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THE IMPACT OF QUALITY CIRCLE ON EMPLOYEE INVOLVEMENT AND ENGAGEMENT-A STUDY

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Abstract

*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. Hence the organization, which is very particular about the quality of products, should provide a good Organizational Climate which would induce the workers to work perfectly.*

Key words : *Quality, Quality Circle, Employee Involvement, Employee Engagement and Motivational Factors.*

Introduction

When the literacy level increased, cultures mingled, people's awareness went up, and life styles changed. These latest developments did not work as the motivational factor. 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 20th Century.

Statement of the Problem

This paper proposes to focus on a goal and thereby give 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 the involvement or improve the relationship between employer and the employee?.
- Does the QC make the organization 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 organization climate have an impact on workers' quality performance?
- Is the improvement in the work efficiency due to QC activity?
- Are the belongingness and Organizational Citizenship of employees the result of QC activities?.

- Is the Participating Management very well practised through Q.C.?

Significance of the Study

This study was 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 help them to 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 minimization and maximum utilization 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 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 organization.

Hypothesis of the Study

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

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

Objectives of the study

1. To evaluate the working of some motivational factors in productivity due to Q.C..
2. To analyse whether the Q.Cs. improve the efficiency and various skills of workers about their involvement and engagement.
3. To study the Q.C's role in shaping the employees towards more involvement with the organisation.

Research Implication

The study reveals that the Q.C. plays an important role in the organisational development. Further, Q.C. Activities influenced the workers

towards the improvement of the quality of work and their involvement. The implementation of Q.C. leads to quality management and the workers feel that some of their skills, namely, decision-making, communications, creativity, report writing and goal-setting process improved after their joining the Q.C. Organizational Citizenship and Belongingness were implanted in them through the Q.C. Activities. The leadership quality also increased considerably.

Sampling Design

The Researchers adopted Stratified Random Sampling Technique for this study. The whole population was stratified according to cadres, sex, age, experience, income, marital status. The data were analyzed according to the stratified segmentation.

The size of the sample of the study constituted 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.

Statistical Tools Used

Statistical Tools like One-Way Anova, Factor Analysis and Semi-Log Trend Model were used in this study at appropriate places.

Analysis and Discussion

Out of 300 respondents, 248 (83.70 per cent) agreed that the Q.C. activities tackled absenteeism. 241 (80.50 per cent) agreed that the purpose of Q.C. was to motivate employees and 261 (87.00 per cent) accepted that Q.C. helped to develop the skills of employees. 251 respondents (83.70 per cent) accepted that through Q.C. the problems can be solved easily and 277 (92.50 per cent) have given the opinion that Q.C. was more helpful in enhancing relationship between employees and management. About the statement, "to improve quality and increase productivity", 275 (91.66 per cent) have agreed. 282 (94.00 per cent)

respondents have given their opinion that Q.C. should be formed in all organisations. 270 (90.00 per cent) respondents agreed that adapting Q.C. system was profitable for the organisation. 238 (79.3 per cent) said that the organization adapts some motivational techniques and only 168 (56.00 per cent) were satisfied with the techniques.

The respondents were asked to respond to nine statements on **members involvement** in the Q.C, either in the question form or in the form of statements. About 282 respondents (94.00 per cent) were satisfied with the present Q.C. 266 (88.66 per cent) and 272 (90.66 per cent) have agreed that they enthusiastically participated in the Q.C. Activities and attended the Q.C. meetings regularly. 216 (72.00 per cent) respondents agreed that the membership in Q.C. helped them to work with more involvement and commitment and 221 (72.7 per cent) said that they felt self confident in performing the task assigned to them. 213 respondents (77.00 per cent) agreed that their work was recognised by the management. 188 (62.70 per cent) respondents agreed that some individual problems were also discussed in Q.C. meeting. 203 (68.3 per cent) respondents agreed that the presence of Q.C. improved the working conditions.

They rated the Motivational Mechanism consisting of five factors on a Five Point Scale. The opinions thus rated were fitted with a mathematical tool called One Way ANOVA to find out the comparative ratings. The result is shown in the **Table- 1.1** which illustrates the significant difference among the groups of employees on factors like Q.C. increases the responsibility, Q.C. enhances the participation of employees, and provides opportunities for growth. The 'F' statistics of the above three factors are 2.5313, 2.6329 and 2.8201 respectively and statistically significant at 5 per cent level. On evaluating the mean scores, it is understood that the production workers highly

rated factors like Q.C. enhances the participation of employees (1.8083), recognition of achievements (1.7606) and rewards and appreciation (1.8333). The office workers' view was that all the factors, except Q.C. increases the responsibility, were rated high. But the supervisors rated high all the four factors, except participation of employees. The mean scores in respect of technical assistants with regard to the factors providing opportunities for growth and reward and appreciation were 1.7272 and 2.000 respectively and hence they perceived these factors highly. Factors like Q.C. increases the responsibility and enhances the participation of employees were perceived moderately by production workers and supervisors respectively.

Ten factors were identified which play an important role in improving Job Satisfaction. The various groups of employees, under different cadres were asked to rate the factors influencing the Job Satisfaction. The results of Anova Test administered on the opinion of the various groups of employees are that significant difference of views among the groups was noticed in factors like wages, conducive working environment, recognition of the skill, participation in decision making, policies and administration, career development and awards since the 'F' statistics of the above factors were 3.5587, 7.6472, 6.0454, 4.7358, 3.6525, 2.5314 and 3.4467 respectively and statistically significant at 5 per cent level. The mean scores in respect of all the factors with regard to the different groups also were rated moderately. But the employees in the age group of 36-45 years rated the factor related to the conducive working environment, very low. At the same time, they rated high the factor related to the present job. Hence it is inferred that all employees enjoyed Job Satisfaction.

The employees were grouped into five according to the years of experience, namely, below 5 years, 6 – 10 years, 11 – 15 years, 16 – 20 years and above 21 years. The results of Anova on their opinions recorded significant

difference of perception among the groups on factors like wages, recognition of skill, participation in decision-making, policies and administration and career development since the 'F' statistics are 2.7052, 2.8769, 3.5187, 2.8533 and 3.2860 respectively and these are statistically significant at 5 per cent level. The magnitude of difference was more on factors like participation in decision making and career development. The mean scores of factors in respect of the groups varied from 3.0000 to 3.8389, except on one factor, that is, security of job (2.8000) which was rated low by the employees having 6 – 10 years experience. All the five groups of employees rated all the factors moderately. These results show that they accepted that those factors influenced the Motivational Mechanism which contributed to Job Satisfaction.

The t-values of all the ten statements like decision making, problem solving techniques, motivation skill, conducting a meeting, team and interpersonal interaction, communication skills, creativity, writing a report, making oral presentation, leadership quality, goal setting process are 12.81, 12.46, 6.15, 12.89, 2.48, 12.22, 11.29, 12.49, 5.34, 12.63 and 13.86 respectively. All the t-values are statistically significant at 5 per cent level and greater than the table value of 1.96. Hence it is inferred that there was significant difference in the opinions of the workers before and after joining the Q.C. Hence it is further inferred that their skills expressed over the ten statements were developed after joining the Q.C. Hence the null hypothesis is rejected.

The ultimate aim to form Q.C.s in the organisation is to solve problems and to improve the quality of workers and **to know about their total involvement in production.** The actual improvements were ascertained through the views of employees on different dimensions with regard to the organizational system.

The tangible results of improvement or development of an organisation could be

measured only through the financial profit and the volume of production the company so far achieved.

In the following section, the Investigator tried to analyse finance in the first instance through trend and CGR of income and expenditure in total and then the expenditure in detail head-wise.

The trend coefficients of income and profit were significant at 5 per cent level and they were positive (**Table-1-3**). It implies that on an average, income and profit were increasing at the rate of Rs.144920.36 and Rs.29458.29 per year respectively. The maximum growth was found in profit and income over the period. The R^2 indicates 98 per cent and 79 per cent variations positively on income and profit. The significant low growth in the expenditure factors shows that the organisation still needs to spend more on advertisements, marketing, procuring more raw materials and appointing more workers to increase production. Also it shows that more care and actions should be taken for the welfare of the workers by increasing salary and other benefits. It signifies that the bargaining/reward system was not working to the fullest level possible.

Conclusion

Quality Circle emphasizes the importance of Employee Engagement and Involvement in the success of a business. An organization should thus recognize employees, more than any other variable, as powerful contributors to a company's competitive position. Therefore, Quality Circle should be a continuous process of learning, improvement, measurement and action of competitive business world. From the above discussions, it is felt that Quality Circle provides Quantitative Information about the Value of Human Asset, which helps the Top Management to take decisions regarding the adequacy of human resources. Hence it is concluded that

Quality Circles are an indispensable but often neglected element and it should to be foregrounded for the betterment of the economy.

Scope for Further Research

Usually one investigation will lead to another. The Researchers had taken up this study in one organisation. This study can be extended to the following:

1. To study and compare the impact of Q.C. in any two production organisations.
2. The need for the Q.C. in big industries can be studied.
3. The impact of Q.C. on public sector companies can be taken up.
4. A comparative study can be undertaken between organisations with Q.C.s and without Q.Cs. with reference to production and quality management.

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Table-1.1
Perception of Motivational Factors by Various Cadres of Employees

Sl. No.	Variable	Mean score position of the employees				F. Value	F. Prob.
		Produc-tion worker	Office worker	Super-visor	Techni-cal assist		
1.	Q.C. increases the responsibility.	1.6404	1.4375	1.7619	1.3529	2.5313*	.0586
2.	Q.C. process enhances the participation of employees in the organizational system.	1.8083	1.9063	1.6400	1.2941	2.6329*	.0513
3.	Q.C. process provide opportunities for growth.	1.6909	2.1250	1.8750	2.0000	2.8201*	.0404
4.	Achievements are recognized through Q.C.	1.7606	1.8947	2.0000	1.5833	1.0149	.3888
5.	Q.C. helps the employees to get rewards and appreciation.	1.8333	2.1053	2.1250	1.7273	0.7187	.5432

* Significant at 5 per cent level.

Table -1.2
Perception of Employees on Status of Skills – Before and After Joining Q.C

Variables		Mean	S.D.	t-value	Level of Significance
Decision Making	Before	3.2568	1.256	12.81*	0.0000
	After	4.3649	0.510		
Problem Solving Techniques	Before	3.1965	1.325	12.46*	0.0000
	After	4.3668	0.567		
Motivation Skill	Before	3.3712	1.242	6.15*	0.0000
	After	4.5677	2.684		
Conducting a Meeting	Before	3.2096	1.246	12.89*	0.0000
	After	4.4192	0.668		
Team and Interpersonal Interaction	Before	3.6681	4.894	2.48*	0.0140
	After	4.4672	0.652		
Communication Skills	Before	3.1974	1.263	12.22*	0.0000
	After	4.3904	0.665		
Creativity	Before	3.2533	1.252	11.29*	0.0000
	After	4.3843	0.676		
Writing a Report	Before	3.1140	1.258	12.49*	0.0000
	After	4.3246	0.677		
Making Oral Presentation	Before	3.2149	1.278	5.34*	0.0000
	After	4.7763	4.245		
Leadership Quality	Before	3.0435	1.274	12.63*	0.0000
	After	4.2609	0.731		
Goal Setting Process	Before	2.9624	1.359	13.89*	0.0000
	After	4.4225	0.591		

* Significant at 5% level.

Table-1.3
Trend and Growth of Income, Expenditure and Profit

Variables	Trend Coefficients		R ²	CGR
	a	b		
Income	140500.400	144920.36* (22.559)	0.9845	18.92
Expenditure	303112.666	57401.64 (1.273)	0.1685	3.07
Profit	-49276.933	29458.296* (5.568)	0.7949	29.89

Figures in brackets are the t-values.

* Indicate that the trend coefficient are statistically significant at 5% level.