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The effect of short-term training on the empowerment of high school teachers in Tehran city from the perspective of the teachers

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ABSTRACT

There is a substantial need for schools to empower their educational teachers in order to achieve the goals and objectives of education and training in the age of knowledge. One way to accomplish this is empowering school's teachers through short-term training. The purpose of the present study was to investigate the impact of short-term training on the empowerment of high school teachers in Tehran city. The study was descriptive-correlational and the population included 10658 persons from all high school teachers in Tehran who were employed in 2012-2013 academic year. The sample size was composed of 371 persons and determined using Morgan table and single-stage cluster sampling method. The measurement tool of the study was a researcher made questionnaire and the reliability was calculated and confirmed using 0.89 Cronbach's alpha. The validity was conducted using structural validity. The data analysis was carried out by utilizing SPSS and Smart PLS 2.0 software in two part of descriptive and inferential. The results showed that short-term trainings affect the empowerment of the teachers. Short-term trainings had effect on the teacher's empowerment dimensions in the dimensions of delegation of authority, job enrichment, forming work teams and participation in setting goals, but they had not effect on the teacher's empowerment dimensions in the dimensions of performance-based reward, participation in decision-making and establishing recommendations system.

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INTRODUCTION

Physical capital, human resources, technology and management are of constituent elements of today's organizations that human resources are the most important element according to many researchers (Unger *et al.*, 2011). Since human resources constitute more than half of the resources and capital of organizations, providing the human capital requires conducting regular training activities at all organizational levels (Khasali, 2006). The education and empowerment of employees is one of the goals of organizations and there is always the belief that productivity demands educated and empowerment employees (Smith, 2000). Education and educational systems are factors that affect the empowerment and capability of employees. Effective educational system leads to the efficiency of human resources through the promotion of individual and job skills. If the education system is not useful and is not established with respect to time and business requirements, the efforts of the organization will not lead to acceptable results. Barret and Connell (1990) represented the training of human resources as a social investment. Organizations try constantly with respect to the age of information technology to provide opportunities to the development of human resource capabilities in order to promote their performance (Rangriz and Azimi, 2006). Therefore, the training of employees in a society that is rapidly changing is not only desirable, but also an activity that each organization should consider resources for it in order to have efficient and informed human resource.

There is a three-step educational structure for the empowerment of employees, which analyzing the abilities of employees and helping them to work with the maximum capacity is the first step. The second step is utilizing educational techniques in order to employ employees, which is beyond their current capabilities. Eventually, the third step is achieving employee's commitment through sharing ideas and values that empowerment is obtained with the fulfillment of this step. Education is one of the most complex tasks in the administration of any organization, especially in human resources. In fact, education is of the most important actions and programs of

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each organization and the educational system, which is considered as a supplement for the employment system, leads to the empowerment of human resources and guarantees future prosperities. Generally, it can be stated that education and improvement lead to deeper insights of knowledge, more ability and skill of the people working in the organization for the implementation of assigned duties, and achieving organizational objectives with greater and better efficiency and effectiveness. Therefore, the main issue of the present study is to investigate the effect of short-term training on the empowerment of high school teachers in Tehran city.

Research literature:

Today, we live in a knowledge-based society, where knowledge and proficiency play an important role in it (Phusavat *et al.*, 2011). In the present era that organizations rely extremely on the knowledge and skills of their employees, educational organizations play an important and vital role in the development of human resources through providing trainings (Hansson, 2007). Education should be based on scientific principles and methods in order to meet the existing needs (Abbasian, 2006). Short-term trainings are of these kinds of trainings that are presented by the organizations. Short-term trainings in terms of organizational are trainings that carry out after hiring a person in an organization and it is aimed at preparing people for better implementation of responsibilities and improve their capabilities and skills (Mohammadi, 2004). These types of training is based primarily on three major factors of development of knowledge, improvement of skills, and creating or changing attitudes (Fathi and Ajargah, 2009) that are used for both new employees and current employees (Bernardin, 2003). The results of several studies indicate that when an organization is a very complex and benefits of research and development within the organization or employs new technology, tends to training programs within the organization such as short-term trainings which are also called in-service trainings. Organizations that make use of advanced technology and are known as entrepreneurial organizations, benefit considerably from in-service trainings than other types of trainings due to the weakness of their employee's skills (Baldwin and Peter, 1999). Planning, implementation and evaluation of training programs for employees are the measures that organizations conduct against environmental changes in order to empower the employees, because job requirements and environmental conditions are consistently exposed to various changes and these trainings can help the employees to adopt themselves to the changes (Nastizai and Hezaremoghadam, 2010).

Empowerment is a concept that can provide organizational interests and can develop the sense of ownership and pride in employees. Empowerment of human resources is one of the effective tools to increase the productivity of employees, and optimal use of the employee's individual and group capacity and capabilities in line with organizational goals (Erisen *et al.*, 2009). Robbins *et al.* (2002) utilized factors such as internal motivation, perception and commitment, job structure, authority transmission, and sharing resources and information in the definition of empowerment. Empowerment, as the shared perceptions of employees, is conceptualized from management structures and policies (Sun *et al.*, 2012; Biron and Bamberger, 2010).

In fact, empowerment is a continuous and permanent process and is analyzed in a dynamic environment at different levels. Empowerment helps the leaders that want to make key changes in their organization to take advantages of knowledge, skills, experiences and motivation of all of their employees (Zhang and Bartol, 2010). Empowerment lead to a feeling of pleasure of being meaningful (e.g. value of work objectives), competency (e.g. self-efficiency), feelings of self-determination (e.g. independence in innovation and continuation of work behaviors), feeling of efficacy (e.g. impact on their results), and sense of identity, ownership and development among teachers (Jiang and Fu, 2011). Eventually, Naveh Ebrahimi and Abdollahi (2006) classified empowerment in seven dimensions of delegation of authority, performance-based rewards, job enrichment, teacher's participation in decision-making, establishment of the proposed systems of teachers, forming work teams and teacher's participation in setting goals, which these dimensions were used in the present study in order to formulate the research hypotheses. Undoubtedly, special attention to the factors that influence the empowerment of employees (especially the employees and teachers working in the field of education) can be considered as the most important factor in the further dynamism and effectiveness of trainings to applicants and young jobseekers.

The related investigations that have been conducted are mentioned in table 1.

Table 1: The related research background

Conclusion	Topic	Researchers
The relationship between professional trainings and individual's empowerment and the effect of these two structures on organizational performance	The role of education and empowerment in environmental performance	Daily <i>et al</i> (2012)
Empowered leaders can enhance the empowerment of individuals through suitable trainings	The relationship between empowered leader and employees creativity, and employee's internal motivation	Zhang & Barto (2010)
The positive effect of in-service trainings on the empowerment of individuals and illness reduction	Employing empowerment training schedules in the self-management of patients	Funnell <i>et al</i> (2005)
There is significant relationship between job empowerment and in-service trainings	The effect of in-service trainings, service records and education on the job empowerment of women teachers	Damavandi and Elzami (2013)

There is a positive and significant relationship between the empowerment of teachers and in-service trainings	The effect of in-service trainings on the empowerment of physical education teachers	Heidarinezhad <i>et al.</i> (2012)
There is a significant relationship between in-service trainings and teacher's job empowerment	The effect of in-service trainings on the job empowerment of physical education teachers	Mehri <i>et al.</i> (2010)
There is a relationship between in-service trainings and empowerment in the dimension of decision making (delegation of authority)	The effect of in-service trainings on the empowerment of the employees of Islamic Azad University	Eslami <i>et al.</i> (2011)
The important effects of in-service trainings on the enhancement of employee's efficiency and effectiveness	The effect of transformational leadership on the empowerment of employees	Hasanpour and Sharif (2011)
In service trainings are effective in performance improvement, strengthening of occupational skills, job satisfaction and readiness to perform the duties of employees, which these dimensions lead to job enrichment	Empowerment of human resources through in-service trainings	Karroubi and Matani (2009)
There is a relationship among the factors of the levels of employee's in-service trainings, delegation of authority to employees, job enrichment, internal and individual motivation, the amount of employee's employing participative management and the amount of empowerment	The effect of effective factors on the empowerment of human resources in water utilization and distribution company in Golestan province	Ghanbari (2007)
In-service trainings are effective in the improvement of professional capabilities of employees	Effective structures in increasing capabilities	Hadavand and Sadeghian (2007)

It can be concluded that previous researches show a positive relationship between short-term trainings and employee's empowerment. Hence, according to the research background and literature, the questions and conceptual model of the research (figure 1) formed, which are mentioned in the following:

Main question:

How much effective are short-term training courses on the empowerment of the high school teachers in Tehran?

Sub-questions:

- 1- How much effective are short-term training courses on the empowerment of the high school teachers in Tehran in the dimension of authority delegation?
- 2- How much effective are short-term training courses on the empowerment of the high school teachers in Tehran in the dimension of performance-based rewards?
- 3- How much effective are short-term training courses on the empowerment of the high school teachers in Tehran in the dimension of job enrichment?
- 4- How much effective are short-term training courses on the empowerment of the high school teachers in Tehran in the dimension of employee's participation in decision-making?
- 5- How much effective are short-term training courses on the empowerment of the high school teachers in Tehran in the dimension of the establishment of teacher's suggestions systems?
- 6- How much effective are short-term training courses on the empowerment of the high school teachers in Tehran in the dimension of forming work teams?
- 7- How much effective are short-term training courses on the empowerment of the high school teachers in Tehran in the dimension of employee's participation in setting goals?

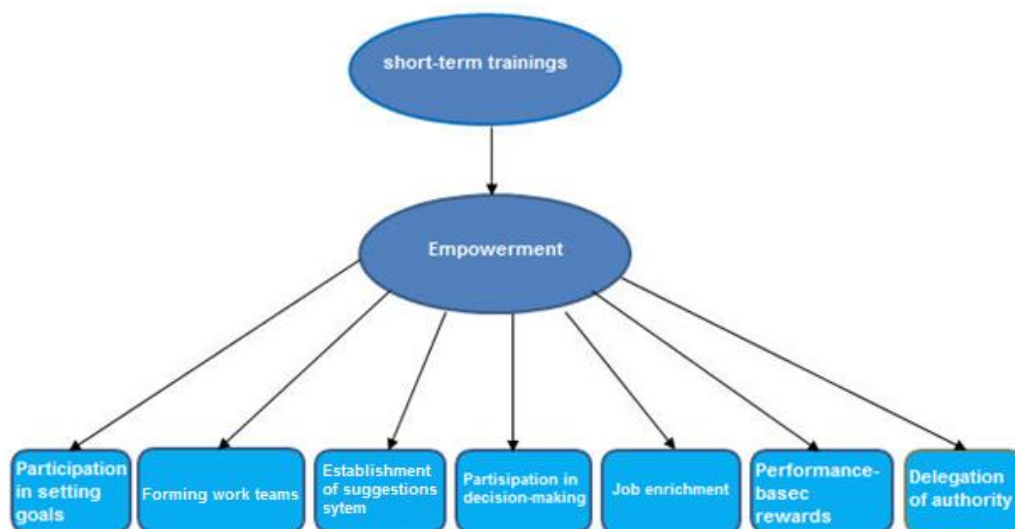


Fig. 1: The conceptual model of the research

Methodology:

Since the present study seeks to identify and apply the results of findings in the investigation of the effects of short-term trainings on the empowerment of high school teachers in Tehran city, the research is practical, descriptive-survey based and quantitative (using questionnaires) in terms of objective, methods of obtaining data and type of collected data, respectively. Data analysis is carried out using Structural Equation Modeling (SEM) method and Smart PLS software. The structural equation model is a comprehensive statistical approach to test the hypotheses about the relationships between variables (Wang and Wang, 2012). Acceptability of theoretical models can be analyzed using correlation data and non-experimental data. Process analyses in SEM carry out in two parts of measurement model and structural model, which the relationship between questions and variables are controlled in the measurement model and the relationship between variables are investigated in structural model (Byrne, 2013).

The population of the present study concluded all high school teachers in Tehran who were employed in 2012-2013 academic year. According to the number of them (10658 persons) and Cochran formula and Morgan table, a sample size of 371 persons was chosen for distribution of the questionnaires. The questionnaires were distributed using single-stage cluster sampling method. Data collection tool for this study was a questionnaire that was consisted of 29 questions (28 questions to assess the empowerment of the teachers and 1 question to assess short-term training courses). The details of the dimensions and the questions of the questionnaire are shown in table 2.

Table 2: The questions and dimensions of the research

Number of questions	Dimension	Concept
4	Delegation of authority	Teacher's empowerment
4	Performance-based reward	
4	Job enrichment	
4	Participation in decision-making	
4	Establishment of suggestions system	
4	Forming work teams	
4	Participation in setting goals	
1	-	Short-term training courses

In SEM method, the research model is measured using criteria related to reliability and validity. In order to check the reliability, two criteria of Cronbach's alpha and Composite Reliability were used that measured the internal consistency of the measurement tool. When these two criteria are more than 0.7, the tool has acceptable internal consistency (Nunnally, 1987; Peterson and Kim, 2013). Table 3 shows that the measurement tool has a suitable reliability due to all coefficients of greater than 0.7.

Table 3: The reliability investigation

Participation in setting goals	Team forming	Suggestions system	Participation in decision-making	Job enrichment	Reward	Delegation of authority	Short-term training courses	Variable
0.79	0.76	0.80	0.83	0.72	0.78	0.81	0.77	Cronbach's alpha
0.83	0.80	0.85	0.87	0.78	0.81	0.84	0.82	Composite Reliability
0.71	0.70	0.73	0.71	0.63	0.66	0.69	0.67	AVE

In order to check the model fitting, in addition to reliability, the validity was measured in two parts of convergent and divergent validity. Divergent validity demonstrates the shared average variance between each hidden variable and its related questions that Average Variance Extracted (AVE) is used for it. Fornell and Larcker stated that AVE values more than 0.5 indicate acceptable divergent validity. The results for the research dimensions are presented in table 3 and considering that all AVE values related to the structures are more than 0.5, the convergent validity of the present questionnaire is acceptable.

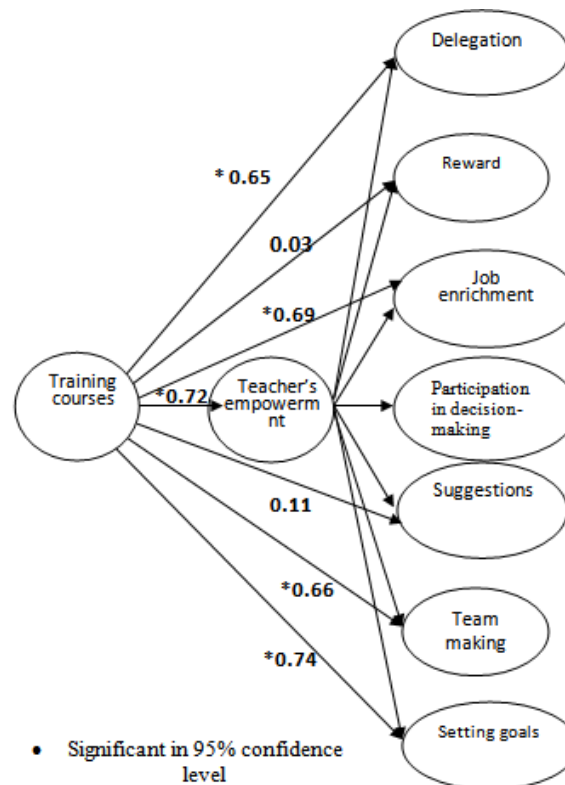
In order to check the divergent validity, the amount of the relationship between a hidden variable or dimension and its related questions was investigated in the comparison of the relationship between the variable and other hidden variables. Fornell and Larcker (1981) stated that divergent validity is acceptable when the root square of AVE for each dimension is more than the square of correlation coefficients between the dimension and other dimensions of the model. According to table 4, the root square of the AVE for each structure is more than the correlation coefficients of the structure and other structures (values associated with the columns and rows of the same structure) and this demonstrates the divergent validity of the structures.

Table 4: The investigation of the divergent validity

Structure	Short-term training courses	Delegation of authority	Reward	Job enrichment	Participation in decision-making	Suggestions system	Team making	Participation in setting goals
Short-term training courses	0.819							
Delegation of authority	0.115	0.831						
Reward	0.253	0.284	0.812					
Job enrichment	0.324	0.229	0.341	0.794				
Participation in decision-making	0.109	0.309	0.532	0.306	0.843			
Suggestions system	0.231	0.415	0.410	0.310	0.496	0.845		
Team making	0.113	0.452	0.427	0.264	0.227	0.105	0.836	
Participation in setting goals	0.194	0.176	0.387	0.365	0.315	0.319	0.219	0.843

Findings:

The results of the casual analysis between short-term training with its dimensions and the teacher's empowerment were measured using SEM method and Smart PLS software. As it is obvious in figure 2, the impact of short-term training courses on the empowerment of the teachers is significant and positive with the value of 72%. According to the t-values showed in table 5, these courses were effective on the teacher's empowerment in the dimensions of delegation of authority, job enrichment, team working and participation in setting goals, but were not effective on the teacher's empowerment in the dimensions of performance-based reward, participation in decision-making and establishment of suggestions system.

**Fig. 2:** The investigation of the casual relationship between short-term training and its dimensions, and empowerment

The output of the Smart PLS software answers the main question and sub-questions of the research (Table 5). The related parameter is significant when the t-value is more than +1.96 and less than -1.96. The t-values in table 5 show that the effects between the variables in the main question and sub-questions are significant.

Table 5: The investigation of the research questions

Result	t-value	The amount of effect	The effects of variables in each of the questions
Significant impact	7.92	%72	Short-term training courses → Empowerment
Significant impact	5.22	%65	Short-term training courses → Delegation of authority
no significant impact	1.21	%3	Short-term training courses → Reward
Significant impact	6.45	%69	Short-term training courses → Job enrichment
no significant impact	0.98	%8	Short-term training courses → Participation in decision-making
no significant impact	1.43	%11	Short-term training courses → Suggestion system
Significant impact	6.73	%66	Short-term training courses → Team making
Significant impact	8.81	%74	Short-term training courses → Participation in goal setting

Conclusion:

Achieving organizational goals nowadays depends on the employee's ability to perform assigned tasks and adaption to changing environment. Short-term training and human resource development make people compatible with organizational and environmental changes in order to continue their activities more effectively and to increase their efficiency.

On the other hand, one of the major problems of executive organizations is the shortage of trained and skilled employees. Universities and institutions of higher education do not have significant role in the preparation of individuals to enter into systems, because the university graduates with a collection of scientific data still do not have necessary capabilities to work in executive organizations. Therefore, education and empowerment of employees and increasing their job skills are essential and necessary for desired activities. In this regard, developing training programs for employees and implementation of short-term trainings, which enhance the employee's intellectual and professional capabilities, are of factors that have crucial role in the empowerment of the employees.

The present study was conducted with the aim of the impact of short-term training courses on the empowerment of high school teachers in Tehran, which the results showed that short-term training courses have effect on the teacher's empowerment. Short-term training courses also have impact on the dimensions of the teacher's empowerment such as delegation of authority, job enrichment, forming work teams and participation in goal settings, but they do not have impact on the dimensions of the teacher's empowerment such as performance-based reward, participation in decision-making and establishment of suggestions system. The results of the research are described in the following with respect to the questions.

With respect to the main question, it can be concluded that empowered educational teachers are as substantial needs for the schools to achieve the goals and ideals of education. Empowerment of teachers through short-term trainings and proposing a suitable model for their utilization by the teachers are of ways of achieving this objective. The results of this question are in harmony with the findings of Funnel *et al.* (2005), Damavandi and Elzami (2013), Heidarinezhad *et al.* (2012) and Mehri *et al.* (2011).

According to the first sub-question, it can be stated that delegation of authority is an effective dimension in the empowerment of the teachers, and short-term trainings lead to empowerment through increasing delegation and cooperation between the teachers. The results are in harmony with the findings of Funnel *et al.* (2005), Damavandi and Elzami (2013), Hasanpour and Sharif (2010) and Karroubi and Matani (2009).

According to the third sub-question, it can be concluded that teacher's education through acquiring information, knowledge creation, learning enhancement and new skill acquisition lead to job enrichment and consequently increase the employee's empowerment. The results are in harmony with the findings of Funnel *et al.* (2005), Damavandi and Elzami (2013), Eslami *et al.* (2011) and Ghanbari (2007).

According to the sixth sub-question, it can be stated that short-term trainings lead to knowledge and necessary information enhancement, and a sense of cooperation and collaboration through intellectual partnerships. Short-term trainings also lead to the promotion of knowledge level in all individuals in the framework of working groups and make the formation and development of work teams, as one of the dimensions of empowerment, possible. Having such a relationship for those who are involved in the educational process make them transfer their information in the best way and carry out trainings that are more effective. Generally, training is one of the most important tasks of managers towards students, and effectiveness of this training is often dependent on the ability of communicate. The results are in harmony with the findings of

Funnel *et al.* (2005), Hasanpour and Sharif (2011), Karroubi and Matani (2009), Hadavand and Sadeghian (2007).

According to the seventh sub-question, it can be concluded that short-term trainings lead to the enhancement of knowledge and information, self-confidence, job skills, the ability of labor division, sense of collaboration through intellectual contributions and participation in setting goals, and eventually lead to empowerment. The results are in harmony with the findings of Funnel *et al.* (2005), Hasanpour and Sharif (2011), Eslami *et al.* (2011) and Ghanbari (2007).

Finally, the suggestions based on the findings of this study are presented as follows:

- A variety of short-term training with appropriate content should be presented through the enhance of empowerment and promotion of teacher's performance
- To present trainings that increase the individual's capability in sense of delegation, job enrichment, forming work teams and participation in setting goals
- To educate intelligent modeling techniques of successful schools in providing in-service training
- To develop appropriate software and hardware in establishing flexibility in in-training procedures with the empowerment approach for all elements of training of high school teachers in Tehran

REFERENCE

- Abbasian, Abdollahossein, 2006. Effectiveness of training courses (Patrick Creak Model), Tadbir Publication, pp: 170.
- Baldwin, J., H. Peter, 1999. *Innovation in the manufacturing sector*, John deutch institute for the study of economic policy, Kingston Tario, Queens university.
- Bernardin, H.G., 2003. *Does training generally work? the returns to in-company training*, economic and social research institute, Dublin.
- Biron, M., & P. Bamberger, 2010. The impact of structural empowerment on individual well-being and performance: Taking agent preferences, self-efficacy and operational constraints into account. *human relations*, 63(2): 163-191.
- Daily, B.F., J.W. Bishop & J.A. Massoud, 2012. The role of training and empowerment in environmental performance: A study of the Mexican< IT> maquiladora<IT> industry. *International Journal of Operations & Production Management*, 32(5): 631-647.
- Damavandi, Ebrahim; Elzami, Esmat, 2013. The relationship between in-service trainings, service records and education, and job empowerment in women teachers, *Journal of Education Technology*, 7(7): 3.
- Erisen, Y., N. Çeliköz, Kurtkan, M.O. Kapıcıoğlu, C. Akyol, & S. Ataş, 2009. The needs for professional development of academic staff at vocational education faculties in turkey. *Procedia-Social and Behavioral Sciences*, 1(1): 1431-1436.
- Eslami, Yahiya; Norouzi, Tahmoureth; Badii, Hossein, 2011. The effects of in-service trainings on the amount of empowerment of employees in Islamic Azad University, *Quarterly of Leadership and Educational Management of Islamic Azad University of Garmsar*, 5(4): 9-22.
- Fathi Vajargah, Koroush, 2007. Planning in-service training of staff, Tehran: Samt
- Funnell, M.M., R. Nwankwo, M.L. Gillard, R.M. Anderson & T.S. Tang, 2005. Implementing an empowerment-based diabetes self-management education program. *The Diabetes Educator*, 31(1): 53-61.
- Ghanbari, Hossein, 2007. The effect of effective factors on the empowerment of human resources in water utilization and distribution company in Golestan province. Training Center of State Management in Golestan Province, Master's thesis
- Hadavand, Saeed; Sadeghian, Shohre, 2007. Effective structures in increasing capabilities, *Quarterly of Tadbir*.
- Hansson, B., 2007. Company-based determinants of training and the impact of training on company performance: Results from an international HRM survey. *Personnel Review*, 36(2): 311-331.
- Hasanpour, Akbar; Abbasi, Tayebe; Norouzi, Mojtaba, 2011. The effect of transformational leadership on the employee's creativity, *Management research in Iran*, 15: 1.
- Heydarinezhad, Sedighe; Bahrami, Mohammad Vazmesha, Tahereh, 2012. The effect of in-service training courses on the empowerment of physical education teachers, *Applicable researches in management and biological sciences*, 2: 81-88.
- Jiang, X., & Q. Fu, 2011. Relationship between Universities Organizational Culture, Teachers' Psychological Empowerment and Organizational Citizenship Behavior. In *Computational Sciences and Optimization (CSO), Fourth International Joint Conference on* (pp. 699-703). IEEE.
- Karroubi, Mahdi; Matani, Mehrdad, 2009. Empowerment of human resources through in-service trainings. *Journal of Beyond Management*. 3(9): 7-30
- Mehri, Ali., Moharram Zadeh, Mehrdad; Maleki, Behnam, 2011. The effect of in-service trainings on the job empowerment of physical education teachers, Sixth National Congress of Iran's Students of Physical

Education and Sport Sciences

Mohammadi, Davoud, 2004. Planning in-service training of staff, Peivand publication

Nastizai, Naser, Hezare Moghaddam, Mahdie, 2010. A comparative study of the effects of direct and indirect short-term training courses on psychological empowerment, Quaterly of Nursing and Midwifery, 8(4): 254-265.

Naveh Ebrahim, Abd Alrahim; Abollahi, Bizhan, 2006. Empowering staff, golden key in human resource management, Virayesh Publication, Tehran

Phusavat, K., N. Comepa, A. Sitko-Lutek & K.B. Ooi, 2011. Interrelationships between intellectual capital and performance: Empirical examination. *Industrial Management & Data Systems*, 111(6): 810-829.

Rangriz, Hasan; Azimi, Nazgol, 2005. Human resources in the third millennium, Tehran: commercial publishing company.

Robbins, T.L., M.D. Crino, L.D. Fredendall, 2002. An integrative model of the empowerment process, *Human Resource management*, 12(1): 419-443.

Smith, J.A., 2000. *The Research Base for Balanced Literacy*. Utah State Office of Education Literacy and Assessment Conference, Salt Lake City.

Sun, L.Y., Z. Zhang, J. Qi, & Z. X. Chen, 2012. Empowerment and creativity: A cross-level investigation. *The Leadership Quarterly*, 23(1): 55-65.

Unger, J.M., A. Rauch, M. Frese, & N. Rosenbusch, 2011. Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26(3): 341-358.

Zhang, X., & K.M. Bartol, 2010. Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1): 107-128.