

A Study of Leadership Behaviour of Principals in Relation to their Perception of Total Quality Management

^a**A. J. Patil**, ^b**Noorjehan N. Ganihar**

^aAssistant Professor Vijayanagar College of Education Vidyanagar, Hubli (Karnataka), India

^bProfessor Post Graduate Department of Education, Karnatak University, Dharwad. (Karnataka), India

Abstract

Total Quality Management (TQM) is a comprehensive and structured approach to organizational management that seeks to improve the quality of products and services through ongoing refinements in response to continuous feedback. Total Quality Management requirements may be defined separately for a particular organization or may be defined in adherence to established standards, such as the international organizational for standardizations ISO 9000 series, TQM can be applied to any type of organizations; it originated in the manufacturing sector and has since been adopted for use in almost every type of organization imaginable including schools, colleges, highway maintenance, hotel management and churches. As a current focus of e-business, TQM is based on quality management from the customer's point of view. With changing patterns of education delivery from face-to-face to online, course content, nature of learner, and organizational structures, the concept of quality has become an inherent component of the educational process for its success. Leadership behaviour may be defined in terms of totaling of functions performed by executives a individual and as a group. Leadership is interpersonal influence exercised in a situation which is directed through communication process, towards the attainment of a specialized goals. There has been a steady increase in the study of leadership in recent years. Early researches were concentrated on what were thought to be essential precursors to leadership-personality and physical traits.

KEYWORDS: Total Quality Management, Leadership Behaviour and Teacher Educators

Total Quality Management

Total Quality Management (TQM) is a comprehensive and structured approach to organizational management that seeks to improve the quality of products and services through ongoing refinements in response to continuous feedback. Total Quality Management requirements may be defined separately for a particular organization or may be defined in adherence to established standards, such as the international organizational for standardizations ISO 9000 series, TQM can be applied to any type of organizations; it originated in the manufacturing sector and has since been adopted for use in almost every type of organization imaginable including schools, colleges, highway maintenance, hotel management and churches. As a current focus of e-business, TQM is based on quality management from the customer's point of view.

With changing patterns of education delivery from face-to-face to online, course content, nature of learner, and organizational structures, the concept of quality has become an inherent component of the educational process for its success. Globally various bodies have been established to develop guidelines for quality products and services; and their maintenance. The globalization of education, migration of students from one community to other, one country to another, provides adequate causes for concerns to the educationists and administrators. Total Quality Management (TQM) in Education is a timely tool, which must be clearly understood, adopted and implemented as soon as possible. The book under review discusses various concepts, issues, processes, models and implementation strategies for TQM in educational settings. The book has consulted heavily the research conducted in the field by various researchers and scholars and thus gives an authentic touch to the quality movement in the schools.

In the present study the perception about TQM in colleges of education is represented by Bonstingle's conceptualization of Demming's 14 points Total Quality Management (TQM) in education.

Leadership Behaviour

Leadership behaviour may be defined in terms of totaling of functions performed by executives a individual and as a group. Leadership is interpersonal influence exercised in a situation which is directed through communication process, towards the attainment of a specialized goals. There has been a steady increase in the study of leadership in recent years. Early researches were concentrated on what were thought to be essential precursors to leadership-personality and physical traits. Weber's (1947) separation of charismatic leadership from position based leadership promoted the belief that leadership was more than a consequence of a set of human actions based on emotional power that engaged the support of others. when Ciulla (2003) tracked variations in the definitions of leadership from the 1940s she noted that in the 1990s the support for the leader was more than the inter-dependent relationship between the leader and led which was significantly different from the traditional view of leadership.

Management is often mistaken for leadership. Leadership is defined as a process of influencing people to put forth effort in achieving an organization's goals (Hodgetts, 1993). Management is defined as the process of achieving organizational goal through the efficient and effective use of organization's resources (Hodgetts, 1993). Organizations have many different types of resources such as money, equipment, and people, available resource used to achieve goal. Thus it can be said that the leadership is just one aspect of management.

Leadership has been a favorite subject of the scholars throughout the history several well recognized models have been proposed over the last 50 years. Each new leadership models have been built on perious ones, aspiring to better explain leadership characteristics several studies has received considerable attention. It is important to understand where today's models have originated.

The Problem

The present investigation is titled as: **A Study of Leadership Behaviour of Principals in Relation to their Perception of Total Quality Management**

Review of Literature

Talaq and Ahmed (2003) studied “The role and importance of motivation in TQM success”. Over the evolution of total quality management (TQM), the emphasis upon people has increased. Any organisation has to produce its outcomes through its people. Therefore, the key to quality performance is the organisation's ability to motivate its people towards desired actions and behaviours and increase their level of quality consciousness. Based on a synthesis of the literature, this paper integrates the various hitherto disparate strands of thought into a pragmatic model of motivation which helps to direct us to precise management actions to create quality conscious actions and behaviours. The developed pragmatic model, called "the 5 "R"s of Motivation" has 5 main constructs: requirements, resources, rewards and recognition, relationships, and responsibility. These constructs are conceptualised to emphasise embedding a strong belief in the people about the deep values and norms that define TQM and lead people to act out quality in their everyday work actions.

Sahney, et al., (2004) studied “Conceptualizing total quality management in higher education”. In keeping with the socio-economic and cultural transformation that has placed newer demands on the educational system, in terms of greater responsibility and accountability and increased expectations by stakeholders, the system has been pressurized to shift its focus from one in quantitative expansion to one with emphasis on quality. Such shifts and changes are being witnessed not only in the developed countries, but also in the developing countries of the world. The education system, and more so the higher education system in particular, in an attempt to react to the demands and ever increasing pressures from its stakeholders, finds itself in a market-oriented environment, with internal and external customers; wherein, “delighting the customer”, is the rule for survival in the long run. “Delighting the customer”, is the core message of total quality management (TQM) and, hence, there is a need to identify and apply the relevant concepts of TQM to each and every aspect of academic life; that is, to the teaching, learning and administrative activities. The paper is a theoretical attempt at conceptualizing TQM in education.

Ahmed (2008) studied “Quality and TQM at Higher Education Institutions in the UK”. The objective of this study is to investigate the level of implication of Quality in the University of East London and TQM in the Aston University. The elements of Quality and Accountability are the major driving forces in academic institutions in the UK, and in this respect, the total quality management (TQM) movement has exploded, capturing the attention of educators at all levels. Certainly, higher education embraces the concept of TQM as a set of tools for planning continuous improvement. In wider context, TQM have all sought to achieve fundamental change in organizations. The focuses of these two

cases are implication of Quality and TQM programme in the University of East London and Aston University respectively.

Shroff and Dave (2014) made “A State-Of-Art Review Of Total Quality Management Application In Service Sector.” Over the past two eras, total quality management (TQM) has become more broadly used management short form and is looked upon as the buzz, discussion in the management practices and has proven that there is a rapid shift in the application of TQM in diverse industries from manufacturing to the service organization. TQM has become a key field of responsiveness to directors, managers, quality practitioners and researchers due to its robust impact on business operation, customer satisfaction and profitability in the sphere of hospitality, education, banking, information and communication technology as the service sector, manufacturing, and even in the public sector to restore their service quality and enhanced job performance. In the light of this, an endeavour has been worked to study and recognize the theory and perception of TQM, its benefits as well as various features of service elements and its categorizations which are applicable to the avail organization. This study has explored all the literature relevant to critical success factors for the implementation of TQM in the selected service organization. This report recognizes the critical factors of TQM and highlights the approaches of quality improvement strategies for an efficient and effective implementation of TQM in business, manufacturing and service sector. Many practices have reached at the conclusion that effective TQM implementation can progress their competitive skills and provide strategic benefits in the market. The determinations of the study also provide a comprehensive understanding of TQM, its uses and present detailed guidelines and explanations of effective implementation of TQM for the betterment of the service sector.

TQM has its applicability in the service sector , education industry, Banking, ITC and manufacturing sector.

- The most target factor is top management involvement for the better interest of the stakeholders. The vision and policies of the top management should be implemented correctly
- Trustworthy feedback, evaluation procedure of teaching and learning, focus on continuous improvement should be made operative to gain high quality in all areas.
- The view of administrative leaders raised up to the overall dimensions of empowerment and their association with the implementation of total quality management.
- Administrative leadership was the backbone for implementing TQM methodology.
- Human resource planning, employee satisfaction ,involvement and empowerment were also supportive factor for achieving better performances.
- Training and education are also important in undertaking the change itself, preparing an institute for a change and institutionalizing it as a long-lasting portion of the organization.
- To avoid defects employees should be trained and encouraged. Quality professionals should train employees and other managers with TQM techniques to improve quality. For improving the production rate, the methods for prevention in reduction of defect or failure should be made clear to the employee and should be focus to implement it.

- Learning, development and training played an essential role in growing technical and information skills to all participants of the school, higher education, colleges and University institution.
- The use of total quality management (TQM) in educational industry will definitely unite educational grounds, rise employee satisfaction
- The influence of a TQM on teaching and learning strategies can increase learning and its importance on the quality of product, orientation to students, encouragement of teamwork, and a continuing desire to improve

Objectives of the study

1. To study the difference in the teacher educators perceptions of Total Quality Management and its dimensions (Constancy of purpose, Adopt a new philosophy, Cease tendency on inspection, Long term relationship, Improve constantly, Institute on the job training, Adopt and institute leadership, Drive out fear, Break down barriers between department, Eliminate slogans, Eliminate quotas, Abolish annual ratings, Education and self improvement, Involve everyone in the transformation) with respect to different age groups (25-35, 36-45, 46 and above).
2. To study the difference of teacher educators perception of leadership behaviour and its dimensions (Transformational leadership, Transactional leadership, Laissez-faire leadership) with respect to different age groups (25-35, 36-45, 46 and above).
3. To study the relationship between the teacher educators perception on leadership behaviour and its dimensions and TQM and its dimensions.

Variables of the Study

In the present study the following variables were considered:

Independent Variable

Total Quality Management

Dependent Variable

Leadership Behaviour

Moderator Variable

Age

Research Design

The present study is a descriptive survey method type research. The research design specifies the questions to be investigated, the process of sample selection, methods

of procedure to be followed, measurements to be obtained and comparison and other analyses to be made.

Hypotheses of the Study

1. There is no difference in the teacher educators perceptions of Total Quality Management and its dimensions (Constancy of purpose, Adopt a new philosophy, Cease tendency on inspection, Long term relationship, Improve constantly, Institute on the job training, Adopt and institute leadership, Drive out fear, Break down barriers between department, Eliminate slogans, Eliminate quotas, Abolish annual ratings, Education and self improvement, Involve everyone in the transformation) with respect to different age groups (25-35, 36-45, 46 and above).
2. There is no difference of teacher educators perception of leadership behaviour and its dimensions (Transformational leadership, Transactional leadership, Laissez-faire leadership) with respect to different age groups (25-35, 36-45, 46 and above).
3. There is no relationship between the teacher educators perception on leadership behaviour and its dimensions and TQM and its dimensions.

Research Tools Used

The following tools were used for collection of data.

- Survey Instrument to Measure Total Quality Management in Education (TQM)-Bonstingle based on his conceptualization of Demming's 14 points of TQM in Education (1992)
- Multifactor Leadership Behaviour Scale (LB) - Bernard Bass and Bruce Avolio (1995)

Sample

In the present study, the investigator used the stratified random sampling procedure to select the sample (participants). The sample was consisted of a 350 population of teacher educators of 34 colleges of education affiliated to Karnatak University, Dharwad.

Data Collection

Data was collected from teacher educators of Colleges of Education. The investigator personally visited the 34 Colleges of Education affiliated to Karnatak University, Dharwad and with the prior permission of the Principal administered the tools to 350 teacher educators. Clear cut instructions were given to fill up the tools.

Statistical Techniques

For the analyses of data collected, differential analysis, such as mean, standard deviation ,ANOVA, t-test, analysis and correlation analysis were used.

Data Analyses

Table-1 Pairwise Comparison Age Groups of Teacher Educators (25-34 Years, 35-44 Years and 45+ Years) with Respect to Total Quality Management and its Dimensions by Tukeys Multiple Posthoc Procedures

Variables	Age groups	25-34 years	35-44 years	45+ years
Total quality Management	Mean	118.4100	122.7000	126.4000
	25-34 years	-		
	35-44 years	0.0001*	-	
	45+ years	0.00001*	0.0081*	-
Adopt a New Philosophy	Mean	9.3054	9.9735	10.2710
	25-34 years	-		
	35-44 years	0.0411*	-	
	45+ years	0.0078*	0.6628	-
Cease tendency on Inspection	Mean	8.3234	8.7168	9.2857
	25-34 years	-		
	35-44 years	0.1761	-	
	45+ years	0.0006*	0.0979	-
Improve Constantly	Mean	8.7006	8.9735	9.7571
	25-34 years	-		
	35-44 years	0.5717	-	
	45+ years	0.0024*	0.0532	-
Adopt and Institute Leadership	Mean	8.1138	7.9735	8.9143
	25-34 years	-		
	35-44 years	0.8380	-	
	45+ years	0.0158*	0.0067	-
Education and Self Improvement	Mean	8.8743	9.2124	9.5714
	25-34 years	-		
	35-44 years	0.2933	-	
	45+ years	0.0228*	0.4115	-

*p<0.05

From the results of the above table, it can be seen that:

- The teacher educators belonging to 25-34 years and 35-44 years, 25-34 years and 45+ years; 35-44 years and 45+ years of age groups differ significantly with respect to total quality management at 5% level of significance. It means that, the teacher educators belonging to 45+ years of age group are higher on perception of total

quality management as compared to teacher educators belonging to 25-34 years and 35-44 years of age groups.

- The teacher educators belonging to 25-34 years and 35-44 years, 25-34 years and 45+ years of age groups differ significantly with respect to dimensions of total quality management i.e., adopt a new philosophy, cease tendency on inspection, improve constantly, adopt and institute leadership, and education and self improvement at 5% level of significance. It means that, the teacher educators belonging to 45+ years of age group are higher on perception of dimensions of total quality management i.e., adopt a new philosophy, cease tendency on inspection, improve constantly, adopt and institute leadership, and education and self improvement as compared to teacher educators belonging to 25-34 years and 35-44 years of age groups.

Table-2: Pair Wise Comparison of Age Groups of Teacher Educators (25-34 Years, 35-44 Years and 45+ Years) with Respect to Leadership Behaviour and its Dimensions by Tukeys Multiple Posthoc Procedure

Variable	Age groups	25-34 years	35-44 years	45+ years
Leadership Behaviour	Mean	76.1740	86.4340	93.7290
	25-34 years	-		
	35-44 years	0.00001*	-	
	45+ years	0.00001*	0.0081*	-
Transformation leadership	Mean	33.1680	39.3360	43.5140
	25-34 years	-		
	35-44 years	0.00001*	-	
	45+ years	0.00001*	0.0067*	-
Transactional Leadership	Mean	20.9100	22.4690	24.3710
	25-34 years	-		
	35-44 years	0.1526	-	
	45+ years	0.0013*	0.1659	-
Laissez faire leadership	Mean	22.2340	24.8580	25.8860
	25-34 years	-		
	35-44 years	0.0022*	-	
	45+ years	0.0002*	0.5412	-

*p<0.05

From the results of the above table, it can be seen that:

- The teacher educators belonging to 25-34 years and 35-44 years, 25-34 years and 45+ years; 35-44 years and 45+ years of age groups differ significantly with respect to leadership behaviour at 5% level of significance. It means that, the teacher educators belonging to 45+ years of age group are higher on perception of leadership behaviour as compared to teacher educators belonging to 25-34 years and 35-44 years of age groups.

- The teacher educators belonging to 25-34 years and 35-44 years, 25-34 years and 45+ years; 35-44 years and 45+ years of age groups differ significantly with respect to dimensions of leadership behaviour i.e., transformation leadership, transactional leadership and laissez faire leadership, at 5% level of significance. It means that, the teacher educators belonging to 45+ years of age group are higher on perception of dimension of leadership behaviour i.e., transformation leadership, transactional leadership and laissez faire leadership as compared to teacher educators belonging to 25-34 years and 35-44 years of age groups.

Table-3: Results of Correlation Coefficients between Teacher Educators Perception of Leadership Behaviour and its Dimensions with Total Quality Management and its Dimensions

Variables	Leadership behaviour	Transformation leadership	Transactional leadership	Laissez fair leadership
Total quality Management	r=0.8475*	r=0.6989*	r=0.6341*	r=0.5329*
Constancy of Purpose	r=0.3108*	r=0.2348*	r=0.2717*	r=0.1808*
Adopt a New Philosophy	r=0.1963*	r=0.1572*	r=0.1672*	r=0.1071
Cease tendency on Inspection	r=0.2788*	r=0.2506*	r=0.0917	r=0.2727*
Long Term Relationship	r=0.2353*	r=0.1803*	r=0.1735*	r=0.1770*
Improve Constantly	r=0.2455*	r=0.2136*	r=0.1861*	r=0.1314*
Institute on the Job Training	r=0.2970*	r=0.2575*	r=0.2663*	r=0.1122*
Adopt and Institute Leadership	r=0.3118*	r=0.2174*	r=0.3059*	r=0.1664*
Drive Out Fear	r=0.1782*	r=0.1452*	r=0.1667*	r=0.0849
Breakdown Barriers Between Department	r=0.1858*	r=0.1517*	r=0.1340*	r=0.1223*
Eliminate Slogans	r=0.1331*	r=0.1044	r=0.0310	r=0.1804*
Eliminate Quotas	r=0.2886*	r=0.2383*	r=0.1731*	r=0.2411*
Abolish Annual Ratings	r=0.2153*	r=0.1978*	r=0.1585*	r=0.1077
Education and Self Improvement	r=0.2571*	r=0.2665*	r=0.1993*	r=0.0537
Involve Everyone in the Transformation	r=0.3456*	r=0.2655*	r=0.2722*	r=0.2359*

*p<0.05

From the results of the above table, it can be seen that

- A significant and positive relationship was observed between total quality management with leadership behaviour ($r=0.8475$, $p<0.05$), total quality management with dimension of leadership behaviour i.e. transformation leadership ($r=0.6989$, $p<0.05$), transactional leadership ($r=0.6341$, $p<0.05$) and laissez fair leadership ($r=0.5329$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the total quality management and leadership behaviour and its dimensions are dependent on each other.
- A significant and positive relationship was observed between constancy of purpose of total quality management with leadership behaviour ($r=0.3108$, $p<0.05$), constancy of purpose of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.2348$, $p<0.05$), transactional leadership ($r=0.2717$, $p<0.05$), transactional leadership ($r=0.1808$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the constancy of purpose of total quality management and leadership behaviour and its dimensions are dependent on each other.
- A significant and positive relationship was observed between adopt a new philosophy of total quality management with leadership behaviour ($r=0.1963$, $p<0.05$), adopt a new philosophy of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.1572$, $p<0.05$), normative commitment ($r=0.1672$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, adopt a new philosophy of total quality management and leadership behaviour and its dimensions are dependent on each other.
- A significant and positive relationship was observed between cease tendency on inspection of total quality management with leadership behaviour ($r=0.2788$, $p<0.05$), cease tendency on inspection of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.2506$, $p<0.05$), laissez faire leadership ($r=0.2727$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the cease tendency on inspection of total quality management and leadership behaviour and its dimensions are dependent on each other.
- A significant and positive relationship was observed between long term relationship of total quality management with leadership behaviour ($r=0.2353$, $p<0.05$), long term relationship of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.1803$, $p<0.05$), transactional leadership ($r=0.1735$, $p<0.05$), laissez fair leadership ($r=0.1770$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the long term relationship of total quality management and leadership behaviour and its dimensions are dependent on each other.
- A significant and positive relationship was observed between improve constantly of total quality management with leadership behaviour ($r=0.2455$, $p<0.05$), improve constantly of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.2136$, $p<0.05$), transactional leadership ($r=0.1861$, $p<0.05$) and laissez faire leadership ($r=0.1314$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means

- that, the improve constantly of total quality management and leadership behaviour and its dimensions are dependent on each other.
- A significant and positive relationship was observed between institute on the job training of total quality management with leadership behaviour ($r=0.2970$, $p<0.05$), institute on the job training of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.2575$, $p<0.05$), transactional leadership ($r=0.2663$, $p<0.05$) and laissez fair leadership ($r=0.1122$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, institute on the job training of total quality management and leadership behaviour and its dimensions are dependent on each other.
 - A significant and positive relationship was observed between adopt and institute leadership of total quality management with leadership behaviour ($r=0.3118$, $p<0.05$), adopt and institute leadership of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.2174$, $p<0.05$), transactional leadership ($r=0.3059$, $p<0.05$), and laissez faire leadership ($r=0.1664$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, adopt and institute leadership of total quality management and leadership behaviour and its dimensions are dependent on each other.
 - A significant and positive relationship was observed between drive out fear of total quality management with leadership behaviour ($r=0.1782$, $p<0.05$), drive out fear of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.1452$, $p<0.05$) and transactional leadership ($r=0.1667$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, drive out fear of total quality management and leadership behaviour and its dimensions are dependent on each other.
 - A significant and positive relationship was observed between breakdown barriers between Department of total quality management with leadership behaviour ($r=0.1858$, $p<0.05$), breakdown barriers between Department of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.1517$, $p<0.05$), transactional leadership ($r=0.1340$, $p<0.05$) and laissez faire leadership ($r=0.1223$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, breakdown barriers between Department of total quality management and leadership behaviour and its dimensions are dependent on each other.
 - A significant and positive relationship was observed between eliminate slogans of total quality management with leadership behaviour ($r=0.1331$, $p<0.05$), eliminate slogans of total quality management with dimension of leadership behaviour i.e. laissez faire leadership ($r=0.1804$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, eliminate slogans of total quality management and leadership behaviour and its dimension laissez faire leadership are dependent on each other.
 - A significant and positive relationship was observed between eliminate quotas of total quality management with leadership behaviour ($r=0.2886$, $p<0.05$), eliminate quotas of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.2383$, $p<0.05$), transactional leadership ($r=0.1731$, $p<0.05$), and laissez faire leadership ($r=0.2411$, $p<0.05$) at 5% level of significance.

- Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, eliminate quotas of total quality management and leadership behaviour and its dimensions are dependent on each other.
- A significant and positive relationship was observed between abolish annual ratings of total quality management with leadership behaviour ($r=0.2153$, $p<0.05$), abolish annual ratings of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.1978$, $p<0.05$), and transactional leadership ($r=0.1585$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, abolish annual ratings of total quality management and leadership behaviour and its dimensions are dependent on each other.
 - A significant and positive relationship was observed between education and improvement of total quality management with leadership behaviour ($r=0.2571$, $p<0.05$), education and improvement of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.2665$, $p<0.05$), and transactional leadership ($r=0.1993$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, education and self improvement of total quality management and leadership behaviour and its dimensions are dependent on each other.
 - A significant and positive relationship was observed between involve everyone in the transformation of total quality management with leadership behaviour ($r=0.3456$, $p<0.05$), involve everyone in the transformation of total quality management with dimensions of leadership behaviour i.e. transformation leadership ($r=0.2655$, $p<0.05$), transactional leadership ($r=0.2722$, $p<0.05$), and laissez faire leadership ($r=0.2359$, $p<0.05$) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, involve everyone in the transformation of total quality management and leadership behaviour and its dimensions are dependent on each other.

Major Findings of the Study

- The teacher educators belonging to 45+ years of age group are higher on perception of total quality management as compared to teacher educators belonging to 25-34 years and 35-44 years of age groups.
- The teacher educators belonging to 45+ years of age group are higher on perception of dimensions of total quality management i.e., adopt a new philosophy, cease tendency on inspection, improve constantly, adopt and institute leadership, and education and self improvement as compared to teacher educators belonging to 25-34 years and 35-44 years of age groups.
- The teacher educators belonging to 45+ years of age group are higher on perception of leadership behaviour as compared to teacher educators belonging to 25-34 years and 35-44 years of age groups.
- The teacher educators belonging to 45+ years of age group are higher on perception of dimension of leadership behaviour i.e., transformation leadership, transactional leadership and laissez faire leadership as compared to teacher educators belonging to 25-34 years and 35-44 years of age groups.

- The total quality management and leadership behaviour and its dimensions are dependent on each other.
- The constancy of purpose dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Adopt a new philosophy dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- The cease tendency on inspection dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- The long term relationship dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- The improve constantly dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Institute on the job training dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Adopt and institute leadership dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Drive out fear dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Breakdown barriers between Department dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Eliminate slogans dimension of total quality management and leadership behaviour and its dimension laissez faire leadership are dependent on each other.
- Eliminate quotas dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Abolish annual ratings dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Education and self improvement dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.
- Involve everyone in the transformation dimension of total quality management and leadership behaviour and its dimensions are dependent on each other.

Implications of the Study

- The main concept of the study is throwing light on total quality management of colleges of education. It is important because the total quality management provides better human resource to the country.
- The study provides opportunity for educational planners to plan systematically by using research data on total quality management of colleges of education.
- Total quality management and present study on total quality management provides colleges of education future oriented thinking in education planning and implementation of these plans with respect to society's needs.
- The study on total quality management gives guidelines for educational management to fulfill colleges needs with respect to teachers, students and overall college perspective.

- Total quality management of colleges of education study caters to perceive the whole education system as whole thing.

Conclusion

Quality management is essential for the survival of institution in the society. Every institution has different parameters to measure the quality of education. Setting up standards is the most crucial activity of an education institution. However if the institution identifies correct components then quality is achievable. In this study the investigator has attempted to identify the teacher educators perception of leadership behaviour of principals of colleges of education that leads to a greater outcome. Due to the intense competition in the society, every institution is facing threat. The main idea is to maintain an appropriate system with quality standards. Thus exercising efficient activities leads to the best results. All the recognized institutions should develop their own quality management unit. The creation of such department in the university will encourage the institution to adopt self assessment methodology. Quality assurance agency has provided guidance in detail to the institutions relating to the quality standards and policies. It will then also help the institution scan their entire system from pedagogy to the course development. Even the offering of new courses to the adoption of new teaching method would be done through the quality management unit. However due to increase knowledge of the teacher educators many institutions are gaining edge out of this system. Thus all the institutions should adopt the quality assurance practices.

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