Evaluating The Service Quality of Vocational Education In Kerala Using SERVQUAL

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Abstract:

This research is based on a review of the quality and effectiveness of vocational education in Kerala. This study analyzes the satisfaction of students with their experiences in vocational institutions in Kerala using a Student Satisfaction Survey on the bases of the SERVQUAL methodology. SERVQUAL is a five-dimensional model which measures service quality using the five service factors: tangibles, reliability, responsiveness, assurance, and empathy. This study will help with the planning process and reasoning for future improvements to the offers of vocational training institutions. A questionnaire based on a five-point Likert scale that covers several aspects of service has been devised, piloted, and then sent to students at various vocational institutes in Kollam district, Kerala. Student inputs are evaluated using the concept of the weighted average. The survey findings provided significant information regarding perceived service gaps and other inputs to develop strategic planning and decision-making at vocational institutes and assist in the program quality improvement and student services.

Keywords: SERVQUAL Model, tangibles, reliability, responsiveness, assurance, empathy, Vocational educational institution

I. Introduction

Vocational education, also known as Vocational Education and Training (VET), is a non-academic program that prepares students for careers that need manual or practical skills. It focuses on the learner's chosen skill, trade, or profession. Economic growth is aided by vocational education. India is transitioning to an expertise economy, and the ability of its people to be more adaptable, logical, and multi-skilled will decide their strategic advantage(Akshay et al., 2012). Low-literacy populations are increasingly turning to vocational educational training to achieve economic stability(Sachith et al., 2017). Individuals - particularly those on the margins of economic growth- can advance economically and socially through vocational education and training (VET) (Bhavani, Sheshadri, et al., 2010). Vocational education is gaining popularity these days because it

helps people who cannot afford regular school acquires valuable and necessary skills that can be applied in the workplace. Vocational education is often inexpensive and open to people of all ages. Vocational education is urgently needed so that people can obtain knowledge in "technical know-how." With over 28 percent of the population living in poverty in India, realistic work opportunities stay out of range for an increasing population. India's terrible disparities can be related to the fact that only a small fraction of people move from secondary to university education due to the strong relationship between education and employment.(Bhavani, Rajamani, et al., 2010).

Vocational education may define as (by UNESCO) through education; learners will acquire information, skills, and competencies unique to a job role or industry or a range of professions or industries. Work-based learning is possible in vocational education. Upon successful execution of such programs, the appropriate national authorities or/and the labour market recognise the vocational qualifications as occupationally-oriented. (*International Standard Classification of Education (ISCED) | UNESCO UIS*, n.d.). According to Gronroos' definition of quality, the service quality must be assessed by its consumers or users. In academic institutions, students are the key customers. Thus their discernment of quality is an essential factor to consider. It is widely accepted that student feedback is linked to the quality definition. (NEERAJ, 2017). Parasuraman, Zeithaml, and Berry (PZB's1988) SERVQUAL is a global method for assessing the quality of services provided by any service company. This model has been used in the educational field and the performance of service quality in academic libraries in emergent nations. It contains five dimensions: tangibility, reliability, responsiveness, assurance, and empathy. (*UK Essays | UKEssays*, n.d.)

The purpose of this research is to assess service quality in the academic sector, fit the SERVQUAL scale to activities in vocational education, and process and evaluate student feedback in order to detect service gaps in Vocational Education Institutions in Kerala.

II. Background and Literature Review

Vocational education is described as education focused on a specific occupation or line of work. Career and technical education (CTE) or technical and vocational education and training are other terms for vocational education (TVET). It trains people in a variety of trades, crafts, and occupations to enhance the accessibility of basic learning skills at all levels of society to provide greater accessibility (Ranjith et al., n.d.) It entails a number of practical actions. Because the learner acquires direct skill in a certain range of procedures, it is frequently referred to as technical education. Vocational education is linked to the time-honored apprenticeship system. To put it another way, vocational education can be defined as the teaching of procedural knowledge. (Kaushik, 2014).

Various models for assessing service quality have been proposed. SERVQUAL is the most widespread and commonly used technique for evaluating service quality among these proposed models. The SERVQUAL technique focuses on determining perceived quality, which is a customer's assessment of a service's quality(Kumar et al., 2019)

The SERVQUAL methodology shows the gaps in expectations (E) and perceptions (P), i.e., Q = P-E. The difference between the perceived and expected service is used to calculate the SERVQUAL score, which determines the service quality. A questionnaire survey that included five service quality criteria was used to examine students' expectations and perceptions of the services provided:

1. Tangibility: Infrastructure, experimental equipment, educational material, library, and accommodation amenities, are all factors to consider.
2. Reliability: The capacity to provide the services as promised with honesty, professionalism, reliability, and proper documentation.
3. Responsiveness: The ability to assist clients/students and react promptly.
4. Assurance: Employees' actions and desire to perform the promised service dependably.
5. Empathy: Students should receive caring, one-on-one attention and feedback to help them improve their performance.

In educational research, the Likert scale is one of the most basic and widely used psychometric tools. A Likert scale from 1 to 5 is used to rate the service quality(Joshi et al., 2015). Students of Vocational Education Institutions were invited to rate the significance of each dimension in terms of service quality and then determine which aspect matched their expectations because of the Vocational Institution's services.

III. RESEARCH METHODOLOGY

The purpose of the study is to examine and discover the quality and performance of vocational education in Kerala. The study was conducted using a standardised questionnaire separated into three components. The first component of the survey inquired about the respondent's demographics, such as gender, institute, and study topic. Sections 2 & 3 covered 18 items from every five categories and asked respondents to express their perceptions and expectations of every service dimension utilizing a five-point Likert Scale. Depending on personal experiences, the respondents were invited to provide their views and opinions regarding the training and services they had received. The questionnaire was written in both English and Malayalam, and it took into account the students' various educational backgrounds and fundamental knowledge (i.e., in English and Malayalam). The questionnaire's structure, as well as the dimensions of service that have been shown in Table 1

Table 1. The Questionnaire Structure and Dimension

TANGIBILITY	1	The physical infrastructure of the institution.
	2	The ambiance of the classroom, laboratories, and other academic areas.
	3	Use of Technologies

	4	Notes and reading materials provided
	5	Library facilities
RELIABILITY	6	The course teachers are qualified and experienced.
	7	The faculties and staffs are always punctual.
	8	Attendance, internship, and exam results were recorded accurately.
	9	The attention of faculties and staff toward the students
RESPONSIVENESS	10	The facilities provided by the institution are students friendly.
	11	Academic related information is pre-informed
	12	The faculty members and supporting staff are always eager to assist the students.
ASSURANCE	13	Supportive behavior of the faculty members and staff
	14	The faculty members are trustworthy and provide timely comments on the students' advancement.
	15	Teachers and staff are polite and friendly.
EMPATHY	16	Faculty members and staff are aware of their students' needs.
	17	Students are able to seek advice from the Head of the department.
	18	The institute is sincerely concerned about having the best services for the students.

The study sample comprises 150 students enrolled in vocational institutes in Kollam district, Kerala. Questions 1 to 5 are part of the tangibles dimension, examining physically visible and tangible assets critical to delivering the service. Questions 6 to 9 represent the reliability dimension, which evaluates the capacity to provide the assured service consistently and precisely—questions 10 to 12 in the third component of responsiveness measure the level of attention given to students. The academic and supporting staff's attitudes and manners and their capability to communicate trust and confidence are examined in questions 13 to 15 of the assurance dimension. The final pillar of this strategy, Empathy, includes questions

16 to 18 and is concerned with offering specific attention and care to students and their specific requirements. A 5-point Likert scale was applied in this research. In the expectation dimension, the scale was built so that 5 represents highly significant and one represents not significant at all. Strongly agree gets a five, and strongly disagree receives a 1. In the perception dimension, strongly agree gets a five, and strongly disagree gets one. The SERVQUAL methodology examined the acquired data to determine the gap between students' perceptions and expectations.

IV. RESULTS AND DISCUSSION

The result is determined by the discrepancy between the student's perceptions and expectations, based on two portions being judged to arrive at a constraint for each of the questions and each of the five dimensions. Table 2 shows the findings of the SERVQUAL questionnaire scales of perceptions and expectations.

Table 2 shows that, despite their small size, certain gaps exist between perceived and expected quality in all five dimensions, both favorably and unfavorably. Students' judgments of the quality of service are higher than their expectations, as seen by the positive gaps. Negative gaps suggest that students' views of service quality are lower than their expectations, indicating room for improvement.

The questions of the Tangibility dimension, which found a total average of -0.01, are represented by questions 1 through 5. In questions 1 and 5, students had high expectations concerning this component. Only questions 2, 3, and 4 have a positive variation between perceptions and expectations (P-E) in this dimension; nonetheless, this topic is about Physical infrastructure, dormitories, libraries, course materials, and laboratory equipment are addressed in questions 1, 2, 3, 4, and 5. Its findings suggest that the institutions must spend to improve their physical facilities and equipment.

Table 2: Tabulation of Data

	Scale /Ques	Expectations							Perceptions							(P-E)
		Frequency of Responses						Average	Frequency of Responses						Average	
		5	4	3	2	1			5	4	3	2	1			
TANGIBILITY	1	65	52	23	10	0	150	4.15	55	63	26	6	0	150	4.11	-0.04
	2	46	66	27	10	1	150	3.97	50	60	34	6	0	150	4.03	0.06
	3	48	56	35	10	1	150	3.93	42	69	28	10	1	150	3.94	0.01
	4	54	59	26	10	1	150	4.03	47	69	27	6	1	150	4.03	0.00
	5	34	69	27	16	4	150	3.75	40	47	38	23	2	150	3.67	-0.08
															Average Tangibility	-0.01
RELI	6	55	61	25	9	0	150	4.08	50	58	27	15	0	150	3.95	-0.13

	7	52	63	32	3	0	150	4.09	53	58	35	4	0	150	4.07	**-0.03**
	8	55	55	32	8	0	150	4.05	55	61	27	7	0	150	4.09	**0.05**
	9	57	54	32	7	0	150	4.07	40	64	32	14	0	150	3.87	**-0.20**
															Average Reliability	**-0.08**
RESPONSIVENESS	**10**	50	60	32	8	0	150	4.01	45	61	32	12	0	150	3.93	**-0.08**
	11	47	60	36	7	0	150	3.98	45	61	37	7	0	150	3.96	**-0.02**
	12	47	72	26	5	0	150	4.07	51	58	27	14	0	150	3.97	**-0.10**
															Average Responsiveness	**-0.07**
ASSURANCE	**13**	36	69	36	9	0	150	3.88	46	59	33	11	1	150	3.92	0.04
	14	59	51	36	4	0	150	4.10	59	55	31	5	0	150	4.12	**0.02**
	15	41	68	29	12	0	150	3.92	41	63	40	6	0	150	3.93	**0.01**
															Average Assurance	**0.02**
EMPATHY	**16**	37	70	36	7	0	150	3.91	47	56	38	9	0	150	3.94	**0.03**
	17	54	60	27	8	1	150	4.05	47	62	34	7	0	150	3.99	**-0.06**
	18	47	53	39	11	0	150	3.91	49	62	33	5	1	150	4.02	**0.11**
															Average Empathy	**0.03**
															TOTAL AVERAGE	**-0.02**

The reliability dimension is explored in questions 6 to 9, providing a holistic value of - 0.08 service gap. In terms of student expectations, it is the second most essential factor. Faculty and staff must prioritize these concerns and politely devote more time to resolving student difficulties.

The responsiveness dimension is represented by questions 10 to 12 of the questionnaire, with an overall average of -0.07. Like all items in this dimension, the disparity between perceptions and expectations (P-E) was negative, indicating that the service has significant flaws, lowering the quality of the service provided.

The assurance dimension, which scored an average score of 0.02, is covered by questions 13 through 15. This aspect shows that providing feedback on students' progress is good enough.

The remaining four questions numbered 16 to 18, are about the empathy dimensions, which received a score of 0.03 overall. Understanding, satisfying student needs, and offering the finest services are the most important concerns in this dimension.

The overall average was -0.02 of the five dimensions that were examined revealed the presence of both negative and positive quality gaps. This demonstrates that there is much to be improved throughout the quality assurance cycle. The most significant disparity exists in

reliability, which is commonly defined as the ability of faculty and staff to provide promised services with honesty, professionalism, regularity, and maintaining records. Dimension responsiveness, which is linked to the ability to assist and react promptly, shows the second-highest negative discrepancy. Dimension tangibility has a negative gap which is associated with physical infrastructure, classroom atmosphere, laboratories, and other academic areas, usage of technology, and library facilities. Dimensions of assurance and empathy show a positive gap. They are related to staff behaviour and attitude toward students, trust among them, the feedback mechanism that helps to improve students' progress, the behavior of faculty and supporting staff toward students, and their concentration in students' success, care given to students, support, and guidance to students, being available to students when they are needed, and advice to improve educational and administrative processes. As a result, students believe that the institutes' human resources, i.e., the academic and non-academic staff, are of the highest quality and essential for any institution.

V. CONCLUSION

This study concluded that, between expectation and perception of the service quality of Vocational Education, the dimensions Tangibility, Reliability, and Responsiveness have a negative gap. In contrast, Assurance and Empathy have a positive gap. Physical infrastructure, notes, and reading materials offered, and the lack of most contemporary facilities in laboratories and workshops are the ones most noted in the study as being low ranked. Supporting the teaching process and ensuring that students have the necessary skills and qualifications is also rated low in the survey. The remaining survey dimensions, such as the friendly behavior of faculty and staff, and the dissemination of academic-related information, need improvement. It is advised that vocational education institutions strive to improve the quality of their service to transmit skill education, allowing students to act independently and reintegrate into society. Future studies with larger sample sizes and numerous institutions in different cities may generate more detailed results.

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