

IMPACT OF TOTAL QUALITY MANAGEMENT AND OCTAPACE CULTURE IN HIGHER EDUCATION SECTOR

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Abstract

Educational institutions around the world strive for academic excellence, operational efficiency and satisfaction of claimants. A holistic way to attain it is possible through Total Quality Management (TQM) which depends upon the hard and soft TQM practices. Hard TQM focus on attainment of operational efficiency through Process Management, Performance Measurement, quality tools. Soft TQM is people based or human based with components like Leadership, Teamwork and Communication for an encouraging work environment. The research study examines the total impact of TQM and OCTAPACE (Openness, Confrontation, Trust, Authenticity, Proactivity, Autonomy, Collaboration, and Experimentation). They strive to get dependable and high quality based findings.

Keywords: *Total Quality Management, OCTAPACE Culture, Academic Excellence, Hard TQM, Soft TQM.*

Introduction

The field of higher education is crucial in forming society's professional and intellectual capacities. Institutions must balance upholding academic excellence with satisfying the various demands of students, faculty, and other stakeholders in an age of globalization and technological innovation. A complete framework for tackling these issues, Total Quality Management (TQM) places an emphasis on operational effectiveness, stakeholder satisfaction, and continual development.

The two main characteristics of TQM practices are hard and soft elements. Technical, data-driven strategies including process standardization, quality control instruments, performance evaluation, and benchmarking are examples of hard TQM components. These components offer the methodological and structural rigor necessary for reliable, high-quality results.

Review of Literature

Higher education employs Soft and hard components of Total Quality Management (TQM) to obtain quality in various metrics. Hard TQM applies Performance Appraisal, Benchmarking along with technical procedures. Academic and administrative excellence depends on operational efficiency and consistency in service delivery, which are guaranteed by strict TQM (Oakland, 2003). The foundation of quality management, according to Juran (1988), is process optimization and organized measurement systems. Soft TQM, on the other hand, stresses cultural and human aspects. Leadership, communication, teamwork, and employee involvement are all essential for creating an organizational culture that supports ongoing development. Kanji and Malek (1999) pointed out that organizations with capable leaders and OCTAPACE Culture in Postsecondary Learning. The OCTAPACE culture, which includes Confrontation, Openness, Authenticity, Trust, Autonomy, Proactivity, Collaboration, and Experimentation, provides a framework based on values for creating a pleasant work environment. OCTAPACE values, according to Pareek (1997), allow businesses to innovate and adjust to change, which are critical attributes in a fast-paced higher education setting. According to research by Kumar and

Patnaik (2002) there will be huge amount of stakeholder satisfaction in universities with a strong OCTAPACE culture. Enhancing institutional effectiveness is a distinct function of each OCTAPACE culture dimension. While trust creates solid bonds between stakeholders, openness makes communication more transparent. Creativity and Teamwork are essential to bring innovative measures. This requires collaboration and experimentation too. Faculty and staff execute their academic and admin responsibilities in a proactive manner. This is a motivational factor for both individual and institutions Sohal (2004). The supportive environment along with hard , soft TQM techniques and OCTAPACE ideas to bring in better outcome to the institutions in terms of innovation, stakeholder satisfaction and quality improvement. Das et al (2011) Adoption of quality practices, change management brings in trust and collaboration. Gopalan and Reddy(2013) TQM and OCTAPACE are equipped to handle issues like changing student expectations, challenges etc.,

Methodology

The study has employed VosViewer (Visualisation of Similarities) a bibliometric analysis tool to create and display bibliometric networks. Three forms of data are used by VOSviewer to generate a map

- **Network Data:** a map based on network data is created using this option.
- **Bibliographical Data:** Co-authorship, keyword co-occurrence, citation, bibliographic coupling, or co-citation map can be created using the bibliographical data option.
- **Text Data:** A word co-occurrence map based on text data can be made using this option. Vosviewer has tabulated the results of its different analyses.

Type of Analysis	Explanation	Unit of Analysis	Counting Methods
Co-authorship analysis	Identifies research collaborations and tracks the evolution of research networks over time.	Authors, Organizations, Countries	Full counting, Fractional counting
Co-occurrence analysis	Identifies the main topics in a field and tracks the evolution of topics over time.	All keywords, Authors keywords, Index keywords	Full counting, Fractional counting
Citation analysis	Identifies the most influential publications in a field and tracks the impact of research.	Documents, Sources, Authors, Organizations, Countries	Full counting, Fractional counting
Bibliographic coupling analysis	Identifies publications that are related to each other, even if they do not cite each other directly.	Documents, Sources, Authors, Organizations, Countries	Full counting, Fractional counting
Co-citation analysis	Identifies groups of publications that are related to each other in terms of their content.	Cited references, Cited sources, Cited authors	Full counting, Fractional counting

Source: <https://libguides.jgu.edu.in/subjects/guide.php?subject=vosviewer#tab-3>

The analysis has established a map on the basis of authorship, co-authorship and citation and has undertaken the full counting. When using full counting a publication is divided equally among the co-

authors. To take an example, a publication which is co-authored by four countries is considered to be a full publication by all the four countries. Visualisations types are as follows.

- **Network Visualization:** It depicts the most effecting variables and the connection between the variables among extracted variables across different referred reviews. On the basis of Bibliographic Data a Map is generated which generates Co-authorship, Keyword occurrence, citation and co-citation. It retrieves data of Scopus, web of science, Dimensions
- **Overlay Visualization:** It displays the most common variables its connection with other variables and the year of publication.
- **Density visualisation:** It displays the volume of association between every variable. The high density variables are huge both in size and font and are the most influential that affect TQM and OCTAPACE Culture and vice-versa.

Table 1 Network Visualisation on the Basis of Authorship, Co-authorship and Citation Strength are as Follows

Item	Cluster	Link	Document	Avg Pub year
Khan Samia	1	3	1	2023
Malik Azam	1	3	1	2023
Zainal, Noor Raihani	1	3	1	2023
Alonaji Wadib	1	3	1	2023

Table 2 Table Showing Network Strength Based on Text Data

Item	Cluster	Link	Total link strength	Occurence	Avg Pub year
Book	1	9	27	11	2021.18
Leadership	1	8	15	6	2021.33
Paper	1	6	7	5	2019.20
Professional	1	5	11	5	2019.00
Research	1	7	16	6	2021.50
Researcher	1	6	13	6	2022.00
Case study	2	5	12	4	2018.50
Organisation	2	7	15	5	2019.00
Practice	2	8	18	8	2020.12
Practioner	2	5	12	4	2018.25

Figure 1 Network Visualisation Map on the Basis of on the Basis of Authorship, Co-authorship and Citation Strength



Figure 2 Network Map on Text Data

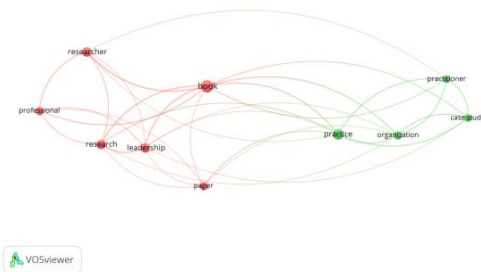
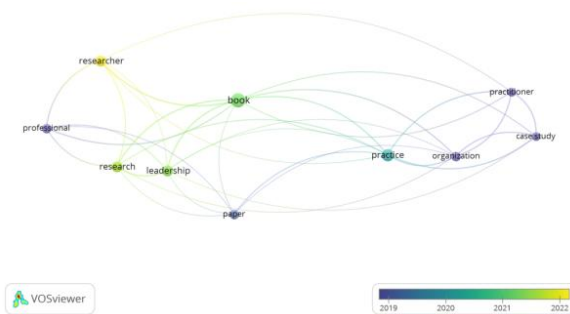


Figure 3 Network Map Showing Overlay Visualisation



Findings

- Books (learning materials) have a high link strength of 27, indicating that they improve both hard and soft TQM by facilitating the teaching and learning process.
- Practice combines process-based and behavior-based TQM components to achieve stakeholder satisfaction, with a connection strength of 18 supporting hard TQM.
- Research that combines OCTAPACE culture with hard and soft TQM procedures to improve academic achievement has a connection strength of 16.
- In order to achieve sustainable academic efficiency and stakeholders' trust in the educational system, process, and application of OCTAPACE culture, leadership and an organization with a connection strength of 15 projects connect people and processes.
- Researcher with the link strength of 13 possess the strong responsibility in blending the TQM practice and OCTAPACE culture.

Suggestions

Hard TQM

- Create Standardized Procedures:** Create and adhere to explicit protocols for academic and administrative work using quality methodologies like Six Sigma and ISO standards.
- Performance Metrics & Benchmarking:** Establish measurable quality standards for teaching, research output, and student outcomes in order to

encourage accountability and continuous improvement.

- **Use of Technology:** Tools like dashboards, Learning Management Systems (LMS) helps in monitoring the academic progress.
- **Improvement of Infrastructure:** Increase educational opportunities according to stakeholder's requirement.
- **Audit and Feedback:** Frequent audit of internal control system in educational institutions, academic audit through Internal Quality Assurance Cell (IQAC) will help in stakeholder enhancement.

Soft TQM

- **Leadership Development:** Leaders should be trained on motivation, inspiration, and involve faculty, staff to attain quality goals.
- **Participative decision-making:** Involve educators in the institution's education planning and policy execution processes.
- **Employee Engagement and Recognition:** Encouraging employees by rewarding and recognising the work attained.
- **Improve Communication Channels:** Develop communication channels in an open and transparent manner to ensure goal alignment.
- **Training and Development:** Provide adequate training and skill enhancement

opportunities for continuous professional development

OCTAPACE Culture

- **Openness and Transparency** among stakeholders to share their ideas.
- **Authenticity and Trust:** Encourage strong ethics, integrity by the stakeholders with institutions.
- **Interdepartmental collaboration:** Encourage faculty for inter disciplinary research, industry collaborations to enhance their research knowledge.
- **Promote independence:** Allow faculty to pursue their personal goals along with fulfilling institutional goals.
- **Confrontation:** Resolve conflicts and build healthy relation in work place.

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