

EFFECTIVENESS OF THE TRAINING PROGRAMMES ON ISO CERTIFICATION AMONG EMPLOYEES OF THE CENTRAL RAILWAY WORKSHOP, TAMIL NADU

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ABSTRACT

Training means acquisition of knowledge, skills, and competencies as a result of the teaching of vocational or practical skills and knowledge that relate to specific useful competencies. Training and development aims at developing competencies such as technical, human, conceptual and managerial for the furtherance of individual and organizational growth. The present work deals with effectiveness of the training programmes on ISO Certifications of select employees in their workplace. The present study has been carried out on the effectiveness of the training programmes among the workers in Southern Railway Central Workshop, Golden Rock, Tiruchirappalli, Tamil Nadu. The major objectives of the study are: to find out the personal profile (age, sex, marital status, religion, community, educational qualification, work experience, monthly income and type of family), to find out the effectiveness of training programmes on ISO (9001, 14001 and 18001) certification and to compare the overall effectiveness of the three different training programmes on ISO (9001: QMS, 14001: EMS and 18001: OHSAS) respectively among the select respondents in the study area. A sample of 45 employees from the study area was taken up for the present study. Few hypotheses have been formulated and examined, by using t-test, chi-square and ANOVA.

KEYWORDS: Training Programmes, ISO: 9001, ISO: 14001 and ISO: 18001

INTRODUCTION

Training is the act of increasing the knowledge and skill of an employee for doing a particular job. Training makes newly appointed workers fully productive in the minimum of time. Training is equally necessary for old employees whenever new machines and equipments are introduced and/or there is a change in the techniques of doing the things. The processes where by individuals acquire knowledge, skills and attitudes through experience, reflection, study or instruction. Learning is the modification of behavior through experience and training.

ISO plays a vital role for the existence and survival of any organization. The success or the failure depends on the perception, attitudes, values of the employees, which they have about their organization. Furthermore, it also depends upon the company mission & leadership, corporate culture, innovation & change, climate, performance management, role of clarity and working condition in the organization. Today organizations are existing in a stiff competition and the organizations are facing problems in the areas of technological advancement, shortage of resources, power, energy etc.

In order to achieve the production as per the desired standards, organization has to motivate the employees through performance appraisal, performance management, role clarity and positive climate. So, these activates are very

essential for the smooth functioning of the organization. Various research findings in the fields of psychology, behavioral sciences had concluded that training, performance appraisal, welfare measures are the key components in the success of any organization. In order to take care of these measures, Human Resource Management (HRM) department are established. Because HRM is a proactive measure carried out in the organization. It helps to achieve productivity and profitability.

Keeping the above in mind, the authors made a study on what extent the training of ISO Certifications is contributing for the satisfaction of the employees in the industry.

LITERATURE REVIEW

Few major literatures on the research problem are presented below for the better understanding of the readers.

Bates and Davis, (2010), Said that usefulness of training programme is possible only when the trainee is able to practise the theoretical aspects learned in training programme in actual work environment. They highlighted the use of role playing, cases, simulation, mediated exercises, and computer based learning to provide exposure to a current and relevant body of knowledge and real world situations.

Schroeder. G., (2008), Reported that "...ISO 9001 Certification has a major impact on worldwide quality practices. Many companies are demanding ISO certification from their suppliers as a condition for doing business". This situation has caused lots of contracting organizations to register for ISO certification.

Environmental Management System: "a set of management tools and principles that is intended to help organizations integrate environmental issues into the conduct of their daily business designed to guide an organization in allocating resources, assigning responsibilities, and continually evaluating its practices, procedures, and processes in order to enhance environmental management", (**Gibson, 2005**).

According to Vinodkumar and Bhasi, (2010), OHSAS 18001 is the fundamental and the standards for developing health and safety management systems for organizations. It assists an organization to control occupational health and safety risks and to develop responds to widespread demand for are cognized standard against which to be certified and assesses. OHSAS 18001 was specifically developed to allow organizations to systematically control OH&S risks and improve performance. Based on that, it is does not state specific performance criteria to improve.

By keeping the above background, problem statement and literatures, the authors formulated the conceptual framework of the study and same are presented in the succeeding pages.

METHODOLOGY

The methodology adopted for carrying out the investigation of the present study is survey method and design used is descriptive in nature. Both dependent and independent variables are adopted in the present study. The research tool used for collecting primary data is made through structured questionnaire, specially developed by the authors, which would exactly measure the Training Programmmes on ISO Certification of the study area. The study was done in Southern Railway Central Workshop, with a sample of 45 respondents in order to test and modify the research tool. The finalized research tool divided into 2 parts. Part - 1 deals with Personal Profile of the Employees and Part - 2 deals with Dimensionsof ISO Certifications, in Southern Railway, Central Workshop, Tiruchirappalli, Tamil Nadu. Three point scaling technique was used for getting responses from the respondents in the study area with appropriate scoring pattern.

The raw data collected was systematically coded, scored and tabulated by using statistical techniques with the support of SPSS package.

OBJECTIVES OF THE STUDY

- To find out the personal profile (age, sex, marital status, religion, community, educational qualification, work experience, monthly income and type of family) of the respondents in the chosen study area.
- To assess the effectiveness of training programmes on ISO (9001, 14001 and 18001) certification among the respondents in the study area.
- To compare the respondents overall effectiveness of the three different training programmes on ISO (9001, 14001 and 18001) respectively in the study area.

RESEARCH UNIVERSE AND SAMPLE

This research is focused on the employees of Central Railway Workshop, Golden Rock, Trichirappalli, Tamilnadu. The languages of the employees are Tamil and English. The universe of study comprises of 604 employees in only three departments, but the researchers adopted simple random sampling method i.e., 45 employees (7.45% of the sample) were selected for the study. The questionnaire was used to collect the necessary information from the respondents. Not to disturb the job of the workers, the researchers collected the data from the workers during their lunch and tea breaks.

SOURCE OF DATA

Primarily the authors studied & reviewed the literatures from various books, journals, research reports, periodicals and some of the conference papers, as secondary sources of data. Primary data were collected from 45 employees on using standard questionnaire, specially designed for the purpose in the study area.

STATISTICAL TOOLS USED

Once the questionnaires were administered and collected from the respondents, the authors coded the data as given in the scoring keys along with the standardized questionnaire. The scores are entered into Microsoft Excel spreadsheet and later on for analysis with the Statistical Package for the Social Sciences (SPSS). T-test, ANOVA, and chi-square test were done for analyzing the data.

RELIABILITY ANALYSIS SCALE (ALPHA)

Reliability Co-efficient

Number of Cases = 45

Number of Items = 40

Alpha = .9651

- Alpha (Cronbach). This is a model of internal consistency, based on the average inter-item correlation.

GENERAL RESULTS

Most of the respondents (75.6) are male employees and only a few respondents (24.4) are female employees. Most of the respondents (48.9%) belongs to the age group of 31 to 45 years of age and about 44.4% of the respondents belongs to the age group of 46 to 60 years of age and only 3% of the respondents belongs to the age group upto 30 years.

Majority of the respondents (37.8%) are holding 12th&Diplomo. 37.8% of the respondents are upto 11th& ITI. The remaining 24.4% are Qualified any UG Degree and Above degree holders respectively. Majority of the respondents (75.6) are workers and 17.8% of the respondents are supervisors and 6.7% of the respondents are executives. Majority of the respondents (91.9%) are skilled and 6.7% of the respondents are semi-skilled employees and remaining 2.2% of the respondents are unskilled employees. About 24.4% of the respondents are getting their monthly income Rs. 10000/- to Rs. 25000/-, 40.0% of the respondents are getting their monthly income ranges between Rs.25001/- to 40000/- and the remaining 35.6% of the respondents getting their monthly income over above Rs.40001/- respectively.

HYPOTHESES RELATED RESULTS

Hypothesis – 1

There will be no significant association between age group and effectiveness of the training programme on ISO - 18001 Certification, (such as General Requirement, OH&S Policy, Planning, Implementation & Operation, Checking and Management Review), of the respondents in the study area

Table-1 Chi-Square Test between Age Group and ISO 18001: Occupational Health and Safety Assessment Series of ISO Certification of the Respondents

	Value	df	Table Value	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.378a	2	5.991	.068
Likelihood Ratio	6.359	2		.042
Linear-by-Linear Association	4.796			
N of Valid Cases	45			

- 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.13.
- Based on 10000 sampled tables with starting seed 1996319532

Table 1 infers that, the chi-square value of 5.378 is less than the table value of 5.991, which states that there is a no significant association between age group and ISO 18001: Occupational Health and safety Assessment Series of ISO certification of the respondents in the study area.

Hence, the Hypothesis 1ie is accepted and concluded as **there is no significant association between the age group and ISO 18001 Certification (such as General Requirement, OH&S Policy, Planning, Implementation & Operation, Checking and Management Review), of the**

Hypothesis - 2

There will be no significant variations, in the training programmes of the three dimensions of QMS, EMS and OHSAS, of the respondents in the study area.

Table 2: One Way ANOVA Test of Over All Effectiveness of the Training Programmes

Dimensions of Training Programmes		Sum of Square	df	Mean Square	F	Level of Significance
QMS	Between Groups	77.445	2	38.722	1.083	*Sig.
	Within Groups	1501.800	42	35.757		
	Total	1579.244	44			
EMS	Between Groups	20.016	2	10.008	.476	*Sig.
	Within Groups	883.184	42	21.028		
	Total	903.200	44			

OHSAS	Between Groups	26.236	2	13.118	1.810	*Sig.
	Within Groups	304.342	42	7.246		
	Total	330.578	44			

*Sig-Significant at 0.05 level

From the data analysis presented in the table-2, it is infors that there are significant variations in the three dimensions of training programmes (QMS, EMS and OHSAS) of the respondents of the study.

Hence, the Hypothesis 2 ie “There will be no significant variations in the training programmesof the three dimensions of QMS, EMS and OHSAS of the respondents in the study area” is rejected and concluded as **there are significant variations in the training programmes such as Quality Management system (ISO : 9001), Environmental Management System (ISO : 14001) and Occupational Health And Safety Assessment Series (OHSAS : 18001), of the respondents in the study area.**

Hypothesis 3:

There will be no significant difference between training programmes and group results (Quality Management System, Environmental Management System and Occupational Health and Safety Management System) of the respondents in the study area.

Table 3: T-Test Showing the Statistical Analysis between Training Programmes and Group Results of the Respondents

Training Programmes		Levene's Test for Equilty of Variance		t-Test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
EF-One	Equal variance assumed	8.246	.008	1.392	28	.175	3.0000	2.15583	-1.41603	7.41603
	Equal variance not assumed			1.392	16.614	.182	3.0000	2.15583	-1.55648	7.55648
EF-Two	Equal variance assumed	16.686	.000	1.771	28	.087	3.2667	1.84477	-5.1217	7.04551
	Equal variance not assumed			1.771	16.315	.095	3.2667	1.84477	-.63793	7.17127
EF-Three	Equal variance assumed	5.802	.023	1.514	28	.141	1.7333	1.14504	-.61217	4.07884
	Equal variance not assumed			1.514	18.933	.147	1.7333	1.14504	-.66383	4.13050

From the data analysis presented in the table-3, there are significant differences between the training programmes and group results of the respondents.

Hence, the Hypothesis 3 ie “There will be no significant difference between training programmes and group results (Quality Management System, Environmental Management System and Occupational Health and Safety Management System) of the respondents in the study area” is rejected and concluded as **there are significant variations in the training programmes of three dimensions (such as Quality Management system (ISO : 9001), Environmental Management System (ISO : 14001) and Occupational Health And Safety Assessment Series (OHSAS : 18001)), of the respondents in the study area.**

DISCUSSIONS AND CONCLUSIONS

Human Resource management is an often-underestimated task in work-environments. However, it is adequate and conscientious HR Management that will establish and retain a qualified, well-cooperating workforce and therefore, ultimately, an increase of organizational growth, efficiency, and profitability. The most important tasks of the Human Resource department are to make sure that the people working in an organization 1) feel happy 2) are in the right job, and 3) get the opportunity to upgrade their skills when necessary. It is also HR's task to coordinate the recruitment of new employees for vacant positions.

Needs for ISO practice are changing rapidly in the 21st Century as a new context emerges from rapid political, technological, market and demographic changes. The challenge for both HR leaders and general managers is to build capabilities that ensure the successful execution of business strategy. The next generation of senior HR professionals will need to think in new ways, take diverse perspectives and lead their organization with confidence.

The present study reveals that there exists a good training programmes being conducted by the Southern Railway, Central Workshop, Tiruchirappalli among their employees periodically. For more productivity of the workshop, organization should adopt innovative training strategies for attaining more effectiveness in their training and development programmes. Though the workshop has got ISO 9001, 14001 & 18001 certifications, providing training to their employees may yield a good quality of service and quality maintenance and environmental maintenance in a long run.

REFERENCES

1. **Arimura, T., Hibiki, A., & Katayama, H. (2008)**, Is a voluntary approach an effective environmental policy instrument? A case for environmental management systems. *Journal of Environmental Economics and Management*, 55, 281-95.
2. **Balogun, J., (2008)**, The practice of organizational restructuring: From design to reality. *European Management Journal*, 25 (2): 81-91
3. **Bates, Donald L. and Davis, Tammy J. (2010)**, "The Application Bridge: A Model for Improving Trainee Engagement in the Training Process", *International Journal of Management*, Vol. 27, No. 3, Part 2, December, pp. 770-776.
4. **Benner, M. J., & Veloso, F. M. (2008)**, ISO 9000 practices and financial performance: a technology coherence perspective. *Journal of Operations Management*, 26, 611-29.
5. **Corbett, C. J. (2006)**, Global diffusion of ISO 9000 certification through supply chains. *Manufacturing and Service Operations Management*, 8, 330-50.
6. **Chih, Jin-Ton.; Li, Ching-Hsiang and Lee, Hung-Wen. (2008)**, "Relationship between Trainee Attitudes and Dimensions of Training Satisfaction: An Empirical Study with Training Institute Employees", *International Journal of Management*, Vol. 25, No. 4, December, pp. 756-765.
7. **Dick, G. P. M., Heras, I., & Casadesús, M. (2008)**, Shedding light on causation between ISO 9001 and improved business performance. *International Journal of Operations & Production Management*, 28(7), 687-708.

8. **Dunu, E. S., &Ayokanmbi, M. F. (2008)**, The impact of IOS 9000 certification on the financial performance of organizations. *Journal of Global Business Issues*, 2, 135-44.
9. **Feng, M., Terziovski, M., & Samson, D. (2008)**, Relationship of ISO 9001:2000 quality system certification with operational and business performance. A survey in Australia and New Zealand-based manufacturing and service companies. *Journal of Manufacturing Technology Management*, 19(1), 22-37.
10. **Gibson, C. V., (2001)**, Air quality products derived from a Graphical Forecast Editor. Fourth Symposium on Fire and Forest Meteorology, Reno, NV, Amer. Met. Soc., 182-188.
11. **Shroeder, Roger G., (2008)**, Operations Management. 4thed. New York. USA: McGrawHill. Print.
12. **Vinodkumar M and Bhasi M, (2010)**, “Safety management practices and safety behaviour: Assessing the mediating role of safety knowledge and motivation”, *Accident Analysis and Prevention*, 42: 2082-93.
13. [http:// www.daoj.com](http://www.daoj.com)
14. http://www.iso.org/iso/iso_9000
15. [http:// www. danielgoleman.info](http://www.danielgoleman.info)
16. <http://www.saiglobal.com/Assurance/ohs/OHSAS18001.htm>
17. http://en.wikipedia.org/wiki/Total_quality_management
18. [http:// www.researchpub.org](http://www.researchpub.org)

