BILAL AHMAD BHAT

Teachers' Perception towards Total Quality Management in Secondary Schools

ABSTRACT: *Quality has been the goal of human beings right from the beginning of life. It has been the driving force for all human endeavors. Quality is also the inspiration for human being to move from better to the best available option. The highest demanding and desirable need of the every hour remains the quality in every sphere. The world has been made for human being and teacher is the person, who deals with humans to mould him. There is a need to assess the perception towards quality. The purpose of this paper is to present the perception of Secondary School teachers of Kulgam district in Jammu and Kashmir, India, regarding TQM (Total Quality Management) in education. It is an attempt to get perception of Secondary School teachers and to understand how these perceptions vary by demographic variables, such as subject specialization (Arts and Sciences) and gender. For this, data were collected from 200 high school teachers from Kulgam district in Jammu and Kashmir on the J.J. Bonstingle (1992)'s conceptualization of W.E. Deming (1986)'s 14 points TQM in education; and were analyzed by using SPSS (Statistical Package for Social Sciences) version 20.0. The data collected were analyzed through ANOVA (Analysis of Variance); and it was found that there is a significant difference between variables sub-scales. The female teachers were having higher mean than male teachers; and also there was a significant difference found between male and female teachers in the perception of TQM. There is no significant difference between Arts and Sciences at the Secondary School teachers in the perception of TQM in education.*

KEY WORDS: *Teachers' Perception; Total Quality Management in Education; Gender; Subject Specialization; Secondary School.*

INTRODUCTION

Quality has been the goal of human beings right from the beginning of life. It has been the driving force for all human endeavors. Quality is the inspiration for human being to move from better to the best available option. It is the source of craving behind the unfolding human civilization through ages immemorial. Quality stares at you. You recognize it. But you cannot define it. Quality lies in the perception of the consumer. What is "great" for one may not be good enough for another (Mukhopadhyay, 2006:22).

There are various well-known definitions of quality. P.B. Crosby (1979) defines quality as "conformance to requirement" (Crosby, 1979). J.M. Juran & F.M. Gryna (1980) define quality as "fitness for use" (Juran & Gryna, 1980). W.E. Deming (1986) defines quality as "a predictable degree of uniformity and

About the Author: Bilal Ahmad Bhat is a Research Scholar at the Department of Education AMU (Aligarh Muslim University), Aligarh, Uttar Pradesh, India. For academic interests, the author is able to be contacted via phone at: +919622561808 or via e-mail at: bilalbhat.amu@gmail.com

dependability at low cost and suited to the market" (Deming, 1986).

It is more towards quality in operation. Many organizations found that the old definition of quality, "the degree of conformance to a standard", was too narrow (*cf* Bonstingle, 1992; Crawford & Shutler, 1999; and Farkhondehzadeh *et al.*, 2013). Consequently, they used a new definition of quality in terms of "customer focus" (*cf* Holt, 2000; Thakkar, Deshmukh & Shastree, 2006; and Farkhondehzadeh *et al.*, 2013).

Rapid change, global competition, and smarter customers have driven organizations to strive for excellence in all areas of organizational operations. Indeed, one of the most important developments of recent years is the renewed attention to the concept of quality. Quality underwent many changes from quality to quality control to quality assurance; and today, it stands as Total Quality Management. The term TQM has considered to be more general to capture the essence of quality improvements (Wani & Mehraj, 2014).

TQM (Total Quality Management) has been defined as a strategic architecture requiring evaluation and refinement of continuous improvement practices in all areas of usefulness. J. Corrigan (1995) gives a definition with an emphasis on customer satisfaction, that:

> TQM is a management philosophy that builds a customer-driven, learning organization dedicated to total customer satisfaction through continuous improvement in the effectiveness and efficiency of the organization and its processes (Corrigan, 1995:61).

According to R. Kaufman (1992), TQM (Total Quality Management) provides what is required as judged by the client. It is accomplished through everyone in the organisation being committed to achieve results, a passion for quality, and decisions based on performance data (Kaufman, 1992). TQM emphasises that it is important for all elements to fit together to turn raw materials into the products and deliverables that satisfy clients. Customer satisfaction is the result most addressed by TQM (Crosby, 1979; and Caplan, 1990).

J.S. Neves & B. Nakhai (1993) describe the basic tenets of TQM which are as follows:

> [...] long-term perspective, customer focus, and top management commitment, systems thinking, training and tools in quality, increased employee participation, development of a measurement and reporting system, improved communication between management and labour, and continuous improvement (Neves & Nakhai, 1993).

It can be seen from the above definitions that TQM (Total Quality Management) describes two main notions: (1) continuous improvement; and (2) the tools and techniques/methods used. In general, TQM encompasses many management and business philosophies and its focus gets shifted, based on the scenario where TQM is applied. Whether it is in industry or higher education, TQM philosophy revolves around the customer (Crosby, 1984; and Wani & Mehraj, 2014).

The service industry rapidly changing; and this dynamic culture offer a challenge for the service companies to lead or to actually survive in this competitive environment. As the education industry is a part of the overall service industry, where students are the customers; this particular factor raises the need for a solid base to be developed to reach for high quality service in the education industry. Hence, adaptation of TQM tool can provide the needed quality, which will enhance the success of the business (*cf* Bostan, 2005; Aydin & Sentürk, 2007; and Haque, Sarwar & Yasmin, 2013).

Adoption of TQM, in the educational institutions, is of common practice in the Western world, e.g. UK (United Kingdom), USA (United States of America), Australia, Europe; those adopted TQM in their learning institutions with an aim to improve the overall quality of the education to attract more students both from home and abroad (Idrus, 1995).

This strategy paid well for them in reaping a generous amount of revenue from the foreign students (Rampa, 2004). Thus, it is not unusual to observe the great potential of the education industry that has significantly contributed to the developed and the developing countries, in terms of sizable

economic advantages and benefits.

Though, there are many countries presently offering high quality education around the globe; however, India's acceptability as an international destination for education is yet to come. Thus, there is a need for investigating the teachers' perception on the current level of TQM practices in Indian learning institutions to identify the present barriers, which have been overlooked by the academicians till date.

Literature Review. The history of TQM (Total Quality Management) is dated back in 1950s, when Japanese manufacturing industry introduced the concept of TQM (Hashmi, 2007). When the Japanese realized that there is a need of some special technique through which the overall operational process might improve, they gave birth to the concept of TQM (Deming, 1986).

According to B. Brocka & S. Brocka (1992), TQM is a continuous management process, where a whole lot of deliberation is needed in improving the performance of every level of operation by proper management of the both resources: human as well as capital (Brocka & Brocka, 1992). In this context, F. Töremen, M. Karakus & T. Yasan (2009) stated that organizations are the places which have a defined set of aims and objectives to be achieved. As such, they cannot be thought of as separate from the outside world (Töremen, Karakus & Yasan, 2009).

To remain competitive, there is always a need to monitor every change that took place inside the organization. This helps is achieving better output for the overall organization. Hence, TQM has become the most vital tool that ensures the organization's goals are achieved and performances are improved (Günbayi & Cevik, 2004).

Furthermore, many studies in the literature developed and validated TQM critical factors or practices in both manufacturing and service sectors. According to D.A. Waldman (1993), these are called "elements"; whereas M.B. Dean & M.M. Helms (1996) described them as "practices"; U. Hellsten & B. Klefsjo (2000) named them as "techniques"; R. Reed, D.J. Lemak & J.C. Montgomery (1996) identified them as "processes"; and S. Sitkin,

K. Sutcliffe & R. Schroeder (1994) mentioned them as "principles".

Need of the Study. Students are our rays of hope. Teachers train and learn them to be leaders of tomorrow. If we have to benefit from the huge investment that we have made and making in education, our teachers must be enabled, inspired, and motivated to commit themselves, personally, and professionally, to the all-round development of students for efficiency and effectiveness in providing quality education (Glatthorn & Jailall, 2000; and UNICEF, 2000).

Quality assurance in education assumes a lot of importance in this context. We have to initiate several interventions like of TQM (Total Quality Management) in Higher Education towards continuous improvements. To achieve this vision, it is imperative to have an institutional arrangement to usher in quality education. In this context, M. Holt (2000) argues, as follows:

> I shall suppose that education is concerned with the development that of minds of the pupils; school produce educated persons who, by virtue of their schooling, to be construe? Commitment to quality makes student proud to learn and work hardly for improvement (Holt, 2000).

Quality improvement is a never ending process. Education quality leads to a prospective future (Glatthorn & Jailall, 2000; and UNICEF, 2000). Hence, insight on quality indices and virtual implementation need to be given top priority and due attention should be paid to the category in the wide range of educational strata, e.g. school, university, educational management, and the staff.

Because of the high importance of quality in education system, in which teacher is a pivotal role player needs to be checked, what kind of perception teachers have regarding TQM (Total Quality Management) in education. The researcher finds it need of the world to assess the perception of teachers towards TQM.

Objectives. The objectives of this study are: (1) to study the level of perception of Secondary School teachers in Kulgam district in Jammu and Kashmir, India, regarding TQM or Total Quality Management in

education; (2) to study the difference between male and female of Secondary School teachers in the level of perception regarding TQM in education; and (3) to study the difference between Arts and Science of Secondary School teachers in the level of perception regarding TQM in education.

Hypotheses. The hypotheses of this study are: (1) There is no significant difference between male and female of Secondary School teachers in the level of perception regarding TQM or Total Quality Management in education; and (2) There is no significant difference between Arts and Science of Secondary School teachers in the level of perception regarding TQM in education.

METHODS

Sample. A total of 200 teachers were elected from the secondary schools of Kulgam district in Jammu and Kashmir, India. A stratified sample of teachers was selected from schools. All the teachers of Science subject and Arts subject selected school were considered as sample for the study. Thus, the sample for the study consisted of 200 teachers of Secondary School. The strata were subjects and sex (Mason, 1994; and Burns, 2000).

Tools. Survey instrument of J.J. Bonstingle (1992) was used to get the data on perception of secondary school teachers regarding TQM or Total Quality Management in education (Bonstingle, 1992). The original form of this tool consisted of 84 items based on J.J. Bonstingle (1992)'s conceptualisation of W.E. Deming (1986)'s 14 points of TQM in education (Deming, 1986; and Bonstingle, 1992).

All the items under 14 points are to be rated by the sample respondents on 4-point Likert's scale having the ratings of: *Not Applicable* = 0, *Low* = 1, *Medium* = 2, and *High* = 3. In this study, 6 out of 14 points of W.E. Deming (1986) consisting of only 30 items were considered, because they were very much related to school programmes, teacher teaching, and student learning (Deming, 1986). They were: (1) Create constancy of purpose; (2) Adopt new philosophy; (3) Improve constantly; (4) Institute training on the job; (5) Institute leadership; and (6) Drive out fear, so that everyone may work effectively

for the institution (*cf* Deming, 1986; and Mukhopadahyay, 2006).

Procedure. The selected Secondary School teachers were met individually for the purpose of the study and were instructed how to respond to the scale survey instrument. Further clarifications were offered on the questions/doubts raised by them (Mason, 1994; and Burns, 2000).

Statistical Analysis. The scales were scored as stated above and the data obtained were then entered for statistical analysis using SPSS (Statistical Package for Social Sciences) for Windows of Evaluated Version 20.0. Mean and SD (Standard Deviation) were calculated separately for all the 4 points in the scale and the total scale to describe the level of perception of Secondary School teachers regarding TQM or Total Quality Management in education (Mason, 1994; and Burns, 2000).

In the study, researcher employed "t" test for significance of difference between means to test the hypothesis formulated for the study (Mason, 1994; and Burns, 2000). Considering the possible range of total scores on TQM questionnaire (0 to 90); and the sample teachers were categorised into 3 groups: AA (Above Average), A (Average), and BA (Below Average) in perception about TQM in education.

For this purpose, the total possible score 90 was divided equally into 3 groups: Teachers scoring between 0-30 as *Below Average*; 31-60 as *Average*; and 61-90 as *Above Average*. The details of the number and percentage of teachers of 3 categories were: AA (No.48 and 23.9%); A (No.112 and 56.0%); and BA (No.40 and 20.1%).

The study employed "t" test to find out the significance of difference in the perception about TQM in education between difference categories of teachers, male and female, Arts and Science, from Kulgam district in Jammu and Kashmir, India. SPSS for Windows (version 20.0) was used for statistical analysis (Mason, 1994; and Burns, 2000).

RESULTS, FINDINGS AND DISCUSSION

Results. It was inferred that more than 50% Secondary School teachers (56.0%) exhibited *Average* level of perception about TQM

(Total Quality Management) in education. However, the percentage of teachers with *Above Average* level of perception about TQM was more (23.9%) than that of teachers with *Below Average* level of perception about TQM (20.1%).

According to the first null hypothesis, "*There is no significant difference between male and female of Secondary School teachers in the level of perception regarding TQM in education*". The obtained results given by SPSS (Statistical Package for Social Sciences) 20 indicated that there was significant difference between female and male teachers of Kulgam district in Jammu and Kashmir, India, in the perception of TQM (t = 2.21 at significance of 0.05 level).

The observation of means between male and female of Secondary School teachers of Kulgam district indicated that the mean score of female teachers (mean = 1.76) was higher than that of male teachers (mean= 1.63). It is concluded that female teachers have better perception than male teachers regarding TQM in education. Thus, not supporting the null hypothesis, it is inferred that there is significant difference between male and female teachers in the perception about TQM in education.

The second null hypothesis stated that "*There is no significant difference between Arts and Science of Secondary School teachers in the level of perception regarding TQM in education*". The obtained results given by SPSS 20 indicated that there was no significant difference between Arts and Science of Secondary School teachers of Kulgam district in the perception of TQM (t = 1.06 at significance of 0.05 level). Thus, respecting the null hypothesis, it is inferred that there is no significant difference between Arts and Science of Secondary School teachers in the perception about TQM in education.

Findings and Discussion. There is a significant difference between male and female teachers in the perception about TQM (Total Quality Management) in education. There is no significant difference between Arts and Science of Secondary School teachers in the perception about TQM in education.

More than 50% Secondary School teachers exhibited *Average* level of perception about TQM in education. Female teachers in Secondary Schools had better perception about TQM in education than male teachers. Arts and Science teachers in Secondary School do not differ in the perception about TQM in education. To conclude, educational organisations, such as schools, colleges, and universities, should have individuals who are committed to their organization, profession, and well-being of their students.

The vitality of all educational organisations lies in the willingness of every person to contribute to the development of their organisations. The process of TQM will lead to all round development of the institution, only and only if all members like principals, teachers, and students are committed towards the cause of organisation.

The literature reveals that there is no difference between male and female of teachers in the level of perception TQM in education (Temponi, 2005; and Thakkar, Deshmukh & Shastree, 2006). In contrast, the study found the significant difference between male and female of Secondary School teachers in the perception about TQM in education.

It has been suggested that TQM may be a more feminine style of leading, or it may be suggested that females are more dedicated and sincere towards their duty. But, N.A. Ali & M. Zairi (2005) found a significant difference between female and male teachers in TQM. Men attributed their use of power and direct styles to TQM, whereas women attributed their use of relational styles to TQM (Ali & Zairi, 2005).

CONCLUSION

In all fields, especially education, quality has an important position. The institutions deal with the precious resource on the earth for which the whole world was created. The resource is being processed in these institutions. Hence, when creator creates everything for human beings for their benefit, why not institutions. So, it is imperative to implement the TQM (Total Quality Management) as a necessary element that has a direct influence on the human improvement.

It can be also led to high commitment and sprit in work environment.

According to the study, majority of Secondary School teachers have exhibited *Average* level of TQM in education. However, the percentage of teachers with *Above Average* level of TQM is more than that of teachers with *Below Average* level of TQM. Usually, the common observation is that females' teachers are more sincere and committed to their work. Always give importance to the quality as such female teachers in the present also study have better perception than male teachers about TQM in education.

However, it can be suggested that measures should be taken to see that male teachers also have better perception of TQM; and all the activities of the school to promote quality education. It is better for all the teachers of the institutions to be exposed to more quality in education, which in turn would influence the perception of teaching.

Teachers should be encouraged towards positive aspect of TQM and to take active participation to render quality education. The quality education will progress us towards the required things and services which the present world will demand from us.[1]

References

Ali, N.A. & M. Zairi. (2005). *Service Quality in Higher Education*. Bradford: Bradford University School of Management.

Aydin, A. & I. Sentürk. (2007). "Application of Total Quality Management in Education: Sample of Primary Schools" in *Journal of Social Sciences*, 17, pp.313-329.

[1]***Statement:*** I, further, clarify that the article is my original contribution and has not been plagiarized or copied from any source. It does not contravene on the rights of others and does not contain any libelous or unlawful statements and all References have been duly acknowledged at the appropriate places. The article submitted only to the *EDUCARE* journal in Bandung, Indonesia, and it has not been previously published or submitted elsewhere for publication in a copyrighted publication. I, hereby, authorize the journal editor to edit, modify, and make changes in the article to make it is suitable for publication in the journal. I, hereby, assign all the copyright relating to the said article to the *EDUCARE* journal; I have not assigned any kind of rights to the above said article to any other person, institute, or publication; and, finally, I agree to indemnify the editor against any claim legal and/or otherwise, action alleging facts which if true, constitute a beach of any of the foregoing warranties.

Bonstingle, J.J. (1992). *Schools of Quality: An Introduction to Total Quality Management in Education*. Alexandria: Association for Supervision and Curriculum Development.

Bostan, F. (2005). "The Assessment of the Total Quality Management Practice at the Boarding Region Schools of Primary Education". *Unpublished Master's Thesis*. Adana: Cukurova University.

Brocka, B. & S. Brocka. (1992). *Quality Management: Implementing the Best Ideas of the Masters*. New York: Irwin, Inc.

Burns, R. (2000). *Introduction to Research Methods*. London: Sage Publications.

Caplan, F. (1990). *The Quality System: A Sourcebook for Managers and Engineers*. Radnor, PA: Chilton Book.

Corrigan, J. (1995). "The Art of TQM" in *Quality Progress,* 28, pp.61-64.

Crawford, L.E.D. & P. Shutler. (1999). "Total Quality Management in Education: Problems and Issues for the Classroom Teacher" in *The International Journal of Educational Management*, 13(2), pp.67-72.

Crosby, P.B. (1979). *Quality is Free*. New York: McGraw-Hill.

Crosby, P.B. (1984). *Quality without Tears*. New York: New American Library.

Dean, M.B. & M.M. Helms. (1996). "The Implementation of Total Quality Management into Public Sector Agencies: A Case Study of the Tennessee Valley Authority" in *Benchmarking for Quality Management and Technology*, 17, pp.1127-1138.

Deming, W.E. (1986). *Out of Crisis*. Cambridge: Cambridge University Press.

Farkhondehzadeh, Alireza *et al*. (2013). "Total Quality Management (TQM) in Iranian Primary Schools Teachers" in *European Online Journal of Natural and Social Sciences*, Vol.2(3), pp.634-640. Available online also at: http://european-science.com/eojnss_proc/article/viewFile/3737/1459 [accessed in Aligarh, India: May 20, 2015].

Glatthorn, A. & J. Jailall. (2000). "Curriculum for the New Millennium" in R. Brandt [ed]. *Education in a New Era: ASCD Yearbook 2000*. Alexandria, Virginia: Association for Supervision and Curriculum Development.

Günbayi, I. & V. Cevik. (2004). "An Investigation on the Opinions of Teachers and Managers about Total Quality Management" in *Journal of National Education*, 163, pp.5-17.

Haque, Ahasanul, Abdullah Sarwar & Farzana Yasmin. (2013). "Teachers' Perception towards Total Quality Management Practices in Malaysian Higher Learning Institutions" in *Creative Education*, Vol.4, No.9, pp.35-40. Available online also at: http://file.scirp.org/pdf/CE_2013093015000473.pdf [accessed in Aligarh, India: May 20, 2015].

Hashmi, K. (2007). "Introduction and Implementation of Total Quality Management (TQM)" in *Journal of Electronics and Quality Management*, 6, pp.45-57.

Hellsten, U. & B. Klefsjo. (2000). "TQM as a Management System Consisting of Values, Techniques, and Tools" in *The TQM Magazine*, 12, pp.238-244. Available online also at: http://dx.doi.org/10.1108/09544780010325822 [accessed in

Aligarh, India: August 17, 2015].

Holt, M. (2000). "The Concept of Quality in Education" in C. Hoy, C. Bayne-Jardine & M. Wood [eds]. *Improving Quality in Education*. London: Falmer Press.

Idrus, N. (1995). "Empowerment as a Manifestation of Total Quality: A Study in Three Countries" in *Total Quality Management*, 6, pp.603-612.

Juran, J.M. & F.M. Gryna. (1980). *Quality Planning and Analysis*. New York: McGraw-Hill.

Kaufman, R. (1992). "The Challenge of Total Quality Management in Education" in *International Journal of Education Reform,* 1(2), pp.149-65.

Mason, J. (1994). "Linking Qualitative and Quantitative Data Analysis" in A. Bryman & R. Burgess [eds]. *Analysing Qualitative Data*. London: Routledge, pp.89-110.

Mukhopadahyay, M. (2006). *Total Quality Management in Education*. New Delhi: Sage.

Neves, J.S. & B. Nakhai. (1993). "The Baldrige Award Framework for Teaching Total Quality Management" in *Journal of Education for Business,* 69(2), pp.121-125. Available online also at: http://dx.doi.org/10.1080/09544129550035251 [accessed in Aligarh, India: August 17, 2015].

Rampa, S.H. (2004). "The Relationship between Total Quality Management and School Improvement". *Unpublished Doctoral Thesis*. Pretoria: University of Pretoria.

Reed, R., D.J. Lemak & J.C. Montgomery. (1996). "Beyond Process: TQM Content and Firm Performance" in *Academy of Management Review*, 21, pp.173-202.

Sitkin, S., K. Sutcliffe & R. Schroeder. (1994). "Distinguishing Control from Learning in Total Quality Management: A Contingency Perspective" in *Academy of Management Review*, 19, pp.537-564.

Temponi, C. (2005). "Continuous Improvement Framework: Implications for Academia" in *Quality Assurance in Education,* 13(1), pp.17-36.

Thakkar, J., S.G. Deshmukh & A. Shastree. (2006). "Total Quality Management (TQM) in Self-Financed Technical Institutions: A Quality Function Deployment (QFD) and Force Field Analysis Approach" in *Quality Assurance in Education,* 14(1), pp.54-74.

Töremen, F., M. Karakus & T. Yasan. (2009). "Total Quality Management Practices in Turkish Primary Schools" in *Quality Assurance in Education*, 17, pp.30-44. Available online also at: http://dx.doi.org/10.1108/09684880910929917 [accessed in Aligarh, India: August 17, 2015].

UNICEF [United Nations International Children's Fund]. (2000). "Defining Quality in Education". *A Paper* presented by UNICEF at the meeting of The International Working Group on Education Florence, Italy. Available online also at: https://www.unicef.org/education/files/QualityEducation.PDF [accessed in Aligarh, India: May 20, 2015].

Waldman, D.A. (1993). "A Theoretical Consideration of Leadership and Total Quality Management" in *The Leadership Quarterly*, 4, pp.65-79. Available online also at: http://dx.doi.org/10.1016/1048-9843(93)90004-D [accessed in Aligarh, India: August 17, 2015].

Wani, Iftikhaar Ahmad & Hakim Khalid Mehraj. (2014). "Total Quality Management in Education: An Analysis" in *International Journal of Humanities and Social Science Invention*, Volume 3, Issue 6, June, pp.71-78. Available online also at: http://www.ijhssi.org/papers/v3(6)/Version-4/N0364071078.pdf [accessed in Aligarh, India: May 20, 2015].

Total Quality Management on Education in India
(Source: http://www.livemint.com, 17/8/2015)

In all fields, especially education, quality has an important position. The institutions deal with the precious resource on the earth for which the whole world was created. The resource is being processed in these institutions. Hence, when creator creates everything for human beings for their benefit, why not institutions. So, it is imperative to implement the TQM (Total Quality Management) as a necessary element that has a direct influence on the human improvement. It can be also led to high commitment and sprit in work environment.