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STUDY ON TOTAL QUALITY MANAGEMENT OF HEI'S: RESEARCH REVIEW

ABSTRACT: The educational institutions of today are concerned with quality. Due to increasing competition, the identification of the academic institutions that have a high level of quality has become a crucial issue. The concept of Total Quality Management (TQM) was developed by an American, W. Edwards Deming, after the World War II, for improving the production quality of goods and services. The concept was not taken seriously by Americans but the

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Japanese adopted it seriously in 1950. The success of TQM in Japan made this concept famous in many countries across the world. Based on the literature review carried out, it was acknowledged that, in fact, there are still many doubts about the relationship between quality management and performance in education sector; hence, it is relevant to study the adoption of Total Quality Management in Education sector and its outcome in India.

INTRODUCTION

The concept of Total Quality Management (TQM) was developed by an American, W. Edwards Deming, after the World War II, for improving the production quality of goods and services. The concept was not taken seriously by Americans but the Japanese adopted it seriously in 1950. The success of TQM in Japan made this concept famous in many countries across the world. Originally, the concept was developed for manufacturing organizations. Later on, it gained popularity in other service institutions including banking, insurance, non-profit organizations, health care and so on. TQM consists of organization wide efforts to install and make permanente climate where employees continuously improve their ability to provide on demand products and services that customers will find of particular value. TQM is philosophy and system for continuously improving

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the services and/or products offered by an organization to its customers. TQM refers to the management method which increases the quality and productivity in the organizations. It is a continuous quality process which moves in the direction of the vision of the organization and helps in realizing its goals.

The definition of Total Quality Management terms by concept is described below:

Total Quality Management (TQM)

Total = involves/ relates to everyone and all the activities of the company.

Quality = Conformance to Requirements (Meeting Customer Requirements). Management = Planning, organizing, directing, controlling and co-coordinating all the activities of the organization for continuous improvement and maintaining a high level of quality.

According to British Standard Institution, TQM consists of a "Management philosophy and company practices which aim to harness the human and material resources of an organization in the most effective way to achieve the objectives of the organization".

In Simple Terms, Total Quality Management as an integrative management philosophy and a set of guiding principles, representing the foundation of a continuously improving organization/institution.

FEATURES OF TQM

- It enhances the way of doing business
- Art of managing the whole to achieve excellence
- Both a philosophy and a set of guiding principles that represents the foundation of a continuously improving the institution.
- Application of quantitative methods and human resources to improve all processes within an organization and exceeds customers' needs now and in future.

OBJECTIVE OF STUDY

To Study the literature on TQM

To study the level of TQM in HEI's

REVIEW OF LITERATURE

Brigham (1993) stated that no other management philosophy in recent memory has captured the fancy of American business like Total Quality Management (TQM). The shining lights of U.S. industry - Motorola, Proctor

and Gamble and Xerox - witness the success that can come with effective TQM practices. The momentum of TQM has been so contagious that it swept through manufacturing, then service and health care, and now comes to government and education. Yet TQM's standing in business circles has been sullied recently by critical press reports in "The Wall Street Journal", "Newsweek", and "The Economist". Much of the criticism originates from surveys conducted by Arthur D. Little, A. T. Kearney, Ernst & Young, McKinsey & Company, and Rath & Strong that have reached similar conclusions: in more cases than not, TQM has failed to produce its promised results. Before higher education proceeds further with its infatuation with TQM, it will do well to ponder the mistakes and accomplishments of previous practitioners, thereby increasing the odds of benefiting from the intelligence and holism of TQM.

Bass, et.al. (1996) A national sample of Professors of Business Schools was used to investigate four research questions concerning faculty members' practices and perceptions about using total quality management (TQM) principles to improve classroom teaching. The findings suggest that few universities have formal plans for applying TQM principles in the classroom, although most respondents apply them in teaching. Also reported are respondent choices of TQM actions to apply to classroom teaching and measures that could be used to evaluate the effectiveness of TQM applications in university classrooms.

Smith & Lewis (1997) strongly berated total quality management, claiming it is a tool of management used to adversely manipulate workers in pursuit of corporate gain. This paper questions this supposition, arguing it is the abuse of TQM by management that is at fault. Effective TQM is based on four principles, Customer Satisfaction, Continuous Improvement, Speaking with Facts, and Respect for People. It is the lack of the genuine respect for people that is the demise of most TQM initiatives.

Koch & Fisher (1998) stated that those who advocate the use of total quality management (TQM) in higher education, issue strong promises that it will unite campuses, increase employee satisfaction and improve nearly any process that it touches. Unfortunately, the empirical evidence in favor of TQM in universities is mostly anecdotal and surprisingly sparse. The evidence that does exist relates primarily to administrative tasks such as bill collection, check writing, financial aid and registration. But, the truly significant problems facing higher education today relate to the nature of the curriculum, uses of faculty time, how to restrain cost increases, distance learning and the use of technology, cooperative relationships with business and governance & leadership arrangements. TQM has precious little to say about these things and even erects subtle roadblocks to change in these areas because of its strong emphasis upon meetings, consensus and process over product. Further, it turns out to be a costly approach to

decision-making because it is very time-intensive. Thus, while TQM appears to have been quite helpful to some business firms, it is only marginally useful in the rapidly changing, indeed revolutionary, environment that universities inhabit today.

Joiner (2006) undertook the study to find out the relationship between the extent of Total Quality Management (TQM) implementation and organization performance and to find out the moderating effect of co-worker support and organization support on the TQM and performance relationship. 80 motor vehicle parts and accessories manufacturing firms in Australia were taken as sample. Mean, Standard deviations, Correlations and Factor Analysis were used for data analysis. The results indicated that there is a strong positive relationship between the extent of implementation of TQM practices and organization performance. This study also found that co-worker support and organization support moderated the relationship between TQM implementation and organization performance.

Soltani & Lai (2007) examined management perception and understanding of the concept of control in the context of TQM and its implications for its success or failure. Three quality driven manufacturing organizations operating in United Kingdom were taken as sample. Multiple Case Study, Indepth Interviews and Content Analysis were used as research methodology. It was concluded that the majority of the managers of TQM-driven organizations at various organizational levels see no difference or relatively little difference between the TQM desirable types of control i.e. process control and control over the workforce.

Vijande & Gonzalez (2007) conducted the study to provide empirical evidence on the relationship between management practices and measures of business performance in the EFQM Excellence Model. Ninety three firms from manufacturing and service sectors in Spain were taken as sample for the study. The statistical techniques used for the purpose of the study were Confirmatory Factor Analysis and Structural Equation Modeling. The results revealed that the adoption of the TQM practices, suggested in the EFQM Excellence Model, allows the firms to outperform their competitors.

Pour & Yeshodhara (2009) investigated the Level of Perception of Secondary School Teachers regarding TQM in Education, difference between the level of perception of male and female secondary school teachers and difference between level of perception of Arts and Science secondary school teachers regarding TQM in education. A sample of 126 High School teachers belonging to 21 schools in Mysore (India) was taken. Mean, Standard Deviation, t- test and Analysis of Variance (ANOVA) were used for data analysis. According to the finding of the study, majority of secondary school teachers have exhibited average level of TQM in

education. It was also observed that female teachers have better perception than male teachers regarding TQM in education and there is no significant difference in the perception of Arts and Science secondary school teachers regarding TQM in education.

Talib et.al. (2010) conducted a study to identify some Critical Success Factors (CSFs) that contribute to the success of TQM in the service industry in India. Thirty nine TQM studies on CSFs were undertaken for the purpose of study. Pareto Analysis was used as research methodology. It was concluded that in the service industry the commitment of the top-management is the top most CSF, whereas Customer Focus and Satisfaction is the second most vital factor for effective TQM implementation.

Gorji and Farooque (2011) examined Health Care Quality and Performance in two countries - India and Iran. A sample of 50 hospitals from India and 60 hospitals from Iran (government, semi – government and private) was taken. ANOVA was used for the purpose of data analysis. The results did not show any significant difference between practicing the philosophy of total quality management for performance excellence in health care in India and Iran. Results showed that there is significant difference between groups of hospitals and the hospitals from India and Iran are not found to be scoring close to the benchmarks.

Idris (2011) investigated the relationship between Total Quality management (TQM) elements and sustainable company performances. For the study, a sample of 400 employees of companies listed in the SIRIM Directory (containing ISO 9000 certified companies) was taken. The research showed significant relationship between the elements of Leadership, Best Practices, Productivity, Customer, Employee, Community Focus and Company Performances.

Bhalla (2012) analyzed the need of continuous quality improvement, components of TQM, challenges of TQM in higher education and to study the means and strategies adopted by different educational institutions for ensuring TQM. The findings of the study revealed that high rate or increasing rate of students' enrolment in the higher educational institutions indicates that the quality of education in the higher educational institutions has been improved. To make TQM a success, today the educational institutions are starting their TQM initiatives from the grass root level. But still there is a huge stress to improve the quality of education in future because India has not yet attained excellent results in the TQM implementation in the higher education sector.

Pourrajab et.al. (2012) conducted the study to identify the level of Total Quality Management (TQM), the level of Culture of Teaching and Learning

(COTL) and to investigate the relationship between TQM and COTL in Iranian secondary schools. The sample comprised of 280 teachers and 40 principals of 20 schools. Mean, Standard deviation and Karl Pearson Correlation Method were used for data analysis. The findings of this study revealed that the level of TQM and COTL is high in Iranian secondary schools. It was concluded that an increase in the level of TQM in schools will also increase the level of COTL in the schools.

Talib et.al. (2012) identified and analyzed TQM practices in Indian Hospitality Industry based on e-mail survey of 34 Hospitality Companies. Statistical measures like mean, standard deviation, reliability test and Pearson Correlation analysis were used. The results presented are focused on 17 TQM practices identified from literature review. It was found that top-management commitment, customer focus, product and service design, continuous improvement and innovation, quality culture and training and education are the most successful driven practices for TQM program in Indian hospitality industry. Moreover, supplier management and human resource management are the least important practices.

Cornelison (2013) analyzed the core principles of TQM and tested their prevalence and effectiveness within the Printing Industry in USA. A sample of 223 employees of printing companies in California (U.S.A) was taken for the purpose of the study. Content analysis, Case study and In-depth survey were used as research methodology. According to the authors, the core principles of TQM were widely implemented in the printing industry. It was also found that many employees did not have a clear idea of TQM concept and successful companies have full knowledge and usage of TQM concept and principles.

Altahayneh (2014) conducted the study to investigate the perceptions of physical education faculty members regarding the application of TQM Principles to Colleges of Physical Education in Jordan, to examine the extent to which these faculty members differ in their perceptions and the extent to which differences in perceptions are influenced by rank, educational level and years of experience. The sample consisted of 72 faculty members from four Colleges of Physical Education in Jordan. Frequencies, Mean, Standard deviation, t-test and One-Way Analysis of Variance (ANOVA) were used for data analysis. A large percentage (58.33%) of the faculty members indicated that there was no effort or slight effort to implement TQM at their colleges. In addition, the findings revealed that academic rank, years of experience and education level did not significantly affect the faculty members' perceptions of TQM implementation.

Barros et.al. (2014) exposed the conceptual model which tends to reflect the relationship between the use and implementation of quality

management principles and practices and their impact on the companies' quality performance. Results showed a significant and positive relationship between the implementation of quality management principles and practices and their impact on the companies' quality performance.

Wani & Mehraj (2014) stated that all the educational institutions should be provided sophisticated infrastructure, well qualified teaching staff, well qualified management to make TQM implementation a success. Not only government aided institutions but privately managed educational institutions should be insisted to adopt the philosophy of TQM. There should be Autonomous Bodies for all the levels, Primary, Secondary and University, which can inspect the educational institutions after every one or two years, so that implementation of TQM can be ensured and monitored. The concept should be applied wholly and solely to change education system which would be according to changing times and needs.

Boyal, Kumar and Ram (2015) conducted the study to establish the effect of drivers on Total Quality Management in Small and Medium enterprises of Rajasthan. Correlation, Regression Analysis, ANOVA test and t- test were used for data analysis. The drivers affecting Total Quality Management have played a crucial role in increasing the performance and sustainability of Total Quality Management in small and medium enterprises in Rajasthan, India.

Ganguly (2015) mentioned that universally, the role of Higher Education is changing and becoming more and more integrated with the process of economic development and prosperity of an economy by contributing to the intellectual capital of the economy. This prudent approach and quality focus will make higher education not only more integrated with the global standards but also contribute to the talent quotient of any country perfectly ready to take on global challenges and contribute towards economic growth and prosperity. Total Quality Management (TQM) is inevitably common factor that will shape the strategies of Higher Education Institutions in their attempt to satisfy major stakeholders like students, industry, society etc. Author also stated that, TQM is a general management technique can be applied to Higher Education Institutions to define and attain quality with a focus to meet and exceed the expectations of stakeholders by instituting the process of continuous improvement. Over the last few years, TQM was applied in the education industry. Majority of the applications were in the administrative side of the institutions, but some institutions applied TQM to curriculum development and delivery area.

Kaur (2016) stated that TQM is a holistic approach towards the overall improvement of an organization. The theory of TQM has tended to be successful in Higher Education provided that the management or the head of the HEI have enough potential to implement it. TQM looks to improve every department of HEIs or Universities. Author laid the stress on the fact that TQM improves every process, every job and every person within the organization. Its application is important in higher education in order to get maximum benefit out of higher education provided by HEIs or Universities. TQM has already proved its utility as a quality management tool in higher education in different parts of world.

Vasantharayalu & Pal (2016) examined the relation of TQM practices on operational performance in both Service and Manufacturing Industries. A sample of 300 participants from 50 Service and Manufacturing Industries in India was selected for the purpose of the study. Mean, Standard deviation, Correlation and Multiple Regression Technique were used for data analysis. It was concluded that the operational performance views that Leadership, Strategic and Planning, Customer Focus, Information and Analysis, People Management and Quality Performance are statistically significant in both kinds of industries.

Al-Damen (2017) examined the impact of TQM implementation on organizational performance. The study was conducted in Jordan Petroleum Refinery Company (JPRC), the study sample size was (103) managers from different levels. The researcher depended on primary and secondary data. The results show that TQM has positive impact on organizational performance.

Honarpour et.al. (2017) examined the reciprocal relation between Total Quality Management (TQM) and Knowledge Management (KM) and their impact on process and product innovation. The data were collected from a survey of 190 Research and Development (R&D) Unit managers in Malaysia. Confirmatory Factor Analysis was used to assess the reliability and validity of the measurement model and Structural Analysis was performed to evaluate the Research Model. The results revealed that there is a reciprocal relationship between TQM and KM. Additionally, TQM and KM showed a positive association with process and product innovation. Regarding the controversy of the relationship between TQM and innovation, this study supports the positive association between TQM and innovation. This study is among the first studies which provide empirical evidence of the existence of reciprocal relationship between TQM and KM. The analysis shows that R&D firms by implementing TQM alongside KM not only are able to manage their activities efficiently, but also are able to effectively perform in an innovative manner.

Madanat & Khasawneh (2017) investigated the impact of implementation of Total Quality Management (TQM) on the effectiveness of Human Resource Management (HRM) practices in the Jordanian Banking Sector. Variations in the implementation of TQM and the effectiveness of HRM according to demographic characteristics are detected. A high level of implementation of TQM (customer focus, top management commitment, and continuous improvement) was manifested, whereas employee engagement yielded a medium level. Similarly, a high level of effectiveness of all HRM (planning, staffing, training & development, and performance appraisal) was displayed, while a medium level of compensation was yielded. Implementation of TQM varies with respect to job title, whereas no significant variations with respect to gender, age, education, and experience are provided. No significant variations in the effectiveness of HRM due to gender, age, education, experience, job title were reported. A significant difference between Islamic and commercial banks in the implementation of three TQM dimensions and two HRM dimensions is uncovered, in favor of Islamic banks. A strong positive impact of TQM dimensions (customer focus, continuous improvement, employee engagement) on the effectiveness of HRM practices was manifested. Top management commitment was not an important factor in explaining variations of HRM practices.

Abdul Salam & Al-Salim (2018) defined the Total Quality Management and its impact on the performance of education institutions in the University of Samarra. This study was based on the analytical descriptive approach, which was composed of the top management and middle administration of the university. The study sample was of 52 individuals. It found some there is a statistically significant effect of total quality management on the performance of education institutions in the University of Samarra. Based on the findings of the study some prominent recommendations were implemented like: To appoint permanent task force on the dissemination of comprehensive quality culture at the University, Engaging employees in the process of strategic planning for quality and benefit from their experience in the field of the application of total quality management.

Lakmal et.al. (2018) explored relationships between identified TQM factors and their performance with regard to those factors. A questionnaire was given to a group of employees in ABC Company in the Seafood Industry in Sri Lanka. The importance of TQM factors is widely recognized. Analysis of the data obtained showed a positive relationship between the implementation of TQM practices (factors) and firm performance. The results of this study showed the implementation of TQM practices is positively associated with enhanced firm performance. This study has

important implications for managers. first, it motivates managers to invest in the time and resources to implement TQM programs, second, evidence from this study signals the importance of developing an environment or “culture” of support to further enhance the performance outcomes of TQM implementation.

Surendran (2018) described that Quality Education is a huge worry in several societies throughout the world. In an extremely aggressive education segment, the accomplishment of academic institutions relies on the quality of education that is imparted. Hence total quality management (TQM) has gained importance and researchers, educationalists, scholars; policymakers, all are showing their genuine interest towards TQM. Total Quality Management is accepted as an efficient management philosophy for customer contentment, continuous improvement, and organizational distinction. The fundamental idea of TQM is a democratic approach to tackle the question(s) of quality in business and in the area of education. Ubiquitously, the function of Higher Education is shifting and becoming increasingly incorporated into the procedure of economic growth and success. This structured worldwide occurrence is throwing multitudes of significant challenges with regard to developing a qualitative approach for handling higher education in a worldwide platform with an obvious goal to bring consistency in many significant areas and decrease the gap of bias in terms of quality education towards understanding and talent building.

Ali & Rumman (2019) presented the findings of a study investigating how the application of Total Quality Management (TQM) can help organizations to tackle the different business challenges brought about as a consequence of the recent global financial crisis including those associated with planning, cost reduction and increasing competition. The study focused on the experiences of employees based within the leading concrete and cement producer ‘Lafarge-Jordan’. The results showed that customer focus and senior management support are the two most important variables that enhance the ability to face different types of challenges. Integrated relationships with suppliers and continuous improvement were found to have a significant impact on reducing quality costs to help overcome competition. Based on the previous literature and results, this research recommends the orientation towards greater employee involvement because they are the cornerstone to successful TQM; further, it is more advantageous to analyze both the soft and hard effects of TQM to overcome challenges. Practically, the outcomes of this research may serve decision makers in the Lafarge Company in their attempts to consider quality issues that have become a must for most stakeholders in this industry including consumers, government as well as investors.

Hawi & Alzyadat (2019) expanded previous studies and the knowledge in this area as well as examining aspects from Total Quality Management definitions as well as present a theoretical framework. The scope of the research from private universities in Jordan comprised of 150 matched members (lecturers) and 200 about to graduate students from business faculty. Total Quality Management was measured with the help of Participation, Development, and Evaluation. Linear Regression Method was used in the study. The findings of this study were instrumental in understanding the influence of Total Quality Management and institutions' excellence in Jordan. Results showed that the Participation variable was the stronger influencer towards students' satisfaction. It was found that, firstly, students in the Jordanian' Universities were most likely satisfied with their universities, secondly, quality and excellence can be found in organizations with high level of practicing management indicators.

CONCLUSION

Quantity and quality of human capital is one of the major determinants of the growth of an economy. Role of Higher Education institutes is changing and becoming more and more integrated with the process of economic development and prosperity by contributing to the intellectual capital of many a country and act as a source of physical and social capital. Reciprocal relation between Total Quality Management and Knowledge Management (KM) enhances the chances of process and product innovations.

In India there is no dearth of human capital quantity-wise but there is still a huge gap in the demand and supply of quality human capital. GOI is making sincere efforts to improve the standards of education imparted by the HEI. GOI is advocating that the techniques of Total quality management should be applied in HEI. Educational institutions should be provided sophisticated infrastructure, well qualified teaching staff, well qualified management to make TQM implementation success. It is believed that the use of TQM practices in higher education will unite campuses, increase employees' satisfaction and improve every process that it touches.

UGC, AICTE and other Regulatory commissions have been established to implement uniform education standards in HEI. In order to know and measure the extent of impact of TQM practices on the performance of education institutions GOI has established the institutions of NAAC, SERB etc.

TQM has failed to produce its promised results mainly in educational institutes. There will be positive results of the adoption of TQM practices provided that the managements or the heads of the HEIs have enough potential to implement it. Before the government agencies and higher

education institutes proceeds further with their infatuation with TQM, it will be beneficial to ponder over the mistakes and accomplishments of previous practitioners

It is observed through the review of literature that studies on TQM was conducted mostly in corporate sector but education sector seems to be unexplored/ neglected by the researchers. Moreover the earlier studies included TQM in education sector covered only in schools and colleges. There are very few studies conducted on TQM in universities and this area is still unexplored.

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