

Evaluating Students Perception Regarding Prevaling Practices of TQM in Management Institutions of Punjab



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Abstract: *The past few decades have witnessed an overwhelming metamorphosis in education field across the globe having the repercussion of colossal quality. Such a drastic transformation has had its impact on the very objective of education making it immensely relevant and far-reaching. India is facing high pressure from its stakeholders as gladdening the clients is of paramount importance and which indeed is the mantra to withstand in the market-oriented ambience in the long run. To identify and implement the TQM in student life, the concept of learning and teaching which is the only method to come out with these difficulties. The teaching structure has vehemently started comprehending the importance of TQM in the education sector to meet the rigorous demands of associates paving the way for the improved and functional scenario. They can help in the true implementation of TQM in educational institutions which is the need of era as the quality of education is at an alarming stage. The study evaluated student's perception across management institutions in Punjab. Additionally, the study investigated the relationship between the dimensions of TQM and gender as well as on overall scores of student Perception. To accomplish the objective of the study, an evaluation questionnaire survey was employed to measure the student's perception of 7 quality dimensions for educational practices. Statistical tests were applied by using SPSS software.*

Keywords: Education Sector, Management Education, Student perception, Total Quality Management (TQM)

I. INTRODUCTION

India as a nation boasts of having the oldest and largest education system in the world. Nevertheless, the quantitative augmentation has taken centre stage over the past decade; there has been also a prospering focus on qualitative facets which has been brought in for through the introduction of policy reforms as education is the main criteria for the safety and development of society as well as people careers. For the more development of economy, quality of education is very important to improve the consistency in the people but the growing economy should not be destabilized. Improvement of higher education all over the world, has a powerful scheme. In the future quality education is proved important because of improvement in the nation by the young generation is only possible by profession. Quality is the continuous process of improvement. Execution is important and understanding of index rate [1].

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In improvement in quality education, they need to know its value. Every individual is having his/her own prospective towards quality and satisfaction. To develop quality in any educational institution, one needs to know the expectations of the customers and standard dimensions to know their level of satisfaction towards quality. It is very important to find how quality must be improved [2]. To reach the conclusions, it is important to find out characteristics of quality. Thus, it is important to regulate the characteristics of quality for good going of the education process [3].

In marketing literature, customer satisfaction is the main issue. Satisfying the customer with high quality at less cost also help the organization to generate more profit margins [4]. According to Past research studies [5], their first step is to deliver what customer needs and wants according to their expectation so that one must provide them satisfaction with quality services. The education institutions that proved good quality with a unique education experience helps the student to achieve something better in their career growth and gainful employment for every organization student is an important customer [6] [7] [8] [9]. Now every good institute is becoming the competitor to other institution so student satisfaction is the main criteria for the institution.

II. BACKGROUND AND LITERATURE REVIEW

Quality control concept began in the 1920s. In 1924 first sketch was made by Shewhart of modern control chart. A bad image in the simulation of products and having uneducated employees in World War II.

In 1950s improvement in total quality was made by Japanese and continues improvement in quality. World War II which spoils the Japanese economy must recover from it. In the western country, it is costly, higher quality product in the 1980s japons start export in the USA.

Quality is finding by the person in a product, not of quality. Quality is defined as consumer satisfaction, security, consumer understanding, quality of product and services. There is a difference between the product from other product it defines what is quality [10].

Quality must have the product up-gradation, consistency and clarity of ideas. Satisfied with all the customer is basic criteria for every organization. It is the 'degree of excellence'

According to British Standard BS 7850, quality is defined as "Quality is concerned with meeting the wants and need of customers" [11].

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Planning, organizing, marketing, sales promotion, production etc. are the functions carry out by each and every organization. One must identify the cost needed to perform quality inspection and testing for departmental activities. Thus, this concept of the quality cost came into existence in the year 1950s. This term is defined by different people in their perspective. People defining quality cost as the quality succeeds in achieving goals. Some of the people define quality cost as extra suffer, due to poor quality. 'But the real meaning of quality cost became extra cost is due to the bad quality of product and services [12].

ISO defined TQM as "A management approach of an organization centred on quality, based on the participation of all its members and aiming at long term benefits to all members of the organization and society."

TQM is "a system of continuous improvement employing participative management and centred on the needs of customers" [13].

The organization continuously improves this by knowledge and workers experience. The main aim of TQM is "Do the right things, right the first time, every time."

It is already applied in manufacturing services and for many years it is applied in services area. It has also become a general management tool. It is applied in both, public as well as service sector. With the common predecessor, there are other different sectors also which are creating their versions.

The importance of improving the quality of teachers suggests that teacher quality plays a critical role in affecting students' performance. Policymakers have elevated their expectation for teacher standards. It is observed that teacher educators should model the strategies and theories they teach. They should visit classroom sites and see how students and the process of teaching have changed. There should be continuous professional development since the quality of teachers and the teaching-learning process depend upon the quality of teachers [14].

The Research explained, with the change in the education system the quality in an institution is automatically changing, such as courses, teaching methods and educational techniques. The study proposes a new framework for successful learning implementation. Introduces new concepts related to traditional and technology-based education systems, i.e., quality assurance strategies for blended learning [15].

The Researcher developed a detailed format for assessing the quality and quality of implementation and evaluation. How these activities are carried out in universities is also developed and discussed in this research. The researcher suggested that the format may change with the academic and social environment may create a positive impact on implementing TQM but this implementation may only be achieved in a year or two [16].

In the education system analyzed and implementing of TQM in HEI is required which satisfies the stakeholder requirements. There are various government strategies which the higher education analysis and classify to the various institutions. Thus, this study proves that there is a high impact on organization to achieve their mission, goals, vision and also improving the quality for development. Although the starting of TQM has brought about changes in

HEI, but many organizations have yet not started the TQM implementation in their institutions [17].

The quality of education is becoming increasingly important for those who are directly or indirectly affected and who use their services [18].

The Research Shown, how many efforts we made in quality improvement by implementing TQM in the education system [19].

The study Elaborated on the modern era paradigm's thinking on entire excellence management and its application in education. This study begins with a background theory/document review and then summarizes the findings, conducted by students to obtain different perspectives on the overall quality management of education. Therefore, this study proposes a theory derived from TQM, such as institutional change environment, sustainable success and innovation, expressing the relationship between TQM and institutions [20].

III. RESEARCH METHODS

A. Research Design

This study was conducted by survey research with a quantitative approach. The research questions addressed in this paper are as follow:

- Is there any significant difference between the components of TQM and gender?
- Is there any significant difference between the level of TQM and Overall Score of the Students' Perspective on Different Components of TQM Implementation?

B. Location, Population and Sample Size

A total of 55 management institutions in Punjab and also to get 271 students from 55 management institutions in Punjab had contacted. Using this data, random sampling was done to select a student in each management institutions. In this work for the collection of data total 40 questionnaires prepared. The survey was conducted from Jan 2019 till July 2019. Due to time constraint, the questionnaire was distributed by hand at the beginning of the lecture and completed questionnaire was collected at the end of the lecture. Content validity was applied to ensure and determine the validity of the instrument. The Cronbach alpha value for the questionnaire was 0.993, this showed that the questionnaire had acceptable reliability [21].

The items were measured on a 5-point Likert scale that varied from 1= Strongly agree to 5= Strongly Disagree).

Table 1: TQM Components

Components of TQM	No. of questions
Top Management	8
Systems Approach to Management	6
Customer Satisfaction	8
Employee Involvement	6
Training	3
Team Work	4
Continuous Improvement	5
Total	40

Out of 271 respondents there are 147 (54.2 percent) respondents are male, the female respondents are 124 (45.5 percent). 229 (84.5 percent) respondents have above percentage between 79-60% in college, 31 (11.4 percent) respondents have above 80% in college, only 11 (4.1 percent) respondents have percentage below 59 in college.

C. Data Analysis Techniques

Mean, Standard deviation (SD) and *t*-test were applied to answer the first and second research questions.

IV. FINDINGS

A. Validity and Reliability of the Instrument

Validity is defined as how well an instrument measured the particular concept it is intended to measure. While reliability is defined as how consistently a measuring instrument measures whatever concept it is measuring [22].

The instrument used in this study was developed based on an extensive literature review of quality in education. The reliability of the instrument was tested through internal consistency. The most popular test of internal consistency reliability is Cronbach's coefficient alpha [22]. The reliability analysis results are summarized in Table 2. The Cronbach's alpha value for all constructs ranges between 0.944 and 0.964. All the values are above the value of 0.90, thus demonstrate that the scales are consistent and reliable.

Table 2: Reliabilities in terms of Cronbach's alpha

Dimension	Cronbach's Alpha
Top Management	0.964
Systems Approach to Management	0.958
Customer Satisfaction	0.964
Employee Involvement	0.960
Training	0.944
Team Work	0.956
Continuous Improvement	0.960

B. Impact of Gender on Different Components of TQM Implementation

Concerning the above, analysis has been performed regarding the impact of gender on different components of TQM implementation.

As evident from the following table 3, the *t*-statistic as shown is statistically significant (p-value of <0.05) across all the different components of TQM

It is concluded that the students' perspective score on TQM implementation components is different for the students of different gender categories or gender does impact the scores of the students' perspective on different components of TQM implementation.

Table 3: Distribution of gender and components of TQM

	Gender	N	Mean	SD
Top Management	1.00	147	2.61	.80
	2.00	124	2.84	.96
Systems Approach to Management	1.00	147	2.58	.80
	2.00	124	2.88	.98
Customer Satisfaction	1.00	147	2.73	.83
	2.00	124	2.99	1.01
Employee Involvement	1.00	147	2.60	.83
	2.00	124	2.96	1.01
Training	1.00	147	2.59	.83
	2.00	124	2.98	1.13
Team Work	1.00	147	2.59	.81
	2.00	124	2.90	1.04
Continuous Improvement	1.00	147	2.58	.81
	2.00	124	2.90	1.02

To analyze the difference between components level of TQM between students' genders t-test sample conducted

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Table 4: t-test for components of TQM

		<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>	<i>Mean Difference</i>
Top Management	Equal variances assumed	-2.1	269	.035	-.22905
	Equal variances not assumed	-2.0	240.03	.038	-.22905
Systems Approach to Management	Equal variances assumed	-2.7	269	.007	-.29597
	Equal variances not assumed	-2.6	237.3	.008	-.29597
Customer Satisfaction	Equal variances assumed	-2.3	269	.019	-.26468
	Equal variances not assumed	-2.3	237.33	.021	-.26468
Employee Involvement	Equal variances assumed	-3.2	269	.001	-.36209
	Equal variances not assumed	-3.1	238.69	.002	-.36209
Training	Equal variances assumed	-3.28	269	.001	-.39288
	Equal variances not assumed	-3.1	221.78	.002	-.39288
Team work	Equal variances assumed	-2.8	269	.005	-.31744
	Equal variances not assumed	-2.8	234.34	.006	-.31744
Continuous Improvement	Equal variances assumed	-2.8	269	.005	-.31497
	Equal variances not assumed	-2.7	233.68	.006	-.31497

C. Impact of Demographic Variable (Gender) On the Overall Score of The Students' Perspective on Different Components of TQM Implementation

The mean distribution of the level of TQM by students' gender is shown in table 4 which presents the results obtained from mean distribution of level of TQM based on students' perception.

Table 4: Distribution of mean of TQM level based on gender

	Gender	N	Mean	SD
Overall	Male	147	2.6173	.80877
	Female	124	2.8464	.96992

It is concluded that the students' perspective score on continuous improvement component of TQM implementation is different for the students of different gender categories or gender does impact the scores of the students' perspective on continuous improvement component of TQM implementation. Independent sample t-test was conducted to analyze the significant difference in the level of TQM between genders of students.

In Table 5, the result shows that the t-statistic is statistically significant (p-value of <0.05) for the overall students' perspective score of TQM implementation.

Table 5: t-test for TQM level

	<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>	<i>Mean Difference</i>
Equal variances assumed	-2.87	269	0.004	-.3110
Equal variances not assumed	-2.82	234.7	0.005	-.3110

Note: * Significance level, $p < .05$.

V. CONCLUSION

To focus on the satisfaction of the consumer is the main purpose of TQM. [23], with the current implementation of TQM, student show more delicate and less satisfied. Therefore, the satisfaction of student which is the basic principle of TQM is not completely visible.



There is some possible justification for this result. It was almost due to absence of reciprocal relationship between (Faculty, teachers and parents) and students in management institutions (teamwork principle of TQM), absence of decision making of students and less involvement in participation of programs (teamwork principle of TQM), adoption of new changes is absence (continuous improvement principles of TQM) in management institutions. To improve the level of TQM implementation to improve customer satisfaction management educational director must focus more attention in this area. They focus more concentration on impacts like training in service, communication, integration, new changes and student focus. This study shows that between the gender of student there is a significant difference in the level of TQM. In this case, the female and male student thinks differently. The level of TQM is higher in their management institution the male student thinks which is different from thinking of female students. A male student has more chance of face challenges and adopts new changes than female students. Therefore, the expectations of female students about TQM are higher than male; regarding more satisfaction than males, females are tougher to satisfy expect more service and more delicate towards satisfaction.

V. IMPLICATION FOR RESEARCH

TQM can apply in education many researchers and scholars believed [24] [25]. Providing better quality services to students, teamwork, achieving their aims, improvement of institutions, training and development this all are the main principles of TQM could be applied as a tool. In the past few researchers also reported the education system in India towards the implementation of TQM. In management institutions how to perform and use by educational staff is uncertainly doubt because research is absent in the implementation of TQM in the Indian education system. In Punjab management institution how TQM principles presented, therefore, this study extends the theoretical (based on TQM models) and empirical research (based on the research findings). To increase the level of TQM in management institution this research can bring down worry and uncertain of some scholars and partitions and shows which principle is better to improve the level of management institution. In the stream of management institution, this study provided more important information to educational institutions and the person who formulation the policy. To more establishments in future, research is the main practical result for this study in education and management institutions.

REFERENCES

1. Murad A., Rajesh K. S. (2010). Implementation of Total Quality Management in Higher Education. *Asian Journal of Business Management*, 2(1): 9-16.
2. Owlia, M. S., & Aspinwall, E. M. (1997). TQM in higher education - A review. *International Journal of Quality & Reliability Management*, 14(5): 527-543.
3. Cheng, Y. C., & Tam, W. M. (1997). Multi-models of quality in education. *Quality Assurance in Education*, 5(1): 22 – 31.
4. Crosby, P. B. (1980). *Quality is Free: The Art of Making Quality Certain*. New York: McGraw-Hill.
5. Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1990), *Delivering Quality Service*, The Free Press, New York, NY.

6. IWA 2:2007, International Standard, Quality management systems - Guidelines for the application of ISO 9001:2000 in education.
7. Sakhivel, P.B. et al. (2005). TQM Implementation and Students Satisfaction of Academic Performance. *The TQM Magazine*, 17(6), 573-589.
8. Hill, F. M (1995). "Managing Service Quality in Higher Education: The Role of Students as Primary Consumer", *Quality Assurance in Education*, 3(3), 10-21.
9. Zairi, M. (1995). Total quality education for superior performance. *Training for Quality*, 3(1), 29-35.
10. Martinez-Lorente, A.R., Dewhurst, F. and Dale, B.G. (1998). Total quality management: origins and evolution of the term. *The TQM Magazine*, 10(5), 378-386.
11. Sivankalai, S and Thulasi Kavitha Yadav, S (2012). Total Quality Management in Academic Libraries: A Study. *International Journal of Educational Research and Technology*, 3(1), 66-72.
12. Juran (2005), *Quality Planning and Analysis*. Singapore: McGraw Hill.
13. Jurow, S. and Barnard, S.B. (1992). Introduction: TQM fundamentals and overview of contents. *Journal of library administration*, 18(1/2), 1-13.
14. Sahni, S (2011). Total quality management in higher education. *New Directions for Institutional Research*, (71): 3-11.
15. Hajraf Al Hajraf, Sharhan Al Salah (2012). 'Total Quality Management (TQM) of Blended E-Learning Systems: A New Integrated Model and Framework'. *Literacy Information and Computer Education Journal*, 3(1), 591-598.
16. Veeranna D.K (2013). Total Quality Management in Engineering Education: An Operational Approach. *International Journal of Enterprise and Innovation Management Studies*, 4(1), 10-15.
17. Pushpa L (2015). Implementation of Total Quality Management in Higher Education Institutions. *International Journal of Scientific Engineering and Research*, 4(5), 38-42.
18. Ravindran N, Kamaravel Karpaga R (2016). 'Total Quality Management in Education: Prospects, Issues and Challenges', *Shanlax International Journal of Education*, 4(2), 58-63.
19. Bishnoi Nisha (2018). Total Quality Management (TQM) in Education: A Revolution. *International Research journal of Management Science and Technology*, 9(2), 272-275.
20. Abhijit Mehta, Faisal Rafik Degi (2019). Total quality management implementation, and its barriers in Education system. *International Scientific Journals*, 3(1), 36-42.
21. George, D. and Mallery, P. (2001) *SPSS for Windows Step by Step: A Simple Guide and Reference*, Allyn & Bacon, Boston, MA.
22. Sekaran, U. (2003). *Research Methods for Business A Skill Building Approach*. Singapore: John Wiley & Sons, Inc.
23. Yohanes Kristianto, Mian M. Ajmal, Maqsood Sandhu (2012). Adopting TQM approach to achieve customer satisfaction. *The TQM Journal*, 24(1), 29-46.
24. Cunningham, M.K. (2007). 'Educator Attitudes towards the Appropriateness of Total Quality Management: A Survey of Elementary and Middle School Administrators and Faculty', Capella University, USA.
25. Dheeraj, M. (2004). 'Applying Total Quality Management in Academics', *Quality Guide to the Non-formal and Informal Learning Processes*, SEEQUEL.

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