A Study about the Service Quality in Special Reference to Tangibilty Dimension with the Perspective of Students

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Abstract

Education is a process by which a person's body, mind, and character become stronger and stronger. It is bringing together the head, heart and mind, and thus enables a person to develop personality throughout the period. The motive for selecting to measure the service quality in polytechnic education lies in the information that in current years there has been a creation of educational institutions in our country. We take tangibility dimension as it is the main infra which will be primarily used by the students to feel comfortable to take education. We have collected data from students about their institute's service quality in reference to tangibility factor. Analysis has been done on the basis of gap score calculated with the help of help of SERVQUAL model. Then T test values, standard deviation and variations with SPSS software has been calculated.

Keywords: Tangibility, Service quality

Introduction

According to Kotler.et.al, "A service is any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product".

According to Tantton, "Services are identifiable, intangible activities that are the main object of a transaction disabled to provide want satisfaction to customers".

Tangibility is the appearance of physical facilities, equipment, personnel, and communication materials. Customers tend to expect clean and professional facilities and shops, employees who look groomed and neat, and well-written and designed materials such as menus, websites, and signs.

Review of Literature

Mokhtar Bunian Seri et.al (2017) focused in their study named "Service Quality of Polytechnic uses a SERQUAL model for Sustainable TVET system" on enhancing the service quality which increases awareness and in addition enhancing the perception of TVET framework in polytechnics and in accomplishing the plan for transformation design. It will prompt the sustainability of TVET framework in the nation. The aim of this study was to assess the service quality of Polytechnic Ungku Omar. The study of the universe comprises of final semester students of Polytechnic Ungku Omar (PUO) and 222 students were picked through random sampling method as the sample of the research work. The data were collected by using the SERVQUAL questionnaire. Information collected were analyzed through SPSS version 21. The findings of the research demonstrated a noteworthy distinction among the

students' expectations and perceptions in the five dimensions related to the service quality and, expectations of the students had a larger score than their perceptions. Besides, the results of various regression analyses also demonstrated that the relation between the four indicator factors and the criterion variable was at significant level p.

Mishra, Gauri et.al (2016) in their study "A review of Quality Factors of Higher Education" highlights the quality factors of Higher Education. The study shows that in developing nations, higher education and especially education from an esteemed university is perceived as a key power for modernization and improvement. This has caused an expansion in the interest of its access, accompanied by various difficulties. The purpose of their research is to identify the factors related to the quality of higher education. The study was based on parameters on qualitative & quantitative; within the higher education sector insights into comparative evaluations of quality dimensions. Higher educational quality dimensions are Aspects related to curriculum; Evaluation of teaching and learning; Making inquiries, Infrastructure and Learning Resources; Support of students & development; group Management and strong Practices, along with its respected factors.

Maysoon, Khaleel, Ibraheem (2016) conducted a study "Relationship between Perceived Service Quality and Student's Satisfaction among Undergraduate Students: A Case Study of Private Higher Education Institute in Dubai". The aim behind the research is to analyze the correlation among the various dimensions of service quality, "tangibility, reliability, responsiveness, assurance, empathy (SERVQUAL) and satisfaction of students". A private University in Dubai, has been chosen as contextual analysis to evaluate the fulfillment the students service quality of the University. Suitable and dependable survey questionnaire have been used for this particular segment study and information were caught with a self controlled method. To analyze the connection among the students satisfaction and SERVQUAL, correlation statistics was used. The study discovered that amongst the 5 measurements, "empathy and assurance" were completely and extensively associated by understudy's fulfillment in the campus of University.

Samuel Anwowie, et.al(2015) developed a study "Assessment of Students' Satisfaction of Service Quality in Takoradi Polytechnic: The Students' Perspective". To know the satisfaction of students regarding the quality of service provided by Takoradi Polytechnic, a research study was done which used the service quality instrument for estimating the students expectations and perceptions as indicated by the five dimensions measurements. 188 understudies be inspected by using the instrument known as SERVQUAL. The investigation demonstrates that the understudies perception regarding quality of service surpassed their prospect on four measurements of service quality to be specific "tangibility, responsiveness, assurance and empathy", while their prospect for "reliability" surpassed their perception. It is suggested that, the administration of Takoradi Polytechnic must keep up or enhance their all four dimensions "tangibility, assurance, empathy and responsiveness". It was also suggested in the study that, the institute have to take critical actions to strategically handle their service quality dimension of reliability.

Abhishek Soni,et.al (2014) conducted a research titled "Study of Parameters for Improving Quality of Technical Education with Customer Satisfaction via Quality Function Deployment" utilizes a device for development that is QFD in quality and setting standards in Technical Institutions. The investigation depends on essential information which was gathered from the students who are considered to be clients as well as instructors, measured as specialized persons from six diverse departments of a technical

institute. A well structured feedback form was utilized for collecting information. The information was analysed by utilizing the procedures of QFD in a technological institution. Based on these input, a place of excellence is created, which featured the main apprehensive zones of enhancing the service quality in education with furthermore featured a few benchmarks where different establishments are more productive. The work stressed on change of value of organization by changing the lab quality, training staff particularly utilize of "POKA YOKE" for finding mistakes that is admission of the understudies. Further the study also found that QFD has assumed a key part in distinguishing client necessities, organizing necessities and addressing the requirements of all clients with a specific end goal to accomplish excellence in different fields and elements of organizations and furthermore in various educational settings over the world.

Chopra Rita et. al(2014) stressed on "Service Quality in Higher Education: A Comparative Study of Management and Education Institutions" they contemplates the students' view regarding the quality of service of the current educational condition, utilizing the newly changed service quality "SERVQUAL" tool to quantify 5 dimensions: "tangibles, reliability, responsiveness, assurance, and empathy". The research was conducted on 500 understudies seeking their PG in the subject of management and education streams in ten establishments situated in the Northern India territory of the state of Haryana. An altogether negative gap is seen in the "expectations and perceptions" regarding the superiority of service of higher educational institutes, which indicates a feeling of disappointment in the understudies.

Stasiak- Betlejewska, R. et al. (2014) The main crucial position of this analysis of research is to identify the expectations of understudies at specialized technical Universities. The study identifies the level of service quality of the university and also the areas where improvement is needed. The outcomes showed that significance of the all service quality aspects with regards to students' expectations and perception. Research findings also in favor of the development of University with the help of scientific research process.

Research Methodology

"Research is an academic activity and an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and experiment. In short, the search of knowledge through objective and systematic method of finding a solution to a problem is research". This section reveals the tactics for the current research. This is an investigation and research which is systematic and this study is used to measure service quality in selected Polytechnics institutions affiliated to AICTE in Haryana.

Descriptive cum exploratory research design is used in the study. The data were collected using a well structured questionnaire. SERQUAL model was used to calculate the scores.

Table 1: Total Respondents

Students	No. of respondents
Govt. Institute	240
Pvt. Institute	240
Total	480

Source: Primary survey

Objectives of the study

1. To measure the tangibility dimension gap scores by students of government polytechnic institutes.

2. To measure the tangibility dimension gap scores by students of private polytechnic institutes.

Formulation of Hypothesis

H1 : There is no significant difference between the expectations and perceptions of private polytechnic institute's students towards tangibility.

H2: There is no significant difference between the expectations and perceptions of government polytechnic institute's students towards tangibility.

Data Analysis

As shown in table 480 students (240 students from government institutes and 240 from private institutes)are selected. In this way, total no. of 480mrespondents are selected for the present study i.e. students of the government and private polytechnics institutes located in Haryana.

Table 2: Reliability of the service quality dimensions

Dimensions	No. of Statements	Cronbach Alpha
Tangible	9	0.761

Table 2 presents the reliability of statements of variables/factors, Cronbach's alpha is used. It consists the measurements of how much variation in scores of variables is imputable to random errors. A value greater than or equal to 0.7 is regarded satisfactory and acceptable which indicates the strong construct of reliability.

Table 3: Perception and Expectations (Tangibility) of students of government and private polytechnic institute

	Perception (Govt.)	Expectation (Govt.)	Perception (Pvt.)	Expectation (Pvt.)	Gap scores (P-E)	
Tangible	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Govt.	Pvt.
Your institute has up to mark equipment.	3.62 (0.82)	3.85(0.62)	3.82(0.12)	3.90 (0.83)	-0.23	-0.08
The physical facilities of your institution are visually appealing.	3.69 (0.25)	3.99(0.90)	3.34(0.29)	3.41(0.10)	-0.3	-0.07

The employees in your institute dressed professionally.	3.00 (0.80)	3.22(0.87)	3.61(0.83)	3.71(0.27)	-0.22	-0.1
The teaching aids are physically attractive.	3.30 (0.92)	3.50(0.71)	3.60(0.57)	3.99(0.39)	-0.20	-0.39
The classrooms in the institution are well furnished.	3.11 (0.13)	3.81(0.19)	3.00(0.24)	3.10(0.81)	-0.70	-0.1
The laboratories are well equipped, purified drinking water and clean toilet facilities are given.	3.23 (0.84)	3.94(0.15)	3.30(0.83)	3.51(0.29)	-0.71	-0.21
The institution has well settled library, well furnished common rooms for girls and sports facility	3.02 (0.62)	3.51(0.49)	3.90(0.40)	3.50(0.17)	-0.49	0.4
The institution has high end systems and Wi-Fi facility.	3.31 (0.43)	3.76(0.81)	3.01(0.61)	3.40(0.36)	-0.45	-0.39
Hostel facility is provided to the students by the institution.	3.02 (0.16)	3.98(0.53)	3.21(0.26)	3.80(0.52)	-0.96	-0.59

Source: Primary Survey

Table 3 shows the perception and expectations of students studying in government institutions and private institutions towards the tangibility dimension of service quality of polytechnics institutes in Haryana. The mean value and standard deviation (SD) of each statement of the tangibility dimension of service quality is given.
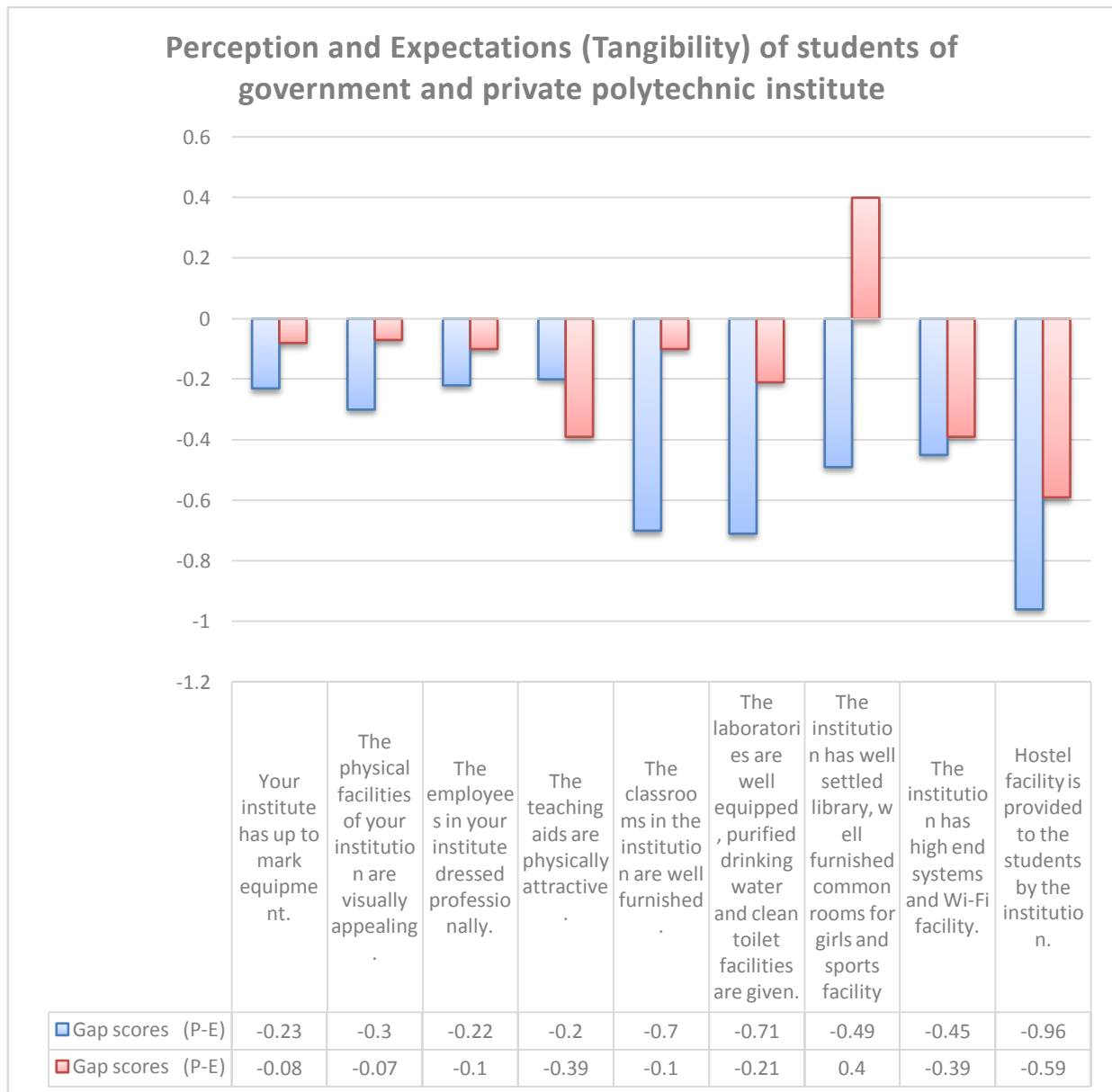
It can be seen that most of the respondents of a government institute highly perceived with the statement "Your institute have up to mark equipment and the physical facilities of your institution are visually appealing" because these statements have highest mean values. Whereas the expectations of respondents of government institutions are higher for the following statements "Hostel facility is provided to the students by the institution and the physical facilities of your institution are visually appealing" because of higher mean values assigned to these statements. In case of private institutes, the student's perception

of tangibility is found higher in these statements: The institution has well settled library, well-furnished common rooms for girls and sports facility and institute has up to mark equipment. The mean score of perception towards tangibility are ranging from 3.00 to 3.90. The expectations of students towards tangibility are higher for these statements: The teaching aids are physically attractive and institute has up to mark equipment. The mean score of expectations of students towards tangibility are ranging from 3.01 to 3.99.

The above table concludes that students expected that the physical facilities are visually appealing in government institutions, whereas students in private institutions expected that teaching aids are physically attractive and institute has up to mark equipment.

Table 4: Tangibility Gap scores

Blue colour show the result of govt polytechnics and Red colour for private polytechnics in the graph

Perception and Expectations (Tangibility) of students of government and private polytechnic institute

	Your institute has up to mark equipment.	The physical facilities of your institution are visually appealing.	The employees in your institute dressed professionally.	The teaching aids are physically attractive.	The classrooms in the institution are well furnished.	The laboratories are well equipped , purified drinking water and clean toilet facilities are given.	The institution has well settled library, well furnished common rooms for girls and sports facility	The institution has high end systems and Wi-Fi facility.	Hostel facility is provided to the students by the institution.
Gap scores (P-E)	-0.23	-0.3	-0.22	-0.2	-0.7	-0.71	-0.49	-0.45	-0.96
Gap scores (P-E)	-0.08	-0.07	-0.1	-0.39	-0.1	-0.21	0.4	-0.39	-0.59

Source: Primary Survey

The gap score has been analyzed which shows the difference between the expectations and perception of the students of government and private institutes. The gap score (Perception –Expectations) is found negative for all statements which indicates that expectations of students are higher than their perception. However, there is not much difference between the scores of perception and expectations of tangibility but are lower than expectations. The results showed a shortfall for all the items except "the institution has well settled library, well-furnished common rooms for girls and sports facility" in case of respondents of private institutes. In particular, it is found that student's perception of tangibility of polytechnic institute did not meet their expectation level because all gap scores are found negative, but gap scores of respondent's perception and expectations of government institute are higher as compared to a gap score of respondent's perception and expectations of private institutes.

Results of Hypothesis

H1 There is no significant difference between the expectations of private polytechnic institute's students and their perception towards tangibility

Table 5: difference between expectations of private polytechnic institute's students and perception towards tangibility

Tangibility	T-test	p-value
Your institute has up to mark equipment.	5.21	0.02
The physical facilities of your institution are visually appealing.	4.10	0.00
The employees in your institute dressed professionally.	7.02	0.01
The teaching aids are physically attractive.	5.91	0.00
The classrooms in the institution are well furnished.	4.20	0.02
The laboratories are well equipped, purified drinking water and clean toilet facilities are given.	5.06	0.00
The institution has well settled library, well-furnished common rooms for girls and sports facility	3.10	0.01
The institution has high end systems and Wi-Fi facility.	2.81	0.00
Hostel facility is provided to the students by the institution.	7.20	0.00

Source: Primary Survey

Table 5 shows the difference between expectations and perception of private polytechnics institute's students towards tangibility. T-test has been used to compare the statements and any significant difference among them. The results show that p value of each statement of tangible dimension is found less than 0.05. Hence, hypothesis: There is no significant difference between the expectations of private polytechnic institute's students and their perception towards tangibility, is rejected that there is no significant difference between the expectations of private polytechnics institutes, studentsand their perception which indicates that service rendered by students are lower than their expectations and private polytechnics institutes are performing below the expectations of students.

H2: There is no significant difference between the expectations of government polytechnic institute's students and their perception towards tangibility

Table 6 : difference between expectations of government polytechnic institute's students and perception towards tangibility

Tangibility	T-test	P-value
Your institute has up to mark equipment.	6.21	0.01
The physical facilities of your institution are visually appealing.	4.50	0.00
The employees in your institute dressed professionally.	7.12	0.00
The teaching aids are physically attractive.	5.69	0.00
The classrooms in the institution are well furnished.	4.03	0.00
The laboratories are well equipped, purified drinking water and clean toilet facilities are given.	6.06	0.00
The institution has well settled library, well-furnished common rooms for girls and sports facility	5.10	0.00
The institution has high end systems and Wi-Fi facility.	3.81	0.01
Hostel facility is provided to the students by the institution.	8.20	0.00

Source: Primary Survey

Table 6 shows the difference between expectations and perception of students towards tangibility. T-test has been used to compare the statements and any significant difference among them. The results show that p value of each statement of tangible dimension is found less than 0.05. Hence, hypothesis: There is no significant difference between the expectations of government polytechnic institute's students and their perception towards tangibility, is rejected that there is no significant difference between the expectations of government polytechnic institute's students and their perception which indicates that service rendered by students are lower than their expectations and polytechnic institutes are performing below the expectations of students.

Findings

- The average score of perception towards tangibility ranged from 3.00 to 3.90. These statements were more than the expectations of the students: teaching aids are physically attractive and institutions have to mark the equipment. The average number of students' expectations was 3.10 to 3.99.

- All gaps of students of govt as well as private polytechnic institutes are negative. It means institutes are not providing infrastructure upto the mark. The gaps of private institutes are also negative but still they are better then the government polytechnics.

- T-test was used in the perception and expectations mean statements, in order to identify whether they're found statistically significant service quality gaps or not.

Results of hypothesis testing (perception and expectations of govt polytechnic institute's students)

- The results show that p value of each statement of tangible was found less than 0.05.

- There found significant difference in the perceptions and expectations of students in government and private institutes towards service quality offered by institutes.

Results of hypothesis testing (perception and expectations of private polytechnic institute's students)

- The results show that p value of each statement of tangible and reliability dimension was found less than 0.05.

- There found significant difference in the perceptions and expectations of students in government and private institutes towards service quality offered by institutes.

- It concludes that expectations and perception of students studying in government institutes are different from the expectations and perception of students of private institutes. In private institutes, students were expecting and perceiving differently from the students of government institutes.

Conclusion

This study represents an imperative beginning in the development of suitable and dependable measures. Overall, this study has shown that the delivering a quality based service by the polytechnic institutes was moderate from the students' perspective. This means that there is a need for incessant improvement of service quality. Therefore, it is very important for the polytechnics institutes to examine their services on a regular basis so as to survive in the market. Because these days it is very difficult to analyze (expectations and perceptions) of a consumer i.e. Students are getting impulsive in selecting the correct institutions. Thus, it would be a major challenge for the technical institutes to maintain their standards and quality in providing good education service to the students as well as exposure for the teachers. The increase in the number of technical institutes has raised the issue of maintaining the quality of education in Haryana.

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