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The pertinence of training and development and their components in non-training standards from the viewpoints of the managers and experts of the manufacturing-service organizations in Iran

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ABSTRACT

The purpose of this study is to investigate the pertinence of training and its components in non-training standards from the viewpoints of the managers and experts of the manufacturing-service organizations in Iran. It is a functional research in purpose. The research method is a mixed one consisting of qualitative and quantitative methods. For data collection and quantitative analysis, the questionnaire was used through a survey method and the categorization is also applied qualitatively. The statistical population includes all the managers and experts of human resources training and development in manufacturing-service organizations in Iran and 64 of them were selected as the research sample through simple sampling. In this study three training standards and 11 non-training standards were weighted and analyzed. In the content analysis with a categorization approach, 9 components were identified and weighted. The data analysis is presented in two general sections: 1) the training experts' viewpoints toward evaluating and prioritizing training components and 2) the perspectives of the managers and the experts toward the pertinence of training components in non-training standards. In the first section, competence was the most important component while the training strategy was considered the least important one. The most prominent point presented in the second section is that "the pertinence of training in the non-training standards is generally inappropriate".

Keywords: training, training standard, non-training standard, training managers and experts

INTRODUCTION

The only way for the managers to overcome the situations which are uncertain, complex and dynamic is to empower the organization and employees through the acquisition of knowledge and skill (Mirjani-Aghdam, 2003). Nowadays training is one of the necessities for every organization, because the changes in the circumstances can be turned into development opportunities only with having the trained employees (Forughinia & Pourshafei, 2011). Therefore, the organizations would make an effort to provide training opportunities to develop human resources and increase their optimal performance (Hoseini & Razavi, 2011). Training enables the employees to be more skillful in carrying out their organizational responsibilities and so to enhance their work in terms of quality and quantity. Not only does training enable the organization to have better service and products, it also reduces the wastage, prevents raw materials to be destroyed and causes the instruments and machines to be used effectively (Asadollah, 2006). Today training is considered as an experience-oriented learning in order to make relatively stable changes in an individual so that he will be able to improve his work and skills as well as to reach the desired goals, therefore, training refers to a change in knowledge, attitude and interaction with the work environment and it necessitates using preplanned programs to reinforce the existing competences of the employees as well as to maximize their effectiveness and efficiency with appropriate training courses (Seidjavadin, 2004). It is worth mentioning that training and training courses cannot solely help the organization achieve its goals. Training courses must be based on the scientific methods and principles to satisfy the present needs, otherwise training would be useless and waste the organizational funds.

2. Statement of the problem

Concurrent with the rise in new products and competition in economic domains, the manufacturing and service organizations would pay more attention to the quality of their products and services as well as their sustainable improvement, so it would be quite vital that they put a lot of effort into fitting their customers' desires and tastes in order to survive, make more profit and have a bigger proportion of the market.

The quality of products and services is an essential factor for the development, success and survival (Zavaar et al, 2008), from day to day, it plays a more important role in organizations attitude and their management while the quality of products and services would persist by using the different standards in the organization. For the sake of sustainability and profundity of quality and profit in the organization, it is necessary to make an investment in the various domains especially human resources (Mohammadi, 2009). In fact, training is a useful investment and key factor in development, if it were planned and implemented accurately, it would have substantial economic returns (Khorasani & Mehdi, 2007).

As the new responsibilities and technologies emerge, individuals should also have the capacity for the rapid acquisition of the relevant competencies, knowledge and skills, this fact increasingly reveals the strategic role of human resources training, the proper use of training not only empowers the organization in the change management, but also enables them to make major changes (Fathi-Vajargah et al, 2011). It is quite obvious that strengthening human resources' commitment, expertise, knowledge and new information has the most important role in the effective development and survival of an organization, so the organization should pay attention to training and development in terms of the plans which are accurate and appropriate for the real organizational needs (Hoseini & Mohammadi, 2010).

In this regard, ISO (International Standard Organization) as an international federation for the national standard organizations is to provide international standards in its technical committees, it has developed different standards to facilitate the international business by improving and expanding the international standards for systems, products and services (Khorasani & Mehdi, 2007) because reaching a favorable quality for a product or service in various industries or organizations needs using designed standards which are suitable to that activity (Mohammadi, 2008).

As long as training and development of human resources are necessary issues for the organizations, International Standard Organization has paid more attention to it and developed some standards which are directly related to training and educational services. This fact must be taken into consideration that the main purpose of these standards is to increase and improve the quality of the products and services and also training is an influential factor in having better quality, so, it seems unlikely that the other standards designed by International Standard Organization ignore the training issues related to these standards. Therefore, this study is to investigate the pertinence of training in non-training standards in order to find out whether there is any place for training and development in non-training standards. To this end, the following questions were set:

1. How is the pertinence of training strategies in non-training standards?

- 2. How is the pertinence of awareness in non-training standards?
- 3. How is the pertinence of learning in non-training standards?
- 4. How is the pertinence of competence in non-training standards?
- 5. How is the pertinence of competency in non-training standards?
- 6. How is the pertinence of education in non-training standards?
- 7. How is the pertinence of training records in non-training standards?
- 8. How is the pertinence of monitoring in non-training standards?
- 9. How is the pertinence of effectiveness in non-training standards?

3. Literature review

3.1 The concept of training and non-training standards

In this study, training standards are defined as ones which attach more importance to training and development of human resources as well as its relevant concepts while training issues are less significant in non-training standards. The standards including EFQM, IWA2 and 10015 are the training standards of this study whereas 9001, 9004, 10005, 10012, 10019, 13000, 14001, 18001, 19011, TS16949, SA8000 are the non-training standards. In addition to the abovementioned standards, there is other training or non-training standards which are not included in this research. ANSI, a training standard, is a training tool developed by American National Standards Institute. 10017, a non-training standard, is the guidance to apply statistical techniques, 10004 is the guidance on monitoring as well as for measuring customer satisfaction, 31000 as a standard shows a general and public policy for risk management.

3.2 Definition of key terms

• **Training**: Goldstein defined training as the systematic acquisition of attitudes, concepts, knowledge, roles or skills that result in improved performance at work (Goldstein, 1993)

• **Competency**: Jackson and Schuler (2003) Competencies are defined as "the skills, knowledge, abilities and other characteristics that someone needs to perform a job effectively" (Hijazeh, 2011) (Soft Competencies).

• **Competence**: in this study, competence means the acquisition of knowledge, skills and abilities which enables individuals to do something in an occupational situation.

• Awareness: it is related to this fact whether the individuals have enough knowledge to perform behaviors and recognize that performance (Cummings & Christopher, 1996).

• Effectiveness: Piter Draker (1964) defined effectiveness as doing a job properly (Alaghemand, 2006)

• Monitoring: revising all the processes and activities of training (Jahadi, 2008).

• Education: it is defined as the type of official education given in educational or training institutions, so, it leads in getting an official degree (Shafiei, 2008).

• **Registering training records:** in this study, the registration of training records is related to the previous activities in an organization in learning/training tasks.

4. Training standards

4.1 ISO 10015: Guidelines for training:

International Standard ISO 10015 was prepared in 1999 by Technical Committee ISO/TC 176, Quality management and quality assurance, Subcommittee SC 3, supporting technologies. The role of this International Standard is to provide guidance that can help an organization to identify and analyze training needs, design and plan the training, provide for the training, evaluate training outcomes, and monitor and improve the training process in order to achieve its objectives. It emphasizes the contribution of training to continual improvement and is intended to help organizations make their training a more effective and efficient investment. Personnel at all levels should be trained to meet the organization's commitment to supply products of a required quality in a rapidly changing market place where customer requirements and expectations are increasing continuously. In fact, This International Standard provides guidelines to assist organizations and their personnel when addressing issues related to training (guidelines for ISO 10015).

4.2 IWA2: Guidelines for the application of ISO 9001:2000 in education

This International Workshop Agreement provides guidance to educational organizations for implementing an effective quality management system in conjunction with and based on ISO 9001:2000. The objective of this International Workshop Agreement is to assure the overall effectiveness of the education organization's quality management system and the delivery and continual improvement of its educational service to the learner. In fact This International Workshop Agreement is not intended for certification nor for contractual purposes. Rather, it provides guidance on a wide range of topics for the continuous improvement of an organization's performance, efficiency, and effectiveness. This International Workshop Agreement is recommended as a guide for educational organizations whose top management wishes to move beyond the requirements of ISO 9001, in pursuit of continuous improvement and sustainability of success. This standard is consist of eight bases which are: Scope, Normative references, Terms and definitions, Quality management system in the educational organization, Management responsibility in the educational organization, Resource management in the educational organization. The educational service and Measurement, analysis and improvement in the educational organization. The educational organization should be included during and following the provision of the educational service:

- a) Education design,
- b) Curriculum development,
- c) Education delivery,
- d) Assessment of learning (guidelines for IWA2).

4.3 EFQM: an excellence model for European business

This excellence model for European business was developed by European Foundation for Quality Management (EFQM) in order to promote total quality management (TQM) and designed for helping organizations in their drive towards being more competitive. The model provides a non-prescriptive framework which has 9 main criteria and 32 secondary ones, the first five criteria are 'enablers' and the other four 'results'. The 'enabler' criteria cover what an organization achieves. According to this model, the performance of an organization will be the best when it is based on managing knowledge and sharing it accompanying with the culture of learning, innovation and continual improvement (Taghavi, 2006).

5. Non-training standards

5.1 ISO 9001:2008: Quality Management System

ISO 9001 provides the requirements of a quality management system and helps organizations ensure their ability for presenting products in order to meet the needs of customers, this standard is to enhance the customer satisfaction (Khorasani & Eidi, 2011). Based on this standard, Personnel performing work affecting product quality shall be competent on the basis of appropriate education, training, skills and experience (guidelines for ISO 9001).

5.2 ISO 9004: 2009: constant success management in an organization

This standard gives guidelines to draw attention to both effectiveness and efficiency of quality management system. It is to improve the organizational performance, customer satisfaction and other stakeholders (Khorasani & Eidi, 2011).

5.3 ISO 10005: 2005: Guidelines for quality plans

This International Standard was prepared to address the need for guidance on quality plans, either in the context of an established quality management system or as an independent management activity. Quality plans provide a means of relating specific requirements of the process, product, project or contract to work methods and practices that support product realization (guidelines for ISO 10005).

5.4 ISO 10012: 2003: Requirements for measurement processes and measuring equipment

This International Standard specifies generic requirements and provides guidance for the management of measurement processes and metrological confirmation of measuring equipment used to support and demonstrate compliance with metrological requirements. It specifies the quality management requirements of a measurement management system that can be used by an organization performing measurements as part of the overall management system, and to ensure metrological requirements are met. This International Standard includes both requirements and guidance for implementation of measurement management systems, and can be useful in improving measurement activities and the quality of products. In this standard, the term of "measurement process" was defined to physical measurement activities (guidelines for ISO 10012).

5.5 ISO 10019: 2005: Guidelines for the selection of quality management system consultants and use of their services

This International Standard provides guidance for the selection of quality management system consultants and the use of their services. When selecting a quality management system consultant, the organization should evaluate whether the consultant maintains the competence appropriate to the scope of the consulting services to be provided. The quality management system consultant should maintain and improve competence through means such as additional work experience, auditing, training, continuing education, self study, coaching, attending professional meetings, seminars and conferences or other relevant activities. Quality management system consultants should have the appropriate education needed to acquire the knowledge and skills relevant for the consulting services to be provided (guidelines for ISO 10019).

5.6 ISO 13000: comprehensive management system

It is a strategic decision to set up a system based on comprehensive management approach. This standard is applied to cover the organizational activities in the mentioned system framework. It requires the organizations to create high quality products based on matching the customer needs, attracting stakeholders' satisfaction, hygienic and safe workplace and considering environmental requirements, more importantly, it makes the negative effects be removed or reduced in the work environment. This standard can be implemented by service and manufacturing organizations and used by the organizations responsible for evaluating the amount of compliance with standards and rules and the national organizations can also apply this to audit the companies and give certifications (Sadeghifard, 2008).

5.7 ISO 14001: 2004: environmental management system

This standard addresses various aspects of environmental management to improve and implement an environmental management system and provides the requirements for an organization in order to get the certificate. ISO 14001:2004 is a management tool enabling an organization to identify the environmental impact of its activities, products or services, and to improve its environmental performance and to demonstrate that the environmental management system is operating effectively and efficiently in conformity to the environmental requirements set by legislative organizations (guidelines for ISO 14001). Environmental information and training is provided to new hires during their orientation. Periodic information and training is also provided during routine safety meetings. On the job training ensures that employees perform their job tasks in a safe and environmentally responsible manner. The Quality Department developed and implemented an employee training matrix. The matrix is used to help establish training topics for initial orientation, as well as the monthly/quarterly safety meetings. Training records are maintained by Human Resources organizations (guidelines for ISO 14001).

5.8 ISO 18001: 2007: Occupational Health and Safety Management Systems Requirements

OHSAS 18000 is an international occupational health and safety management system specification. This Occupational Health and Safety Assessment Series (OHSAS) Standard specifies requirements for an occupational health and safety (OH&S) management system, to enable an organization to control its OH&S risks and improve its OH&S performance. The organization shall ensure that any person(s) under its control performing tasks that can impact on OH&S is (are) competent on the basis of appropriate education, training or experience, and shall retain associated records organizations (guidelines for ISO 18001).

5.9 ISO 19011: 2002: Guidelines for quality and/or environmental management systems auditing

This International Standard provides guidance on the management of audit programmes, the conduct of internal or external audits of quality and/or environmental management systems, as well as on the competence and evaluation of auditors. It is intended to apply to a broad range of potential users, including auditors, organizations implementing quality and/or environmental management systems, organizations needing to conduct audits of quality and/or environmental management systems, and organizations involved in auditor certification or training, in certification/registration of management systems, in accreditation or in standardization in the area of conformity assessment organizations (guidelines for ISO 19011).

5.10 TS 16949: 2009: quality management system in the automobile manufacturers

It was prepared by the International Automotive Task Force (IATF) with the support of 'Technical Committee 176' of ISO "Quality Management and Quality Assurance" (Pakdoost & Moradi, 2011). Based on ISO 9001 and national quality standards, TS 16949 was developed by the vanguard of the automobile industry. TS16949 covers the design, development, production and servicing of automotive-related products all over the world.

5.11 SA 8000: social accountability

Nowadays providing the employees with a safe and healthy working environment, reducing safety risks and promoting their life quality as well as ensuring labor and workers rights are considered as one of the fundamental issues in realization of social justice. To this end, SA 8000 was developed to prepare the conditions for social justice (Hakimpanah, 2005).

		monitoring	Effectiveness	Training records	Competency	competence	learning	Strategy	awareness	Education
1	ISO 9001	✓	✓	\checkmark	✓	✓		√	~	✓
2	ISO 9004	✓	✓			✓	✓			
3	ISO 10005	✓				✓		√		
4	ISO 10012		✓	\checkmark		✓		√	~	✓
5	ISO 10019					✓		√		
6	ISO 13000	✓	✓	\checkmark	✓	✓		√	~	✓
7	ISO 14001			\checkmark		✓		√	~	
8	ISO 18001	✓		\checkmark		✓		√	~	✓
9	ISO 19011					✓		✓		✓
10	TS 16949				\checkmark			✓	\checkmark	
11	SA 8000	✓	✓	✓				✓	✓	✓

Table 1: the pertinence of training components and its related concepts in non-training standards

6. The pertinence of training and its related concepts in non-training standards

In this study, content analysis and categorization were used to investigate the pertinence of training in non-training standards. Content analysis is a technique in research for making inferences out of communication objectively, systematically and quantitatively, categorization is defined as classifying the components of collection through identifying their differences and regrouping them in terms of the criteria set in advance (Yamani & Ashtiani, 1997). The study of the pertinence of training in non-training standards showed that every standard needs the training dimension and its related concepts and terms almost in all the standards. The comparison between non-training standards (Table 1) shows that training term and its related concepts such as awareness, education, monitoring, effectiveness, training records, competency and competence are totally noticeable in ISO 9001 (quality management system) and 13000 (comprehensive management system), in fact, these two standards includes all the above mentioned concepts. In standard 13000 for getting effective outcomes, the organization is required to determine the needed level of competence and competency for a job, training need analyses, planning and implementing training courses and having a method for the evaluation of effectiveness of training courses. On the other hand, ISO 10019 (Guidelines for the selection of quality management system consultants) includes the fewest concepts mentioned above in a way that only the concept of competence and training have been included. The use of learning term instead of training is only excluded to ISO 9004 (constant success management in an organization) in which learning is defined as getting information from both internal and external sources and acquiring insight. Competence defined as knowledge- and skill-oriented component is included into all the standards except for ISO 8000 (Social Accountability).

MATERIALS AND METHODS

This research is functional in purpose and has a mixed method consisting of quantitative and qualitative methods. In the mixed methods research the researcher would collect the data and analyze it quantitatively and qualitatively in order to figure out the problem. In other words, a mixed method is a research design in which the researcher would mix qualitative and quantitative data in one study sometimes with a multilevel design that includes data collection and analysis (Creswell, 2003 Quoted in Johnson, 2008). The samples' opinions were quantitatively investigated through survey method and the data was qualitatively analyzed with categorization of components. The statistical population includes all the managers and experts in training and development of human resources in manufacturing-service organizations in Iran and 64 people were selected as the statistical sample through simple sampling.

7.1 The method of data analysis

Data analysis is presented in two sections:

1-The data analysis with weighting the components related to training through interview with 11 training specialists. 2-The data analysis based on the main research question using questionnaires for the managers and experts.

Section one: The data analysis with weighting the components related to training through interview with 11 training specialists

In this section, the components related to training are arranged through 5-point Likert scale in the questionnaire, these were given to 11 training specialists who are asked to weight and priorize the components in terms of their importance and necessity. The data taken from the questionnaires has been analyzed using weighting mean and the level of importance, and finally they were prioritized. The data showed that competence had the highest level of importance (weight) and training strategy had the lowest level of importance. Some components had the same level of importance: monitoring and competency (proirity 3) and learning and registering training records (priority 4). Table 2 shows the results of weighting and prioritizing the components related to training based on experts' opinions.

Importance level (priority)	Importance rate (percentage)	Weighting mean
5	%69	3.45
6	%68.80	3.44
7	%68	3.4
4	%73.20	3.66
1	%82.40	4.12
3	%80	4
4	%73.20	3.66
2	%82.20	4.11
3	%80	4
	Importance level (priority) 5 6 7 4 1 3 4 2 3 3	Importance level (priority) Importance rate (percentage) 5 %69 6 %68.80 7 %68 4 %73.20 1 %82.40 3 %80 4 %73.20 2 %82.20 3 %80

Table 2: weighting the components related to training based on training experts

Section two: The data analysis based on the main research question using questionnaires for the managers and experts

In this section, the research data was analyzed using one-sample t-test and variance analysis. It is worth mentioning that the investigation of the research questions using one-sample t-test showed that appropriateness of the components was based on empirical mean being higher than theoretical mean and the amount of obtained t being significant. According to the spectrum of the questionnaire and codifying options from the lowest to the highest with numbers, 1 to 5, the basis of theoretical mean of 60% was considered as the possible highest score for each question. Whereas the highest score for a question option is 5, 60 percent of 5 equals 3 considered as the theoretical mean of each question. Therefore, if the mean obtained from the people's answer were higher than 3 and the t value were at a significant level, that component or question would be one of the noticeable components, otherwise, the importance of the question is estimated at a low level.

8. Data analysis

8.1 Question 1- How is the pertinence of training strategies in non-training standards?

Table 3: the results of one-sample t-test about the comparison between empirical and theoretical means of the pertinence of training strategy in non-training standards

index	Manager N = 21 \mathcal{G} df = 22		expert N = 41 \mathcal{G} df = 42		Test value = 3				
variable					manager		expei	rt	
variable	М	SD	2.4286	SD	t	р	t	р	
Does your organization define and develop a training system?	2.0455	.65300	2.3571	.65598	-6.856	.000	-6.351	.000	
Has your organization defined the training goals in a way which is measurable?	2.5909	.50324	2.4524	.50376	-3.813	.001	-7.045	.000	
Has your organization provided the training opportunities for all the employees?	2.4091	.50324	2.5476	.50376	-5.508	.000	-5.820	.000	
Total score for training strategy	2.3485	.21767	2.4524	.21866	-14.039	.000	-16.231	.000	

Based on the data in table 3, the t value is significant at α =0.05 level in all the questions about the pertinence of training strategy in non-training standards in managers group with degree of freedom of 21 and in experts group with *df* of 42, therefore, the null hypothesis, no difference between the sample mean and theoretical mean, was rejected and it can be said that the empirical mean is smaller than the theoretical mean with 95% confidence, so, the training strategy has a little importance in the non-training standards and these standards do not pay attention to developing strategies in training.

8.2 Question 2- How is the pertinence of awareness in non-training standards?

Table 4: the results of one-sample t-test about the comparison between theoretical mean and empirical mean of the pertinence of
awareness in non-training standards

index	Manager		expert		Test value = 3			
	N = 21	N = 21 e $df = 22$		N = 41 و $df = 42$		manager		ert
variable	М	SD	2.4286	SD	t	р	t	р
Are the trainees given an initial introduction about the training course?	3.3182	1.12911	3.2143	1.09401	1.322	.200	1.269	.211
Does your organization have some courses to raise the employees' awareness?	2.8636	.99021	3.0714	1.19741	646	.525	.387	.701
Do the employees have awareness of the effect of their activities on the organization?	2.2727	.55048	2.5952	.79815	-6.197	.000	-3.287	.002
Total score of awareness	2.8182	.60620	2.9603	.60800	-1.407	.174	423	.675

According to the data in table 4, the t value is not significant at α =0.05 level in all the questions about the pertinence of awareness as well as its total score (except for the question about the employees' awareness of the effect of their activities on the organization that the theoretical mean is smaller than the empirical mean) in managers group with degree of freedom of 21 and in experts group with df of 41, therefore, the null hypothesis, no difference between the sample mean and theoretical mean, was proven and there is a difference between the sample mean and the theoretical mean, so, it can be said with 95% confidence that the awareness is almost important in the non-training standards and these standards would pay attention to raising awareness in training.

8.3Question 3- how is the pertinence of learning in non-training standards?

Table 5: the results of one-sample t-test about the comparison between the theoretical mean and the empirical mean of the pertinence of learning in the non-training standards

index	Manager expert		Test value $= 3$					
	N = 21	N = 21 eff = 22		N = 41 eff = 42		manager		ert
variable	М	SD	2.4286	SD	t	р	t	р
Does your organization provide learning opportunities individualistically and collectively?	3.1364	.71016	2.8333	.82393	.901	.378	-1.311	.197
Do the employees share their experiences with others in your organization?	2.1818	.39477	2.2857	.45723	-9.721	.000	-10.124	.000
Are the employees motivated to solve problems in groups in your organization?	2.8636	.83355	2.6905	.84068	767	.451	-2.386	.022
Total score of learning	2.7273	.33549	2.6032	.36245	-3.813	.001	-7.095	.000

Based on the data in table 5, the t value is significant for the pertinence of learning in non-training standards in managers group with df of 21 and experts with df 41, therefore, the null hypothesis was rejected, because the

empirical mean is smaller than the theoretical mean, it can be said with 95% of confidence that learning in non-training standards has a little importance and these standards pay no attention to learning.

8.4 Question 4- How is the pertinence of competence in non-training standards?

Table 6: the results of one-sample t-test about the comparison between the theoretical mean and the empirical mean of the pertinence of competence in the non-training standards

index	Manager		expert					
	N = 21	df = 22 و	N = 41 eff = 42		manager		exp	bert
variable	М	SD	2.4286	SD	t	р	t	р
Is there any process to use the skills and knowledge by the employees in your organization?	2.8182	1.25874	2.9286	1.29526	678	.505	357	.723
Does the organization use the competent employees for training?	2.6364	1.32900	2.7619	1.18547	-1.283	.213	-1.302	.200
Do the trainers have the efficiency and competence required the training courses?	2.4091	.79637	2.6190	.88214	-3.480	.002	-2.799	.008
Total score of competence	2.6212	.85012	2.7698	.75255	-2.090	.049	-1.982	.054

Based on the data in table 6, the t value is significant at α =0.05 level for the pertinence of competence in nontraining standards in managers group with degree of freedom of 21, therefore, the null hypothesis, no difference between the sample mean and theoretical mean, was rejected because the empirical mean is smaller than the theoretical mean and it can be said that with 95% confidence that the pertinence of competence was evaluated inappropriate, because the t value is not significant at α =0.05 level for the pertinence of competence in non-training standards in experts group with degree of freedom of 41 so there is no difference between the empirical and theoretical means, therefore, competence has a little importance in the non-training standards and these standards do not pay attention to competence in training.

8.5 Question 5- How is the pertinence of competency in non-training standards?

Table 7: the results of one-sample t-test about the comparison between the theoretical mean and the empirical mean of the pertinence o
competency in the non-training standards

index	Manager		exp	ert	Test value = 3				
	N = 21 و $df = 22$		N = 41 g	df = 42	manager		expe	rt	
variable	М	SD	2.4286	SD	t	р	t	р	
Does your organization have a process to identify the employees' potential abilities and competencies?	2.5000	.96362	2.5476	1.13056	-2.434	.024	-2.593	.013	
Is there any connection between the individual potential abilities and competencies with organizational goals?	1.9545	.65300	1.7619	.57634	-7.509	.000	-13.922	.000	
Is a skill standard defined for each job?	1.9545	.78542	2.0238	.68032	-6.243	.000	-9.299	.000	
Total score for competency	2.1364	.54101	2.1111	.52918	-7.488	.000	-10.886	.000	

Based on the data in table 7, the t value is significant at α =0.05 level for the pertinence of competency in non-training standards in managers group with degree of freedom of 21 and in experts group with *df* of 42, therefore, the null hypothesis, no difference between the sample mean and theoretical mean, was rejected and because the empirical mean is smaller than the theoretical mean, it can be said with 95% confidence the pertinence of competency is inappropriate in the non-training standards.

8.6 Question 6- How is the pertinence of education in non-training standards?

Table 8: the results of one-sample t-test about the comparison between the theoretical mean and the empirical mean of the pertinence of education in the non-training standards

index	Manager		expert		Test value = 3			
	N = 21.	N = 21 و $df = 22$		N = 41 و $df = 42$		manager		ert
variable	М	SD	2.4286	SD	t	р	t	р
Does the organization provide facilities for the employees to improve their education?	2.5909	.79637	2.8095	.89000	-2.409	.025	-1.387	.173
Does the organization make any effort to attract those employees who have education related to the jobs?	2.0455	.21320	2.0000	.00000a	-21.000	.000	-10.379	.000
Is the trainees' education taken into account in training courses?	3.5000	.51177	3.4524	.63255	4.583	.000	4.635	.000
Total score of education	2.7121	.27785	2.7540	.32141	-4.860	.000	-4.961	.000

Based on the data in table 8, the t value is significant at α =0.05 level for the pertinence of education in non-training standards in managers group with degree of freedom of 21 and in experts group with *df* of 42, therefore, the null hypothesis, no difference between the sample mean and theoretical mean, was rejected and because the empirical

mean is smaller than the theoretical mean, it can be said with 95% confidence the pertinence of education is inappropriate in the non-training standards, therefore, the education has a little importance in non-training standards and these standards pay no attention to education in training.

8.7 Question 7- How is the pertinence of training records in non-training standards?

Table9: the results of one-sample t-test about the comparison between the theoretical mean and the empirical mean of the pertinence of training records in the non-training standards

index	Manager		expert		Test value = 3			
	N = 21	N = 21 e $df = 22$		N = 41 $cont df = 42$		manager		ert
variable	М	SD	2.4286	SD	t	р	t	р
Is there any document for training records of the employees?	2.6364	1.52894	2.9048	1.51646	-1.116	.277	-2.442	.019
Does your organization identify, classify and match the employees' knowledge and skill the organizational needs?	3.1818	1.36753	3.1905	1.46187	.624	.540	422	.675
Does the organization document a process for the identification of the employees' potential competencies?	3.3636	1.09307	2.8413	1.10956	1.560	.134	1.113	.272
Total score of training records	3.0606	1.31590	2.4286	1.34796	.216	.831	763	.450

According to the data in table 9, the t value is not significant at α =0.05 level for the pertinence of training records in managers group with degree of freedom of 21 and in experts group with *df* of 41, therefore, the null hypothesis, no difference between the sample mean and theoretical mean, was proven and there is a difference between the sample mean and the theoretical mean, so, it can be said with 95% confidence that the pertinence of training records is almost appropriate in the non-training standards, so, the training records is almost important in non-training standards.

8.8 Question 8- How is the pertinence of monitoring in non-training standards?

Table 10: the results of one-sample t-test about the comparison between the theoretical mean and the empirical mean of the pertinence of monitoring in the non-training standards

index	Manager		expert		Test value = 3			
	N = 21 e $df = 22$		N = 41 eff = 42		manager		expe	ert
variable	М	SD	М	SD	t	р	t	р
Are the training needs revised in your organization annually?	1.9545	.65300	2.0238	.74860	-7.509	.000	-8.451	.000
Does your organization revise the training process?	2.8636	.88884	2.6905	.81114	720	.480	-2.473	.018
Does the organization monitor the implementation of the training programs?	2.0000	.61721	2.1905	.59420	-7.599	.000	-8.829	.000
Total score of effectiveness	2.2727	.40677	2.3016	.32767	-8.386	.000	-13.813	.000

Based on the data in table 8, the t value is significant at α =0.05 level for the pertinence of monitoring in non-training standards in managers group with degree of freedom of 21 and in experts group with *df* of 41, therefore, the null hypothesis, no difference between the sample mean and theoretical mean, was rejected and because the empirical mean is smaller than the theoretical mean, it can be said with 95% confidence the pertinence of monitoring is inappropriate in the non-training standards, therefore, the monitoring has a little importance in non-training standards and these standards pay no attention to monitoring in training.

8.9 Question 9- How is the pertinence of effectiveness in non-training standards?

Table 11: the results of one-sample t-test about the comparison between the theoretical mean and the empirical mean of the pertinence of effectiveness in the non-training standards

index	Manager		expert		Test value = 3			
	N = 21 e $df = 22$		N = 41 e $df = 42$		manager		expert	
variable	М	SD	М	SD	t	р	t	р
Does the organization determine any evaluative criteria for training effectiveness?	2.8182	.39477	2.7143	.45723	-2.160	.042	-4.050	.000
Does your organization apply the appropriate technique to evaluate training activities?	2.7727	.42893	2.7381	.44500	-2.485	.021	-3.814	.000
Are the results of evaluation used for development of training activities?	2.4545	.50965	2.5238	.50549	-5.020	.000	-6.105	.000
Total score of effectiveness	2.6818	.24075	2.6587	.23842	-6.199	.000	-9.276	.000

Based on the data in table 8, the t value is significant at α =0.05 level for the pertinence of effectiveness in nontraining standards in managers group with degree of freedom of 21 and in experts group with *df* of 41, therefore, the null hypothesis, no difference between the sample mean and theoretical mean, was rejected and because the empirical mean is smaller than the theoretical mean, it can be said with 95% confidence the pertinence of monitoring

Awareness learning

competence

competency

Training records

education

monitoring

effectiveness

total

effectiveness

Training strategy

7.865

3.486

376.889

565.667

456.000

511.778

305.222

486.222

656.000

344.000

458.667

effectiveness is inappropriate in the non-training standards, therefore, the effectiveness has a little importance in non-training standards and these standards pay no attention to effectiveness in training.

8.10 Is there any difference between the opinions of managers and experts about the pertinence of training in non-training standards?

Sources of variance Sum of squares Degrees of freedom Mean of Squares F Level of significance variable .002 002 .038 .845 Training strategy 1 Awareness .133 1 .133 358 .552 .088 .088 1 .689 .410 learning .548 .548 .890 .349 competence 1 074 1 074 .260 612 competency .061 .648 .424 education .061 1 .017 1 .017 010 .922 Training records .024 1 .024 .186 .668 monitoring .069 .069 1.232 1 271 effectiveness Training strategy 3.109 62 .050 23.032 62 .371 Awareness learning 7.885 62 .127 38.167 62 .616 competence 17.563 62 .283 error competency education 5.821 62 .094 1.799 Training records 111.538 62

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between the opinions of managers and experts about the pertinence of training in non-training standards.

127

.056

Table 12: the results of multivariate analysis of variance (MONOVA) about the comparison between the opinions of managers and experts about the pertinence of training in non-training standards

DISCUSSION	AND	CONCLUSION
	AND	CONCLUSION

The data in the tables showed that the F value is not significant at α =0.05 level, therefore, there is no difference

Training is one of the methods and strategies for acquiring knowledge and skill. The main goal of training is to provide, obtain and improve the necessary skills in order to help organizations of achieve their goals of adding value to their key resources (Abozed, Melanie, Saci, 2008). Aguinis and Kraiger has defined training as the systematic approach to affecting individuals' knowledge, skills, and attitudes in order to improve individual, team, and organizational effectiveness (Aguinis and Kraiger, 2009).

This study has investigated the pertinence of training in non-training standards, the elements and components of training were evaluated from managers and experts' viewpoints in 9 factors (training strategy, awareness, learning, competence, and competency, education, training records, monitoring and effectiveness).

The results revealed that the pertinence of training strategy has a little importance in non-training standards. It is effective on achieving organizational goals to develop strategies for the staff training system in terms of organizational mission, strategies and resources of the organization, and considering internal and external factors of the system (Abili & Alavi, 2000).

For the pertinence of awareness, the findings showed that it has an appropriate status in non-training standards. While the organizations consider the knowledge and awareness as a property (Mirjani Aghdam, 2003), increasing the scope of knowledge, awareness and skill of employees will broaden their sight in facing the issues inside the organization and noticeably affect mutual understanding among the staff, solving problems, reinforcing cooperation and establishing suitable conditions in the workplace (Haghighi, 2007).

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For the pertinence of learning, the data showed that it has an inappropriate status in non-training standards. In fact, the employees should have the opportunity for learning in order to be regarded as real collaborators (Jafari Ghooshchi, 2002). Both sharing knowledge and having a learning atmosphere are of the most important factors influential on the staff performance (Yaghubi, 2011). The results indicated that the status of competence is, to some extent, estimated inappropriate.

For the pertinence of competency, the data showed that it has an inappropriate status in non-training standards. Enhancing human resource competencies increases efficiency, effectiveness and ultimately organizational productivity at individual, group and organizational level. In a study about 300 human resources experts working in different fields, the following factors were introduced as the ones forming the competencies: the leadership style, management intuition, functional competencies and personal attributes. The results related to education showed that it has an inappropriate status in non-training standards. Based on the research findings, implications of specialized resources in increasing the productivity would appear when the human resources were in the occupational position fitting their specialty or education (Fazeli, 2004).

The results showed that training records has an appropriate status in non-training standards. But the pertinence of monitoring and effectiveness is not favorable in non-training standards. If the effectiveness were implemented correctly and at the right time, with ignoring an amount of error, it would be estimated that implementing training courses considerably help increase profit, reduce cost, use the equipment properly, enhance productivity, augment the employees' job satisfaction, increase customer satisfaction and decrease losses (Shokouki, 2008).

In addition to the above mentioned analyses, the results of multivariate analysis of variance (MONOVA) showed that there is no significant difference between training managers and experts' viewpoints on the pertinence of training in non-training standards.

Table 13: summary of findings

	questions	findings		
1	The pertinence of training strategy in non-training standards	A little important and inappropriate		
2	The pertinence of awareness in non-training standards	Appropriate and fairly good		
3	The pertinence of learning in non-training standards	A little important and inappropriate		
4	The pertinence of competence in non-training standards	A little important and inappropriate		
5	The pertinence of competency in non-training standards	A little important and inappropriate		
6	The pertinence of education in non-training standards	A little important and inappropriate		
7	The pertinence of training records in non-training standards	Appropriate and fairly good		
8	The pertinence of monitoring in non-training standards	A little important and inappropriate		
9	The pertinence of effectiveness in non-training standards	A little important and inappropriate		

Based on the findings of this study, some suggestions are made:

• It is suggested that the results of the present study are used to revise the mentioned standards in International Standards Organization.

• In an organization, the success of training section depends on having specialized experienced human resources. Therefore, it is necessary to pay attention to this matter in identifying competent experts and staff. One of the successful managers says "the best human resources must be organized in training and research centers".

• The senior managers' attempt and participation is essential for developing and designing training strategy to guide the training strategies in the direction of vision, mission and goals of the organization.

• Whereas the managers have a key role in transferring the employees' learning to the work environment, it is suggested that the managers should guide and lead the employees in using new skills and behaviors by establishing a suitable atmosphere and workplace.

• The evaluation of the training effectiveness is considered as a part of comprehensive evaluation of training system, therefore, implementing the evaluation plans of trainings effectiveness requires having a comprehensive coherent training evaluation system. In fact, the training effectiveness evaluation is a cycle of diagnostic, formative and summative evaluation of training courses. Therefore, it is advised that the comprehensive training evaluation system is designed and implemented. In this way the data needed to evaluate the effectiveness of training programs is available to the experts with a suitable quality and quantity at the right time.

• The managers and experts in training can motivate the employees to participate in training course actively by increasing the amount of the employees' participation in training process (need analysis, implementation and evaluation).

Limitation of the study:

• Weighting the components is done by individuals who were volunteers to weight and prioritize the categories.

• Lack of prior studies in Iran

• Lack of prior studies abroad

• Lack of enough time to investigate all the training and non-training standards.

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