A STUDY ON THE IMPACT OF QUALITY CIRCLES IN EMPLOYEE MOTIVATION AT HI-TECH ARAI LTD., MADURAI

Synopsis of the thesis submitted to the Madurai Kamaraj University for the award of the Degree of DOCTOR OF PHILOSOPHY IN MANAGEMENT STUDIES

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SYNOPSIS

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Introduction

“Quality control begins with education and ends with education”

- K. Ishikawa

When people’s literacy level increases, correspondingly their awareness of the quality of consumables also increases. The quality of the product is based on the perfection in the manufacturing process. Perfection comes from knowledge, skills and the ability of the worker who is involved in making the product. It is the responsibility of the management or the organization to keep the workers or make them knowledgeable and skilled. So the organisation, which is very particular about the quality of products should have a good organizational climate by providing all necessary infrastructure, and inducing the workers to work perfectly.

Globalisation has narrowed down the gaps between countries, people and societies. Whatever be the products manufactured and available in other countries they are made available easily in our country. It results is competition among the corporates. Quality is the most important factor in facing competition. The present trend of the people is to go for good quality products and they are never bothered about the price. Quality plays an important role in meeting the market demands.
Quality is one of the important factors in branding the product and the company. It is thus decided by the perfection of the product.

The responsibility of the company lies not only in manufacturing good quality products, but also, in taking necessary steps to produce the goods in sufficient numbers and to make the goods available in markets for the consumers. So the production function also is very much important in the process. All these processes are carried out by the Human Resource (HR) control. When the HR function is systematized, the expected results could easily be achieved.

Since it involves Human Resource, managing the human work force, is very essential to keep them on their toe by giving them all necessary support and satisfying all their needs to keep them happy and free from stress and worries.

When the literacy level increased, cultures mingled, people’s awareness went up, and life styles changed. These latest developments, resulted in some of the motivational factors not working at all. There may be some intangible factors, apart from the ones already developed by experts previously.

So far managements have enforced some of the motivational factors either directly or through the unions. But it satisfied only a few workers fully. Also the managements tried very hard to implement various types of organizational development strategies with the workers. To get rid of all these cumbersome
processes, a new strategy called “quality control” was evolved in the latter part of this 20th century.

**Need for the Study**

India is a very late starter in the Quality Control Movement. Protectionist policies and absence of competition relegated quality to the back stage. It is only since the advent of Japanese technology into India that QC has attracted attention. The opening of Indian economy to market forces and global competition since 1991, has now brought quality to the front stage. Even now, the need for and importance of comprehensive and continuous education in quality control methods at all job levels, from top management to shop floor workers are not sufficiently recognised and appreciated. They aim at preventing quality defects rather than detecting them. Still most of the companies follow Taylor model of treating shop floor workers as mere cogs in the production machine.

The researcher as a faculty member became interested in the quality concepts and tried to know in-depth practice. The area of the study being the company having collaboration with a Japanese company, the researcher thought that the company, should practise the QC process. After knowing the Hi Tech Arai Ltd., Madurai is actually practising the QC, the researcher wanted to study the QC in the light of Human Resource application and its impact on the productivity in the above organization. Since it will be a very arduous study to
take up the whole TQM concept in the company, the researcher took only the HR aspect in the TQM that is QC. If the study makes a good prospective result in terms of productivity, this may in future to lead the other companies improving quality production with quality work and workers.

Statement of the Problem

The statement of the problem either in question or as a decorative statement attempts to focus on a goal and thereby gives direction to the research problem. It must be limited in scope to arrive at a definite conclusion. A problem suggests a specific answer or conclusion. A cause-effect relationship may be suggested upon the basis of personal observation, experience and review of selected studies. The problem of study undertaken may be stated as under.

- Does the QC enhance or improve the relationship between employer and the employee?.
- Does the QC make the organisation exert lesser efforts in solving the problems?
- Is it true that the attitude of the employees is based on the QC activities?
- Does the employee or the QC member expect participation in decision-making?
• Does the employee or the QC member expect recognition by the management of the good work done by him?.

• Do the motivational factors really contribute to the productivity?

• Do the work environment and organisation climate have an impact on workers’ quality performance.

• Is the improvement in the work efficiency due to QC activity?.

• Are the belongingness and organisational citizenship of employee the result of QC activities?.

• Is the participating management very well practised through Q.C.?

**Objectives of the Study**

The study has the objectives as stated below:

1. To study the working of QC in Hi Tech Aray Ltd.,

2. To study the respondents’ profile in detail.

3. To evaluate the working of some motivational factors in productivity due to Q.C.

4. To analyse whether the Q.Cs. improve the efficiency and various skills of workers.

5. To study how far Q.C. serves the purpose of the employees.

6. To study how far Q.C. enhances the attitude of job satisfaction.

7. To study the Q.C’s role in shaping the employees more involved with organisation.
8. To study the employees contribution to Q.C.
9. To study how far the employees are involved in Q.C. activities.
10. To suggest uniform procedure, so as to eliminate disparities, and favouritism among and towards employees.
11. To study whether there is increase in productivity due to establishment of Q.Cs.
12. To investigate financial progress in the organisation due to Q.Cs activities.
13. To make useful suggestions on the basis of findings.

Hypothesis of the Study

Following null hypothesis was framed to find out whether the Q.C. has actually improved the various skills of the employees.

Hi: There is no significance difference in improvement of skills among workers after joining Q.C.

Significance of the Study

This study is done to assess the Quality Circle activities mainly in relation to motivation. This study may throw light on whether the QC activities motivate the employees towards higher productivity and solve the problems. And also to find out if the persistent efforts and activities result in any improvement in
employee skills, attitude and whether the work minimisation and maximum utilisation of skills and energy are actually welcomed by employees.

The findings of the study may help in planning the future course of action in areas of H.R. This study may help the other similar organisations in improving various skills of the worker and make him part and parcel of the organisation and to establish Q.Cs. in the organisation

**Methodology**

**Sample and Population**

For this study Hi Tech Aray limited, Madurai was taken as the universe. This study is mainly related to the H.R. functions, and investigation was carried out through the perception of the employees to investigate whether QC is motivating the employees in the organisation. So the various activities of QC in the organisation were analysed to find out how far the QC motivates the employees. The employees including permanent and other temporary/casual labourers were also considered as samples for this study.

Since most of them are casual labourers temporary employees were continuously working with a little gap, it is presumed that they must have the work knowledge and skills to perform the work. Eventhough, they were not entitled to avail some of the benefits, rewards and awards, their contribution to the
organisational development could not be set aside. They may also be considered as knowledge workers along with permanent employees.

**Sampling Techniques**

In this study, the investigator defines the population sample as the employees that are workers, supervisors, managers, at all levels and the administrative staff of the organisation including the casual and temporary labourers.

The researcher has adopted stratified random sampling technique for this study. The whole population is stratified according to cadres, sex, age, experience, income, marital status. The data were analysed according to the stratified segmentation.

The size of the sample of the study constitutes 132 (44.0) production workers including temporary employees and casual labourers, 46 (15.3) office/administrative employees, 19 (1.3) supervisors and 103 (34.3) technicians of the organisation.

The present study is an empirical survey for the purpose of selection of employees whose response form the core of the investigation. The research study is limited to the only one organisation that is Hi Tech Aray Limited, Madurai. No other organisation is compared because this study is considered to be a case work.
In total, 300 respondents were selected for this study through stratified convenience random sampling technique.

**Data Collection**

The study depends both on primary and secondary data. The primary data were collected through interview schedule to obtain the perceptions of the employees. The secondary data were collected from the records of the organisation. The documents used for the secondary data are the annual reports and audit reports of various years of the organisations. The data were classified according to the analysing objectives. The variables relating to receipts (income) and expenditures have been measured in lakhs of rupees. The productivity is measured in terms of thousands.

**Statistical Tools Used**

The statistical tools like, One-Way Anova, Factor Analysis and Semi-log trend model were used in this study at appropriate places.

**Anova**

To find out the important variables perceived by the employees and also the individual group of employees namely, workers, supervisors and managers, the test of Analysis of Variance was employed.
Factor Analysis

To group the factors dimension-wise, Factor Analysis Model was used.

Compound Growth Rate

For trend and growth of income and expenditure, linear and semi-log equation was applied.

‘t’ Test

The ‘t’ test employed to find out the significance of difference between the means of different variables was used in the study. The variables related to are before joining Q.C. and after joining QC. If significant difference is observed, then it can be concluded that the employees’ various skills and work knowledge were improved after joining the Q.C.

Correlation Study

To find out the relationship between the criterion variable and the correlates, the following Pearson product – Moment Correlation formula was used for calculating the co-efficient of correlation.
Chapterisation

This study consists of six chapters. The first one is introductory in nature. The second chapter reviews related studies. The third chapter presents a profile of the Hi Tech Aray limited, Madurai. The fourth chapter explains the methodology adopted. The fifth chapter analyses and interprets the data. The sixth one and the final chapter present the findings, conclusion and suggestions respectively based on the study.

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