Assessing the Effectiveness of Specialized Courses for Financial and Urban Economic Experts of Tehran Municipality Based on Patrick Model

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Received: 2015/12/01 **Accepted: 2016/02/22**

Abstract: Training is a convenient tool for investing in human resources. Tehran Municipality, as an institution that its mission is servicing to the public, is responsible for important mission of staff's training and development that they should attempt in line with servicing to citizens. This is much more delicate in areas involving in financial and economic issues. The remarkable point is that training is not profitable by itself, unless presented training to be evaluated and specified whether they have had necessary effectiveness or not. This research is applied in terms of purpose, and it is descriptive-survey considering method. The effectiveness of seven specialized courses of financial and urban economy experts of Tehran Municipality held in 2014 has been assessed. Statistical population is all financial and urban economy experts of Tehran Municipality who they were 227 people. 143 of them were selected as available sample attended in these courses by using simple random method. 36 people were direct managers. Data collection tool is research-made questionnaire based on Kirkpatrick Model. Its validity was verified by professors and experts in the field of training and assessment and its reliability has been verified using Cronbach's alpha coefficient. One sample t test was used for the first, third, and fourth levels (reaction, behavior change and results), and paired samples t test was used for the second level (learning). The results indicate that specialized training courses have had appropriate efficacy at all four assessment levels of Patrick model special for financial and urban economy experts of Tehran Municipality held in 2014 including employees' reaction to training courses, learning gained from training courses, behavioral changes in employees, and changes in organizational performance.

Keywords: Educational assessment, effectiveness, Patrick model, financial and urban economy experts, Tehran Municipality
JEL Classification: R00, B26, C35, H21, C52
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The Scientific-Research Quarterly Journal of Urban Economics and Managementl
ISSN: 2345-2870
Indexed in: ISC, SID, Noormags, RICeST, Ensani, Magiran
www.Iueam.ir
Vol. 4, No.13
Winter 2016
Pages: 17-31

[Downloaded from iueam.ir on 2026-11-06]
[DOR: 20.1001.1.23452870.1394.4.13.2.9]

1- Introduction

Management of personnel affairs is a field that is as old as management, but it has been subject to change naturally. When management of human resources is proposed as staff management, the turning point of the change and evolution occurs. Management of human resources has not only the principles and concepts of staff management, but it also considers more general and newer approaches in human resources management (Mohammadpour Zarandi et.al, 2013). Different concepts have been proposed in human resources management including staff training. The process of training and improvement is one of the necessary activities for adjusting human force with changing conditions of organization and environment and it can create acceptable limit of cognitive knowledge (knowledge about what), advanced skills (knowledge about how), and systematic understanding (knowledge about why) in organizations' human forces to solve problems (Noe et al., 2010). Creating a suitable administrative system is possible by the help of training and improvement of human force's abilities. The increasing dominance of man over nature, knowledge of unknowns, and research for finding new techniques and tools in order to solve society's problem, particularly in developing countries, has made training of human resources important and effective more than before (Iqbal & Khan, 2012). Organizational training is equipping employees with knowledge, required skills, and creating correct attitudes in them. These knowledge and skills lead to increase organizational efficacy, reduce direct supervision on employees, organizational improvement, organizational learning, and increase organizations' flexibility (Mohammadpour Zarandi and Tabatabaei Mozdabadi, 2015).

Considering possible problems in holding training courses, organizations are inevitable to design and select method(s) to get feedback from held courses. Assessment or evaluation of training courses in different methods is one of these strategies (Bahreyni and Tabibiyan, 2007). Assessment of training courses makes organizations' comprehensive educational system review suitably in each period, remove existing shortcomings in it, and be up-to-date and suitable with organization's educational needs. The problem here is assessment level and effectiveness of obtained feedback from assessment in different levels to improve efficacy of held training courses and their economic issue. Assessment of training courses can occur in several levels and its results may be different (Topno, 2012).

Most famous evaluation models were based on four-level training evaluation model in previous years presented by Kirkpatrick for the first time. This model has been defined as comprehensive, simple, and scientific one for many educational opportunities and considered as criterion in this field by many experts. Kirkpatrick defined evaluation as determining effectiveness in a training program and divided evaluation process into four levels or steps including respondents' reaction, gained learning, behavioral changes, and key results (Kirkpatrick & Kirkpatrick, 2008).

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Municipalities, as public bodies, try to achieve reducing stress of urban life, access to the goals of sustainable development and urban management by defining goals and effective programs in the urban field in the third millennium. In this regard, the responsibility of municipality is very difficult to achieve this important matter and it needs compassionate, skilled, and experienced human force. In order to train human resources, it is necessary to educate with correct management. Tehran Municipality, as an institution that its mission is servicing to the public, is responsible for training and improvement of employees who should not spare any effort to serve citizens. Since created revenues are the most important source of servicing to the citizens, employees' expertise in financial and urban economy fields is of great importance that they should increase their skill level by various training in specialized field. However, merely holding training courses would not help to improve the conditions and their effectiveness should be ensured.

It has been tried in this research to assess held specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 based on Patrick model. In this regard, following questions will be answered:

- What is the extent of effectiveness of specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 at reaction level?
- What is the extent of effectiveness of specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 at learning level?
- What is the extent of effectiveness of training courses for financial and urban economy experts of Tehran Municipality after holding specialized training courses in 2014?
- What is the extent of effectiveness of holding specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 on the performance of Tehran Municipality?
- Is there any significant difference between assessing effectiveness of specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 and work experience?

2- Literature Review

Hojjati et.al. assessed the effectiveness of nurses' in-service training courses. This research was done aiming to evaluate effectiveness of in-service training entitled "patient education" based on Patrick model. This descriptive- cross-sectional study was done for 50 nurses in Hakim Jorjani Hospital of Gorgan attended in patient education course in 2012 by census method. The results indicated that general index of effectiveness is 14.85 showing suitable situation and effectiveness of training course comparing to the accreditation index of the hospital (85 percent). Effectiveness of each in-service training course can be assessed by applying Patrick model at the end of each course since it shows the changes obtained by training at learning level and nurses' behavior well and nurse managers

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can plan for achievement to higher index in this regard (Hojjati, et.al, 2013).

Mazloomi Mahmoodabad et.al. (2013) did a research entitled "evaluating effectiveness of training courses of guilds' health based on Patrick model." This research was descriptive- cross-sectional for 900 shopkeepers with health certificate. Data collection tool was a questionnaire based on Kirkpatrick Model at the level of learning based on awareness, attitude, performance, and satisfaction components. The results indicated that effectiveness of held training courses was average at the level of learning according to Kirkpatrick Model. It is necessary to improve training and learning process level in each of training level.

Mahmoodi et.al. (2013) in a research done among 214 people of managers and employees of Govah company stated that training courses of Govah company were effective in four-step of reaction, learning, behavior, and results from managers and employees' perspective and there is no significant difference between perspective of managers and employees about effectiveness of training courses.

Rahimian and Tabatabaei Mozdabadi (2014) analyzed the gap of general and specialized skill needs for financial and urban economy experts. Statistical population was all the financial and urban economy experts of Tehran Municipality who were 227 people and 143 of them were selected by using Cochran sampling formula. The results indicated that 1. Existing situation of educational needs was assessed moderately and ideal situation of educational needs was assessed highly. 2. There was a significant difference between current and ideal situation of educational needs (general and specialized). 3. Prioritization of general skills of financial and economic experts of Tehran Municipality (gap of general training) respectively includes statistics, writing procedures, communication, management and planning, and computer. 4. Prioritization of specialized skills of financial and urban economy experts of Tehran Municipality (gap of specialized skills) respectively includes accounting, cooperative financial, and investment. General and specialized courses for financial and urban economy experts of Tehran Municipality have been designed based on the need-assessment.

Statistical population was 7593 people including all participants in the courses of cooperatives in the study of Farniya et.al (2013). 357 people were selected as a sample by using cluster-sampling method. The results indicated that educational courses of cooperative were effective at all levels, but as courses become operational, their effectiveness is reduced that can be as a result of emphasizing on theoretical issues during the course or lack of learners' adequate motivation for obtaining knowledge and creating evolution in them.

Gosh et.al (2011) assessed the effectiveness of educational programs by using trainees' response. The purpose of this research is assessing the effectiveness of consisting parameters of an educational program considering trainees' response toward them. The results indicate that six factors including clarity of concepts,

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educational equipment, venue, food service, course practicality, and learners' relationship can be effective on their positive response and effectiveness of training course (Ghosh et al., 2011).

Alvelos et.al (2015) measured the impact of social supports on assessment of educational effectiveness. The purpose of this research is specifying effective social factors on assessing the effectiveness of educational courses. The results indicate that rise in social support within or out of the organization can make educational courses more effective and the results can be more useful (Alvelos et al., 2015).

3- Theoretical Principles

The commission of human force services has presented a comprehensive definition of training. It considers training as a designed process to reform way of thinking, knowledge or behavioral skills through experimental learning in order to achieve to effective performance in an activity or one of the activities their purposes in educational workshops developing individuals' abilities and current and future satisfaction of the needs of organizations' human force (Mirza & Riaz, 2012).

Trained and specialized people are counted as the most important success factors of organizations in the 21st century, but today, different specialties cannot be considered on a constant basis because of the pace and intensity of environmental changes, since new skills are replaced by old ones over time. Therefore, organizations should inevitably hold specialized training courses continuously, sustainably, and in accordance with present needs. They should advance in line with the need of new job or provide their required experts out of the organization. Organizations would face heavy costs with many problems in both cases (Stephens & Dailey, 2015). What is more important than training is the effectiveness of educational courses. In other words, if holding training courses and employees' attendance looked satisfying in the past, it would be expected that it could facilitate organizational purposes (Abili et.al, 2009).

Evaluation is description, measurement of program's effectiveness, and achievement of determined purposes. Proximity to the intended targets is measured by evaluation (Bates, 2004). Purposes should be clearly defined and specified in evaluation of each case. Some of evaluation purposes are as follows:

- Measurement and identification of trainees' progress
- Preventing recurrence of deviations, eliminating shortcomings, and presenting suitable solutions
- Measurement the effectiveness of training method, teaching methods, and removing their flaws
- Obtaining more information to adopt administrative decisions etc. (Ghosh et al., 2011).

Evaluation should be continued constantly during educational program, at the end of it, and even in the following in real work environment in order to control weaknesses of the program, eliminate

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after detecting them, and improve their strengths (Ghosh et al., 2012).

Evaluation of educational courses is considered as a necessary tool for training manager so that it is counted as an integral part of systematic approach to education and its goal, like monitoring, is data collection for improvement of planning process. It should be noted that assessment is not done only one time after implementation of educational program, but it should be continued constantly during implementation of the program in order to enable the adjustment of performance with the purposes of the program (Alvelos et al., 2015).

There is no comprehensive and specific definition of effective assessment of training because its access process is difficult. Effective assessment of training means that partly determine how much conducted training has been leaded to create organization's required skills functionally (Harris et al., 2014).

Training effectiveness or evaluation of educational impacts is considered as one of the assessment methods of training, but organizations have paid special attention to training effectiveness and they emphasize on training results in the work time (Towler et al., 2014).

Kirkpatrick presented four levels of effectiveness evaluation model of training in his book entitled "Evaluating Training Program." This model has four levels including:

1. Response: people's response toward educational course and learning experience is measures in this level. Do learners enjoy educational program, and satisfied with it? In other words, participants' response from held educational course is considered in relation to factors such as instructor, course topics, presentation method, timetable, facilities, and learning activities. The simplest and the most common approach is to evaluate education programs. Participants' response in the course can be measured about their satisfaction after the end of educational course (Kirkpatrick & Kirkpatrick, 2008).

2. Learning: participants' knowledge, principles, subjects, facts, and skills are measured at this level. If we consider learning as change and increase of an individual's knowledge, attitude, and skill as a result of his/her attendance in educational course, individual's awareness, and mastery to principles, concepts, skills, and presented activity in the course may reflect his/her learning degree (Ghosh et al., 2012). This type of evaluation is usually done immediately after the end of the course by the instructor from learners. Final exam represents effective evaluation at this level (Attia & Honeycutt Jr, 2012).

If learning is at knowledge level, learning level can be measured by achievement tests. If it is at skill level, it can be measured by functional tests. If it is at attitude level, it can be measured by questionnaire measuring attitudes. Pre-test and post-test are another method in order to specify what an individual has been learned (Rafiq, 2015).

3. Behavior: participants' behavior change in relation with their jobs in the work environment is one of the purposes of holding educational courses due to their attendance. Kirkpatrick indicates

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that learning occurs in the classroom or other educational sites. There is no guarantee that an individual applies those skills in his/her job (Cervai and Polo, 2015). In other words, here is the issue of transfer of learning. The purpose of transfer of learning is the application of knowledge, skill, and acquired behaviors in educational environment in real environment (organization). However, transfer of learning depends on factors such as adequate atmosphere of the environment for the application of subjects, management and colleagues' support, and having required opportunity for the application of learned materials. Generally, direct managers are asked through questionnaires to evaluate people's behavior change and performance a few months after the training session (Rafiq, 2015).

4. Results: Tangible and measurable results of performed training courses are considered at this level. In other words, the main question is about organization's benefit from held training course (Simpson et al., 2015).

4- Research Method

This research is applies in terms of purpose, and it is descriptive-survey in terms of method. The purpose of this method is assessing the effectiveness of specialized courses for financial and urban economic experts of Tehran municipality in 2014 based on Patrick model.

Statistical population is all financial and urban economy experts of Tehran Municipality including 227 people with 36 direct mangers. 143 available experts were selected based on simple random sampling who attended seven specialized training courses in 2014.

Data collection tool was researcher-made questionnaire designed based on five-point Likert scale (from very low to very high). The questionnaire has 24 items at response level assessing financial and urban economy experts' response toward held specialized training courses in 2014 in three parts including training content, teaching method, and the manner of holding the course. Since seven specialized courses for financial and urban economy experts of Tehran Municipality were held in 2014 and 5 behavioral goals have been developed for each course, the questionnaire at the third level has 35 questions i.e. assessment of financial and urban economy experts' behavioral change of Tehran Municipality after the course. Similarly, 28 questions have been developed at the fourth level i.e. assessment of course results.

45 questionnaires were completed to determine reliability of the used questionnaire in this research. Cronbach's alpha equal to 0.967 was obtained by using SPSS. Since this number is more than 0.7, it can be said that the questionnaire has adequate reliability. Cronbach's alpha coefficients have been specified for each variable separately in table1.

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Table1. Cronbach's alpha coefficient

variable	Cronbach's alpha coefficient
Response	0.956
Behavior	0.820
Results	0.929

Source: (Researchers' findings)

In order to determine validity, professors and experts' opinions in the field of training and assessment were asked that results indicated high convergence.

To assess the effectiveness of specialized courses for financial and urban economy experts of Tehran Municipality in 2014 at response level, developed questionnaire was distributed among financial and urban economy experts of Tehran Municipality among 143 people, and 36 questionnaires were distributed among direct managers of financial and urban economy Tehran Municipality at behavior level. In order to analyze data statistically, considering continuous scale and interval data after ensuring normal data using Kolmogorov-Smirnov test, one-sample t-test, for the first, third, and fourth level, and paired samples t-test were used for the second level of Patrick model since pre-test and post-test were used for each of seven courses done by instructor at this level. Moreover, one-way ANOVA has been used based on work experience to investigate difference of assessing effectiveness of specialized training courses for financial and urban economy experts of Tehran Municipality in 2014.

5- Research Findings

To answer the first question of the research i.e. what is the extent of effectiveness of specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 at response level, one sample t test was used. This part includes 24 questions. Questions 1 to 5 are related to the content of training, 6 to 15 to teaching method, and 16 to 24 to the way of holding courses distributed among 143 financial and urban economy experts of Tehran Municipality after seven specialized curses in 2014. The results have been shown in table 2.

Table2. The results of one sample t test at response level related to financial and urban economy experts of Tehran Municipality related to holding specialized training courses in 2014

Response levels	Mean	Standard deviation	Df	t	Sig
Educational content	4.40	0.58	142	116.952	0.000
Teaching method	4.44	0.25	142	68.754	0.000
Manner of holding courses	4.32	0.24	142	66.952	0.000
Total response	4.38	0.14	142	116.588	0.000

Source: (Researchers' findings)

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As it has been shown in the above table, the significance level obtained 0.000. According to the obtained t, it can be concluded that there is a significant difference at the level of α=0.01 between theoretical average (number 3) and experimental averages. Therefore, since experimental averages are higher than theoretical average, it can be said that specialized training had positive response from participants in the course for financial and urban economy experts of Tehran Municipality in 2014.

In order to answer the second question i.e. "what is the extent of effectiveness of specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 at learning level?", pre-test and post-test were used for seven specialized courses for financial and urban economy experts of Tehran Municipality. Obtained data, before and after holding courses, were analyzed by paired t-test. The results have been shown in table3. It is worth mentioning that the scores were calculated based on the score of 20 by the instructor before and after the courses.

Table3. The result of pre-test and post-test of learning for financial and urban economy experts of Tehran Municipality in 2014 for each course.

Pre-test/post-test	Average	Standard deviation	Before-after				
			Average	Standard deviation	Df	t	Sig
Pre-test for course 1	10.32	1.10	-7.30	1.68	142	-50.072	0.000
Post-test for course 1	17.36	1.39					
Pre-test for course 2	9.64	1.57	-7.99	1.74	142	-54.872	0.000
Post-test for course 2	17.64	0.80					
Pre-test for course 3	9.78	1.60	-8.37	1.63	142	-37.998	0.000
Post-test for course 3	18.15	1.15					
Pre-test for course 4	10.90	1.98	-7.33	1.64	142	-35.533	0.000
Post-test for course 4	18.23	1.15					
Pre-test for course 5	9.88	1.20	-7.90	1.63	142	-73.392	0.000
Post-test for course 5	17.79	0.72					
Pre-test for course 6	9.80	1.68	-8.44	1.26	142	-44.540	0.000
Post-test for course 6	18.24	1.09					
Pre-test for course 7	8.45	1.39	-8.03	1.11	142	-45.295	0.000
Post-test for course 7	16.48	1.59					

Source: (researchers' findings)

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Table4. The result of pre-test and post-test of total learning for financial and urban economy experts of Tehran Municipality in 2014.

	Average	Number of sample	Standard deviation	Standard deviation of the average
Pre-test	9.82	143	0.56	0.47
Post-test	17.70	143	0.39	0.33

Source: (researchers' findings)

Table5. Paired t-test for the level of learning for seven specialized courses for financial and urban economy experts of Tehran Municipality in 2014.

	Average	Standard deviation	Df	t	Sig
Before- after	-7.78	0.70	142	-133.784	0.000

Source: (researchers' findings)

According to the significance level of 0.000 and obtained t, it can be concluded that there is a significant level at the level of α=0.01 between pre-test and post-test at the level of learning for each of seven courses and total courses in general. Therefore, it can be said that learning from specialized courses for financial and urban economy experts of Tehran Municipality has been achieved significantly.

To answer the third question of the research, i.e. "what is the extent of effectiveness of training courses for financial and urban economy experts of Tehran Municipality after holding specialized training courses in 2014?", one sample t test was used. This part was done for seven specialized courses for financial and urban economy experts of Tehran Municipality in 2014. Five behavioral goals have been specified for each course i.e. 35 questions. It has been completed by direct managers of financial and urban economy experts of Tehran Municipality after three months. The results have been shown in table 6.

Table6. The results of one sample t-test at the level of financial and urban economy experts' behavioral change at Tehran Municipality after holding specialized training courses in 2014

	average	Standard deviation	Df	t	Sig
behavioral change	4.04	0.17	142	77.134	0.000

Source: (researchers' findings)

As it has been specified in table 6, the significance level is 0.000. Considering obtained t, it can be concluded that there is a significant difference at the level of α=0.01 between theoretical average (number3) and experimental averages. Therefore, since experimental averages are higher than theoretical one, it can be said that specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 based have created significantly positive behavioral change in financial and urban economy

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experts of Tehran Municipality from perspective of direct managers.

In order to answer the fourth question i.e. "what is the extent of effectiveness of holding specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 on the performance of Tehran Municipality?", one sample t test was used. This part has 28 questions i.e. four functional results were considered by Tehran Municipality for seven held courses. They were completed by direct managers of financial and urban economy experts of Tehran Municipality three months after holding each course. The results have been shown in table7.

Table7. The results of one sample t-test at the level of functional results for financial and urban economy experts of Tehran Municipality after holding specialized training course in 2014

	average	Standard deviation	Df	t	Sig
Functional results	3089	0.21	142	50.680	0.000

Source: (researchers' findings)

As it has been shown in table7, the significance level is 0.000. According to the obtained t, it can be concluded that there is a significant at the level of α=0.01 between theoretical average (number3) and experimental averages. Therefore, considering that experimental averages are higher than theoretical average, it can be stated that specialized training for financial and urban economy experts of Tehran Municipality has resulted a better performance of Tehran Municipality.

In order to answer the fifth question, i.e. "is there any significant difference between assessing effectiveness of specialized training courses for financial and urban economy experts of Tehran Municipality in 2014 and work experience?", one-way ANOVA was used. The results have been shown in table 8. It is noteworthy that to perform variance analysis at the level of learning, the difference between the total score of posttest and total score of pretest for each of financial and urban economy experts of Tehran Municipality was calculated at first, and then ANOVA was done based on it.

Table8. A comparison of effectiveness assessment average at four levels of Kirkpatrick evaluation related to the specialized courses of financial and urban economy experts of Tehran Municipality in 2014 considering work experience

four levels of Kirkpatrick evaluation model	Less than 10 years		Between 10 to 20 years		More than 20 years			
	Average	Standard deviation	Average	Standard deviation	Average	Standard deviation	F	sig
Response	4.41	0.18	4.36	0.14	4.39	0.14	1.981	0.149
Learning	7.94	0.69	7.87	0.70	7.81	0.74	0.371	0.690
Behavioral change	4.26	0.14	4.25	0.16	4.21	0.15	1.110	0.332
Results	4.12	0.22	4.09	0.19	3.99	0.24	4.229	0.074

Source: (researchers' findings)

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Calculated F value is smaller with degree of freedom of 2 and 140 on all four levels of Kirkpatrick's evaluation model than the F in the table; therefore, effectiveness assessment of specialized training courses of financial and urban economy experts of Tehran Municipality in 2014 is at the level of $\alpha = 0.01$ for all four levels of Kirkpatrick evaluation model. Thus, the results of ANOVA test indicated that there is not any significant difference between work experience and effective assessment of specialized training courses regarding each level of Kirkpatrick evaluation.

6- Conclusion and suggestion

This research assessed the effectiveness of specialized courses for financial and urban economy experts of Tehran Municipality in 2014. According to the results from data analysis, it was specified that training courses were effective at four levels of Kirkpatrick model. Since employees' response was positive toward held training courses, financial and educational managers of Tehran Municipality should pay special attention to factors such as increasing awareness level after courses, difficulty level of courses, the utility of teaching method, completeness of the course objectives, meeting employees' expectations, utility of class discussions, utility of group activities, the relationship between course and job, compatibility of teaching aids and media with the course, quality of teaching aids (writing instruments, images, etc.), instructors' ability to direct and control the classroom, quality of feedback in class, encouraging learners to discuss in class by teachers, clear explanations and training, instructors' total effectiveness, and overall benefit of training courses for improving the quality of training. The results of this level of Patrick model are in line with the results of Hojjati et.al. (2013), Mazloomi Mahmoodabad et.al. (2013), Mahmoodi et.al. (2013), and Farniya et.al. (2013).

Regarding the second level of Patrick model i.e. learning, since learning from training courses is suitable, managers should pay special attention to factors such as increasing employees' ability, skills, speed of operation, accuracy, dominance, and job commitment as well as improving tasks and duties. The results are in line with Hojjati et.al, (2013), Mazloomi Mahmoodabad et.al. (2013), Mahmoodi et.al. (2013), and Farniya et.al. (2013).

In order to increase the quality of training at the third level of Patrick model, considering that training courses have created behavioral change in employees, managers should pay special attention to factors such as improving employees' citizenship behavior, work ethic, and quality of job behavior, increasing the quantity of job behavior, evident behavioral changes in employees, sustainability of behavior change in employees, being sensible of behavioral changes in long-term, and being sensible of constructive behavioral changes in employees. The result was in line with Hojjati et.al. (2013), Mazloomi Mahmoodabad et.al. (2013), Mazloomi et.al. (2013), and Farniya et.al. (2013).

Managers should pay special attention to factors such as creating positive

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changes in organization, approaching the organization to achieve its goals, being sensible of benefits for the organization, financially appropriate profit for the organization, increasing organizations' excellence, organizations' improvement, quality of servicing, performance, efficiency and effectiveness, the value of the brand name, and employees' trust in order to make courses effective at the last level of Patrick model addressing the results of training course considering that holding training courses has had change in the organizations' performance. It is in line with Hojjati et.al (2013), Mazloomi Mahmoodabad et.al (2013), Mahmoodi et.al. (2013), and Farniya et.al. (2013).

In general, assessing the effectiveness of educational courses at Tehran Municipality allows managers and staffs to gain a clearer image of educational activities and enable them to be aware of strengths and weaknesses of training programs in order to try to make educational courses more effective.

In order to make specialized training courses more effective, the following suggestions are offered:

- Since effectiveness of organizational training courses relates with ability of training in response to employees' occupational needs, it is suggested to assess effectiveness for all specialized courses at four levels of Patrick model.

- As participants' response has been assessed in three parts of training content, teaching method, and the manner of holding courses, it is suggested to use new educational methods, particularly in specialized financial courses such as coaching method in order to increase effectiveness of courses.

- Considering that two levels of behavioral change and results are assessed by direct mangers of attendants, it is suggested that direct mangers have enough information, identify behavioral objectives of courses, and support holding and attending employees in courses.

- Considering the level of behavioral change, it is suggested that those employees who transfer their learned materials into the work place to be encouraged in order to be more effective at this level.

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