

DESIGN, IMPLEMENTATION AND EVALUATION OF THE EFFECTIVENESS OF MICRO TRAINING COURSE ON THE STAFFS (CASE STUDY: THE STAFFS OF IRAN KHODRO COMPANY (IKC))

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ABSTRACT

The current study was done with the aim of designing, implementing and evaluating the effectiveness of microtraining course on the staffs of section 3 engine manufacturing of the driving force department in Iran Khodro Company. To this end, in a semi-experimental study and with pre-test post-test method with the control group, 60 staffs of Iran Khodro Company were selected as the study sample by using random sampling method. The data collection tool was the researcher-made questionnaire and the obtained data was also analyzed by the descriptive and illative statistic indices in the environment of SPSS software. The research findings demonstrated that using design and implementation of micro training in the production line of Renault in Iran Khodro Company increases the effectiveness of the employees' performance, satisfaction and their better learning. Hence, the obtained result from the study indicated that micro training has been able to increase the effectiveness among the staffs.

Keywords: human force, micro training, Iran Khodro, effectiveness, designing, implementing, evaluating.

INTRODUCTION

Human resources are from the most important fields of organizational management, so that they can make an organization fail or success. As a capital with unlimited potential, this resource influences the development of the organization and the society more than the other resources (material, mechanical, informational) (Ebrahimi, 2012). Since the efficient human force is considered as the most valuable resource of any organization, the major part of investments will focus on the human force. The most important tool used in this end is training which is used with the aim of qualitative promotion of the skill, knowledge and attitude level and empowerment of the people in playing their roles and prosperity of the organization. Organization should identify the educational needs and provide the educational facilities and evaluate their effectiveness. This guarantees that all influencing activities on the quality of the product and services are carried out by competent staffs (Khorasani; Hasan Zadeh,

2007). Training an developing human resources is considered as a kind of useful investment and a key factor in development which can have considerable outcome in case of appropriate and competent plan and implementation. Training is always considered as a safe tool in order to improve the performance quality and solving the problems of management and its loss is also a fundamental and critical issues of any organization. Undoubtedly, in order to equip and develop the human forces and benefit from them as effective as possible, training is one of the most effective strategies for improving affairs (Abbasian, 2006).

Training helps people in fertility of their special talents and abilities (Alsagheer, 2011). Nova (1986) considers training as “ the plan of learning experiences which has been designed for taking necessary actions in order to make eternal and continuous changes in knowledge, attitude or skills of the people” (Nova, 1986). But it should be mentioned that just the existence of a unit or management under the title of training and allocation of human resources and facilities cannot guarantee the realization of the purpose of development and growth of the employees and the organizations; but adjustment of the appropriate plans and implementing them are also essential and all the whole of these factors can be called management and leadership of the organizational education and the necessary contexts for realization of the mentioned aims can be provided (Qahremani, 2009).

On the other hand, perhaps, it could be safe to say that the most fundamental part of any plan is evaluation; because the shortages of a plan can be just found and solved with its help. In many countries, the evaluation is considered as the hoping factor to improve and develop the management and employees. Evaluation is a device without it the educational activities are only like “Shooting in the dark”. Educational evaluation helps the educational needs to be identified, and the educational and training systems be targeted and desired curriculums be adjusted based on these needs and the purposes (Bazargan et al., 2007).

Undoubtedly, evaluation is considered as a continuous process and the inseparable part of the educational plans of the human force and also is known as the linking and interaction ring of all factors of an educational plan (input, process, output). Thus, it can be posed that the educational evaluation is a consistent and dynamic method to identify the errors and shortages of the training and learning process (Qelich Li, 2007).

In other words, evaluation is done as an effective action in the field of educational plans and it has a short history. From 1965, evaluation in the educational areas has been recognized and created under the title of the educational evaluation with integrating the evaluation of teacher, learner and the teaching method; today, evaluation is of high priority in the different educational areas (Houman, 2006).

Evaluation of teachers and investigation of their attitudes in the field of evaluation is an essential affair which can provide increasing actions in the field of learning development in the learners. As a regular process, evaluation of the educational system and human force have a data collection and analysis process and provision of feedback about the quality and quantity of the work and the way of performance of human force and it leads to the identification of strengths and weaknesses and the provision of the necessary actions in order to promote the level of their education and efficiency and ease of decision making. Hence, evaluation of human force can lead to the prosperity and development of the educational system (Bazargan et al. 2010). Therefore, one of the aims of this study is to evaluate the effectiveness of the micro courses for the staffs.

In the studies done, several factors have been expresses for the effectiveness of the educational courses, from them, we can refer to the review of the content of educational plan based on the current standards (Cook et al., 2010; Zahedi&Tabrizi, 2007), appropriate design of text and context in the computer-based courses (Zufic&Kalpic, 2009), using the appropriate theoretical model in the educational design, creating the opportunity of learner - teacher, learner - text and learner - learner interactions (Song, 2008; Almala, 2005, Koohang, 2009, Kidd). The educational design, prediction and adjustment of the educational events are based on purpose, content and the existing facilities and regarding to the characteristics and cognitive structure of the learner. The educational

design is specially significant whether it is related to a complete course or an educational session (Kidd & Song, 2008).

Today, the automotive industry is considered as the main and national industry of any country in the world and the attention of governments to this industry will be followed by the development of the other industries of that country. In recent decade, with the development of the technologies of this industry and the complexity of the modern systems in today's cars of the world and the competition of automotive companies on more sales of their products, the efficient human force in this industry has become significantly important. The professional and experienced human force, widespread network of agencies all over the country and the facilities are from the important factors of the progress of this industry. From these factors, the professional human forces are more significant, because they have knowledge and the duty of directing and benefiting from the two other factors. Thereby, educating human force working in the control company's agencies is especially important and this will be realized with educational courses and evaluation of the educational courses has been established with the aim of optimizing the educational courses based on assessing factors such as knowledge, skill, and occupational and functional behavior of the human force.

In this study, due to the significance of process of education management and activity of managers of the control company and the agencies of Iran Khodro Diesel Company, the researcher intends to investigate the effectiveness of the training courses on the personnel of the agencies of the control company. Thus, the current study has been done with the aim of investigation of the effectiveness of the micro training courses in Iran Khodro Company.

RESEARCH BACKGROUND

Abbasian (2004) in a research under the title of "Investigation of the effectiveness of the in-service trainings of Iran Khodro Company based on Krick Patrick Model" indicated that the learners had a desirable reaction to the held training courses and the courses had desirably increased the knowledge level of the learners; the level of the made changes in the learners' behavior was almost desirable and it was determined that the courses had decreased the reinventions up to 99% which was the main purpose of holding the course.

In a study under the title of "Investigation of the relationship between in-service trainings and the efficiency of the staffs of Welfare Organization of city of Kerman" Andishmand (1997) got to the result that the trained staffs are more able than the untrained ones in solving work problems and making effective decisions and are more capable to cope with their job duties; moreover, they need less control and have a lot of enthusiasm and motivation.

Zarei (2010) "Evaluated the effectiveness of the educational course of comers teacher of Allameh Tabatabaei Teacher Training Center in Boushehr city based on Krick Patrick Model in the school year of 2005 – 2006". The results of this research indicated that the extent of learning of the graduated was not desirable and the educational course in this field had not been successful; he has used evaluated learning extent with the results of this study, but in the research, the evaluation by using questionnaire has been of demand.

Haj Yousefi (2010) conducted a study entitled "The impact of in-service training on the increase of the job skill level of the staffs". The results obtained from this study indicated that the in-service training influences the creation of the professional knowledge in the experts, promotion of the people's job motivation level, creativity, innovation and increase in the job skill level.

The results of the study of Zavarian (2006) based on Krick Patrick Model indicated the desirable reaction of the learners to the training courses and also change in their behaviors.

In a study Rajabian (2006) "Evaluation of the effectiveness of the training courses on the occupational performance of staffs of Keshavarzi Bank in city of Mashhad", Rajabian got to the result that from the viewpoint of the staffs and managers, holding training courses has a significant impact of their occupational performance.

Nasrollahi (2009) conducted a research in order to "Evaluate the effectiveness of the in-service trainings of Bahman Automotive Group based on Krick Patrick Model". The results of this study showed that the staffs had desirable reaction to the training course. The training course had a significant impact on their learning extent and from the viewpoint of supervisors, the organization had benefited from the desirable consequents of these trainings; and totally, the held training courses had been effective.

In a study, Qharli (2009) "Investigated the in-service training courses of the staffs of Municipality Organization with the emphasis on Krick Model". The obtained results from the reaction, learning, skill levels indicate that the staffs have had good reaction to the training courses' the training courses have influenced their learning rate and also the rate of their skill.

In a study under the title of "Evaluation of the effectiveness of the training courses of statement writers in Judiciary", Jalilvand (2011) indicated that from the viewpoint of statement writers, the special in-service training courses had caused positive reaction and increase in their learning but it had not realized the organizational purposes. From the idea of managers of judiciary offices, passing the in-service training courses has improved the behaviors and realized the organizational purposes. Also the results indicated that there was a significant difference between the viewpoints of statement writers and the managers of judiciary offices about the impact of the training courses on the realization of the organizational goals and these two ideas are not similar.

RESEARCH METHODOLOGY

The current research is a clinical trial from the kind of a semi-experimental study with pre-test post-test plan and control group. The statistical society includes all production operators of Tondar (a kind of sedan car) who are totally 1300 operators; 456 persons are working in the body manufacturing section, 469 persons in coloring section and 375 persons in montage section. The sampling is done in random classification method. The research sample is selected in available voluntarily way. Then, the people were randomly divided into two control and experimental groups (control group included 30 persons and experimental group included 30 persons). After random selection of the people, the desired intervention was implemented on the experimental group and the control group did not receive this intervention. Given the fact that this study was from the kind of semi-experimental studies, the required data in the field of the micro training system of Iran Khodro Diesel Company was collected based on the research's purpose and through the questionnaire of the performance of production line operators; after the data collection, the research's questions were answered in the random sampling from the studied society and analyzing data. in the executive process of the micro training course, at the beginning of the course and after obtaining the consent of the respected head of the training administration of Iran Khodro Company, it was stipulated that some teachers from the teacher club of Iran Khodro Company be chosen to be got familiar with the nature of this training style; in the second stage after selecting the teachers (3 teachers) the explanation classes were held for 30 hours and in five 6-hours sessions in order for the teachers to become familiar with the components of micro training. It was agreed that they hold the micro training courses once for the workers in line 3 of driving force section who enter the skill schools and are from the samples. After implementation of these courses, it was taken action toward the process of posing the questionnaire and collecting data in order to analyze the information.

DATA COLLECTION TOOL

The data collection tool of this study is the researcher made 23-question questionnaire which has been set by using the comments of experts in the 5 level Likert scale.

DATA ANALYZING METHOD

The indices of descriptive statistics (mean and standard deviation) in the scale of performance of testees in the pre-test and post-test stages and the method of illative statistics including covariance analysis have been used analyze data. All analyses have been done with the help of SPSS18 software.

RESEARCH FINDINGS

The demographic findings: 30 percent of the people in two groups were in the age range of 25 – 30 years old and 50 percent were in the age range of 30 – 35 and 20 percent of the peoples in the research were higher than 35 years old. Also 50 percent of the two groups has associate degree, 26.7 percent had B.A. and 23.3 percent had M.A and higher educational degree.

The Descriptive Findings in Pretest and Posttest Stages.

Table (1): mean and standard deviation of the two groups in the variable of the effectiveness of staffs in the two stages of the experiment

Experimental group			Control group			Variable of effectiveness of the staffs
Standard deviation	Mean	Number	Standard deviation	Mean	Number	
683.4	16.46	30	556.7	93.47	30	Effectiveness of the staffs in pretest
380.3	23.55	30	776.7	06.50	30	Effectiveness of the staffs in posttest

Regarding to the table 1, the mean of the variable of effectiveness of staffs of control group in pretest is 47.93 and in the experimental group, it is 46.16. The mean of the variable of effectiveness of staffs of control group in posttest is 50.06 and in the experimental group, it is 55.23.

Table (2): mean and standard deviation of the two groups in the variable of the satisfaction of staffs in the two stages of the experiment

Experimental group			Control group			Variable of satisfaction of the staffs
Standard deviation	Mean	Number	Standard deviation	Mean	Number	
520.3	86.20	30	503.3	06.23	30	Satisfaction of the staffs in pretest
684.2	36.26	30	420.3	56.23	30	Satisfaction of the staffs in posttest

Regarding to the table 2, the mean of the variable of satisfaction of staffs of control group in pretest is 23.06 and in the experimental group, it is 20.86. The mean of the variable of satisfaction of staffs of control group in posttest is 23.56 and in the experimental group, it is 26.36.

Table (3): mean and standard deviation of the two groups in the variable of the learning of staffs in the two stages of the experiment

Experimental group			Control group			Variable of learning of the staffs
Standard deviation	Mean	Number	Standard deviation	Mean	Number	
4.083	28.86	30	7.560	31.46	30	learning of the staffs in pretest

3.756	35.60	30	4.038	33.96	30	learning of the staffs in posttest
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Regarding to the table 3, the mean of the variable of learning of staffs of control group in pretest is 31.46 and in the experimental group, it is 28.86. The mean of the variable of learning of staffs of control group in posttest is 33.96 and in the experimental group, it is 35.60.

Table (4): mean and standard deviation of the two groups in the variable of the performance of staffs in the two stages of the experiment

Experimental group			Control group			Variable of performance of the staffs
Standard deviation	Mean	Number	Standard deviation	Mean	Number	
4.074	31.46	30	4.508	35.46	30	Performance of the staffs in pretest
3.302	38.30	30	3.724	37.300	30	Performance of the staffs in posttest

Regarding to the table 4, the mean of the variable of performance of staffs of control group in pretest is 35.46 and in the experimental group, it is 31.46. The mean of the variable of performance of staffs of control group in posttest is 37.300 and in the experimental group, it is 38.30. in this study, we used the defaults of normality of the distribution of scores and we also used Kolmogorov – Smirnov test in order to estimate the suppositions and the results were present as following:

The first default, normality of the distribution of scores

table (5): Kolmogorov – Smirnov test

Significance level	Kolmogorov – Smirnov rate	Standard deviation	Mean	Frequency	Statistical indices
0.085	1.25	3.654	21.96	60	Staffs' effectiveness
0.794	0.64	6.164	30.16	60	Satisfaction
0.035	1.42	4.713	33.46	60	Learning
0.226	1.04	6.296	47.05	60	Effectiveness of performance

The results of Kolmogorov – Smirnov test indicate that the distribution of the mentioned data is normal. Since the observed significance level for the variable of effectiveness of the staffs in Kolmogorov – Smirnov was equal to 0.085 and higher than 0.05, and for the variable of satisfaction, the observed significance level in Kolmogorov – Smirnov was equal to 0.64 and higher than 0.05; and also for the variable of effectiveness of performance, the observed significance level in Kolmogorov – Smirnov of 1.04 was equal to 0.226 and higher than 0.05, so the normality of the distribution of data is confirmed.

Research Hypotheses: using design and implementation of micro training in the production line of Renault in Iran Khodro Company increases the effectiveness of the performance of employees in this line.

Table (6): Covariance analysis of the variable of staff's effectiveness

Impact size	F	Mean squares	Freedom degree	Total squares	Statistical indices of variance resources
0.547	68.84	644.27	1	644.2	Intervention impact
		9.35	57	533.3	Error
			60	168807.0	Total

According to the above table, the significance level of this table equals to 0.000 and is lower than 0.05; this indicates that the variable of effectiveness of the staffs in posttest stage and after the implementation of micro training is significantly different from this variable in the pretest stage and since the impact size of this variable is negative, this indicates that this variable has decreased in posttest.

The second hypothesis: compared to the existing educational methods, using the micro trainings cause more satisfaction of the staffs.

Table (7): Covariance analysis of variable of satisfaction in the staffs

Impact size	F	Mean squares	Freedom degree	Total squares	Statistical indices of variance resources
33.0	3.28	6.197	1	6.197	Intervention impact
		9.6	57	6.397	Error
			60	0.38066	Total

According to the above table, the significance level of this table equals to 0.000 and is lower than 0.05; this indicates that the variable of satisfaction of the staffs in posttest stage and after the implementation of micro training is significantly different from this variable in the pretest stage and since the impact size of this variable is positive, this indicates that this variable has increased in posttest.

The third hypothesis: compared to the existing educational methods, using the micro trainings cause better learning of the staffs.

Table (8): Covariance analysis of variable of learning in the staffs

Impact size	F	Mean squares	Freedom degree	Total squares	Statistical indices of variance resources
0.110	7.06	84.47	1	84.47	Intervention impact
		11.96	57	681.85	Error

			60	735150	Total
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According to the above table, the significance level of this table equals to 0.000 and is lower than 0.05; this indicates that the variable of learning of the staffs in posttest stage and after the implementation of micro training is significantly different from this variable in the pretest stage and since the impact size of this variable is positive, this indicates that this variable has increased in posttest.

The fourth hypothesis: compared to the existing educational methods, using the micro trainings cause increase in the performance effectiveness of the staffs.

Table (9): Covariance analysis of variable of performance effectiveness of the staffs

Impact size	F	Mean squares	Freedom degree	Total squares	Statistical indices of variance resources
0.266	20.62	132.78	1	132.78	Intervention impact
		6.43	57	367.03	Error
			60	86464.0	Total

According to the above table, the significance level of this table equals to 0.000 and is lower than 0.05; this indicates that the variable of performance effectiveness of the staffs in posttest stage and after the implementation of micro training is significantly different from this variable in the pretest stage and since the impact size of this variable is positive, this indicates that this variable has increased in posttest.

DISCUSSION AND CONCLUSION

The current study was done with the aim of designing, implementing and evaluating the realization rate of the purposes after implementing this course in the production line of Renault in Iran Khodro Company. The obtained results indicated the micro training has been able to increase effectiveness rate in the staffs. In the light of the findings of the domestic and international researchers, this study is consistent with the findings of the researches of domestic researchers including Abbasian (2006), Andishmand (1997), Zare'i (2010), Haji Yousefi (2004), Zavarian (2006), Rajabian (2006), Nasrollahi (2009), Qarli (2010), Jalilvand (2011).

In a study under the title of "Investigation of the effectiveness of in-service trainings on Iran Khodro Company based on Krick Patrick Model", Abbasian indicated that the learners has good reactions to the implemented courses and the courses had desirably increased the knowledge level of the learners; the level of the made changes in the behavior of the learners was rather desirable; and it was determined that the courses had decreased the reinventions up to 99% which was the main purpose of holding the course (Abbasian, 2006). The results obtained from the study of Haji Yousefi indicate that the in-service training influences the creation of professional knowledge in the experts, promotion of the people's job motivation level, creativity, innovation and increase in the job skill level (Haj Yousefi, 2004). The results of the study of Zavarian based on Krick Patrick Model indicated the desirable reaction of the learners to the training courses and also change in their behavior (Zavarian, 2006).

The results of the study of Rajabian indicated that from the viewpoint of the staffs and managers, holding training courses significantly influences their occupational performance (Rajabian, 2006). A study under the title of Evaluation of the effectiveness of the short-time in-service training courses on the performance of the staffs of Ministry of Mines and Metals has been done by Hamid Reza Zadeh

Goli and it has obtained significant results as following: 1. The in-service trainings are designed based on assessing the need of the worker and improve occupational promotion and make more interest of the staffs in their jobs. The statistical results and data analysis confirm the first hypothesis and no theoretical difference was observed between the degree of confirmation of the staffs and supervisors. 2. Participation of the employees in the in-service training courses causes them to obtain more professional knowledge. The obtained results confirm this hypothesis but the confirmation levels of the staffs and supervisors are not equal 3. Participation of the staffs in the in-service training courses increases their skills and abilities in using their job required tools and devices. The obtained results confirm this hypothesis. 4. Participation of the staffs in the in-service training courses increases arrangement, discipline, accuracy, cooperation and cooperative morale among them and the obtained results confirmed this hypothesis and participation of employees in the in-service training courses decreases wastes in tools, machines, raw materials and the time of doing works. 5. Participation of the staffs in the in-service training courses increases the power of production and the outcome of their work. Surveys have indicated that the employees confirm this hypothesis but the supervisors reject it. 6. Participation of the staffs in the in-service training courses decreases accidents of job and increases the observation of safety precautions and the regulations ruling the work environment by the employees. The obtained results from both of the groups confirm this hypothesis.

Nasrollahi has conducted a study in order to evaluate the effectiveness of the training courses of Bahman Automotive Group based on Krick Patrick Model. The result illustrated that the staffs had a good reaction to the training course. The training course has had a significant influence on their learning rate and from the viewpoint of the supervisors the skill rate of the organization had benefitted from the good results of these trainings; and totally, the held training courses have been effective (Nasrollahi, 2009).

In a study entitled Evaluation of the effectiveness of the training courses of statement writers in Judiciary, Jalilvand indicated that from the viewpoint of the statement writers, passing the in-service certain training courses had caused positive reaction and increased their learning, but it had not realized the organizational goals. From the idea of managers of judiciary offices, passing the in-service training courses has improved the behaviors and realized the organizational purposes. Also the results indicated that there was a significant difference between the viewpoints of statement writers and the managers of judiciary offices about the impact of the training courses on the realization of the organizational goals and these two ideas are not similar (Jalilvand, 2011).

Ultimately, the research's findings suggest that the dedicated in-service training courses can increase the speed of workforce, the decision making power in correct selection and the ability of innovation in order to enhance productivity. But, from the viewpoint of the learners, the organization has not desirably benefitted from holding the training courses. Regarding to the evaluation of their positive attitude, the reasons of this negative comment of the learners can be caused by the fact that they do not consider themselves participate in the important organizational decision makings, or they do not believe in the role of training in productivity improvement in the organization and in this case, it is necessary to investigate the organization and the culture ruling it, too. in total, the results indicated that in the executive training courses, the training center of the control company has been effective.

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