

Gap between Expectation and Perception of service quality in education for Public Polytechnic institute

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ABSTRACT - The aim of the research paper is to explore the gap between perception and expectation of service quality in education for public polytechnic institutes. This study is steered with the help of primary data. Questionnaire is framed for collecting the necessary information. Likert's 7 point scale has been adopted to quote the responses of the students. In order to study the study the gap analysis, means of perceptions and expectations is calculated. Paired sampled t test has been conducted to find the significant differences of various dimensions of service quality. Results of Paired samples t –test shows that in public polytechnic institutes, expectations and perceptions for the dimension Tangibility and Responsiveness were not equal. The study highlights that the public institutes must concentrate on the upliftment of factors tangibility and responsiveness. As in other areas the extent of public sector is contracting, thus it becomes quite clear that government should maintain standards of education if they are to compete with private sector.

KEYWORDS: Public ,Gap ,Dimension of service quality

1.INTRODUCTION

In present era of globalization, every education service provider has to look much beyond their basic facilities for the students. Whenever student makes a choice for any particular college or university, they have a lot of expectations in their minds with regard to different dimensions of service quality. Perception of students is also a subjective criterion. When student derives some specific service to meet his/her expectation, it results in satisfaction. On the other hand,gap arises when there is a

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lag between perception and expectation. Several studies have been conducted related to the model of service quality. In some studies idea of perceptions and expectations is also discussed (Parasuraman *et al.*, 1985, 1988).

The current paper is exclusively devoted to determine the difference between expectations and perceptions for quality of education for public polytechnic institutes. This paper has been divided into three sections. Section I, SERVQUAL model of Gap analysis has been explained. Different hypotheses tested for service quality are also explained in this section. The gap between expectations and perceptions of service quality in education for public polytechnic institutes is analyzed in section II. The whole discussion has been concluded in section III.

REVIEW OF LITERATURE

Devi & Ramburuth (2012) studied the service quality of the products in the Mauritian Banking sector. The objective of the study was to determine the gap between expectation and perception of the customers with regard to service quality dimensions. Primary method of data collection was used. Likert scale was used for rating of the statement. Mean of 44 items of the SERVQUAL model was calculated including perception and expectation of the consumer. The gap between expectation and perception was calculated. An assessment of overall service quality depends on the gap between the expected and perceived service. The study concluded that for four statements of Tangibility, means expectation scores were greater than the mean perception scores. It also stated that no doubt, customers were aware of new products and services but they were less interested in these products because of increasing cost. They felt more secured and easy with the use of already existed products.

Lather *et al.*; (2012) investigated the gap between actual and perceived satisfaction level of tourist in adventure tourism. The main objective of the study was to know the association between level of expectation and level of satisfaction of Indian tourist and foreign tourist. Data was collected from 300 tourists. Out of this 150 were domestic and 150 were international tourists. Convenience sampling method was used to collect the data. Data was analyzed on five point Likert scale. Paired sample t test was used. A high gap was found between expectations and perceptions of domestic and foreign tourists with regard to different factors. Domestic tourists were more satisfied than foreign tourists.

Mandal & Banerjee (2012) explored the perceptual gaps between the shareholders' vis-à-vis quality dimensions of the academic program. The shareholders of these educational institutions were faculty and industry executives. The study designated the state of West Bengal for leading current research. Total sample was of 260 responses. Different hypotheses were framed to find out significant difference in perception of engineering administrators and faculty members of the institutes in terms of academic performance. The study found the perceptual gap between the two vital shareholders of education sector. These were faculty, and industry executives. It was concerned about the appearance of a best engineering program. The other finding of the study was that there were significant gaps between these two groups of stakeholder's i.e faculty and executive. This difference was concerned with the important performance factors of a best engineering curriculum.

DATA BASE AND RESEARCH METHODOLOGY

The present study is based on primary data. For the data collection, a questionnaire was developed based on SERVQUAL scale and review of literature. All 45 statements of questionnaire were framed for evaluating the service quality in polytechnic institutes. These attributes were measured on a seven-point rating scale, ranging from 1 (strongly disagree) to 7 (strongly agree), where students were asked to indicate the extent to which each attribute influences their evaluation for choosing public polytechnical institutes. Data were collected from students studying in polytechnics of cities Jalandhar and Mohali.

SECTION- I

1.1 SERVQUAL Model in Gap Analysis

A research was conducted in the banking, telecommunication, insurance and appliance sector by Parasuraman, Zeithaml and Berry in the Period between 1985 and 1994. They developed a gap model. It analyzes the gaps of service processes. Gap of service process can be measured by calculating the difference of perception score and expectation score.

The subsequent equation states the gap analysis of service quality.

Gap = Perception Score (P) - Expectation Score (E)

1.1.1 Service Quality in Technical Education

Review of previous research shows that many studies have used SERVQUAL scale in the field of technical and higher education. Therefore, to determine the difference between students' perceptions and expectations for service quality in education for polytechnic institute, a customized scale pertinent to education sector has been created. Paired sample t test was used to define noteworthy gap between anticipated and real gratification level of students. Following postulates were verified.

1.1.2 Hypotheses: Public Polytechnic institutes are providing facilities related to various dimension. There may occur gap between expectations and perceptions of students. The following postulates have been tested to find out the gap between the two.

H₀₁: There is no significant difference between expectations and perceptions for the technical education provided by public polytechnic institutes for dimension Tangibility.

H₀₂: There is no significant difference between expectations and perceptions for the technical education provided by public polytechnic institutes for dimension Responsiveness.

H₀₃: There is no significant difference between expectations and perceptions for the technical education provided by public polytechnic institutes for dimension Assurance.

H₀₄: There is no significant difference between expectations and perceptions for the technical education provided by public polytechnic institutes for dimension Empathy.

H₀₅: There is no significant difference between expectations and perceptions for the technical education provided by public polytechnic institutes for dimension Reliability.

SECTION- II

2.1 Exploration and Explanation of Gaps between Expectations and Perceptions of Students for Quality of Education in Public Polytechnic Institutes

Initially mean score for expectations and perceptions were calculated. Their difference was taken as gap. A negative gap score will appear when actual

perceived services of consumer lags behind their expectation (Perception–Expectation). The result of gap between expectations and perceptions has been shown in the Table 1

(i) H₀₁: There is no significant difference between expectations and perceptions of students for the dimension ‘Tangibility’ in public polytechnic institutes.

Tangibility means the advent of physical facilities and equipment. It also includes personnel and materials of communication. Table 1 shows positive gap (0.05534) between perception (5.032) and expectation (4.97666) for dimension ‘Tangibility’ which indicates that students were satisfied. Under dimension ‘Tangibility’ item wise analysis indicated that the highest level of displeasure was experienced for item ‘Members of faculty are well dressed in your institution (gap= -0.49). On the contrary, satisfaction was found for the item ‘Support staff is well dressed in your institution’(gap= 0.67) followed by ‘The institution uses modern equipment and technology’(gap= 0.036667) and ‘Physical facilities are visually appealing in your institution’ (gap= 0.03333)and ‘Materials are visually appealing in your institution’(gap= 0.026667). Moreover, p value for this dimension is less than 0.05 at 5% level of significance; hence null hypothesis is rejected meaning thereby that there is noteworthy gap between expectations and actual satisfaction level of the students for dimension “Tangibility”. It is possible that students who will relinquish and move to other institutes if one educational institute does not provide quality service.

(ii) H₀₂: There is no significant difference between expectations and perceptions of students for the dimension ‘Responsiveness’ in public polytechnic institutes.

Responsiveness means the readiness to assist consumers. It also enables to provide prompt service to them. In case dimension ‘Responsiveness’ the gap turns out to be negative with difference of 0.29333 as its expected mean score was 5.49444 and perceived mean score was 5.20111. For current dimension, largest negative gap score was observed for the item ‘Your institution promise to do something and did so’ with a gap of 1.08667 followed by ‘Support staff told exactly when services were done’(gap= 0.86667) ‘Support staff provided services at time promised’ (gap= 0.62333) ‘Support staff gave prompt service to you’(gap= 0.41667) ,‘Your institution show individualized interest in solving your problem’(gap= 0.33333)and

‘Support staff responded to requests all the time’(gap=0.14667). On the contrary the positive gap was found for the dimension ‘Faculty maintained error free records’(gap=0.473334) followed by ‘Support staff maintained error free records’(gap=0.213333) and ‘Faculty performed services right at first time’(gap= 0.146666).

(iii) H₀₃: There is no significant difference between expectations and perceptions of students for the dimension ‘Assurance’ in public polytechnic institutes.

Assurance is feeling of caring, individualized attention toward consumers. In case dimension ‘Assurance’ has mean perception score of 5.3508 and mean expectation score 5.5924 a negative gap score of 0.2416 which indicates less dissatisfaction for this dimension. Under this dimension, highest negative gap was found for the item ‘Faculty gave individual attention to you’ (gap=0.50667) followed by ‘Faculty has the knowledge to answer your questions’ (gap=0.45) and ‘Support staff are consistently courteous to you’(gap=0.04). On the other hand, positive gap score was found in case of item ‘Faculty behaviour instilled confidence in you’ (gap=0.03).

(iv) H₀₄: There is no significant difference between expectations and perceptions of students for the dimension ‘Empathy’ in public polytechnic institutes.

As far Empathy dimension is concerned, its perception mean is 4.87500 and expected mean is 4.9358 with a negative gap of 0.0608. For current dimension, largest negative gap score was observed for the item ‘Support staff gave individual attention to you’ (gap= 0.14667), ‘Support staff behaviour instilled confidence in you’ (gap= 0.13333) and followed by ‘Support staff have the knowledge to answer your questions’ (gap= 0.05333). On the contrary, the positive gap was found for the dimension ‘Felt safe in learning environment’ (gap= 0.09).

Table 1: Result for Gap between Expectations and Perceptions of Students in Public Polytechnic Institutes

Statements	Mean of Perceptions	Mean of Expectations	Mean Gap between Expectations and Perceptions	t-value	Sig.	Results
Tangibility	5.032	4.97666	0.05534	3.216	.032*	Rejected
Members of faculty are well dressed in your institution	5.05	5.54	-0.49	-11.617	.000*	Rejected
Support staff is well dressed in your institution	5.23	4.56	0.67	11.291	.000*	Rejected
The institution uses modern equipment and technology	4.95	4.913333	0.036667	0.629	.530	Accepted
Physical facilities are visually appealing in your institution	4.97	4.936667	0.033333	9.021	.000*	Rejected
Materials are visually appealing in your institution	4.96	4.933333	0.026667	3.975	.000*	Rejected
Responsiveness	5.20111	5.49444	-0.29333	-9.003	.000*	Rejected
Faculty performed services right at first time	4.923333	4.776667	0.146666	0.805	.422	Accepted
Faculty maintained error free records	5.046667	4.573333	0.473334	2.828	.005*	Rejected
Support staff maintained error free records	4.973333	4.76	0.213333	2.675	.008*	Rejected
Support staff told exactly when services were done	4.976667	5.843333	-0.86667	-10.271	.000*	Rejected

Support staff responded to requests all the time	5.723333	5.87	-0.14667	-2.171	.031*	Rejected
Support staff provided services at time promised	5.176667	5.8	-0.62333	-8.199	.000*	Rejected
Your institution promise to do something and did so	4.916667	6.003333	-1.08667	-12.827	.000*	Rejected
Your institution show individualized interest in solving your problem	5.51	5.843333	-0.33333	-4.462	.000*	Rejected
Support staff gave prompt service to you	5.563333	5.98	-0.41667	-5.436	.000*	Rejected
Assurance	5.3508	5.5924	-0.2416	-1.551	.121	Accepted
Support staff are consistently courteous to you	5.683333	5.723333	-0.04	-2.131	.034*	Rejected
Faculty has the knowledge to answer your questions	5.373333	5.823333	-0.45	-3.248	.001*	Rejected
Faculty behaviour instilled confidence in you	5.36	5.33	0.03	3.354	.001*	Rejected
Faculty gave individual attention to you	4.986667	5.493333	-0.50667	-1.940	.053	Accepted
Empathy	4.87500	4.9358	-0.0608	-0.591	.555	Accepted
Support staff have the knowledge to answer your questions	4.87	4.923333	-0.05333	-0.586	.558	Accepted
Felt safe in learning environment	4.946667	4.856667	0.09	4.622	.000*	Rejected

Support staff behaviour instilled confidence in you	4.856667	4.99	-0.13333	-.364	.716	Accepted
Support staff gave individual attention to you	4.826667	4.973333	-0.14667	-6.296	.000*	Rejected
Reliability	5.2126	5.6906	-0.478	-1.135	.257	Accepted
Faculty provided services right at time promised	4.923333	5.683333	-0.76	-0.777	.438	Accepted
Support staff performed service right at first time	5.72	5.646667	0.073333	1.195	.233	Accepted
Faculty is always ready to help	4.926667	5.776667	-0.85	-1.956	.051	Accepted
Faculty gave prompt services to you	4.826667	5.716667	-0.89	-2.045	.042*	Rejected
Faculty told exactly when the services were done	5.666667	5.63	0.036667	9.545	.000*	Rejected

Source: Author's calculations

Gap mean = perception mean – expectation mean; Students' expectations and perceptions were measured on a 7-point Likert scale, where 1= strongly disagree and 7=strongly agree;

Note :() Indicates significance at 5% level*

(v) H₀₅: There is no significant difference between expectations and perceptions of students for the dimension ‘Reliability’ in public polytechnic institutes.

As far as dimension ‘Reliability’ is concerned its expected mean score was 5.6906 and perceived mean score was 5.2126 with a negative difference of 0.478. For current dimension, largest negative gap score was observed for the item ‘Faculty gave prompt services to you’ (gap= 0.89), ‘Faculty is always ready to help’ (gap= 0.85) and followed by ‘Faculty provided services right at time promised’ with a negative gap of 0.76. On the divergent, the positive gap was found for the dimension ‘Support staff performed services right at first time’ (gap=0.073333) and also for the dimension ‘Faculty told exactly when the service were done’ (gap =0.036667).

The results presented in table 1 show that perceptions and expectations of students with regard to dimensions such as Assurance, Empathy and Reliability are equal. In order to find out the significant difference between expectations and perceptions of students for technical education, Paired sample t test was employed. It was observed that expectations and perceptions for the dimensions such as Tangibility and Responsiveness were not equal. Therefore there is need for service providers in education sector to improve the matter related to their students. They should divert more resources towards these critical issues.

SECTION - III

In Public polytechnic institutes, the result of hypotheses testing shows that there are no significant differences between perceptions and expectations of students with regard to dimensions such as Assurance, Empathy and Reliability. In order to find out the significant difference between expectations and perceptions of students for technical education, Paired sample t test was employed. The significant difference has been found in the factors like Tangibility and Responsiveness. It reveals a gap between what these public institute promise about tangibility and responsiveness and what the students actually receive. The study highlights the gap regarding availability and condition of physical infrastructure and technology used in the government institutions. Thus public institutes must concentrate on the upliftment of factors included in tangibility and responsiveness. As in other areas the extent of public sector is contracting, thus it becomes quite clear that government should maintain standards of education if they are to compete with private sector.

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