

ANALYTICAL STUDY ON GAP ANALYSIS OF STUDENTS EXPECTATIONS AND SATISFACTION IN NBA ACCREDITED ENGINEERING COLLEGES IN KARNATAKA

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INTRODUCTION

“Education is the manifestation of the perfection already in man”

- Swami Vivekananda

In the present era of knowledge driven economy, the role of higher education becomes instrumental in the overall socio-economic development of any country. According to WTO, under the provisions of the GATT, the sale and purchase of education is considered as service. Higher education can be classified as a marketable service as it possesses all the characteristics of a typical service industry – intangible, heterogeneous, perishable, inseparable from the person delivering it and high customer (student) contact. Educational institutions should take efforts to provide the services effectively and efficiently which would result in satisfaction of students (Kerlin 2000). In this context, an attempt was made to study the students’ satisfaction, in NBA accredited engineering colleges in Bangalore.

1.1 SERVICE SECTOR IN INDIA

The service sector has significant contribution especially for income generation and employment of the world gross national product. According to the Economic Survey 2017 – 18 report ‘Service sector contributes 7,378,705 crores to GDP which accounts for 53.66%. Service sector.

India will emerge as a largest educational hub in the world in near future. There is a tremendous increase in the number of universities and higher educational institutions since independence. “Right to education” act as a boon to Indian education system which accords free education to all in the age group of 6-14 year.

Private sector contribution to India’s higher education is very large at 60%. Private sector participation has accelerated the growth of higher education in India, which accounts for largest number of institutions in higher education in the world.

India’s higher education is surrounded by various challenges. Graduation enrollment ratio is very less at 25.5%. There is no equity or balance in GER among various regions, gender and states. Significant imbalance may be seen in GER in higher education in India. political interference, quality, infrastructure, faculty, research and innovation are other major issues affecting the higher education in India. There are wonderful opportunities for higher education as India witnesses a large number of young population in the age group of 18-23 years. Higher education is growing very fast in India though the challenges are surrounded by it.

It is observed that education which is a tertiary in nature is essential in order to create an economy in which growth is dependent on quality and quantity. Currently statistics shows that India produces many knowledge workers in tertiary, scientific and technical education. But then the availability of knowledge workers are still less and there exists a serious supply shortage of knowledge individuals. This is an urgent need to take steps to improve the quality and scope of the higher education system so that it meets the industries specifications and the trends of the economy.

NON CONFIRMATION OF THEORY EXPECTATIONS

The central theme of service quality is the non confirmation of theory expectations (Rowley and Dawes 1999). Non confirmation arte formed resulting in comparison between perception and expectations of consumed services (Ruytes et al 1997) and expected result on non-confirmation affects the service quality perceived and Harlet 1997; Gohieb et al.

Customer satisfaction will be high following if the service delivery covers within the range of the tolerance zone (Parashuram 2004)

The tolerance zone may be defined as “the extent to which customers are willing to accept and recognize” the

service performance variation(Bitner and Zeithaml 2003)

Non confirmation are of two types, positive and negative non confirmation. If the performance of services is greater than previous expectations positive non –confirmation and satisfaction are formed by customers. But when previous expectations are great than performance of services,negative nonconfirmation and dissatisfaction are formed.(Rugter et al 1997).

Non confirmation which is negative will form a negative impact towards the perceived quality based on the services that are offered(Gotlieb et al,1994).

Although non confirmation of theory expectation gives a supporting structure to compare perception and expectations of services, it lacks the measurable foundations which can be applicable universally through out the industry(Kleiner and Baggs 1996).In addition, this concept of exceeding expectations may be hard to achieve as well as difficult to put into operation as there are no economic reasons for providing a quality which is higher than expected (Johnston 2004).therefore, it may be perceived by the consumers as an expensive service and may attract criticism(Johnston 2004).However the surviving literature supports the relationship between the perceived service quality and non confirmation of theory expectations empirically(Brown and Swartz 1989;Parashuram et al 1988). Hence, this study will adopt non confirmation of theory expectations as a base in evaluating the perception of students on service quality on various institutional; quality factors.

Student's Satisfaction

According to Clarke and Kotler(1987) students satisfaction may be defined as the expected result of a job or task that influences one's self esteem.Yarmohammadian and Rad (2006) defines satisfaction as a “willful accomplishment resulting in ones contextment”.

Dyson et al (1996) opines that the service quality especially in higher educational institutions is the primary aspect of educational excellance.Rowley and Alridge(2001) opines that when students perceive an institutions learning environment,qualified faculty and infrastructure, their interest in the institution would increase nad would be exhibited through positive behavior. The academic and administrative efficiency of the institution greatly influences students motivation. With respect to education institutions, administrative and educational systems consistent performance provides a resultant outcome of satisfaction(Zeithmal 1988)

Spooreen et al (2007) opines that intellectual ability of faculty,professional development,organizational harmony,transparency in students evaluation,traing and feedback are the important features that develop the mentality of students.

Klein and Rodie (2000),argued that if the institutions holds essential educational facilities will effective teaching staff, then students would be loyal, motivated and good performance. The teacher's performance whether inside or outside the class is an important aspect in enhancing students motivation, satisfaction and impartiality.

Shett eta al(2000) stated that students are satisfied with teachers who are accerate,reasonable,logical and punctual and approach in a friendly way

Dalton and Denson(2009) and Elliot and Shin(2002) stated the levels of students satisfaction increases by working with those faculty and academicians who can properly handle projects,tests exam and assignments and those who can facilitate students's aptitude development and logical reasoning.

Academic facilities such as academic advisors,intellectual faculty, mentoring programs nad career counseling are the essential features an institution requires for 15 students better performance and satisfaction(Drew and Bolton 1991)

The co-operation of the administration,staff and faculty with students heads to student satisfaction many students may lose intertest or get de-motivated if faculty,staff and administrators are not co-operative.

Attitude

Attitudes may be positive or negative emotional responses which are developed over a period of time.Attitudes are intense feeling and are relatively stable. According to the theory of planned behavior,attitude may be categorized as a positive or negative emotion an individual exhibits on a particular behaviour (Fishbein and Ajzen 1980).

Attitude with regards to behaviour is considered as an individual's important belief about the evaluation of outcomes resulting from that behaviour (Chang 1998). Liu and Ghen (2004) opines that attitude is one of the main determinants influencing the way an individual behaves. Individual attitude towards the behaviour reflects the degree positively or negatively an individual has with regards to the perception of the behaviour.

Behavioural attitudes are determined by individual beliefs and consequences of exhibiting that behaviour and each belief is measured subjectively (Tan and Laswad 2006; Ajzen 2001).

Behavioural Outcome

Behavioural outcome could be measured based on two factors; firstly, when a customer (students in case of educational institutions) recommends the institution, spreads positive thoughts and remains loyal to the institution. Secondly, when a customer changes over to another institution, complains and spreads negative thoughts about the institution. Behavioural outcome of individuals is greatly influenced by the level of service quality (Zeithaml et al 1996).

It is often said that positive customer behaviour such as repeat purchase, spread of positive thoughts through positive communication will lead to greater customer satisfaction. Once the customer is totally satisfied, service firms experience greater market share and higher profit margins (Parusharam et al 1994).

Word of mouth is one of the most commonly used variables which affects behavioural outcome. (Parshuram et al 1991) found that when consumers perceive service quality to be very high, consumers make good recommendations of that firm to others.

Sasser and Reichhelds (1990) stated that through positive word of mouth, existing customers attracted potential customers and new customers as well.

Zeithaml (2000) opined that existing customers may validate the firm's good reputation to new and potential customers. Singh (1998) & Richins (1983) stated that when the service performance of a firm was at its worst, customers are likely to spread negative publicity to third parties.

RESEARCH OBJECTIVE

1. To analyze the gap between students' expectation and satisfaction of NBA accredited engineering colleges in Bengaluru.

METHODOLOGY:

Research methodology includes the methods used by the researcher for collecting information and data of the study. Knowledge about the systematic way in which a research is conducted is essential for scientific analysis and interpretation of the data as the success of the research depends on the methodology used by the researcher.

The research method used is quantitative design. Simple random sampling is used and the required samples were collected in selected colleges. Primary data is collected from the sample students of NBA accredited engineering colleges of Bangalore region which are affiliated to VTU and autonomous in Bengaluru through a well-structured questionnaire. With the view to study the students' satisfaction in NBA accredited engineering colleges, a set of 5 variables of academic excellence are used to assess the satisfaction of students. This research used a structured questionnaire based on the five variables of academic excellence which are commitment of top management, course delivery, campus facilities, courtesy and customer feedback and improvement. Questionnaire also consists of accreditation criteria input, process and output. These constructs are the indicators of students' satisfaction. Simple random sampling method is used in this survey to choose the sample respondents. To analyze data, statistical package for social sciences (SPSS) is used.

MEASURING TOOL/ INSTRUMENTS

The study was based on empirical basis. The findings were based on a survey of 391 students in the city of Bengaluru. Various statistical tools like Descriptive statistics, Factor analysis, Correlation, t-test, Multiple regression, ANOVA, GAP analysis were used to analyze the data collected.

SAMPLING DESIGN:

Population

A population can be defined as including all people or items with the characteristic one wishes to understand. Because there is very rarely enough time or money to gather information from everyone or everything in a population, the goal becomes finding a representative sample (or subset) of that population. Final year and pre-

final year undergraduate engineering students in VTU affiliated NBA accredited engineering colleges would constitute as population for this study.

Sampling Frame

The sampling frame defines a set of elements from which a researcher can select a sample of the target population. The sampling frame constitutes all NBA accredited engineering colleges under Visvesvaraya Technological University in Karnataka covering Bengaluru region only as 50% of engineering colleges affiliated to VTU are in Bengaluru.

Sample unit:

Final year and pre final year undergraduate engineering students in VTU affiliated NBA accredited engineering colleges would constitute as sample unit for this study.

Sample Size

The researcher has taken the Slovin’s formula to figure out what sample size which is 320.

Sampling Type

Simple Random sampling would be employed to choose the sample respondents. Population size in the sample frame is well known and defined, hence simple random sampling technique would be more appropriate for the present study.

Pilot Study

After tentatively finalizing the title of the research study, the researcher had a detailed discussion with different persons who are involved in technical education to find out the feasibility of conducting the research study. A pilot study was conducted in order to arrive at the right focus.

After preparing the Questionnaire, the researcher had a detailed discussion with different persons who are involved in technical education field to find out the feasibility of conducting the research study. The pilot study was conducted in Bangalore city, by contacting all branches of engineering and taken the opinion from the respondents through questionnaire. Based on the inputs received from those samples, the questionnaire was fine-tuned and got the approval from the research supervisor for primary data collection. With the help of the pilot survey, the researcher has modified certain statements in the questionnaire and learned about the administration of Question, follow-up study etc.

Analysis and interpretation

Table - 1: GAP Analysis between respondent’s expectation and satisfaction

	Expectation	Satisfaction	t value	p value
v1.Nearest from residence	3.71	3.44	5.26	0.00
v2.Location allows you to pursue a hobby or other interest	3.67	3.22	6.51	0.00
v3.Quality of the program in my Specialization	3.82	3.4	7.12	0.00
v4.Faculty - student ratio	3.85	3.51	6.84	0.00
v5.Programs offered suits my area of interest	3.88	3.48	6.95	0.00
v6.Quality of teaching	4.01	3.57	6.93	0.00
v7.Placement record	4.03	3.6	7.22	0.00
v8.Faculty mentoring	3.98	3.57	7.35	0.00
v9.Quality of faculty	3.91	3.48	7.29	0.00
v10.Opportunities for internships and hands on experience	3.83	3.02	9.51	0.00
v11.Academic resource facilities	3.82	3.37	7.66	0.00
v12.Class strength	3.72	3.53	2.70	0.01
v13.Syllabus modification to meet the employers need	3.75	3.04	9.25	0.00
v14.Curriculum content	3.96	3.34	10.54	0.00
v15.University Affiliation	3.86	3.45	6.93	0.00

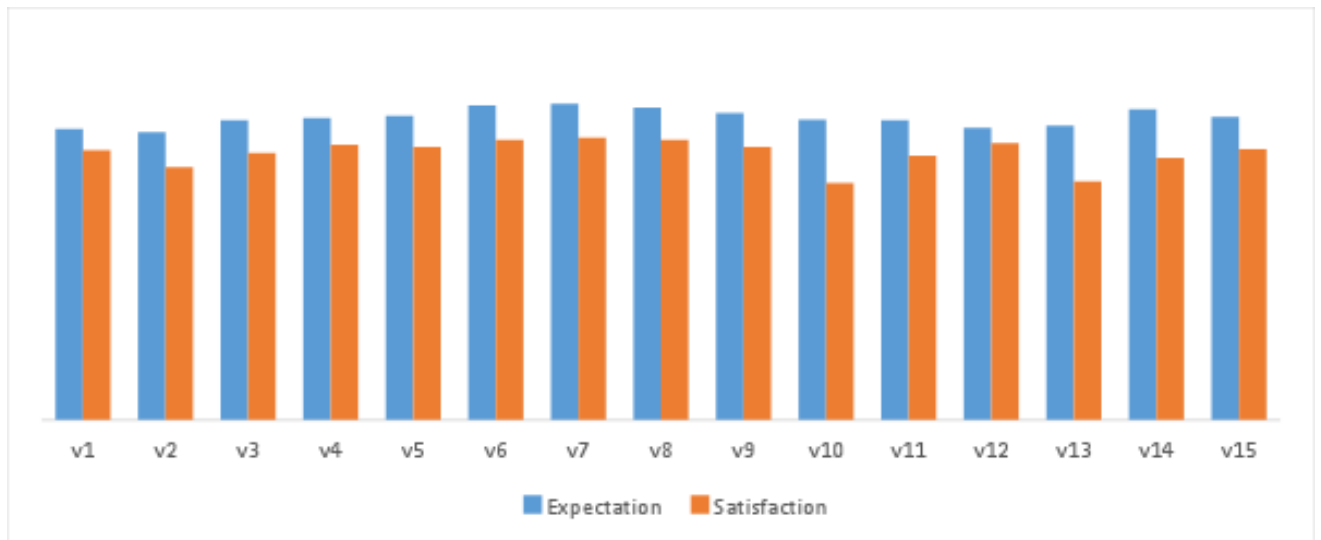


Table - 1.1: GAP Analysis between respondents expectation and satisfaction

	Expectation	Satisfaction	t value	p value
v16.Choice based credit system	3.85	3.27	9.13	0.00
v17.Industry-institute collaboration	3.89	3.1	11.18	0.00
v18.Image/Brand	3.92	3.39	9.21	0.00
v19.Overall reputation	4	3.53	7.97	0.00
v20.Ambience of the Campus	3.95	3.62	6.15	0.00
v21.Size of the campus (in terms of enrollment)	4.07	3.64	7.51	0.00
v22.Friendly environment	3.87	3.63	4.34	0.00
v23.Brand awareness	3.87	3.54	6.10	0.00
v24.Diversity of students	3.94	3.53	7.07	0.00
v25.Infrastructure	3.91	3.54	5.74	0.00
v26.Campus safety and security	4.02	3.47	8.85	0.00
v27.Extracurricular activities (Clubs and sports, etc)	3.83	3.41	6.37	0.00
v28.Stationery facilities	3.83	3.42	6.89	0.00
v29.Alumni cell	3.8	3.28	8.27	0.00
v30.Visually appealing	3.83	3.28	8.63	0.00
v31.Classrooms and campus	3.82	3.24	8.90	0.00
v32.Modern classroom facilities and Equipment	3.82	3.4	6.91	0.00
v33.Tuition costs	3.76	3.31	7.31	0.00
v34.Living costs	3.82	3.31	8.03	0.00
v35.Availability of financial aid	3.87	3.33	8.72	0.00
v36.Scholarship opportunities	3.94	3.42	10.31	0.00

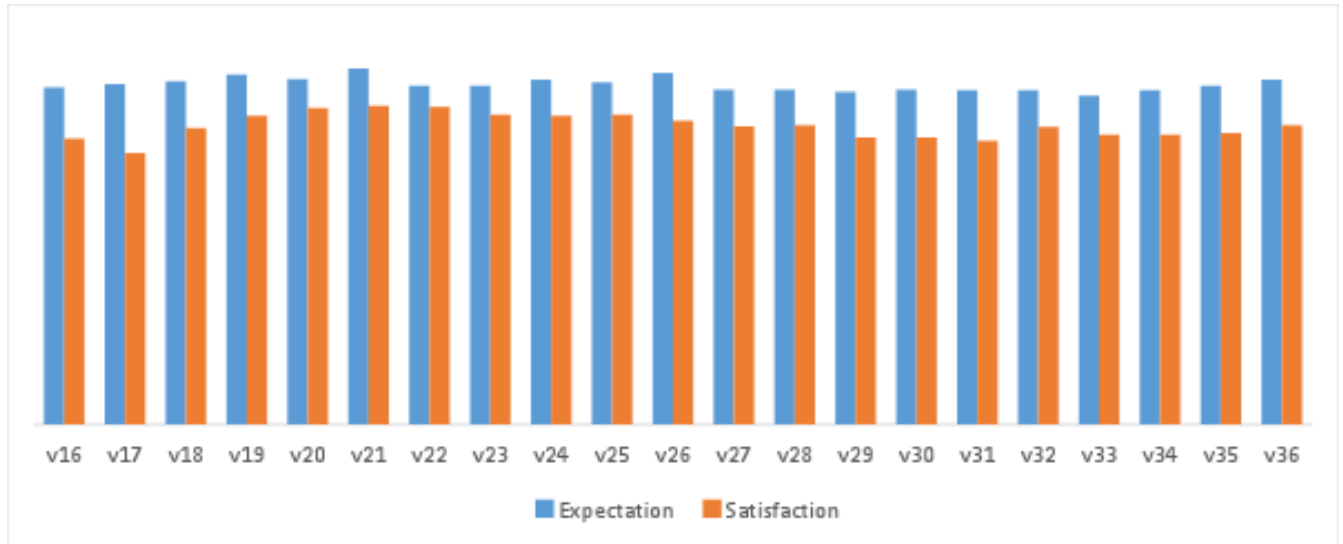
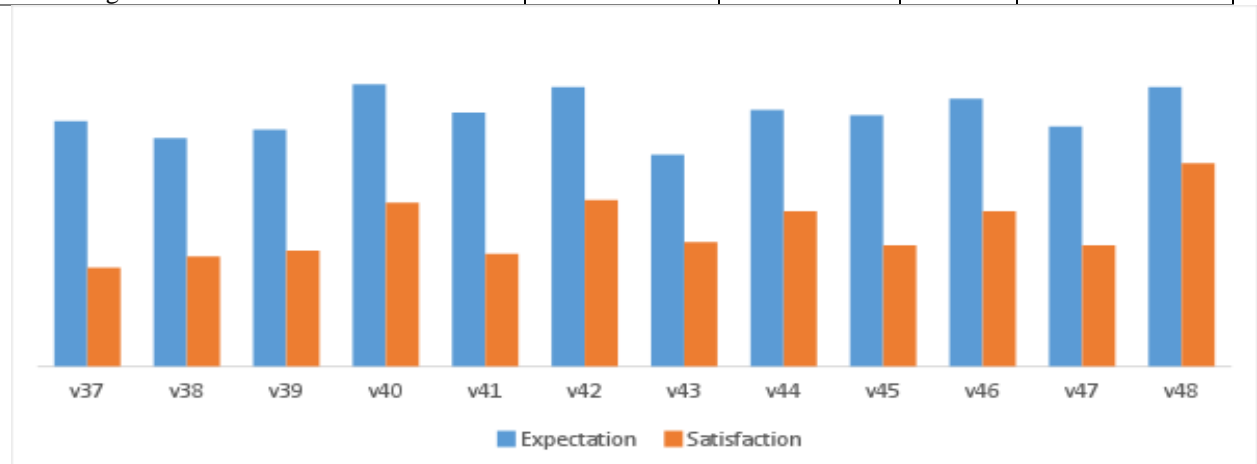


Table -1.2: GAP Analysis between respondents expectation and satisfaction

	Expectation	Satisfaction	t value	p value
v37.Personnel	3.87	3.35	9.66	0.00
v38.Prompt service to the students	3.81	3.39	7.68	0.00
v39.Employees are always caring	3.84	3.41	7.87	0.00
v40.Providing services as promised	4	3.58	8.14	0.00
v41.All staff members in this institution are friendly and approachable	3.9	3.4	8.82	0.00
v42.Having the students interest in mind	3.99	3.59	7.38	0.00
v43.Willingness to help students	3.75	3.44	6.06	0.00
v44.Maintaining error-free records	3.91	3.55	6.34	0.00
v45.Updating the students whenever required	3.89	3.43	7.68	0.00
v46.Employees who built confidence in students	3.95	3.55	7.07	0.00
v47.Readiness to respond to Students requests	3.85	3.43	7.33	0.00
v48.Giving students individual Attention	3.99	3.72	5.60	0.00



The above table and graph shows the gap analysis between expectation and satisfaction of respondents which indicates that there is a significant difference between the parameters of expectation and satisfaction.

SUMMARY OF FINDINGS:

It is found that the gap analysis between expectation and satisfaction of respondents which indicates that there is an important difference between the parameters of expectation and approval. Therefore, students prefer institutions that meet their expectation and satisfaction parameters considered in the research study

SUGGESTIONS

The faculties should undergo adequate training on delivery of the knowledge and improve their style of pedagogy, so that they can enhance the quality of the education, which will in turn provide a great positive to the students during selection process.

The study examined that most of the students are requesting for better in-campus facilities, such as: physical library, telephone booths, post office, first aid/ hospital, stationery shops, ATM counters, multi-media laboratory, internet connectivity and road facilities within the campus and the in-house hostel facilities. Consequently, it is suggested that these facilities play a highly motivating role for students and should incorporate upgradation/installation (if not available) on a regular basis.

The study advocates that the following cells and systems (Grievance Cell, Grading or Evaluating) and the method of Monitoring & Enhancing Students overall performance also including their liberty while selecting their respective elective courses must be giving high preference and focus on improving, the institution should understand the individual needs and their preferences that are suitable to their career.

The institutions must incorporate better strategies to increase the overall performance of a student, by providing a high standard of appraisal system, induction program and good platform and opportunity to work on the student's creativity and innovation.

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