

Effect of Training on Implementation of Hard TQM Practice in Indian Pharmaceutical Sector

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ABSTRACT

Quality is the main concern of the various organizations, and it become very important when it comes in the name of pharmaceutical as it is related to human health. In this paper the impact of training is found out in Indian pharmaceutical sector. After multiple regressions is found that, training shows a major impact on TQM implementation.

Key Words: Training, TQM, pharmaceutical

INTRODUCTION

Quality of product and services is the main concern of companies now a days, as now customers are more and more concern about the quality, when it is the matter of pharmaceutical companies, quality becomes more serious issue as it is concerned with humanity.

According to ISO (9000, 2005)., "Total Quality Management is the management approach of an organization centered of quality, based on the participation of all its members and aiming at long term success through customer satisfaction, and benefits to all members of the organization and to society".

TQM emphasizes on a clear customer orientation both internal and external. The needs of the customer have to be satisfied. TQM is not limited to the quality department but involves all departments within the business organization. TQM involves everyone within the company; every employee should contribute his ideas of improvement of the work processes.

It is found that the various aspects of quality implementation can be divided into two areas: technical and management practices, Evans and Lindsay (1996) also observed that a total quality system is comprised of two distinct systems: the management system and the technical system, Management practices are related to HRM practices and technical are related to production quality.

The soft TQM is related to "Human Resource Management (HRM) characteristics" (Singh & Dubey, 2011). Training is related to the Soft aspects of TQM practices and it is considered as most important part for implementation of any change in organizations.

Training of employees is very important for enriching the human capital of the organization. Training and education are essential to provide new techniques and practices to employees that are necessary to TQM implementation. Training and education are basic need for change and it makes a base for change. Training should focus on building quality skills with equal attention paid to behavioral skills and quality tools needed for change in performance management and recognition (Palo & Padhi, 2005). Training must include explanation of overall company operations and product quality specifications. Training makes employees habitual of implementation of quality policy in routine life and day to day work. It reduces defects and wastage.

Hard aspects of TQM, are concerned with tools and systems that are necessary to support the implementation of soft factors (Black and Porter, 1996). It generally includes benchmarking, quality systems, quality assurance, just-in-time, zero defect, continuous improvement and innovation, information and performance measurement, process management, strategic

planning, process control, and product/service design (Lewis et al. 2006). As opposed to soft aspects of TQM which are more intangible, hard dimensions of TQM are more systems-oriented and tangible.

LITERATURE REVIEW

A brief literature review related to topic is given below to understand what earlier has been done by the researchers. Powell (1995) considered TQM as strategic tool for future resource. He reviewed TQM as competitive advantage. He identified that TQM success depends on some factors i.e. open organization, executive commitment and employee empowerment. It is less depends on Hard TQM factors i.e. benchmarking, training, flexible manufacturing. He identified the significance of Soft TQM aspect like employee empowerment, commitment, and involvement for success of Hard TQM factors.

Smyth and Scullion (1996) tried to compare two companies for the TQM and HRM linkage. The company which is focusing on HRM practices is giving more successful results as compared to the company which is not focusing so much on HRM practices in its initial stage. Positive relation is shown between in HRM and TQM practices, it causes a change in empowerment and style of management. Elements of TQM and HRM are closely associated with each other and successes of one depend upon the other.

Dale (1999) in his research project explained that some practices which are common in both of TQM/HRM like leadership, training, involvement, participation, co-operation and customer focus which leads to organizational excellence.

Wilkinson, Marchington and Daleuman (1994) had explained that now a day's emphasis was given more on the HR aspect of TQM. And involvement of personnel department is increasing day by day. It is suggested that TQM cannot achieve its objective until it is incorporated with HR functions. HR people play a creative role in TQM implementation. They contributed to the introductory phase and provide assistance to maintenance of TQM through reward strategies and recognition.

Vermeulen and Crous (2000) tried to find out the importance of training and education to implement quality in banking service industry. Most of organizations do not have the proper training program for TQM implementation. Only 33 percent employee program accept that company is using the appropriate training. Training is continuous program so training also should be in continuous form. TQM training is only successful when top management is involved properly. An overall TQM training strategy and plan should be developed and delegation of responsibility about training is must. Expert outside consultants should be hired if internal expertise is not available. The TQM training curriculum should be all inclusive and should address all issues which are important for improvement of quality. For effective training it is must the top management should aware about the training principles and training importance about quality.

Vouzas and Pshycogios (2007) while assessing the managers awareness of TQM identifies nine soft TQM concepts from the existing literature, that are employee involvement, continuous improvement, training, teamwork, empowerment, top management, commitment and supportive democratic management style and culture change. Out of these three are more important i.e continuous improvement, training and employee empowerment.

Fotopolous and Psomas (2010) explored the relation between Soft and Hard TQM practices and its effect on quality management results. Soft" and "hard" TQM elements both directly and indirectly effects quality management results. Customer focus is mainly influenced by the process improvement and than by soft factors. Market benefits are influenced by customer focus. They concluded that a both soft and hard factor equally affects quality management results. Customer satisfaction requires the company's quality improvement and the adoption of TQM principle. And adoption of TQM practices can help in improving company's performance.

Palo and Padhi (2003) measured the effectiveness of TQM training in Indian organizations. Training creates awareness about the TQM to employees. TQM training showed positive influence on building employees' commitment to the organization's quality policy and strategy, teamwork. Training reduces the stress level of employees and increases the skill levels of employees. Training did not play a positive role on customer satisfaction. Resource allocation is must for effective training. Training can be used an effective medium to create awareness among the employees and make effective use of TQM tools.

OBJECTIVES

After going through literature review, the study has been decided to carried out with following objectives of importance of training in Indian organizations and how it help in successful implementation of Hard TQM program in organizations.

METHODOLOGY

Research means to search closely, a deeper look into the problem and the way to deal with it is needed. Exploratory research is to explore the research problem and help in better understanding of the problem (Malhotra and Mukherjee, 2004). Here exploratory research design is used to clearly understand the problem and explain it in systemic manner.

Primary data is used in study which is collected with the help of structured questionnaire. Questionnaire was developed on a likert scale on five point scale from 1 to 5 (which moves from “not at all” to “large extent”) for the first two parts of the questionnaire i.e. Soft and Hard TQM practices. For organizational effectiveness item are also measured on likert scale which 1 to 5 (where 1 for “no change” to 5 for “major change”).

All the employees of the pharmaceuticals are considered a population for the study where simple random sampling technique is used to select the sample from the population. The area for study is bound to northern region of the country. The questionnaire is checked for reliability and validity. The collected data is tabulated and analyzed with the help of SPSS.

RESULTS

After data collection, the questionnaire is subjected to the factor analysis from where Soft TQM practices are reduced to 11 factors and Hard TQM practices are reduced to four factors. Then to study the impact of training on Hard TQM practices, data is subjected to multiple regressions.

The equation of regression is as below:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \dots + B_nX_n$$

Where Y is dependent variable, X is independent variables, a is constant or intercept and $b_1, b_2, b_3, \dots, b_n$ are slope (beta coefficient) for respective independent variable.

Here Training is taken as Independent variable and all the Hard TQM factors are taken as dependent variable.

Model 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.385 ^a	.148	.147	.92370936

a. Predictors: (Constant) Training, for Hard TQM Operating and manufacturing performance

The value of ‘r’ is 0.385 which indicate that there is the moderate degree of correlation between independent and dependent variable the value of R Square is found 0.148 which shows that 14.8 % variation in Hard TQM is because of training.

Model 2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.314 ^a	.099	.097	.95037242

a. Predictors: (Constant) Training, for Hard TQM benchmarking and statistical process control

The value of ‘r’ is 0.314 which indicate that there is the moderate degree of correlation between independent and dependent variable the value of R Square is found 0.099 which shows that 9.9 % variation in Hard TQM is because of training.

Model 3

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.255 ^a	.065	.063	.96783781

a. Predictors: (Constant), Training, for Hard TQM Audit and inspection

The value of ‘r’ is 0.255 which indicate that there is the moderate degree of correlation between independent and dependent variable the value of R Square is found 0.065 which shows that 6.5 % variation in Hard TQM is because of training.

CONCLUSION

After data analysis it was found that training shows different impact on hard TQM practices. It shows impact on all HARD practices but maximum impact is shown on operating and manufacturing processes, which make clear that for successful manufacturing processes, employees must be trained in new manufacturing and techniques.

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