher education is fundamental to a country's development because universities are the ones that prepare the professionals who will work as managers in companies and manage public and private resources and care for the health and education of new generations.

"Higher education has been increasingly recognized as a service industry and, as a sector, it must strive to identify the expectations and needs of its clients, who are the students" (MELLO, DUTRA and OLIVEIRA, 2001, p. 130).

According to Lovelock (2001), education service is classified as a service with intangible actions, directed towards the minds of people, with continuous delivery, conducted through a partnership between the service organization and its client, andalthough it provides high personal contact, there is low customization.

The institutions must work to obtain a standard of quality that exceeds client and/or student expectations and needs, extrapolating the assessments from legal demands (PEREIRA, 2004).

10. Service quality concept

Quality in a service organization is a measure of the range to which the service delivered meets the customer's expectations. The characteristics of service consist of intangibility, heterogeneity and inseparability. Quality as defined for higher education has been identified by Harvey and Knight (1996). They suggested that quality reflects exceptional, consistency, fitness for purpose, value for money, and transformative.

Research on service quality gained a major push forward in the early 1980s. A number of researchers posit that service quality involves a comparison of expectations with performance. Lewis and Booms (1983) argued that service quality is a measure of how well the service level delivered matches customer expectations. Grönroos (1984) identified two dimensions of service quality namely functional quality — which involves the performance in which the service delivered and technical quality -- the actual outcome of the service. Finally, Parasuraman, Zeithaml and Berry (1985) conceptualized service quality using a disconfirmation model that assesses customer's expectations and perceptions, with development and subsequent refinement in 1988 and 1991 of the SERVQUAL instrumentation (Parasuraman, Zeithaml, & Berry, 1991).

The SERVQUAL model used to assess service quality is determined by the size and direction of the so-called internal gaps. The gaps are defined as: Gap 1 (positioning gap) -

between customer expectations and management perceptions of those expectations; Gap 2 (specification gap) - concerned with management perceptions of customer expectations and the firm's service quality specifications; Gap 3 (delivery gap) - between service quality specifications and actual service delivery by employee; Gap 4 (communication gap) - pertains to actual service delivery and external communications about the service (Khodayari & Khodayari, 2011). The SERVQUAL instrument is based on Gap 5 (perception gap) is the difference between the customer's internal perception and expectation of the services (Zeithaml, Parasuraman, & Berry, 1990; Akter, Upal & Hani, 2008)

The original SERVQUAL scale was comprised of ten dimensions, which following further testing by Parasuraman, Zeithaml, and Berry (1988) reduced from ten to five dimensions. The five key dimensions of service quality namely reliability, responsiveness, assurance and empathy, and tangibles, is one of the most used models for evaluating customer expectations and their perceptions of the service quality (Abu Hasan et al., 2008; Al-Alak & Alnaser, 2012; Khodayari & Khodayari, 2011; Zarei et al., 2012; Pakdil & Aydln, 2007). These five dimensions are identified as follows:

- Tangibles – refers to the appearance of physical facilities, equipment, personnel and communication materials.
- Reliability – refers to the ability to perform the promised service dependably and accurately.
- Responsiveness – refers to the willingness to help customers and to provide prompt service.
- Assurance – refers to the knowledge, courtesy of employees and ability to convey trust and confidence in the customer towards the service provider.
- Empathy - refers to the provision of caring, individualized attention provided to customers.

These dimensions are captured in the SERVQUAL instrument which consists of a total of 25 scale items. Each item is measured on the basis of responses of two statements: the

first, measures customer expectations concerning a service (E) and the second, is the perception of the actual service delivered by the firms within that service sector (P). The gap for each item is calculated as the perceptions score minus the expectations score (P - E). The results of computation were as follows:

- A positive gap score implied that expectations have been met or exceeded, service quality is perceived to be satisfied.
- A negative gap score implied that expectations have not being met, quality is perceived to be unsatisfactory.

Gap scores can be analyzed for each individual statement and can be aggregated to give an overall gap score for each dimension (Parasuraman et al., 1988; Ramseook-unhurrun, Naidoo, & Nundlall, 2010). Moreover, SERVQUAL has been applied widely by researchers in higher education to assess customer perceptions of service quality (Khodayari & Khodayari, 2011; Mohamad Yusof et al., 2012; Al-Alak & Alnaser, 2012; Amelia, Hidayanto, & Hapsari, 2011).

11. Study Community & Sample

The research was conducted at one institution of higher education (HTI) in Matroh. The total number of students enrolled for the first time in all years of study on the first cycle of study according to the official data in 2015 was 725.

In social science research, a sample with a sampling rate over 5% is considered to be a large enough sample. However, for this research a sampling rate of 11% was set and the total number of students in the sample was N=82 (11% of the population). The following was taken into consideration during sample design: the aim of the research, the size of the population, the confidence level, the level of data variability, the costs of the research, and time needed. The structure of the proportional stratified sample, according to the year of study and gender , are presented in the following table.

Table 1. Population and sample structure according to the year of study and gender

Description		Number of students in the population	Number of students in the sample (stratified)
Year of study			
1		178	20
2		138	16
3		178	20
4		235	26
Gender			
Female		319	36
Male		406	46
Total		725	82

For the purpose of this research, the authors adapted the SERVQUAL generic questionnaire for the higher education sector taking into consideration the characteristics of this sector based on the results of a prior pilot test in a group of 50 students and literature review. This research was conducted using a structured questionnaire with 25 questions for each scale: one to measure students' expectations and one to measure their perception of the received services. All of the five dimensions of the SERVQUAL model: tangibles, reliability, responsiveness, assurance and empathy were covered with 25 questions, and the structure of the questionnaire is presented by Table 2.

Table 2. Dimensions and structure of the questionnaire

Dimensions	Variables (questions)
Tangibles	1-4
Reliability	5-10
Responsiveness	11-13
Assurance	14-19
Empathy	20-25

Dimension related to tangibles includes questions 1 to 4 and analyzes physically tangible and visible assets important for providing the service (for example equipment, infrastructure, interior, teaching materials, brochure, etc.). Dimension related to

reliability is represented by questions 5 to 10 and analyzes the ability to deliver the promised service accurately and dependably (for example to resolve student problems, claims and requests). Third dimension (responsiveness) includes questions 11 to 13 and analyzes the attention directed towards students in order to provide prompt service. Dimension related to assurance (questions 14 to 19) analyzes knowledge and courtesy of academic and non-academic staff and their ability to convey trust and confidence. The last dimension of this model (empathy) includes questions 20 to 25 and is related to individualized attention and care which is provided to students and their specific needs. In this research, a 5-point Likert scale. After data collection, the data was analyzed using descriptive statistics before it was used in accordance with the SERVQUAL methodology to identify the gap between students' expectations and perceptions.

12. Field Study Results

a. Study results for the First Hypothesis

1- There are significant differences between the perceptions of students and their expectations for the level of service elements provided in Higher Technological Institute in Matrouh.

Table 3:The difference between the statistical means of the perceptions of students and their expectations for the level of service provided by the Institute in regard of the elements and the value of (t) calculated.

No.	Dimensions and Items	Mean Perceptions	Mean Expectations	Gap (P-E)	T	Sig.
	Tangibles					
1	Faculty of Economics has contemporary equipment for the education process (PCs, LCDs, beamers, etc.).	3.23	3.65	-0.42	-5.220*	.000
2	Building and premises of Faculty of Economics are modern and visually likeable.	3.63	3.80	-0.17	-4.084*	.000

3	Employees of Faculty of Economics appear professional and neat.	3.76	3.70	0.06	2.293*	.024
4	Teaching materials are available and up-to-date (study programs, brochures, student guides, etc.).	3.73	3.68	0.05	2.038*	.045
	Total Tangibles	3.58	3.70	-0.12	-4.618*	.000
	Reliability					
5	Classes are held in accordance with the schedule of lectures and without delays.	3.67	3.63	0.04	1.754	.083
6	Working hours of Office for student affairs are adequate and in accordance with students' needs.	3.63	3.77	-0.14	-2.254*	.027
7	Staff at Faculty of Economics provides support and help to students.	3.71	3.68	0.03	.532	.596
8	Academic staff has precise records of students' activities (presence at lectures, exam results, etc.).	3.85	3.84	0.01	.445	.657
9	Academic staff applies consistent grading criteria.	3.85	3.82	0.03	.686	.495
10	Students are timely informed about realization of certain activities (exams, presentations, seminars, etc.).	3.84	3.78	0.06	1.149	.254
	Total Reliability	3.76	3.75	0.01	.291	.772
	Responsiveness					
11	Inquiries, requests and claims of students are handled and resolved timely and promptly.	3.59	3.65	-0.06	-2.293*	.024
12	Academic staff conducts themselves in students' best interest.	3.56	3.65	-0.09	-2.157*	.034
13	Academic staff pays special attention and provides help to students in resolving their problems.	3.63	3.60	0.03	1.754	.083
	Total Responsiveness	3.59	3.63	-0.04	-2.235*	.028
	Assurance					
14	Academic staff has the necessary knowledge and skills, and adequate communication skills.	3.87	3.78	0.09	2.750*	.007
15	Faculty of Economics implements study and educational programs with clear aims for specialization of students.	3.78	3.73	0.05	2.038*	.045
16	Quality of education process is at a high level.	3.67	3.90	-0.23	-3.531*	.001
17	Conduct of staff fills students with confidence.	3.65	3.76	-0.11	-3.160*	.002
18	Reputation and position of the Faculty in the environment is adequate.	3.63	3.76	-0.13	-3.027*	.003
19	Academic staff provides professional answers to students' questions.	3.67	3.60	0.07	2.529*	.013
	Total Assurance	3.71	3.75	-0.04	-2.905*	.005
	Empathy					

20	Academic staff understands students' needs.	3.83	3.76	0.07	2.529*	.013
21	Academic staff shows positive attitudes towards students.	3.76	3.67	0.09	2.750*	.007
22	Academic staff treats students equally and with respect.	3.74	3.70	0.04	2.038*	.045
23	Academic staff is available for consultations and is forthcoming towards students.	3.73	3.68	0.05	1.650	.103
24	Faculty of Economics values and acknowledges feedback from students for improving processes.	3.66	3.74	-0.08	-2.157*	.034
25	Staff is polite, kind and professional in communication with students.	3.63	3.71	-0.08	-2.169*	.033
	Total Empathy	3.73	3.71	0.02	1.238	.219
	Total Degree	3.69	3.72	-0.03	-3.427*	.001

The findings in the previous timetable showed that the students' assessment to the level of quality of service provided by the Higher Technological Institute in Matrouh as measured by the differences between the average perception and expectations of each of the questions, which include the five dimensions. The results analysis showed the following points:

1 - The assessment of students to the level of service provided by the Higher Technological Institute according to the gap between perceptions and expectations were positive and statistically significant in the questions (elements, variables).

(3) " Employees of Faculty of Economics appear professional and neat." (0.06), and (4) "Teaching materials are available and up-to-date (study programs, brochures, student guides, etc.)." (0.05), and (14) "Academic staff has the necessary knowledge and skills, and adequate communication skills." (0.09), and (15) "Faculty of Economics implements study and educational programs with clear aims for specialization of students." (0.05), and (19) "Quality of education process is at a high level." (0.07), and (20) "Academic staff understands students' needs." (0.07), and (21) "Academic staff shows positive attitudes towards students." (0.09), and (22) "Academic staff treats students equally and with respect." (0.04).

2 - The assessment of students to the level of service provided by the Higher Technological Institute according to the gap between perceptions and expectations were positive and statistically significant in the questions (elements, variables).

(5) " Classes are held in accordance with the schedule of lectures and without delays." (0.04), and (7) "Staff at Faculty of Economics provides support and help to students." (0.03), and (8) "Academic staff has precise records of students' activities (presence at lectures, exam results, etc.)." (0.01), and (9) "Academic staff applies consistent grading criteria." (0.03), and (10) "Students are timely informed about realization of certain activities (exams, presentations, seminars, etc.)." (0.06), and (13) "Academic staff pays special attention and provides help to students in resolving their problems." (0.03), and (23) "Academic staff is available for consultations and is forthcoming towards students." (0.05).

3- The assessment of students to the level of service provided by the Higher Technological Institute according to the gap between perceptions and expectations were negative and statistically significant in the questions (elements, variables).

(1)" Faculty of Economics has contemporary equipment for the education process (PCs, LCDs, beamers, etc.)." (-0.42), and (2) " Building and premises of Faculty of Economics are modern and visually likeable." (-0.17), and (6) " Working hours of Office for student affairs are adequate and in accordance with students' needs." (-0.14), and (11) " Inquiries, requests and claims of students are handled and resolved timely and promptly." (-0.06), and (12) " Academic staff conducts themselves in students' best interest." (-0.09), and (16) " Quality of education process is at a high level." (-0.23), and (17) " Conduct of staff fills students with confidence." (-0.11), and (18) " Reputation and position of the Faculty in the environment is adequate." (-0.13), and (24) " Faculty of Economics values and acknowledges feedback from students for improving processes." (-0.08), and (25) " Staff is polite, kind and professional in communication with students." (-0.08) .

4-According to the level of the five dimensions of service provided by the Institute, learners have given a positive assessment of and non-statistically significant in the following two dimensions: the second dimension Reliability (0.01), and the fifth dimension Empathy (0.02). on the other hand they have shown a negative assessment and non-statistically significant in the other dimensions:

The first dimension Tangibles (-0.12), and the third dimension Responsiveness (-0.04), and the fourth dimension Assurance (-0.04). The total score of the provided deduced from these results stated that the general difference between perception average and learners expectations ranged to -0.03 which considered negative and statistically significant. It is an indicator of the poor level of services provided by the Institute from the perspective of students' point of view.

Of the total of these results it can be concluded that the dimensions Reliability and Empathy was of a positive assessment, but is not statistically significant. While the dimensions Tangibles, Responsiveness and Assurance had a negative impact and statistically significant, and confirms the urgent need to re-examine all the elements (questions) five dimensions, especially dimensional Tangibles, Responsiveness and Assurance and containing them from the elements (questions) in order to be adjusted in a desirable direction , in order to raise the standard of quality of service offered by the institute so that less or fade differences between what learners actually realize what they expect of them.

Based on the above we can accept the validity of the first hypothesis ،There are significant differences between the perceptions of students and their expectations for the level of service elements provided in Higher Technological Institute in Matrouh.

b. Study Results Related to Second Hypothesis

2-there are substantial differences between the perceptions of students and their expectations for the level of service provided in the areas of Higher Technological Institute in Matrouh back to the variable sex.

Table 4:The statistical means, medians, standard deviations, and the results of the test "T" of the significance of differences between learners / students estimates perceived and projected to the level of service areas provided by the institute according to gender

Dimensions	Gap	Male		Female		t	Sig.
		Mean	Std. dev.	Mean	Std. dev.		
Tangibles	Perceptions	3.673	.237	3.521	.257	2.742	.008
	Expectations	3.701	.259	3.712	.252	-.186	.853
Reliability	Perceptions	3.773	.211	3.750	.171	.548	.585
	Expectations	3.763	.188	3.746	.212	.388	.699
Responsiveness	Perceptions	3.601	.354	3.587	.255	.221	.826
	Expectations	3.620	.266	3.637	.270	-.290	.773
Assurance	Perceptions	3.763	.170	3.670	.200	2.238	.028
	Expectations	3.796	.178	3.721	.179	1.889	.062
Empathy	Perceptions	3.750	.166	3.706	.211	1.012	.315
	Expectations	3.773	.183	3.659	.213	2.544	.013
Total	Perceptions	3.728	.117	3.664	.108	2.573	.012
	Expectations	3.746	.107	3.700	.111	1.876	.064

1- For the physical aspects and concrete Tangibles There is a difference between the perceptions of students, male and female, and this was in favor of males, and there is no significant difference between the students, male and female expectations.

2-For Reliability results indicate that in the previous table that there is no statistically significant differences between the students perceived and the expected level of service provided by the Technological Institute estimates dating back to the variable of sex, in the sense that there is no fundamental difference between the perceptions of male and female expectations for the level of service provided by the Institute.

3-For Responsiveness results indicate that in the previous table that there is no statistically significant differences between the students perceived and the expected level of service provided by the Technological Institute estimates dating back to the variable of sex, in the sense that there is no fundamental difference between the perceptions of male and female and their expectations for the level of service provided by the Institute.

4-For Assurance there is a difference between the perceptions of students, male and female, and this was in favor of males, and there is no significant difference between the students, male and female expectations.

5-For the aspects of empathy there is no difference between the perceptions of students, male and female, and this was in favor of males, and no significant difference between the students, male and female expectations and this was in favor of males.

6- In total there is a difference between students' perceptions (male and female) and this was in favor of males, and there was no difference between the expectations of students (male and female).

Based on the above we can accept the validity of the second hypothesis, there are substantial differences between the perceptions of students and their expectations for the level of service provided in the areas of Higher Technological Institute in Matrouh based on the gender variable.

c. Study Results Related to Third Hypothesis

3- There are substantial differences between the perceptions of students and their expectations for the level of service provided in the Higher Technological Institute in Matrouh according to years of study variable.

Table 5:Results of the variance of the significance of differences between the mean estimates of learner's different areas analysis of their perception of the level of service in depending on the variable-years of study

Dimensions	Source	Sum of Squares	df	Mean Square	F	Sig.
Tangibles	Between Groups	.949	3	.316	5.514	.002
	Within Groups	4.473	78	.057		
	Total	5.421	81			
Reliability	Between Groups	.239	3	.080	2.345	.079
	Within Groups	2.655	78	.034		
	Total	2.894	81			
Responsiveness	Between Groups	.126	3	.042	.454	.715
	Within Groups	7.213	78	.092		
	Total	7.339	81			
Assurance	Between Groups	.237	3	.079	2.226	.092
	Within Groups	2.766	78	.035		
	Total	3.003	81			
Empathy	Between Groups	.074	3	.025	.654	.583
	Within Groups	2.947	78	.038		
	Total	3.021	81			
Total	Between Groups	.163	3	.054	4.532	.006
	Within Groups	.937	78	.012		
	Total	1.100	81			

Table 6: Special dimension Tangibles Touques test results

Year		Mean Difference (I-J)			
		1	2	3	4
1	3.6875	—	.03125	.05000	.25481*
2	3.6563	—	—	.01875	.22356*
3	3.6375	—	—	—	.20481*
4	3.4327	—	—	—	—

1- Concerning dimension of Tangibles there are some significant differences between students' perceptions to the level of service provided in the areas of the Institute, and by the test of Touques analysis to know the difference between the average years of study which shows the following:

1/1- The differences between the statistical means of the first and second year and the third is not statistically significant

1/2- There is a difference between the statistical means of the fourth year and the previous three years.

Υ- For the dimensions of Reliability, Responsiveness, Empathy and Assurance there are no significant differences between students' perceptions to the level of service provided in the areas of Institute

3- In total there are significant differences between students' perceptions to the level of service provided in the areas of Institute

Based on the above we can accept the validity of the third hypothesis, there are significant differences between students' perceptions to the level of service provided in the areas of Higher Technological Institute in Matrouh due to the years of the study variable.

d. Study Results Related to Fourth Hypothesis:

4 - There are substantial differences between the perceptions of students and their expectations for the level of service provided in the Higher Technological Institute in Matrouh according to years of study variable.

Table 7: The analysis outcomes of the variance of the significance of differences between the mean estimates of studying learners' expectations for the level of service in different areas depending on the analysis of the years of study variable.

Dimensions	Source	Sum of Squares	df	Mean Square	F	Sig.
Tangibles	Between Groups	.034	3	.011	.170	.916
	Within Groups	5.192	78	.067		
	Total	5.226	81			
Reliability	Between Groups	.164	3	.055	1.366	.259
	Within Groups	3.126	78	.040		
	Total	3.290	81			
Responsiveness	Between Groups	.098	3	.033	.451	.718
	Within Groups	5.681	78	.073		
	Total	5.779	81			
Assurance	Between Groups	.152	3	.051	1.561	.206
	Within Groups	2.527	78	.032		
	Total	2.679	81			
Empathy	Between Groups	.271	3	.090	2.190	.096
	Within Groups	3.218	78	.041		
	Total	3.489	81			
Total	Between Groups	.089	3	.030	2.532	.063
	Within Groups	.916	78	.012		
	Total	1.005	81			

The above table refers to a lack of statistically significant differences between the average of expectations of the students to the level of service offered by the institute in various fields and in the total sum of these areas depending on the variable-years of study, which estimates the sense that all learners regardless of the school year, have estimated their expectations for the level of service provided by the Institute at the same level

13. Conclusions

Based on the above results, it can be said that the service provided by the Higher Technological Institute in Matrouh, subject of study, the level was positive and provides an abstract significance concerning some variables, compared to the gap between the average perceptions and expectations of students for this service, so the variables of sex and years of study of the impact; there is also negative rates for some variables that showed statistically significant differences for some of these averages, so that it can be attributed to gender or specialization, but the differences were huge and this led to the fact that students, whether they are male or female, and whether they are in different years of study have evaluated their estimates as measured by the gap between the perceptions and expectations of the level of assessment service negative overall. This may be due to a narrow geographical area of Matrouh Governorate, which reduces the gap between students in knowing institute's news ·and get to know what its services and expertise, in addition to the fact that the institute is the most common and attractive to students in the trade area in the province; which makes community members and students specifically post-secondary technical more interactive with the Institute through recognizing its projects, programmes, specializations and all other available activities.

14. Recommendations

In light of the findings, the researcher suggests the following recommendations:

1. The researcher advises the Institute Board to focus on the areas of service and all what it includes in the different elements that make a difference. Students showed negative significance in the level of service particularly in the materials and authorizations areas to review them thoroughly and improve the level of services provided to the students in these areas and all other elements.

2. Giving due care and attention to the areas of safety, security and social responsiveness, empathy and its various elements,

which showed a positive assessment of the students and development to remain in a good and attractive level.

3. The researcher advices other researchers to give due attention and focus on further studies and researches in this area in different regions and educational centers in order to ensure that quality service provided by the Institute.

4. Implementing further studies and researches in this area deals with other variables from the viewpoint of other categories of non-students such as supervisors, academics, administrators and others stakeholders who are concerned in process of service offered by the university to find out objective criteria to assess the service quality that is provided by the university.

5. In order to get objective facts in this field the researcher recommends conducting intensive cross-sectional and longitudinal studies in which the study individuals will be students in high school to identify the possible expectations regarding the service provided by the university, and then follow up the same students after their enrollment in the university to know the actual awareness and perceptions for the provided services.

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