

The Impact Of Total Quality Management (TQM) On The Efficiency Of Academic Performance - Empirical Study - The Higher Education Sector – The University Of Jordan

Dr. Ibrahim Awwad Salem Mashagba

Abstract: This study aims to identify the total quality management and its impact on the efficiency of academic performance in Jordanian universities, through the knowledge level of the application of the principles of total quality management in the University of Jordan, from the viewpoint of its employees (faculty members) and to identify the most TQM principles applied in the university as seen employees faculty members and activating the role of interested and administrators Jordan University, and other universities to apply the principles of total quality management and work on enhancing them as well as to identify the requirements of the overall quality of the educational system and to identify the appropriateness of the education system at the University of Jordan to total quality management. So is the problem of the study in a survey TQM principles applied in the University of Jordan, as perceived by its employees through a four principles of quality requirements in education, follow-up of the educational process, the development of human resources (faculty members), and academic administration decisions. The study found many of the recommendations the most important need to focus senior management in educational institutions on the process of applying the principles of total quality management to improve the system of university education and guide the process of decision-making in Jordanian universities, especially the University of Jordan in the preparation of the cadres of the Academy are eligible to lead the process of change and the impact on efficiency and productivity to reach the learning outcomes high quality and the need for attention out of total quality management as a specific quality assurance process in organizations that do not aim to profit any service organizations such as educational.

Index Terms: TQM Total Quality Management, the University of Jordan, Faculty Members, educational institutions, Academic Performance, Higher Education Sector.

1 INTRODUCTION

THE times in which we live in witnessed a number of variables in all areas of life, where contributed scientific and technological progress in increasing recognize the need for change and development and keeping up all the developments of civilization, which led to a great interest in the operations of education reform in most countries of the world and gained overall quality of attention unprecedented to the extent that making thinkers call age the age of quality as one of the main pillars of modern management model to keep up with developments in local and international sides, and became the global community looks at the overall quality and educational reform as two sides of the same coin is the key pillars of the Total Quality Management of great importance in the context of scientific application in various institutions. However, these cornerstones that will indicate to the basic facts that should be based on need when initiating using this method practical application in various organizations as it refers to the construction of philosophical ideas underlying the scientific aspect of the application has been varied opinions academics and thinkers on the subject of setting priorities and the importance of these cornerstones of the researcher to another but it is in terms of the intellectual point of view still constitute a critical juncture in the possibility of the application of Total Quality Management.

This study came to find out the extent of interest and the application of educational institutions to TQM principles to produce outputs of high educational level achieved goals and the competitive advantage of these institutions is based on the continuous development and improvement of the educational process through existing and employees alike as, where the Jordanian University one of these educational institutions of modern in Hashemite Kingdom Of Jordan, And which adopted principles of total quality as a goal to strive to achieve from the beginning of its establishment for learning outcomes compete with the local market and the Arab world, this study was aimed to measure the impact of quality management on the efficiency of the overall academic performance in the Kingdom (**An Empirical Study on The University of Jordan**) and to achieve this goal, the researcher will design a questionnaire, and distributed to the community study of faculty members in the University of Jordan.

2 THE STUDY PROBLEM

The problem with the study in the survey TQM principles applied in the University of Jordan as perceived by its employees through the four principles:

- A quality requirements in education
- Follow-up of the educational process
- Manpower development (represented by faculty members)
- The decisions of academic administration
- In trying attempt to answer the following questions: -

2.1.What is the impact of the application of the principles of total quality management on the efficiency of academic performance at the University of Jordan?

2.2.What is the impact on education quality requirements on the efficiency of academic performance at the University of Jordan?

- *Dr. Ibrahim Awwad Salem Mashagba, Assistant Prof, Majmaah University*

- 2.3.** What is the impact of the follow-up of the educational process on the efficiency of academic performance at Jordan University?
- 2.4.** What is the impact of the development of human resources (the faculty members) on the efficiency of academic performance at Jordan University?
- 2.5.** What is the impact of the administration Academy decisions on the efficiency of the academic performance at Jordan University?

3 THE STUDY IMPORTANCE

The importance of this study raise from vitality of the matter of subject, in addition to the attention of Arab libraries and especially in Jordan in such studies, also This study represents a reference benefit scholars, students, and those interested in showing the role of senior management in educational institutions in the process of applying the principles of total quality management in improving the system of higher education as well as being useful for decision makers in Jordanian universities, especially in the preparation of the consolidated university academic staff qualified to lead the process of change and the impact on efficiency, productivity and access to the learning outcomes of high quality. Therefore, the researcher will attempt to shed light on the key principles of TQM which mentioned in the problem of study to be more useful for all those who have been mentioned in item in importance of the study.

4 THE STUDY OBJECTIVES

This study aims to shed light on:

- 4.1.** Determine the level of application of the principles of total quality management in the University of Jordan, from the viewpoint of its employees (faculty members).
- 4.2.** Identify the most TQM principles applied in the university as seen by its employees (faculty members).
- 4.3.** Activating the role of interested and Administrators University of Jordan, and other universities to apply the principles of total quality management and work on enhancing them.
- 4.4.** Identify the requirements of the overall quality of the educational system.
- 4.5.** Identify the appropriateness of the education system at the University of Jordan to TQM.

5 THE STUDY HYPOTHESES

Depending on the study problem, the researcher formulates hypotheses for the preparation of this study as follows:

5.1. The 1st hypothesis:

H0: There is No effect of the application of the principles of total quality management on the efficiency of academic performance at University of Jordan.

5.2. The 2nd hypothesis:

H0: There is No effect to the requirements of quality in higher education on the efficiency of academic performance at the University of Jordan.

5.3. The 3rd hypothesis:

H0: There is No effect of the follow-up of the educational process on the efficiency of academic performance at the University of Jordan.

5.4. The 4th hypothesis:

H0: There is No impact to the development of human resources (the faculty members) on the efficiency of academic performance at the University of Jordan.

5.5. The 5th hypothesis:

H0: There is No effect of the Administration Academy decisions of the on the efficiency of academic performance at the University of Jordan.

6 LITERATURE REVIEW

6.1. Study of Al-Jaz Iman (2006) under tile: The impact of the modern systems cost to control the overall quality in industrial farms.

The study aimed to that system costs a tool to apply the concept of total quality, and as a tool to adjust the overall quality in industrial enterprises. The study pointed out the importance of having quality products and comprehensive study highlighted the most important concepts, tools and techniques for managing the overall quality. The study shows the important role of modern systems as a tool for cost control, organization and coordination and enhances the performance and quality control in industrial enterprises Sudanese. The study concluded that the system is based on a comprehensive quality control systems and methods of modern costs mainly.

6.2. Study of Al-Amin Taha (2005) under tile: The impact of the application of the concept of total quality management TQM on the institutions of the state.

This aims to improve the performance of organizations through the interest component of quality. The study aimed to that there is a relationship between the application of total quality management and increase productivity, and that the application of total quality management means increased profitability. The study concluded that there is a weakness in the official interest by the state apparatus of Administrative Development ordered the overall quality and not give it enough priority , and that most of the public institutions that have tried TQM implementation was a result of the initiatives of self- originated from within , the concept and principles of total quality management in its ability to strengthen Authority competitive capabilities in the future , disinterest supervisory authorities and other development-related administrative concepts of total quality management and the provision of material and moral support to the body in order to develop the experience of the application.

6.3. Study of No'man Al-Musawi (2003), entitled: Develop a tool to measure the total quality management in higher education institutions

The study aimed to build a tool to measure the total quality management in higher education institutions through the verification from sincerity and persistence and their applicability in the educational institutions and the study found building measure included 48 paragraph divided into four areas of quality management in institutions of higher education, a quality requirements and follow-up and the development of human resources and decision-making, community service and study recommended the application of this measure in higher education institutions in the Arab region.

6.4. The Study Waks and Frank (1996) titled ((Entrance List of Total Quality Management: Principles and ISO standards (9000) in engineering education))

The study aimed to Identify the principles and standards of total quality management and discussed the principles and strategies of total quality management in engineering education has also developed several tools and methods for managing the overall quality suitable for the effectiveness of education and suggested a course for total quality management includes discussions and readings and case study and suggestions.

6.5. Study of Motwani (1995) entitled ((The application of total quality management in education efforts, modern and future trends))

The study included four theoretical trends in the quality of education: the definition and procedures, and normative studies, and conceptual models and the application and evaluation. The study includes on the stages of the application of total quality management in education which is awareness and commitment, planning, program implementation and evaluation and future trends to those aspects of the proposed.

6.6. Study of Alexander & keeler (1995) entitled: ((The application of the entrance of Total Quality Management TQM in Education))

The results indicated that the total quality management is working to solve educational problems, has been organizing this study in four sections linked model of Total Quality Management: Application Form (TQM) in business and industry, schools, and language, use the formula rhetorical.

6.7. Study of Bin Billa Hamed (2004) ((the impact of the application of the concept of total quality management on job satisfaction))

The problem of the study is that some businesses lack the application of some of the methods of modern management, which negatively affects the continuity, including the manner of TQM, which works to upgrade the performance and provide product and service excellence, so the quest is considering the extent to which the application of total quality management in the factory (Bizyanos) water invasive satisfaction employees and thus improve the performance of increased production. The study found that the most important requirements of TQM need persuasion and consent of senior management of the importance of these modern management , and require TQM Order all of the senior management and staff to make effective efforts to apply this administration which in turn help upgrade management , as the application of total quality management to improve the quality of products , the application of TQM comprehensive application leads to job satisfaction for employees because TQM aims to improve the work at each stage is also working on improving the performance of employees and their attention and improve their living conditions .

6.8. The Study of Taher, Mshaer Abu Zeid (2004): ((The impact of the application of the concept of total quality management on productivity))

The study aimed to examine the state of Khartoum Company for the manufacture of gum Arabic to get to know the company's strategy to satisfying the customer first before profit

and the role of TQM in the company's success globally, and stand on the most important achievements of the company in the field of quality control. The problem of the study in the industrial organizations in Sudan does not pay attention to total quality management system, which has become the basic foundation for all organizations to industrial world. Study found that the total quality management system of modern administrative system, where most of the business organizations in the public and private sectors tend to be applied to achieve management overall quality of their output, whether goods or services. Through the previous view of the studies and research conducted on the subject of Total Quality Management (TQM) can be drawn as follows:

- Results of all studies in Arab and foreign countries to the importance of the application of total quality management in the educational process.
- The studies and research that conducted in the field of total quality management in the educational process Confirmed to continue instruction in the application of this management style because of its interest back to the university and the community alike.
- Most previous studies have focused in this area and the reality of total quality management in educational institutions.
- Researcher benefited from previous studies in the identification of a set of aspects, including scientific methodology, and scientific instruments used, and statistical methods, and methods of information processing, and original references in this area.
- All previous studies have been applied to educational institutions outside the Hashemite Kingdom of Jordan and focused on the schools and universities, government and the public and this is what has characterized the current search terms have been applied to the University of Jordanian government and the old establishment.

7 CONCEPTUAL FRAMEWORK

7.1. Comprehensive definition of the concept (Total Quality Management) (TQM):

It is the continuous development of operations management and that reviewed and analyzed and the search for ways and means to raise the level of performance and reduce the time to accomplish by cutting out all the tasks and functions are useless and unnecessary for the client or the process by reducing the cost and raise the level of quality basing in all stages of development on the requirements and needs of the client (Khudair Kazem Hamoud, 2006).

7.2. The development of the concept: (TQM) Total Quality Management:

The concept of total quality management has passed in four main stages:

7.2.1. The 1st phase: Testing

The analysis of quality focus only on the product, and the decision was the main prevailing during that era is the decision to define when products are inspected and what the number of products which are subject to examination. Process involves examination of activities related to the measurement and selection and inspection of the product and determine the

product's compliance with the technical specifications laid down , so the products conforming to the technical specifications can be delivered to the customer , either non-conforming products with the technical specifications , it will either destroy or re- work on them or they are sold at lower prices , the process of checking the product was only focused on the discovery of mistakes and do corrected err or defect or damage has actually happened , the process of examination discovered a mistake , but it did not prevent him from the ground .

7.2.2. The 2nd phases: Quality Control

Quality control includes all activities and statistical methods included maintaining the interview Item Specification. As says Dale Bester that quality control is the use of tools and do different activities to develop the quality of the product or service, and thus Controlling quality cover to make sure that the design Item conformity with the specifications set out, and make sure and therefore has extended quality control process to include the design and performance and we can say that this stage adopted on the use of modern statistical methods for quality control.

7.2.3. The 3rd phases: Quality Assurance

This phase focused on directing all efforts to prevent the occurrence of mistakes and thus described the stage as based on a system basis to prevent the mistakes from the beginning. Creating solve the problem, do not match the specifications is not an effective method, where the best is to prevent the problem already and the elimination of their causes since the beginning. Quality assurance process that includes all the necessary measures to provide confidence that the product or process meets the quality requirements, and therefore the administration's thinking style should be changed to develop a regulatory philosophy relies on prevention rather than inspection and discovered the error after it's too late. The quality assurance process includes the planning stage for quality, in addition to the need to examine the costs and quality comparable benefits can be collected from the application of quality assurance systems.

7.2.4 The 4th phases: Total Quality Management (TQM)

The concept of total quality management to emerge in the eighties of the twentieth century, where includes this concept quality processes in addition to the quality of the product, and focuses on teamwork and encourage participation of workers and their integration, in addition to the focus on the customer and the participation of suppliers and there are differences in many Overall, between traditional and total quality management

7.2.5 Comparison between Traditional management and Total Quality Management

TABLE (1)

Traditional management and Total Quality Management

Traditional Management	TQM
Close monitoring nitpick	Self-censorship
Unilateral action	Teamwork and team spirit
Focus on the product	Focus on the product and processes
Participation staff	Integration of staff
Improvement in time of need	Continuous Improvement
Rigidity of policies and procedures	Flexible procedures and policies
Data Saving	Data analysis, comparisons interlayer
Focus on profit-taking	Focus on customer satisfaction
Perception of the suppliers that they are exploiting	Participation suppliers
Internal customer	Internal and external customer

8 METHODOLOGY

8.1. The methods of data collection:

8.1.1. Information and data from secondary sources:

It Have been collected from domestic and foreign Studies, books, articles, theses and previous research, and the information network (Internet).

8.1.2. Primary sources:

Through a questionnaire that was designed for the purposes of testing hypotheses, which have been distributed to the Random sample to many faculty members in the University of Jordan.

8.1.3. The researcher analyzed the data collected through the questionnaire and test hypotheses using the SPSS system for statistical analysis, and the use of statistical methods to measure the relationship between the variables of the study.

8.2. The Sample of Study

The number of students at the University of Jordan comparable to the 120 thousand students, including a good percentage (12%) of foreign students under the so-called International Program, and the number of graduates, 200 thousand, and the number of faculty members up to 1,200 Lecturer about one-third of those who hold degrees Prof. (Professor) graduates of American universities and the European, Asian and Arabic in addition to graduates of the University of Jordan itself. So the researcher takes a Random sample from the (1200) Faculty members by (120) Faculty members between Professor, Associate Prof, Assistant Prof & Lecturer in all faculties in University of Jordan, so it appears that the sample express 10% from the population of study.

8.3. The questionnaire

The questionnaire that made by researchers depend on (Likert) scale or (Five Dimensions measure) to find a basis that we can use it to judge on the impact of each variable on the Independent variable in our study, and the main form for Likert Scale as follow:

TABLE (2)
LIKERT SCALE

Answer	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
weight	1	2	3	4	5

After the researcher distributed the questionnaire mentioned above, which were 120 questionnaires to faculty members in University of Jordan, of which 80 returned questionnaire recover **66.6%**, and the researcher think it's enough to make judge on the hypotheses'.

8.4. Sincerity of and convenient research instrument

The researcher display the scale on five arbitrators in the field of management education and asked them to determine the extent of a holistic measure of the principles of total quality management and health science paragraphs and the degree of correlation of each standard field which included underneath it and add new paragraphs, delete, or modify and Health linguistic paragraphs and validity of the scale of the application.

8.5. Constancy of the instrument:

Has been checked and Constancy the tool on all members of the study sample consisting of (120) faculty member, so the researcher extracted the reliability coefficient using equation (Cronbach's alpha) to assess the degree of homogeneity and harmony of the areas of study, the total score and the following table illustrates this:

TABLE (3)

RELIABILITY COEFFICIENTS FOR THE FIELDS OF STUDY AND THE TOTAL SCORE OF THE SCALE BY THE EQUATION OF ALPHA

S.R	Area	Number of Paragraph	Value of Alfa
1	The application of the principles of TQM	10	0.91
2	The requirements of quality in higher education.	10	0.90
3	The follow-up of the educational process	10	0.89
4	The development of human resources (the faculty members)	10	0.93
5	The Administration Academy decisions	10	0.91
*	TOTAL	50	0.96

As reliability coefficient extracted by bringing retail midterm (0.908) and then using the equation $\rho_{tt} = \frac{r_{tt}}{1 - r_{tt}}$ Spearman Brown bringing stability coefficient (0.96) is extracted reliability coefficients for this measure is suitable and meet for the purposes of the study.

8.6. Testing Hypothesis

After the implementing the Likert scale to collect the variables Data the researcher use these data to Test the Hypothesis as follows:

8.6.1. The 1st hypothesis:

H0: There is No effect of the application of the principles of total quality management on the efficiency of academic performance at University of Jordan

TABLE (4)
RESULT OF THE 1ST HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
The application of the principles of TQM	80	3.02	0.81	0.00

The table above (4) shows that the significant value of 0.00 which is less than the value of 0.05 means that: Means **accepting** the sample surveyed of the term and the arithmetic mean of the answers respondents is **3.02** which are greater than the Default mean (3) thus the respondents approve of the phrase.

The result:

There is effect of the application of the principles of total quality management on the efficiency of academic performance at University of Jordan.

8.6.2. The 2nd hypothesis:

H0: There is No effect to the requirements of quality in higher education on the efficiency of academic performance at the University of Jordan.

TABLE (4)
RESULT OF THE 2ND HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
The requirements of quality in higher education	80	3.55	0.77	0.00

The table above shows that the significant value of 0.00 which is less than the value of 0.05 means that: Means **accepting** the sample surveyed of the term and the arithmetic mean of the answers respondents is **3.55** which are greater than the Default mean (3) thus the respondents approve of the phrase.

The result:

There is effect to the requirements of quality in higher education on the efficiency of academic performance at the University of Jordan.

8.6.3. The 3rd hypothesis:

H0: There is No effect of the follow-up of the educational process on the efficiency of academic performance at the University of Jordan.

TABLE (5)
RESULT OF THE 3RD HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
follow-up of the educational process	80	3.9	0.79	0.00

The table above shows that the significant value of 0.00 which is less than the value of 0.05 means that: Means **accepting** the sample surveyed of the term and the arithmetic mean of the answers respondents is **3.9** which are greater than the Default mean (3) thus the respondents approve of the phrase.

The result:

There is No effect of the follow-up of the educational process on the efficiency of academic performance at the University of Jordan.

8.6.4. The 4th hypothesis:

H0: There is No impact to the development of human resources (the faculty members) on the efficiency of academic performance at the University of Jordan.

TABLE (6)
RESULT OF THE 4TH HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
the development of human resources	80	3.1	0.87	0.00

The table above shows that the significant value of 0.00 which is less than the value of 0.05 means that: Means **accepting** the sample surveyed of the term and the arithmetic mean of the answers respondents is **3.1** which are greater than the Default mean (3) thus the respondents approve of the phrase.

The result:

There is impact to the development of human resources (the faculty members) on the efficiency of academic performance at the University of Jordan

8.6.5. The 5th hypothesis:

H0: There is No effect of the Administration Academy decisions of the on the efficiency of academic performance at the University of Jordan.

TABLE (7)
RESULT OF THE 5TH HYPOTHESIS

Variable	DF	Mean	St.D	Sig* 0.05
The Administration Academy decisions	80	3.6	0.89	0.00

The table above shows that the significant value of 0.00 which is less than the value of 0.05 means that: Means **accepting** the sample surveyed of the term and the arithmetic mean of the answers respondents is **3.6** which are greater than the Default mean (3) thus the respondents approve of the phrase.

The result:

There is effect of the Administration Academy decisions of the on the efficiency of academic performance at the University of Jordan.

9 CONCLUSION

- 9.1. The study showed that there is a positive impact for the application of the principles of total quality management on the efficiency of academic performance in Jordanian universities.
- 9.2. The study showed that there is a positive effect to the requirements of quality in higher education on the efficiency of academic performance in Jordanian universities.
- 9.3. The study showed that there is a positive impact for the follow-up of the educational process on the efficiency of academic performance Jordanian universities.
- 9.4. The study showed that there is a positive impact to the development of human resources (faculty members) on the efficiency of academic performance in Jordanian universities.
- 9.5. During the field study of the University adopted a strategy of care changes some of the actions and behaviors administrative ruling to be replaced by a culture of quality and behavior.
- 9.6. Through the study it became clear that universities adopt a philosophy of continuous improvement and development from the University of Jordan and then the other to commit themselves to the principles of total quality management and the integration of this philosophy with the university environment.
- 9.7. It turns out that the study by the Jordanian universities to seek the presence of the elements of the pillars of quality (physical and human), which is the basis for the implementation philosophy, which means TQM.

REFERENCES

- [1]. Sidney Ipressey Frances. P.Robinson and John. E Horrocke Psyegiy in education (NY. Harper 1959.
- [2]. Wdgar. Date, audio, visual methods in teaching, rev.ed. (N.Y 1997).
- [3]. Hillel son, Tabagat Wad dayfella-SN.R.vd1923.
- [4]. Yousif Fadlla Hassan, The penetration Islamic in the east ran Sudan- London 1996.

- [5]. Albert I. Oliver, Curriculum improvement 2nd ed (N.Y) 1977.
- [6]. Bester Field, D.H. Total quality management, N.J, Englewood cliffs, prentice hall.
- [7]. Christian N.Madu , Strategic TQM, (London ;quorum Books ,2002).
- [8]. Michael Armstrong, personal management,london,clays ltd.,1996.
- [9]. Rayan David, Total quality management, Empirical concepts and practical issues, Administrative science quarterly June, 2001.
- [10]. Jhon Ocland, Total Quality Management, Human professional, Vol.3, No.7, 2002.
- [11]. Alexander, Gary and Keeler, Carolyn (1995):Total Quality Management :The Emperor's Tailor , ERIC , ED:387922.
- [12]. Johannsen, Carl Gustav (2000): Total Quality Management in a Knowledge, Management Perspective, Journal of Documentation, V(56) N(1) , ERIC NO: E1608496.
- [13]. Motwani, Jaideep,(1995): Implementing T.Q.M in Education : Current Effort and Future Research Directions, Journal of Education for Business, V (71) N(2) November.
- [14]. Taylor,Steve and Bogdan, Robert (1997):Introduction to Qualitative Research Methods , new York : John Wiley sons.
- [15]. Waks , Shlomo, and Frank ,Moti (1996): Application of the T.Q.M Approach Principle and the ISO 9000 Standards in Engineering Education, European Journal of Engineering Education ,V (24) , N(3) P:249- 258 ,ERIC , ED: 607090.
- [16]. Hackman, J.R., & Wage man, R.(1995).Total Quality Management: Empirical, Conceptual, practical issues. Administrative science Quarterly, 40, 309-342.
- [17]. Hashmi, khurram (2005).Introduction And Implementation of Total Quality Management, <http://www.isixsigma.com>, from goole.com Retrieved on 30/09/2006.
- [18]. Horng, ching& huarng, Fenghueih(2002).TQM adoption by hospitals in Taiwan, Francis Group vol. 13, No 4/July/2002, pp 441-463. www.google.com. Retrieved on 7/10/2006.
- [19]. Karajewisky L.J.,& Ritz man k.p.,(1996). operation Management: Strategy and analysis, 4th.ed, Addison wisely pub. Co.
- [20]. Lawler, E.E(1994). Total Quality Management and employee involvement: Are they compatible? Academy of Management Executive, 8,68-76.
- [21]. Miller,Phillip&Yasin,Mahmoud M(2005) An empirical investigation of quality improvement initiatives in for-profit and not-for-profit hospitals in Tennessee,USA, From www.emeraldinsight.com retrieved on 20/11/2006.
- [22]. Mosadegh Rad,Ali Mohammad(2005). A survey of Total quality management in Iran: Barriers to successful implementation in health care organizations, Emerald Group Publishing Limited,Vol.,18 Issue,3,pp12-34 From www.emeraldinsight.com/095 retrieved on 20/11/2006.
- [23]. Parker, S.K., wall, T.D.,& Jackson, P.R.(1997)."That's not my job" Developing flexible employee work orientations, Academy of management journal, 40, 899-929.
- [24]. Peter Weeb, And Harold Bryant,"The challenge of kaizen Technology for American Businss competition"(1993). Journal of organizational change Management, vol.6, no. 4, 1993,pp.9-16.
- [25]. Robbins, Stephen p & Coulter, Mary,(2005). Management, 8th.ed., Pearson Education, Inc., Upper saddle River, New Jersey, 07458.
- [26]. Weech Robert J. Jacqueline's & Brannon, Diane(2000). Resource Dependence and Institutional elements in Nursing Home TQM Adoption. <http://www.pubmedcentral.nih.gov/picrender> from www.google.com.Retrieved on1/11/2006.