



Measuring the quality of educational services from the students' perspective: A field study

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Abstract

The quality of educational services provided to students is a clear objective for the administration of the Higher Institute of Technological Sciences, addressing modern aspects of the relationship between the institute and its students. Therefore, this study aims to measure the quality of educational services provided by the institute to its students using the Service Quality Model (SERVQUAL). It also seeks to determine if there is a gap between students' expectations and their perception of the quality of these services. The researcher arrived at several key findings, the most important of which are: the existence of statistically significant differences between students' perception and expectations of the quality of educational services provided by student-related departments, including academic departments, registration, and examinations; and the existence of a negative gap between students' perception of the actual quality of educational services provided and their expectations. After measuring the quality of services provided by the institute, the researcher found that the quality level was considered average from the students' perspective. Furthermore, no statistically significant differences were found in students' evaluation of the actual quality of educational services provided by the institute based on the following demographic variables: gender, academic department, and academic year. Based on these results, the researcher recommends... By improving the quality of services provided to students, particularly in developing and enhancing tangible, reliable, and empathetic aspects, which are crucial for improving and developing the overall quality of educational services, as well as increasing attention to safety and responsiveness in the institute's educational services.

Keywords: Measurement - Quality - Services - Educational – Students.

1 .Introduction

In the first decade of the new millennium, Libya witnessed remarkable development in the higher education sector in general, and the technical education sector in particular. This development was driven by the diversification of academic disciplines and departments, the establishment of higher institutes, and the provision of necessary resources to improve and develop technical education in Libya. This, in turn, motivated these institutes to enhance and improve the services they offer to students, benefiting society as a whole and meeting the demands of the labor market in particular, by graduating highly competent students. Therefore, this research will measure and evaluate the quality of educational services

provided by the institute under study from the students' perspective. The aim is to identify their attitudes, perceptions, and expectations regarding the quality of educational services provided to them. This will be achieved using the SERVQUL scale, also known as the Service Quality Model, one of the most well-known and widely used models for measuring service quality in general across all service sectors. This is because it considers the expectations of customers (service beneficiaries). Since service quality represents the difference between the students' expectations in this study and their perception of the actual performance of the educational service provided, [1] the students' expectations will be identified through the application of the SERVQUL model in this study. Research Methodology

First: Research Problem:

The service sector in general, and the education sector in particular, is witnessing a number of developments, including changes and innovations related to quality considerations. Quality standards have made rapid and effective strides, covering modern aspects of the relationship between higher education institutions and students. Therefore, this research aims to measure the quality of educational services provided by the Higher Institute of Technological Sciences in Raqdalin to its students. This is especially important given that most previous studies have focused on measuring the quality of services in various economic sectors, and studies measuring the quality of services provided to students from their perspective are rare. Accordingly, the research problem can be formulated in the following questions:

1 (What is the level of expectations of the students of the Higher Institute under study regarding the quality of educational services provided to them, from their perspective? And how can these expectations be measured?

2 (Is there a difference between the level of quality that the students of the Institute under study expect from the services provided and the services that the Institute actually provides to them? Secondly: The Importance of the Research:

The importance of this research stems from the importance of the quality of higher education and its outcomes. The quality of educational services provided to students is a fundamental pillar that helps graduate cohorts capable of competing in the labor market. This is achieved by improving and developing the services offered by educational institutions and providing them with high quality. Given the importance of the technical higher education sector at the institute under study, measuring its performance, evaluating its effectiveness, testing the quality of its services, and identifying shortcomings are crucial means of advancing and developing the institute. This will enable it to achieve its goals and contribute to improving technical higher education in Libya in general. Therefore, this research seeks to understand students' evaluation of the quality of educational services provided by the institute, the factors influencing this quality, and to identify the positive and negative aspects of the dimensions of service quality offered by the institute under study. Finally, it aims to offer suggestions that can help the institute's administration address shortcomings in serving its students and work to improve and develop these services in a way that satisfies them and meets their needs.

Third: Research Objectives:

This research aims to measure the quality of services provided by the Higher Institute under study, in order to achieve the following objectives:

- 1 (To identify the level of service quality provided by the Higher Institute under study from the perspective of its students, and to define its dimensions.
- 2 (To identify the relative importance of the factors that students use in evaluating the quality of educational services provided by the Higher Institute under study.
- 3 (To determine whether there is a gap between students' expectations of the quality of educational services provided to them by the Higher Institute under study and their perception of the actual quality of these services.
- 4 (To test the extent to which certain personal characteristics, such as gender, academic department, and academic year, influence students' evaluation of the quality of banking services provided to them.

Fourth: Research Hypotheses:

The research hypotheses can be formulated based on the research problem, questions, and objectives as follows:

- 1 (There are no statistically significant differences between the service perceived by students and their expectations of this service from the Higher Institute under study.
- 2 (There is statistical evidence that the educational services actually provided by the Higher Institute to its students are of a high quality.
- 3 (There are no statistically significant differences in the evaluations of the institute's individual clients regarding the actual quality of educational services provided, attributable to the influence of the following demographic variables: gender, academic department, and academic year.

Fifth: Research Methodology:

This research adopted a descriptive-analytical approach to data collection using a questionnaire designed for this purpose. The data was then statistically analyzed to test the hypotheses. Furthermore, the researchers relied on secondary sources, namely scientific references and previous studies, to provide the theoretical framework for this research. Sixth: The research population and its sample:

The research population consists of all students in the Higher Institute under study. A random sample of students was selected from each department of the Higher Institute under study, in their different semester stages, consisting of (450) students, which represents the study

sample. (450) questionnaires were distributed to a random sample of students in each department of the Higher Institute over two semesters. (400) questionnaire forms were returned from all the targeted departments, and (25) were excluded because they were not suitable for analysis, so the number of forms suitable for analysis became (375) questionnaire forms.

Seventh: Research Limitations:

It is well-known that every study has its own limitations, reflecting the degree of accuracy and adherence to the overall research methodology. These limitations can be outlined through the following points: - This research employed a sampling method due to the difficulty of conducting a comprehensive survey of all students under investigation, as well as to save time and effort.

-The study was limited to the Higher Institute of Technical Sciences in Raqdalín, using a random sample of students enrolled at the institute. The lead researcher is a faculty member at the institute.

-The timeframe was limited to February 2026 to May 2026.

Previous Research

First: Arab Research

1 (A study by researcher Abdullah Saleh entitled "Measuring Service Quality in Saudi Commercial Banks - A Survey of Al Rajhi Bank Customers' Opinions in Riyadh," 2008, Jordanian Journal of Applied Sciences, Volume 7, Issue 1. This study aimed to determine the overall quality of banking services at Al Rajhi Bank from the customers' perspective, and to identify any statistically significant differences in customers' attitudes towards the quality of banking services based on their demographic variables. The study reached a number of conclusions, the most important of which was that the overall quality of banking services at the bank was considered good, and that the study sample perceived the quality of service in the tangible aspects, reliability, responsiveness, and security as good, while they perceived it in the empathy aspect as average.

2 (A study by researcher Salah Abdul Rahman entitled: "Measuring the Quality of Islamic Banking Services in the Hashemite Kingdom of Jordan" (2006). The study aimed to measure the quality of educational services provided by Islamic banks from the perspective of their customers, and to determine the extent of customer inclination towards Islamic banking services. The study reached a number of conclusions, the most important of which was that there was a positive impression of the quality of Islamic banking services from the perspective of their beneficiaries in the areas of material and tangible aspects, responsiveness, and empathy.[2] However, in the areas of reliability and security, it was not satisfactory for beneficiaries. 3) Researcher Raad Al-Sarn's study, titled "A New Method for Studying Service Quality in the Banking Sector: A Comparative Field Study Between Some Syrian and Jordanian Banks," 2005, PhD dissertation, Damascus University. This study aims to develop a new method for studying service quality in the banking sector. The researcher reached a number of conclusions, the most important of which was that the banking sector in Syria suffers from

several problems, including the absence of competition, weak oversight and accountability mechanisms, limited experience and competence among bank employees, a lack of advanced banking services, and the absence of a law or decree regulating electronic transactions between banks and their domestic and international clients.

4 (The study by researcher Thamer Mohammed, entitled "Measuring the Quality of Banking Services in Qatari National Commercial Banks" (2005), aimed to measure the quality of banking services provided by Qatari commercial banks from the customers' perspective [3], using the SERVPERF scale to reveal the level of service quality. It also aimed to identify the positive and negative aspects in the areas and dimensions of banking service quality for the banks under study. The study reached several conclusions, the most important of which was: a high level of banking service quality provided by Qatari commercial banks from the customers' perspective. Furthermore, a statistically significant relationship was found between the overall quality of banking services provided by the Qatari commercial banks under study and the areas and dimensions of banking service quality, namely tangible aspects, reliability, security, responsiveness, and empathy [4].

Secondly: What distinguishes this research from previous studies:

This research differs from previous studies in terms of location. Previous studies were conducted in environments different from the Libyan environment in terms of measuring quality from the customers' perspective, and also in terms of the types of customers, which makes it difficult to use and generalize their results to this study.

Theoretical Framework

First / The Concept of Quality in Educational Services

The concept of service quality has emerged as one of the most important areas in which service providers can compete. This means that customers' demand for services is not solely based on the marketing content they receive, but also on the symbolic values that customers seek and perceive as being of higher quality. Examples include the quality of educational services, empathy shown to them [5], speed of completion, ease of procedures, service delivery style, the appearance of staff, and other concepts that constitute areas of excellence in service provision. This forms a comprehensive concept of service quality (Abu Muammar, Fares Mahmoud, (2005) p. 78).

However, adopting the concept of external quality of service is more widespread and important, because the concept of quality in this direction focuses on the perception of customers and their preferences, and accordingly the service is shaped in light of the expectations, preferences and desires of customers.[6] That is, the concept of service quality according to this direction differs from that concept determined by standard specifications, as there is a great difference and variation between the quality perceived by customers and the quality determined according to standard specifications. (Al-Talib, Salah Abdul Rahman, (2004), p. 27.)

Marketing literature has presented numerous definitions of quality. However, some of these definitions will be mentioned, focusing on their common characteristics. Quality, as defined

by the American Society for Quality (ASQ) and the European Organisation for Quality Control (EOQC), is the sum total of features and characteristics that enable a service provider to meet customer needs and desires (Al-Haddad, Awad, (1999), p. 39). The UK's National Bureau of Economic Development defines quality as the set of factors or characteristics that must be present in a product or service to meet market demands. It is also defined as the conformity of a product or service to specifications. Therefore, the customer will be satisfied when the service characteristics meet their requirements (Al-Khalidi, Ayman, (2006), p. 41). Thus, it can be said that the quality of educational services is based on students' expectations and desires, as the student is the primary and sole determinant of quality and the beneficiary of quality educational services. Figure (1) below illustrates the concept of service quality.

The Concept of Service Quality (Al-Talib, Salah Abdul Rahman, (2004), p. 5)

Secondly / Levels of Service Quality: (Abdul Mohsen, Tawfiq, (2002), p. 17)

Five levels of service quality can be distinguished and defined as follows:

- Expected Quality: This represents the level of service quality that customers expect to receive from those they deal with.

- Perceived Quality: This is what the organization's management perceives as the quality of service it provides to its customers, believing that it will satisfy their needs and desires to a high level.

- Technical Quality: This is the method by which the service provider performs, and it is subject to the quality specifications of the service provided.

- Actual Quality: This expresses the extent of compatibility and ability to use service delivery methods effectively to satisfy customers.

- Desired Customer Quality: This refers to the level of satisfaction and acceptance that the organization can obtain from customers when they receive these services.

Thirdly / The SERVQUL Measurement Model (Al-Khalidi, Ayman, (2006), p. 41)

The SERVQUL model, which is defined as The Service Quality Model (SQM), abbreviated as the Service Quality Model, is one of the most well-known and widely used models. Several studies have contributed to establishing a scientific and practical foundation and standards for measuring service quality. These researchers presented the renowned SERVQUL scale, which marked a turning point in service quality literature [7]. This model is based on a questionnaire consisting of 22 items designed to cover five dimensions of service quality. The research team integrated these dimensions based on their own research. The scale comprises two sets of 22 statements each. The first set aims to determine customers' perceptions of the quality of service provided, while the second set aims to determine customers' expectations of service quality. If customers' perceptions of the quality of service provided are lower than their expectations, the quality is considered low. This can be expressed by the following equation: Service Quality = Expected Service – Actual Performance.[8]

Fourth: Dimensions of Service Quality (Al-Khalidi, Ayman, (2006), p. 41)

1 -Tangibles: These represent the tangible and material aspects related to the service, such as buildings, modern technologies, equipment necessary for service delivery, and employee appearance. This dimension is measured According to the model and study questionnaire, items 1-6.

2 -Reliability: This reflects the organization's ability, from the customer's perspective, to provide the service at the time requested and with the accuracy that satisfies their expectations. This dimension is measured according to the model and study questionnaire, items 7-12.

3 -Safety: This is the assurance that the service provided to customers is free from errors and defects, encompassing both psychological and material security. It is one of the most important dimensions of quality that customers focus on when choosing an organization. This dimension is measured according to the model and study questionnaire, items 23-26.

4 -Responsiveness: This is the ability to effectively handle all customer requirements and respond to complaints in a way that convinces customers that they are valued and respected by the organization they deal with. Furthermore, responsiveness reflects the initiative of employees in providing service with a welcoming attitude. This dimension is measured according to the model and study questionnaire, items 19-22.

5- Empathy: This is demonstrating a spirit of friendship, friendliness, and concern for the customer and their interests, making them feel important and demonstrating a desire to... Serving him according to his likes and preferences, and in a way that achieves the highest levels of satisfaction for him. This dimension is measured according to the model and the study questionnaire in items 13-18.

Data Presentation and Analysis

First: Research Instrument:

A questionnaire was developed specifically to achieve the research objectives and test its hypotheses. This development drew upon several previous studies and research. The questionnaire consists of two parts. The first part covers the demographic variables of the study sample (gender, academic department, and academic year). The second part is divided into two sections. The first section contains 26 items representing the student's perception of the quality of educational services actually provided by the institute. The second section also contains 26 items reflecting the student's expectations of the quality of educational services that should be provided by the institute, encompassing the five dimensions of quality. The items for each dimension were measured using a five-point Likert scale: (5) Very Available, (4) Available, (3) Neutral, (2) Not Available, and (1) Very Not Available. To ensure accuracy and objectivity in the theoretical description of the questionnaire results, as will be demonstrated by the arithmetic means, the researcher calculated the actual numerical values of the available options for respondents to answer the items. The questionnaire, according to the five-point Likert scale used to measure the research variables, was designed by converting the distances between the options into four levels. The distance between 1 and 2 represents

level 1, the distance between 2 and 3 level 2, the distance between 3 and 4 level 3, and the distance between 4 and 5 level 4. To distribute the scores, $5 - 1 = 4$ across the five answer choices, resulting in a length of $5/4 = 0.8$. Therefore, each level is categorized as follows:

- Level 1: The range from 1 to less than 1.8 indicates very low availability.
- Level 2: The range from 1.8 to less than 2.6 indicates no availability.
- Level 3: The range from 2.6 to less than 3.4 indicates neutral availability.

-Level 4: The range from 3.4 to less than 4.2 indicates high availability. - Level 5: The range from (4.2) to (5) indicates very available or very high availability.

To analyze the data obtained from the questionnaire, statistical analysis methods were employed using the Statistical Package for the Social Sciences (SPSS). The statistical analysis included the application of descriptive and inferential statistical techniques appropriate to the nature of the study data. Second: Validity and Reliability of the Research Instrument:

To test the validity and reliability of the research instrument, the questionnaire was presented to several academic specialists at the Faculty of Economics at the Universities of Tripoli and Zawiya to obtain their feedback. They approved the questionnaire, offering some scientific observations regarding modifications and wording of certain items. These modifications aimed to better present the research problem, test its hypotheses, and achieve its objectives.[9] To determine the clarity and comprehension of the questionnaire items from the respondents' perspectives, a sample of (20) respondents was selected for this purpose. Cronbach's alpha coefficient for internal consistency was calculated and found to be (85.2%), indicating a high reliability rate.

Third: Characteristics of the Research Sample:

The questionnaire included (3) questions about the general characteristics or data of the research sample, namely gender, educational qualification, and duration of dealings with the bank. Table (1) below shows the results of the analysis of the demographic characteristics of the research sample, as follows: - Gender: It is clear from Table (1) that the percentage of females reached (83.3%) of the total research sample, while the percentage of males reached only (16.7%) of the total study sample. This means that the majority of beneficiaries of the educational services provided by the Higher Institute under study are females, according to the study sample. - Academic Department: The Mechanical Engineering Department comprised 5.2% of the total research sample, while the Administrative Sciences Department comprised 25.5%. The Computer Science Department comprised 24.3%, the Civil Engineering Department 35.7%, and the Electrical Engineering Department 9.3%. These percentages indicate a close relationship between departments with high student density and those with low student density.

- Academic Year: Table 1 shows that 48.9% of the study sample were enrolled in the fifth semester and were all taught by the researcher during the study period. The sixth semester comprised 27% of the total sample, and the third semester comprised 24.1%.

Research Findings and Recommendations

First: Key Research Findings:

1 (The actual quality of educational services provided by the Higher Institute under study in Raqdalín to its students is considered (average) from the students' perspective.

2 (Students' evaluation of the Higher Institute under study regarding some dimensions of the actual quality of educational services provided to them was high, specifically concerning the aspects of safety and responsiveness.

3 (There are statistically significant differences between students' perception and evaluation of the actual performance level of educational services provided by the Higher Institute under study and their evaluation of the expected quality of educational services.

4 (There is a negative gap between students' expectations of the quality of educational services provided by the higher institute under study and their perception of the actual quality of these services. However, in the area of empathy, the gap was positive, with expectations exceeding perceptions in four dimensions of service quality. The negative gaps in each dimension of service quality were ranked from largest to smallest as follows: (tangible aspects, safety aspects, reliability aspects, and responsiveness aspects.)

5 (There are no statistically significant differences in students' evaluation of the actual quality of educational services provided by the higher institute under study that can be attributed to the demographic variables of the study sample. Secondly, in light of the researcher's findings, the following recommendations can be made:

1 (The higher institute under study must prioritize improving the quality of services provided to students, particularly in developing and enhancing tangible, reliable, and empathetic aspects. These are crucial for improving the overall quality of educational services and their development. Furthermore, the institute should increase its focus on safety and responsiveness in its services [18.]

2 (The higher institute under study must prioritize developing its services, especially regarding the modernization of equipment and technology used in academic achievement, to keep pace with the latest developments in educational services.

3 (Staff at the institute under study must be made aware of the importance of quality and its improvement, and its role in achieving the institute's goals. Quality improvement begins with focusing on and prioritizing students, who are the foundation of the institute's success and development.

4 (Efforts should be made to reduce the negative gap between students' expectations and their perception of the quality of educational services provided. This can be achieved by addressing shortcomings and weaknesses in educational services and reinforcing positive aspects through ongoing research to measure the quality of these services.

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