

## EFFECTS OF TOTAL QUALITY MANAGEMENT PRACTICES ON TEACHERS PERFORMANCE AND STUDENTS SATISFACTION IN HIGHER EDUCATION

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### ABSTRACT

*The more ruthless character of today's corporate world has not only caused education to develop as a substantial industry and a necessary component of life, but it has also caused parents to view it as an investment that they make on behalf of their children. When it comes to attracting and retaining students who are interested in pursuing higher education, the quality of the education that is being provided is a vital component that must be taken into consideration in both the public and the private sectors of the education system. The purpose of this study is to investigate the influence that a variety of high-quality services have on the levels of contentment that are experienced by students attending higher education institutions in a sizeable portion of the Punjab region in Pakistan. Specifically, this investigation will focus on the city of Faisalabad. This study examines institutes from both the public and private sectors, including both public and private institutes. We collected data from 240 business students who were either enrolled in a master's programme or a graduate programme at provincially authorised institutions in the Gujranwala area of Pakistan. These universities provide graduate and master's degree programmes. The sample had male and female students in proportions that were about equivalent to one another. The data indicate that the vast majority of students are content with the services provided by Tangibility, Assurance, Reliability, and Empathy. On the other hand, the vast majority of students are not satisfied with the computer labs, cafeteria services, parking facilities, or complaint handling system. There is a discussion of suggestions, as well as the implications for those who decide policy, and there is also the offer of direction for further research.*

**Keywords:** Service Quality, Education, Students' Satisfaction, Perceived Quality

### INTRODUCTION

Total Quality Management, which is sometimes referred to as TQM, is a management concept that is widely recognised as being effective and is utilised as a strategy for the purpose of achieving excellence inside an organisation. Although Dr. W. Edwards Deming promoted the idea of total quality management in the late 1950s in the United States, Japan was the first nation to embrace this idea in order to recover their economy after World War II. This was done in order to ensure that total quality was maintained throughout the entire process. This was done with the intention of preserving Japan's position as a formidable competitor in the international market. As a direct consequence of Total Quality Management's (TQM) achievements in Japan, this concept attained widespread notoriety in a vast number of countries all over the world. At first, the concept was intended for businesses that were engaged in manufacturing; but, over the course of succeeding years, it gained popularity among other service institutions, such as banks, insurance firms, non-profit organisations, healthcare facilities, and so on. Lunenburg makes the observation that Total Quality Management (TQM) is applicable not only to businesses but also to service organisations and educational institutions, including

elementary and secondary schools. Nowadays, Total Quality Management is widely recognised as a universal management strategy that is adaptable for use in any business.

### **Total Quality Management (TQM)**

When it comes to the development of excellence, competence, and knowledge — all of which are important for the overall expansion of the economy — it is impossible to underestimate the relevance of education. As a consequence of this, practically every nation on the face of the earth has been forced to design an efficient strategy for the growth of its higher education institutions. If and only if we have an advanced system of higher education in which effectiveness continues to serve as the only criterion to judge success, then and only then will it be conceivable for the United States to adopt a position of leadership on a worldwide scale. It has been observed that the system of higher education is effective in providing society with a team of human resources that is committed, focused, and devoted in addition to being professionally sound. This is necessary for determining the destiny of any nation, and it is one of the reasons why higher education is so important. This will not be possible unless the principles of quality management have been thoroughly established in the educational system at the level of higher education. Total Quality Management (TQM) is an unavoidable component that will play a significant role in determining the strategies that higher educational institutions employ in their efforts to appease a wide range of stakeholders, such as students, parents, the business community, and society as a whole. This is because TQM is a component that will play a significant role in determining the techniques that higher educational institutions employ in their efforts to appease a wide range of stakeholders. This paper makes an attempt, although a theoretical one, to explain how Total Quality Management (TQM) may be used in the sector of education. It starts by discussing issues that are associated with the quality of higher education and then moves on to analyse the elements that have an impact on the quality of higher education. The new theories of economic growth have placed a greater focus on the significance of human capital as the driving force behind economic expansion and development. This is because human capital is seen as the engine that propels economic expansion and development. According to the findings of a recent research that the World Bank carried out in 190 different countries, one aspect that helps to enhancing the overall quality of the workforce is increased access to higher education. Consequently, getting a higher education is an important investment that is necessary to be made in order to improve one's quality of life in general. There has never been a moment when the robust relationship that exists between the economy and education has been more easily obvious than it is right now. This is the case because there has not been a time when there has been a time.

The vast majority of companies are of the opinion that in order to be successful in the face of ever-increasing levels of competition, it is an absolute necessity to have a culture that promotes a total dedication to providing the utmost pleasure to customers by way of ongoing development and innovation. This is because of the fact that customers have higher expectations than ever before. Total quality management, also known as TQM, is a culture that promotes a total commitment to achieving 100% customer satisfaction through the use of continuous improvement measures across all aspects of an organization's operations. These measures can be implemented in any department of the business. Academic institutions that wish to make ongoing changes must first ascertain the requirements and expectations of the institution's customers or consumers. In an academic institution, "suppliers" convert into "customers," and "customers" take on the function of "suppliers," according to the research conducted by Raouf (2004). Although TQM is used in commercial and industrial contexts, it has only just been introduced into the world of higher education, where it is now being evaluated. A number of educational institutions, such as universities and colleges, have turned to Total Quality

Management as a strategy for elevating the quality of higher education in their respective institutions. Everyone is aware of how important quality is, and educational institutions that offer higher levels of instruction have a wealth of TQM material available to their students. The student is considered to be a client since "quality" indicates "conformance to standards" of the customer. In response to the ever-increasing levels of global competition, privatisation, and internationalisation of education, a large number of educational institutions in India and elsewhere throughout the world have adopted TQM as an educational philosophy. It is now a well-established phenomena that, in tandem with globalisation, the internationalisation of higher education is taking place. Internationalization is not something that should be undertaken only for the sake of internationalisation; rather, it should be pursued as a technique of boosting overall quality. Quality may be defined as the extent to which an organisation is able to fulfil the responsibilities placed upon it and achieve the goals it has set for itself. Total Quality Management, when applied to higher education, refers to the process of enhancing the quality of educational offerings, as well as the input instructional process, resource management procedures and structures, the output of student support services, and connections with the professional world and other organisations (Tulsi, 2001). Because it is a complete approach, it is essential for quality development to have the support and involvement of both the teaching staff and the administrative employees. The Total Quality Management (TQM) practise lays a substantial focus on the engagement of each and every worker who works on a team for a business.

## OBJECTIVE

1. To study the perception of students regarding the TQM practices in their institution.
2. Study would make a special focus on the characteristics and the potential benefits of adopting the term TQM.

## RESEARCH METHODOLOGY

The descriptive technique of research is utilised rather heavily throughout the majority of the research process for this study. The technique concentrated mostly on presenting the current circumstance, evaluating the evidence, exploring it, and interpreting the outcomes. In order to determine the precise state of the myriad of components that are involved, this study is now being carried out. In Punjab, a study was conducted on a total of 260 management departments at both private and public institutions of higher education. The survey was carried out during the months of January 2019 and July 2019. The province of Punjab is home to 55 management institutes, all of which contributed data. A total of 65 questionnaires were handed out in a haphazard manner. Above 0.91 was the Cronbach alpha score for each of the specific components as well as the overall scale that was used to measure the perspective of the faculty on the implementation of TQM. This measure of internal consistency dependability of scale with a value greater than 0.6 suggests a fairly reliable scale; hence it verifies the reliability of the study instrument in this instance as well. An exploratory factor analysis, abbreviated as EFA, was carried out with the purpose of determining the dimensions that roughly describe each detected variable. The In the education sector of Punjab, a total of seven variables were identified as important, including top management, a system approach to management, customer satisfaction, staff participation, training, team effort, and continual progress towards TQM. The following items were included in the Faculty perception questionnaire on comprehensive quality management in management institutes of Punjab:

### Table-I: TQM Components

TQM's Constituent Parts	No. of questions
Top Management	12
An Approach to Management Based on Systems	7
Satisfaction of the Customer	10
Employee Involvement	14
Training	6
Collaborative Efforts	5
Continuous Improvement	11
<b>Total</b>	<b>65</b>

The items were evaluated using a Likert scale of five points, with one representing strong agreement and five representing extreme disagreement. There were 260 respondents total, and 149 (57.3%) of them were between the ages of 25 and 35. There were 100 (38.5%) respondents who were between the ages of 36 and 45, and there were 11 (4.2%) respondents who were in the age category of 46 years and over. Three-eighty-five percent of the respondents are males, making up 100 of the total respondents; the female respondents number 160. (61.5 percentage). The majority of respondents, 182 (70 percent), have a postgraduate qualification, and the number of respondents who have a postgraduate degree or above is 78. (30percent). The majority of the respondents, 236 (90.8%), hold the position of assistant professor, while 21 (8.1%) hold the position of associate professor, and only three (1.2%) hold the position of professor.

## RESULTS AND DISCUSSION

### A. Examination of Dependability

The degree to which a scale generates consistent findings is what's referred to as its reliability. The reliability of a scale can be evaluated by first obtaining the proportion of systematic variation that the scale exhibits and then determining the association between the scores that are obtained from the various administrations of the scale. This will give the reliability analysis its foundation. Therefore, if the association in the reliability analysis is strong, it indicates that the scale is dependable since it consistently produces the same findings. The investigation of dependability in this study is performed using either coefficient alpha or Cronbach's alpha. Table 2 displays the values of the coefficient of reliability, also known as Cronbach's alpha, for each of the seven scales. Because all of the values are high enough, the condition is met, and as a result, all seven constructions are internally consistent, and their dependability ratings are sufficient.

**Table-II: Cronbach's alpha as a measure of the reliability of the data**

Dimension	Cronbach Alpha
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"Top Management"	0.955
"Systems Approach to Management"	0.911
"Customer Satisfaction"	0.951
"Employee Involvement"	0.958
"Training"	0.922
"Team Work"	0.918
"Continuous Improvement"	0.962

## B. Factor Analysis

In this particular study, the dimensional structure of quality inside management institutions was determined through the utilisation of factor analysis. According to Hair et al research 's from 1995, the data matrix has adequate correlations to support the use of it in various contexts. An excellence of factor analysis is achieved as a result of the discovery made in the first stage, which reveals that all correlations are significant when P is set at 0.01.

The next step is to determine the overall significance of the correlation matrix by using the Bartlett test of sphericity. This test offers the statistical likelihood that the correlation matrix has significant correlations between at least some of the variables. The findings of the Kaiser-Meyer-Olkin (KMO) study are presented in Table 3 below.

**Table-III: The Test Devised By KMO And Bartlett**

KMO and Bartlett's Test		
The Kaiser-Meyer-Olkin Measure of the Adequacy of the Sampling.		.976
Bartlett's Test of Sphericity	Approx. Chi-Square	17910.410
	df	2080
	Sig.	.000

The KMO statistics range from 0 to 1, and they are used to evaluate the adequateness of the sample. According to Kaiser (1974), a value of 0.5 is considered an adequate sample size. This test's value for the Kaiser–Meyer–Olkin (KMO) metric is 0.976, which is sufficient evidence that the sample size is appropriate. This indicates that the test was successful.

In order to get a deeper comprehension of the component structure, an exploratory factor analysis was performed on each of the sixty-five questions that comprised the questionnaire. This was done in order to achieve a better grasp of the factor structure. The choice to include a variable in a factor was made based on the fact that the factor loadings for the variable were more than 0.3 (Hair et al., 1995)[18], and all factors whose Eigenvalues were greater than 1.0 were maintained in the factor solution (Tabachnick and Fidell, 1989)[32]. The decision regarding factor loadings bigger than 0.3 was not founded on any mathematical notion; rather, it is more closely related to the relevance of the practical implications. The findings of the factor analysis are displayed in Table 4 and include the names of the factors, the variables' loadings on each factor, and the percentage of variation that can be attributed to each component. The following is a description of each of the seven factors that were found in table 1.

**Factor 1: Top Management.** This component considers the function that management plays as well as the obligations that manager have to formulate plans, policies, and directions.

The use of management systems is the second consideration. The things that fall under this category are connected to Identifying, Understanding, and Managing an Interrelated Process as a System Contributes to the Effectiveness of the Institution, which is the Overarching Theme of These Items.

**Factor 3: Ensuring the Happiness of Your Customers** This component is involved with the development of value things and the delight of customers.

The involvement of workers is the fourth consideration. This element considers the degree to which personnel at all levels of the company participate in organisational activities. 5. The importance of training the education and development of staff members is the focus of this consideration.

Working together as a team is the sixth factor. This component is concerned with the cooperative effort made by workers toward the overall purpose of the organisation.

The seventh consideration is persistent progress. The modification of tactics and procedures is what this aspect of the equation is all about.

The findings are laid out in table 4, and they provide some significant information, which may be summarised as follows:

The opinions of the various age groups represented by the members of the faculty have resulted in a high rating for a number of different variables, including "The effort of top management in ensuring that everyone in the organisation has a customer focus and clear performance measures," "Institution has clear vision, mission, and policy statements related to quality," and "Top management has clear objectives with respect to quality performance." On the other hand, there are significant differences between the two on the following variables: "There is an effective human resources plan in respective of reward and recognition," and "Comprehensive goal setting process for quality is within the institution, and the top management has clear objectives with regard to quality performance." As a result, it has been discovered that none of these three factors are used in any way, despite the fact that it is recognised as being significant. In regard to the characteristic known as "Top Management Commitment," members of the faculty with varying amounts of years of experience have, like those of varying ages, expressed the same opinion as that presented in the previous paragraph.

When it comes to the crucial component known as "System Approach to Management," the members of the faculty who fall into a variety of age brackets have given reasonable ratings to five criteria. The following three variables, "Institution has Academic Performance Analysis Cell (APAC) for maintaining quality in Education" (V7), "Six-Sigma (DMAIC) Methodology / TQM is practised in the institutions" (V6), and "There is no documentary practise of ISO 9001:2000 quality management system in the institution" (V4), all have significant differences in their perceptions of one another. This unequivocally demonstrates that the majority of Management Institutions are not putting the aforementioned quality measurement methodology into practise.

The only variable on which the years of experience of the faculty members considerably differ is the one that asks whether or not Six-Sigma or Total Quality Management is used at the schools. Therefore, in general, they have also come to the conclusion that, despite the fact that the process of quality measurement is regarded as an essential component, it is not implemented in the majority of management institutions. Concerning the essential component known as "Customer Satisfaction," the members of the faculty who fall into a variety of age categories have come to the conclusion that, in the majority of Management Institutions, industry-institution interaction programmes are not at all carried out on a periodic basis, and there is no benchmarking practise that is followed in those establishments. However, the institutions are now doing customer orientation programmes in order to demonstrate their dedication to the process of customer satisfaction and to ensure that everyone is included in the process.

The members of the faculty, who have a combined total of many years of experience, have a more consistent assessment of the seven factors. However, members with 0-10 years of experience were of the opinion that the benchmarking practise is not practised. Members with 11-20 years of experience and members with 21 years of experience and more who are experienced members have felt the need and importance of placement programmes for preparing students for campus recruitment.

When it comes to the essential component known as "Employee Involvement," faculty members of varying ages have the impression that management schools do not routinely provide seminars, workshops, and conferences. This is the consensus among the faculty members. In addition to this, they have the impression that the majority of management institutions are not employing the six-sigma methodology. However, there is complete contentment across the board with regard to the pay and the benefits. In management institutions, the absence of quality circles and irregularities in the delivery of training programmes have been brought to the attention of the faculty members by individuals with varying levels of professional experience. They do, however, acknowledge that it is acceptable for workers to express their opinions openly within the organisation.

When asked about the most important factor, "Training," faculty members of varying ages agreed that they do not receive any training in the implementation of ISO 9001:2000 or Six-Sigma or TQM concepts in most management institutions despite the fact that these are thought to be more important in terms of providing high-quality education. However, they did acknowledge the existence of interdepartmental coordination in institutions. In addition to this, they have acknowledged the fact that the Indian Society for Technical Education's (ISTE) short term training programme, Faculty Development Programme (FDP), refresher course, and workshops are carried out in an effective manner. The faculty members, who have a variety of years of experience, have given a moderate rating to five out of the six variables, with the exception of the variable concerning the execution of an internal audit in accordance with ISO 9001:2000, which they have given a low rating in score for.

Concerning the essential component known as "Team Work," the members of the faculty, who come from a variety of age groups and have accumulated a variety of years of experience, have come to the conclusion that the institutions do not make use of the specialists to resolve the issues that are connected to the level of quality. Both of these groups have the same perspective on the helpful efforts that have been performed by the faculty in order to improve the outcomes of the institutions they work for.

Regarding the essential component known as "Continuous Improvement," faculty members of varying ages have the perception that there is no mechanism in the organisation for putting suggestions obtained in the form of feedback or audit into practise in relation to academic matters. This is the consensus among the faculty members.

### **Regression Analysis**

At this study, regression analysis was done to determine how faculty members felt about the deployment of TQM in their individual universities based on the demographic data collected about those institutions (age, gender, qualification, salary, designation and experience). It has been determined that the model is significant because the F-ratio of 9.879 has a p-value that falls within the range of 0.000 0.05. This indicates that there is a significant impact of age, gender, qualification, salary, designation, and experience on the overall perspective score of faculties regarding TQM implementation. According to the findings of the analysis of the coefficient, the only regression coefficients that are statistically significant are those that include age, qualifications, and salaries. R-square has a value of 0.190, which is a very low number. It appears that the existing model can only account for 19% of the overall variance in the perception scores of the faculties.

### **CONCLUSION**

Implementation of Total Quality Assurance Management in education will give better results in all fields of the process of education as a good technique of management used and proven giving excellent results in other industrial and business organisations. Management in education will give better results in all fields of the process of education. It is the delivery of an exceptional level of satisfaction to one's customers. It adheres to the participative management concept as its guiding principle. It adheres to the principle that members of the educational organisation should work together to achieve continuous progress in the organization's mission. If effective steps are not made to remedy the quality gaps in the Management education sector, the current scenario may generate a lengthy crisis of instability in the management abilities of our young people. This might be the case if effective measures are not done. On the other hand, they have the impression that the institutions do not make any effort to facilitate extracurricular activities or engagement with the business community. However, despite the fact that the other key factors—such as an excellent infrastructure, an attitude taken by management, and effective teaching practices—are now being put into reality, they still require additional particular attention in execution. In addition to providing staff members with training and educational opportunities, institutions have a significant impact on whether or not total quality management is implemented successfully in the educational system. Continuous monitoring of its development and the challenges it encounters should be carried out because these might impede its implementation if they are not monitored. For the Total Quality Management implementation to be effective, commitment must come from all levels of the business. In conclusion, but certainly not least, the involvement and participation of students is equally vital since it gives measures of the real performance, which finishes off the feedback loop in the process of strategic management.



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