

Research Article

Investigating the Effectives of the efficiency of In-Service Training Courses on the Efficacy of Teachers in the Education Organization of Bukan Township based on the Kirkpatrick Model

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ABSTRACT

Investigating the formation and evolution of human organizations indicates that in the past times, due to the simplicity of communities and limited technology, the structure of organizations and their functions were generally simple and primary. The present study is to investigate the effectiveness of in-service training courses on the efficacy of teachers of the Education Organization in Bukan Township based on the Kirkpatrick Model. The results of the present study indicate that with regard to the value of the one sample t-test, investigating the present views of teachers of the Education Organization towards “investigating the effectiveness of in-service training on teachers’ reactions” can be presented. There is a significant difference between the theoretical and experiential mean scores in all components and the whole variable at the significance level 0.01. Therefore, investigating research questions indicates that since in all components, experiential mean scores is higher than the theoretical mean scores; thus teachers of the Education Organization reported the effectiveness of in-service training courses based on the Kirkpatrick Model as higher than the moderate level.

Keywords: teachers, in-service training courses, the Education Organization.

INTRODUCTION

Investigating the formation and evolution of human organizations indicates that in the past times, due to the simplicity of communities and limited technology, the structure of organizations and their functions were generally simple and primary. Every person could be ready for specific jobs via training courses or master-disciple trainings. However, the reason for changes and transformations in different dimensions of human lives, particularly after the Industrial Revolution which gave a new face to jobs, master-disciple training could not prepare individuals for different jobs anymore. Those transformations appearing

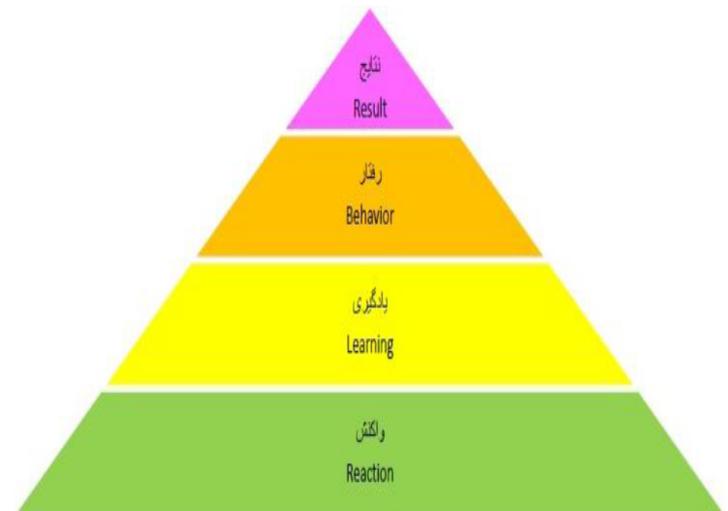
under the shadow of innovations, inventions and initiatives, influenced different dimensions of life. Those organizations as institutions rising from the heart of communities, had to be in consistency with transformations. Thus, organizational structures were risen from simple and traditional forms towards more complicated and specialized kinds, and their tasks and functions became more complicated. In such assituation, preparing for a certain job requires spending a lot of time for training specializations. As a result, training teachers found a special status in most of jobs and professions (Fathi&Ejargah, 2011).

THEORETICAL FRAMEWORK

Education with the aim of increasing efficacy and effectiveness of teachers, updating their knowledge and capabilities appropriate with development of knowledge and technology as well as developing ethical issues, organizational culture, and improvement of human relations, every day allocated significant amount of budget for training human forces (Orangi et al. 2011) in such a way that investment for training teachers is one of the most valuable ones in that capable teachers are the initial point in the educational development. When teachers have high influence, their students obtained high levels of academic knowledge, motivation, independence, and self-confidence. Since teachers in the one hand have great efforts in preparing students for living in different communities and cultures, and on the other hand, in all countries, a significant amount of resources are spent for improving the training system of teachers, the issue of teacher training has been discussed by policymakers of those countries. According to Sarkar Arani, efficient education requires putting teachers in a world with appropriate cultural grounds appropriate to life. Countries, faced with the challenge of effective teacher training, should be in search of improving old methods and execute the most effective courses via using effective communication technologies and the Internet (SamieiZafarghandi, 2011).

In Iran, teacher training courses can be divided into two main parts of pre-service and in-service courses. Pre-service courses are held in teacher training centers and universities. In-service courses are conducted in two long-term and short-term courses (Samiei, 2011). Because of different reasons such as changes in curricula, reforming the content of books or updating knowledge, information, and skills of teachers, short-term in-services courses are held at the level of schools, educational areas, provinces, or at the national level. The system and process of planning and implementing those courses are relatively same (SamieiZafarghandi, 2011).

Thus, one of the most influential assessment models of HRM, the Kirkpatrick Model was developed by Donald Kirkpatrick (Tavakkol, 2010). According to Kirkpatrick, assessment of training course should be conducted should be conducted at four levels of criteria, i.e. reaction, learning, behavior, and results of training. In this model, those four levels are proposed for training assessment (Sam Khanian, 1999). The reaction level includes learning, behavioral skills, and results (Bakhshandeh et al. 2013).



Now, a lot of organizations, regardless of the type and degree of formal education of their own staff and considering the dynamics used in the sciences as well as professional needs, organizations should hold different and consistent courses for them. Investment in training the staff is an increasing process and organizations increasingly have emphasized the development of training activities and providing opportunities of learning for all staff at different organizational levels (Saki, 1998). Concurrent with the increase in paying attention to training, expectations raises as well.

Accordingly, nowadays the significance and role of in-service trainings (short-term and long-term periods) are clear for organizations. Each organization, appropriate to the significance they give to this issue, they have allocated time and capital to training human forces. In-service training which continues with systematic courses and tries to increase the abilities, skills, and

knowledge of the staff can be effective on solving problems of workplaces and survive organizations. Therefore, consistent efforts for improving quality of in-service training can be with significant benefits. It can be never claimed that training is beneficial by its own unless the presented trainings should be assessed (Pirouyan et al. 2011).

Irzil defines assessment as the final step in the process of training with the aim of improving training or doing judgment regarding value and effectiveness of training programs. Assessment provides information for justifying the effectiveness of training programs. It is via this information that the consistency of training are considered for the next times. A lot of scholars believe that assessment is a regular process for determining values, merits, or aims of something. In other words, assessment refers to collecting a regular set of explanations and information as well as judgment for decision making regarding something (Jack, 2003). If assessment is in relation with training, it means the process of judgment about aspects of learners' behaviors and includes some skills via which it can be identified whether learners have achieved the determined aims or not. Assessment is an integral part of an educational system (Ahmadi and Hakimi, 2007). Educational assessment is the process of interpreting results via information assessment for judgment regarding general aims of education or the degree of learners' successes. All in all, educational assessment is the regular approaches of collecting data helping managers to make suitable and valuable decisions for training programs.

Kirkpatrick states three main reasons for educational assessment:

1. Justification of reasons for the existence of training units by showing the role and significance of education for aims and responsibilities of organizations;
2. Making decision for continuing educational programs;

3. Improving education (Salvatore and Falletta, 1998).

As a result, the model of effectiveness of training courses proposed by Kirkpatrick can be presented as follows:

The Kirkpatrick's four-level model of assessment of effectiveness of training courses

Data collection instruments	Outcome of each level	Level
Surveys and questionnaires	Reaction	1
The use of pre-test and background for the assessment and learning	Learning	2
Changes in work and behaviors through education stakeholders	Behavior	3
Review of documents and impact on the entire organization	Results	4

Resource: Bakhshandeh et al. 2011

Efficiency

The simplest and the most comprehensive definition of efficiency has been presented by Peter Drucker. According to Drucker, efficiency refers of doing activities as appropriately and effectively as possible. Katz and Kahn (1978) defined efficiency as the ratio of outputs of production to the inputs required for producing those outputs.

Those scholars consider some differences between potential and actual efficiency. Potential efficiency shows that how much an organization can produce if it acts optimally, while actual efficiency refers to the ration of the level of outputs to the actual level. Actual efficiency is usually lower than the potential one.

Another definition of efficiency is the ratio of actual productivity to the standard one, or in fact the ratio of the degree of done work to the degree of the work which should have been done (Khoshbakht et al. 2012).

The definition of efficiency

Efficiency is in fact the ration that compares some aspects of performances of units with costs imposed on them due to doing those performances. Efficiency means the least duration of time or the energy consumed for the highest

degree of work which has been done. The increase in the level of efficiency has been directly handed over to managers. The increase in the efficiency resulted in the enhancement of productivity and effective contribution to achieve organizational aims. Efficiency refers to the amount of resource consumed for producing a unit of products. It can be calculated in terms of the ratio of consumption to products. If an organization can achieve a certain resource by consuming fewer amounts of resources than other organizations, it has higher efficiency. In other words, efficiency refers to the least time or energy consumed for the highest level of doing work. In fact, the ratio of the done work to the degree of the work should have been done (GhaznaviOskuei, 2000).

Definition of efficiency from the theorists' viewpoints

Efficiency from Fredrick Taylor's view (Scientific Management Theory)

Taylor considers the art of management as the constructive tools of the relationship between managers and workers. Taylor considers the following factors affective more efficiency (Golabi, 1998):

1. The division of labor based on specialization of tasks;
2. strong staff who have been recruited for difficult situations;
3. Effective coordination between all duties. However the concept, organizing is a means to achieve greater efficiency through cost reduction.

Taylor emphasizes specialization and skill of the staff and knows trained staff as the factor of production with better quality and higher quantity. He also considers the factor of motivation simply based on higher skills and production. In the third

principle emphasizing encouragement and punishment, he considers materialistic incentives as the only encouragement for higher production and efficiency. As a result, I is known as an incomplete theory.

Efficiency from Henry Gant's view

Henry Gant is contemporary to Taylor to whom he had close friendship and cooperation. Their theories are similar to each other from different perspectives, but the emphasis of Henry Gant is on issues such as human elements in organizations in that he specially emphasized work and the staff as well as the degree of individual efficiency. Regarding the identification of real values of human elements observed in his research, he concluded that effects of doing correct work for the staff is the result of conscious motivations in them. He believed that if organizations do not something new, they should make workers to do something new in which the motivation of new activities can be produced. This should be done because of receiving more incentives as much as possible. They should do their best and gain success in their job. He felt that this action is not only accepted by workers, but also enjoyable for them to achieve successes (Golabi, 1998).

Main research question

Is in-service training effective on teachers' efficiency in the Education Organization Bukan Township based on Kirkpatrick's model?

Secondary questions

How is teachers' reactions to in-service training courses?

How is teachers' learning to in-service training courses?

How is teachers' degree of behavioral changes to in-service training courses?

Statistical indices related to investigating the subscale of "reaction" in subjects

Index of central tendency			Index of dispersion			Distribution indices		
Median	Model	Mean	variation range	Variation	SD	Standard error	Skewness index	Kurtosis Index
30	30	29.34	41	44.88	6.69	0.42	-0.34	0.49

Statistical indices related to investigating the subscale of “learning” in subjects

Index of central tendency			Index of dispersion			Distribution indices		
Median	Model	Mean	variation range	Variation	SD	Standard error	Skewness index	Kurtosis Index
21	20	19.48	28	26.19	5.11	0.32	-0.74	0.98

Statistical indices related to investigating the subscale of “behavioral changes” in subjects

Index of central tendency			Index of dispersion			Distribution indices		
Median	Model	Mean	variation range	Variation	SD	Standard error	Skewness index	Kurtosis Index
34	32	30.99	45	82.36	9.07	0.59	-0.67	0.39

Statistical indices related to investigating the subscale of “behavioral changes” in subjects

Index of central tendency			Index of dispersion			Distribution indices		
Median	Model	Mean	variation range	Variation	SD	Standard error	Skewness index	Kurtosis Index
90	83	80.11	98	342.38	18.50	1.21	-0.54	0.11

CONCLUSION

The results of the present study indicate that with regard to the value of the one sample t-test, investigating the present views of teachers of the Education Organization towards “investigating the effectiveness of in-service training on teachers’ reactions” can be presented. There is a significant difference between theoretical and experiential mean scores in all components and the whole variable at the significance level 0.01. Therefore, investigating research questions indicates that since in all components, experiential mean scores is higher than the theoretical mean scores; thus teachers of the Education Organization reported the effectiveness of in-service training courses based on the Kirkpatrick Model as higher than the moderate level.

The results of the present study indicate that with regard to the value of the one sample t-test, investigating the present views of teachers of the Education Organization towards “investigating the effectiveness of in-service training on teachers’ learning” can be presented. There is a significant difference between theoretical and experiential

mean scores in all components and the whole variable at the significance level 0.01. Therefore, investigating the second research question indicates that since in all components, experiential mean scores is higher than the theoretical mean scores; thus teachers of the Education Organization reported the effectiveness of in-service training courses on learning based on the Kirkpatrick Model as higher than the moderate level.

The results of the present study indicate that with regard to the value of the one sample t-test, investigating the present views of teachers of the Education Organization towards “investigating the effectiveness of in-service training on teachers’ behavioral changes” can be presented. There is a significant difference between theoretical and experiential mean scores in all components and the whole variable at the significance level 0.01. Therefore, investigating the second research question indicates that since in all components, experiential mean scores is higher than the theoretical mean scores; thus teachers of the Education Organization reported the effectiveness of in-service training courses on behavioral

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