

Auditing of training need assessment education unite of national Iranian gas company based on ISO10015's international training standard

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ABSTRACT

The overall purpose of this research is to investigate the existent Process of employees' training needs assessment, in the National Iranian Gas Company and the identification of its consistencies and inconsistencies with regard to the requirements of ISO10015:1999 International Training Standard and also identification the points that is required to develop and improve the training needs assessment process. The present study is an applied research in terms of purpose and a descriptive one regarding the research method (Survey Res) The population of this study were all the people involved in the process of training and development of human resources in National Iranian Gas Company including the managers, educational experts of headquarters and provincial gas companies, operational regions, gas refineries and who were 72 persons altogether. Using a proportional stratified random sampling, 47 people of them were selected for this study. In order to collect data, a researcher made questionnaire consisting of 22 closed-ended items in the form of a 5-point Likert scale was used. This questionnaire has a reliability of .78. To analyze the data, SPSS statistical package version 16 were used. The statistical analysis used in this study was one-sample t-test, One- Way ANOVA and Turkey Test. With inferential statistical analysis of the data on the training needs assessment process in National Iranian Gas Company following points were examined 1) Determine the needs of organization, 2) Defining and analyzing competence requirements, 3) Reviewing competence, 4) Defining competence gaps, 5) Identifying solution to close the competence gaps, 6) Defining the specification for training needs. Of these steps, steps 1, 2, 5 and 6 have consistencies with ISO10015:1999 training standard's requirements from viewpoints of National Iranian Gas Company's training authorities but steps 3 and 4 have inconsistencies with ISO10015:1999 training standard's requirements from viewpoints of National Iranian Gas Company's training authorities.

Keywords: Auditing, training needs assessment, human resource, ISO10015:1999 international training standard.

INTRODUCTION

Employee training should not be a side issue that is only considered after every other detail has been carefully planned and accounted for. It must be made an integral part of any planning process, because the success or failure of every organizational activity is ultimately determined by the abilities of the employees. (Wetland, 2007). Studies have shown that training lead to maintaining the continuity and Surviving of the organizations. "A3-yearstudyin Singapore have shown that17%of commercial and industrial companies have gone bankrupt in this country where less than 1% of these companies were those that had been held training courses for their employees" (Nouri, 2010, p. 13). The considerable point is that designing and executing of training programs merely can't help the organization to reach its goals but if we want to the result lead to fulfill the current needs, training should be based

on scientific principles and methods (Abbasian, 2006). One of the main challenges that is confront of organizations' training leaders and managers is training needs assessment that is required for employees and organization so that maximum investment can be done and at the same time, rise the competitiveness of organization. What is important and should be emphasized is that training process should be done after analyzing employees and organization's needs. Training needs assessment is the process of determining knowledge, skills and abilities (KSA) that are required for employees to do their jobs (Ford, 1999, p.11). Through this most of organizations utilize different training needs assessment models such as: Herman & Kaufman model, Targeting Resources for The Educational Needs of the Disadvantaged (Trend), Stout model, Houston Needs Assessment System (HNAS), SWOT model and other models. One of these models that have been popular in recent years is training needs assessment model based on Iso10015 training standard.

Background of the study

“Training assessment is a process to gather information about practical and received training need that will be fixes after identifying through training” (Barbazette, 2005, p.6). Training assessment defined as identify the needs (the gap between "what is" and "what should be") and ranked them in order of preference and choose the needs that should be reduced or eliminated (Abbas-Zadegan & Tork-Zadeh, 2009, p. 65). Burton & Merrill believed that needs assessment generally is a systematic process for determining goals, determine gaps between current situation and goals and finally determining priorities for action (Fathi & Vajargah, 2009, p.25). Training process should be started after analyzing organization needs and also after recording issues related to the competence. Organization should determine competencies required for each task that affect quality of products, evaluate employees' competencies to do the task and provide plans to eliminate contingency deficiencies related to competence. Determining training needs should be done based on analyzing current needs and organization's expected needs in comparison with current employees' competence. “This stage should be used for a) Determine the gap between existing competencies and expected competence b) Determine training needs for employees that their existing competencies doesn't match with their expected competencies for their work c) Instructional design of training needs, in this regard it should be specified does the gap between existing competencies can be reduced through training with expected competencies or other activities are required. The existing gap should be analyzed” (Khorasani & Gharaj Donyavi, 2007, p.10). What is note worthy in needs assessment issue is that in Iso10015 standard only training needs are attractive and other types of needs are not desirable. "Training needs are those needs that reflect training demands or goals (Fathi & Vajargah, 2009, p.20)."The first step in training and developing is needs assessment. Needs assessment is used as foundation of training purposes, selecting and designing training programs, executing the programs and evaluation of programs. This process shape a continuous cycle that always commence with training needs assessment" (Mailer & Osinsky, 2002). Training needs assessment is essential for various reasons; it is possible that training given to employees hasn't been correctly selected in order to solve their problems, training programs has been problems, and training has been unable to meet expectations of organization in changing employees' behaviors, their skills and etc. (Noe, 2008).

Theoretical Foundations of research

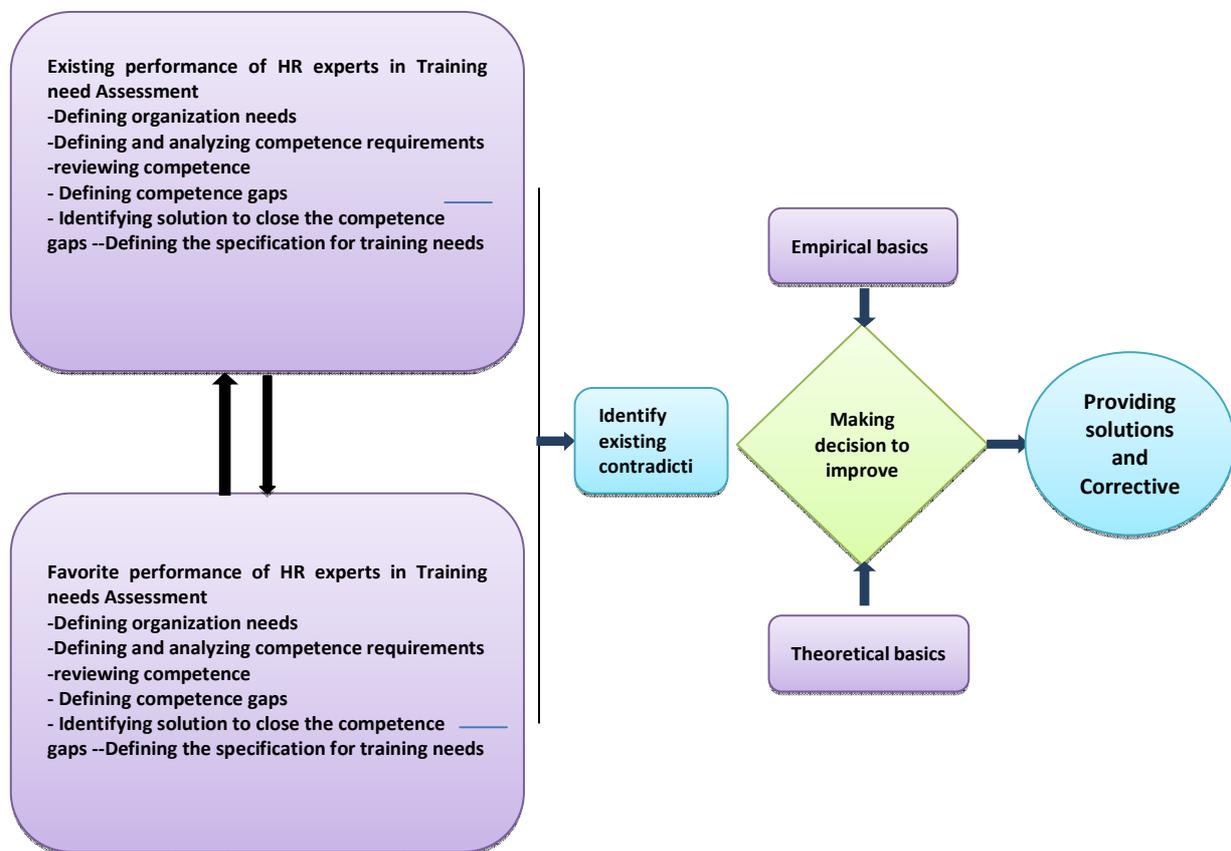
Training and development of human resources and its audit are priorities of any organization and it should be based on appropriate operational model. ISO10015 International Standard training with comprehensive view and special flexibility somehow is managed to cover all the variables in the training process models and gives a comprehensive models to the training experts. ISO10015 with a distinctive and unique characteristics like: monitoring in other parts of the training process, keeping records of activities, out puts documenting each training cycle, the evaluation of both short and long term...It is important. In addition, this standard was adopted in 1999 and was reapproved with a vote of 85 countries around the world in the 2005's to train employees that could be a valid reason for choosing this standard for certification training offered by the National Iranian Gas Company in this study. Consistencies and inconsistencies of these training need assessments in the sixe-phase training need assessment cycle, achieved based on these standards by the analysis of the data obtained. Director of National Iranian Gas Company should eliminate cracks and conflicts and not only maintain their competitive advantage in the national and international arena, but increase.

Research objectives:

The overall purpose in this study is investigate the current process of employees' training needs assessment in the National Iranian Gas Company and identification of its consistencies and inconsistencies with the requirements and documentation of ISO 10015 international training standard and points that is necessary to improve the training needs assessment process. To reach that, also following partial purpose have been considered. 1) Investigation of

defining the needs of organization's step in National Iranian Gas Company employees' training needs assessment process based on Iso10015:1999 standard model, and identification the points that is required to develop and improve this step. 2) Investigation of defining and analyzing competence requirements step in National Iranian Gas Company employees' training needs assessment process based on Iso10015:1999 standard model, and identification the points that is required to develop and improve this step. 3) Investigation of reviewing competence step in National Iranian Gas Company employees' training needs assessment process based on Iso10015:1999 standard model, and identification the points that is required to develop and improve this step. 4) Investigation of defining competence gaps step in National Iranian Gas Company employees' training needs assessment process based on Iso10015:1999 standard model, and identification the points that is required to develop and improve this step. 5) Investigation of identifying solution to close the competence gaps step in National Iranian Gas Company employees' training needs assessment process based on Iso10015:1999 standard model, and identification the points that is required to develop and improve this step, 6) Investigation of defining the specification for training needs step in National Iranian Gas Company employees' training needs assessment process based on Iso10015:1999 standard model, and identification the points that is required to develop and improve this step.

Figure 2: Proposed model



MATERIALS AND METHODS

Research methods

In terms of purpose the present study is an applied research. On the other hand this study investigates the training and developing programs In National Iranian Gas Company and also gathered data is for reply to current questions, so in terms of method this study is a descriptive research.

Statistical population

In this study statistical population is all the training and developing process practitioners and overseers of the National Iranian Gas Company that includes: NIGC's staff training managers and experts (N=20), provincial Gas Companies' managers and experts (N= 28), Operational Areas of Gas Transmission's managers and experts (N=10), Gas Refinery companies' managers and bosses (N=8), Natural Gas Storage Company (N=1), Non-industrial services company (N=1), Iranian Gas Transmission Company (N=1), Gas Engineering and Development Company (N=1), Staff Training Center (N=1), and HSE (N=1) and Total population (N=72).

Stratified random sampling method in this study was used, to determine the sample size Morgan table has been used and then to determine the number of each subgroup ratio and proportion was used. Based on the table, the sample size for N=72 statistical population is N=59. It should be noted that number of 12 samples were used to estimate reliability and this number of samples were not used in the final analysis so sample size after estimating reliability were N=47 and can be said response rate has been 80%.

Measures

Researcher-made questionnaire with four separate sections includes: a) Introduction of questionnaire in which it was expressed the purpose of the study, instructions on how to complete the questionnaire and how to return it. b) Personal Information, that was set based on three demographic variables include: education, career position and tenure c) definitions and terminology, for clarification of concepts and terms in the questionnaire and d) main questionnaire text that has 22 items and designed based on main text of ISO10015. In this study to ensure from validity original text ISO10015:1999 standard has been referred and the items matched with those. Also items have been confirmed by supervisors, advisors and other experts. Also to achieve content validity, the expressions has been used that was in the area of respondent expertise and in addition, a number of terms are operationally defined. In terms of face validity, all of the items measured the same ISO10015:1999 points. In this study to estimate reliability, Cronbach Alfa was utilized (0.785). To analyze the data in this study both descriptive and inferential statistics have been applied. Descriptive statistic methods include: preparing and arranging table of frequency distribution and charting central tendency parameters (mode, median and mean) and dispersion parameters (range, quartile deviation, variance and standard deviation) given that the research was conducted in the behavioral sciences and the questionnaire was designed in the Likert form, we use interval scale so the mean is used as an indicator of central tendency. In the inferential statistic section some important points is considered. We used parametric statistical models because of our central index is the mean. Our intention in this study was comparing the existing reality of training need assessment process among employees of National Iranian Gas Company (empirical data) with features of employees training and developing according to the ISO10015 standard model (theoretical data). Therefore appropriate statistical model for this study was one sample t-test with the average. Also, one way ANOVA test and Tukey's test was used. According to this model, adaptation and fit of each component of the training and developing process is measured with training and developing process components that is exist in ISO10015 standard model among employees of National Iranian Gas Company.

RESULTS

Overall research question: What are consistencies and inconsistencies of existing training needs assessment process in National Iranian Gas Company with requirements and documentation of training ISO10015:1999 standard and what are the necessary points to improve it in National Iranian Gas Company's employees?

While considering inferential analysis of training needs assessment process, in National Iranian Gas Company, we found out four from six steps include: defining the needs of organization's step, defining and analyzing competence requirements step, identifying solution to close the competence gaps step, defining the specification for training needs step (steps 1-2-5-6) have consistency with iso10015 standard requirements of the respondent's view but steps 3) reviewing competence and 4) defining competence gaps have no consistency with iso10015 standard requirements of the respondent's view (Table 1).

Table 1: Inferential analysis of Training need assessment in National Iranian Gas Company based on ISO10015:1999 international standard training process

row	Variable	N	SD	DF	T	Empirical mean	Theoretical mean	Difference between means	Sig	appropriateness
1	Defining organization needs	40	0.704	39	8.124	3.905	3	0.905	0.000	Appropriate
2	Defining and analyzing competence requirements	40	0.414	39	4.704	3.308	3	0.3083	0.000	Appropriate
3	reviewing competence	40	0.807	39	1.322	3.168	3	0.1687	0.194	improvable
4	Defining competence gaps	40	0.900	39	0.703	3.10	3	0.100	0.486	improvable
5	identifying solution to close the competence gaps	40	1.238	39	2.171	3.42	3	0.425	0.036	Appropriate
6	Defining the specification for training needs	40	0.799	39	8.311	4.05	3	1.05	0.000	Appropriate

Table 2: Descriptive statistic of training need assessment

need assessment	N	M	SD	SE
	40	3.492	0.5855	0.0925

Table 3: one sample t-test of training need assessment Component

Training need assessment	Theoretical mean = 3					
	T	DF	Sig	Means difference	95% Confidence interval	
					LL	UL
5.323	39	0.000	0.4928	0.3056	0.6801	

To analysis training needs assessment process based on inferential statistic and one sample t-test statistical model we used COMPUTE command in SPSS software (Momeni, 2008, p.17) and, the amounts of six steps listed in table 4.16 were integrated to calculate the training needs assessment and its analysis has shown in Tables 4 and 5. According to the table, empirical mean was (3.492), Standard deviation (0.585), T amount (5.323), theoretical mean (3.00), the mean difference between empirical and theoretical means (0.492) and significance level was (p= 0.000). Since significance level was less than 0.05 so null hypothesis was rejected and must be acknowledged that the difference between means (0.492) was significant. Because this difference is positive we can conclude that training needs assessment process that is the first cycle of training process has consistency with ISO10015:1999 international standard's criteria among National Iranian Gas Company's managers and training specialist.

1st partial question: What are consistencies and inconsistencies of defining the needs of organization's step that is component of training needs assessment with requirements and documentation of training ISO10015:1999 standard and what are the necessary points to improve it in National Iranian Gas Company's employees?

Table 4: Inferential analysis of Defining needs organization phase in National Iranian Gas Company based on ISO10015:1999 international standard training process

row	Variable	N	SD	DF	T	E mean	T mean	Difference between means	Sig	appropriateness
1-1	Quality Policy	40	0.905	39	5.0604	3.72	3	0.725	0.000	Appropriate
1-2	Training policy	40	0.700	39	10.393	4.15	3	1.150	0.000	Appropriate
1-3	Quality management requirements	40	0.920	39	5.331	3.78	3	0.775	0.000	Appropriate
1-4	Resource management	40	0.709	39	9.814	4.10	3	1.100	0.000	Appropriate
1-5	Process design	40	0.920	39	5.331	3.78	3	0.775	0.000	Appropriate

According to table 4 and regarding significant level of each item that has been derived from SPSS, it is clear that the null hypothesis has been rejected in all items. This issue indicates that in this items there is significant difference between empirical and theoretical means and because the differences between empirical and theoretical means has been positive in all items, it means the acquired mean is larger than the theoretical mean, we can conclude that of the

National Iranian Gas Company respondent's view, training unit has consistency with ISO10015:1999 training standard criteria.

Table 5: Descriptive statistic of Defining needs organization phase

Defining needs organization	N	M	SD	SE
	40	3.9050	0.70455	0.11140

Table 6: one sample t-test of Defining needs organization phase

Defining needs organization phase	Theoretical mean = 3					
	T	DF	Sig	Means difference	95% Confidence interval	
	8.124	39	0.000	0.905	LL	UL
					0.6797	1.1303

To analysis defining the needs of organization's step based on inferential statistic and one sample t-test statistical model we used COMPUTE command in SPSS software and to calculate defining the needs of organization's step the amounts of the first 5 items (namely items listed in Table) were integrated and its analysis has shown in Tables 7 and 8. According to the Table, empirical mean was (3.905), standard deviation (0.704), T amount (8.124), theoretical mean (3.00), the mean difference between empirical and theoretical means (0.905) and significance level was (p= 0.000). Since significance level was less than 0.05 so null hypothesis was rejected and must be acknowledged that the difference between means (0.905) was significant. Because this difference is positive we can conclude that defining the needs of organization's step that is first step of training needs assessment process has consistency with ISO10015:1999 international standard's criteria among National Iranian Gas Company's managers and training specialist.

2nd partial question: What are consistencies and inconsistencies of defining and analyzing competence requirements step that is component of training needs assessment with requirements and documentation of training ISO10015:1999 standard and what are the necessary points to improve it in National Iranian Gas Company's employees?

Table 7: Inferential analysis of Defining and analyzing competence requirements phase in National Iranian Gas Company based on ISO10015:1999 international standard training process

row	Variable	N	SD	DF	T	E mean	T mean	Difference between means	Sig	appropriateness
1-6	Organizational or technological changes	40	.877	39	5.230	3.72	3	.725	.000	Appropriate
1-7	Data recorded	40	.736	39	14.178	4.65	3	1.650	.000	Appropriate
1-8	Appraisal of employees' competences	40	.810	39	3.122	3.40	3	.400	.003	Appropriate
1-9	Records of temporary employees	40	.810	39	.781	3.10	3	.100	.440	Improvable
1-10	Issuing certificate	40	1.244	39	3.557	3.70	3	.700	.001	Appropriate
1-11	Employees' requests	40	.944	39	2.177	3.32	3	.325	.036	Appropriate
1-12	consumer complaint	40	.822	39	6.729	3.88	3	.875	.000	Appropriate
1-13	Observance of rules	40	.530	39	14.605	4.22	3	1.225	.000	Appropriate
1-14	consumers' new requirements	40	.955	39	.662	3.10	3	.100	.512	Improvable

According to table 7 that has been derived from SPSS, it is clear that in 6-1 to 8-1 and 10-1 to 13-1 rows, significant level was less than 0.05 so null hypothesis has been rejected. This issue indicates that in this items there is significant difference between empirical and theoretical means and because the differences between empirical and theoretical means has been positive, it means the acquired mean is larger than the theoretical mean, we can conclude that of the National Iranian Gas Company respondent's view, training units has a good condition in this items and is consistent with ISO10015:1999 standard criteria but in 1-9 and 1-14 rows null hypothesis has been confirmed because significant level was larger than 0.05 that it means the difference between means is due to sampling so this items have inconsistency with Iso10015 standard's criteria in National Iranian Gas Company's employees' view.

Table 8: Descriptive statistic of Defining and analyzing competence requirements

Defining and analyzing competence requirements	N	M	SD	SE
	40	3.3083	0.41459	0.06555

Table 9: one sample t-test of Defining and analyzing competence requirements

Defining and analyzing competence requirements	Theoretical mean = 3					
	T	DF	Sig	Means difference	95% Confidence interval	
					LL	UL
	4.704	39	0.000	0.30833	0.1757	0.4409

To analysis defining and analyzing competence requirements step based on inferential statistic and one sample t-test statistical model we used COMPUTE command in SPSS software and to calculate defining and analyzing competence requirements step the amounts of the third 9 items (namely items listed in Table) were integrated and Its analysis has shown in Tables 10 and 11. According to the Table, empirical mean was (3.308), standard deviation (0.414), T amount (4.704), theoretical mean (3.00), the mean difference between empirical and theoretical means (0.308) and significance level was (p= 0.000). Since significance level was less than 0.05 so null hypothesis was rejected and must be acknowledged that the difference between means (0.308) was significant. Because this difference is positive we can conclude that defining and analyzing competence requirements step that is second step of training needs assessment process has consistency with ISO10015:1999 international standard's criteria among National Iranian Gas Company's managers and training specialist.

Table 10: Inferential analysis of reviewing competence phase in National Iranian Gas Company based on ISO10015:1999 international standard training process

row	Variable	N	SD	DF	T	E mean	T mean	Difference between means	Sig	appropriateness
1-15	Concerning to evidences	40	.921	39	2.430	3.35	3	.350	.021	Appropriate
1-16	Competence records	40	1.062	39	-1.638	2.72	3	-.275	.109	Improvable
1-17	Competence review	40	1.171	39	-1.350	2.75	3	-.250	.185	Improvable
1-18	Experts' data	40	.802	39	6.701	3.85	3	.850	.000	Appropriate

3rd partial question: What are consistencies and inconsistencies of reviewing competence step that is component of training needs assessment with requirements and documentation of training ISO10015:1999 standard and what are the necessary points to improve it in National Iranian Gas Company's employees?

According to table 10 that has been derived from SPSS, it is clear that in 15-1 and 18-1 rows, significant level was less than 0.05 so null hypothesis has been rejected. This issue indicates that in these items there is significant difference between empirical and theoretical means. Because in both items the difference between means are positive, it means the acquired mean is larger than the theoretical mean, we can conclude that of the National Iranian Gas Company respondent's view, training units in this items has consistency with ISO10015:1999 standard criteria but due to the significant level in 16-1 and 17-1 rows null hypothesis has been confirmed because significant level was larger than 0.05 that it means the difference between means is due to sampling so this items have inconsistency with Iso10015 standard's criteria in National Iranian Gas Company's employees' view.

Table 11: Descriptive statistic of reviewing competence phase

reviewing competence phase	N	M	SD	SE
	40	3.1688	0.80739	0.12766

Table 12: one sample t-test of reviewing competence phase

reviewing competence phase	Theoretical mean = 3					
	T	DF	Sig	Means difference	95% Confidence interval	
					LL	UL
	1.322	39	0.194	0.16875	-0.0895	0.4270

To analysis reviewing competence step based on inferential statistic and one sample t-test statistical model we used COMPUTE command in SPSS software and to calculate defining and analyzing competence requirements step the amounts of 4 items (namely items listed in Table) were integrated and its analysis has shown in Tables 13 and 14. According to the Table, empirical mean was (3.168), standard deviation (0.807), T amount (1.322), theoretical mean (3.00), the mean difference between empirical and theoretical means (0.168) and significance level was (p= 0.194). Since significance level was more than 0.05 so null hypothesis was confirmed and must be acknowledged that the difference between means (0.168) wasn't significant. So we can conclude that reviewing competence step that is

third step of training needs assessment process has inconsistency with ISO10015:1999 international standard's criteria among National Iranian Gas Company's managers and training specialist.

4th partial question: What are consistencies and inconsistencies of defining competence gaps step that is component of training needs assessment with requirements and documentation of training ISO10015:1999 standard and what are the necessary points to improve it in National Iranian Gas Company's employees?

Table 13: Inferential analysis of Defining competence gaps phase in National Iranian Gas Company based on ISO10015:1999 international standard training process

row	Variable	N	SD	DF	T	E mean	T mean	Difference between means	Sig	appropriateness
1-19	Competence comparison	40	.900	39	.703	3.10	3	.100	.486	Improvable

According to table 13 and observing significant level of item number 1-19, it is clear that significant level was more than 0.05 so null hypothesis has been confirmed. This issue indicates that in this item there is no significant difference between empirical and theoretical means and it is due to sampling so this item has inconsistency with ISO10015 standard's criteria in National Iranian Gas Company's employees' view.

Table 14: Descriptive statistic of Defining competence gaps phase

Defining competence gaps phase	N	M	SD	SE
	40	3.10	0.900	0.142

Table 15: one sample t-test of Defining competence gaps phase

Defining competence gaps phase	Theoretical mean = 3					
	T	DF	Sig	Means difference	95% Confidence interval	
					LL	UL
	0.703	39	0.486	0.100	-0.19	0.39

To analysis defining competence gaps step based on inferential statistic we used one sample t-test with mean in SPSS software and to calculate defining competence gaps step we use the amounts of item number 19-1 (listed in Table) that its analysis has shown in Tables 14 and 15. According to the Table, empirical mean was (3.100), standard deviation (0.900), T amount (4.703), theoretical mean (3.00), the mean difference between empirical and theoretical means (0.100) and significance level was (p= 0.486). Since significance level was more than 0.05 so null hypothesis was confirmed and must be acknowledged that the difference between means (0.100) wasn't significant so we can conclude that defining competence gaps step that is fourth step of training needs assessment process has inconsistency with ISO10015:1999 international standard's criteria among National Iranian Gas Company's managers and training specialist.

5th partial question: What are consistencies and inconsistencies of identifying solution to close the competence gaps step that is component of training needs assessment with requirements and documentation of training ISO10015:1999 standard and what are the necessary points to improve it in National Iranian Gas Company's employees?

Table 16: Inferential analysis of identifying solution to close the competence gaps phase in National Iranian Gas Company based on ISO10015:1999 international standard training process

row	Variable	N	SD	DF	T	E mean	T mean	Difference between means	Sig	appropriateness
1-20	Identifying different ways	40	.847	39	2.054	3.28	3	.275	.047	Improvable

According to table 16 and observing significant level of item number 20-1, it is clear that significant level was more than 0.05 so null hypothesis has been confirmed. This issue indicates that in this item there is no significant difference between empirical and theoretical means and it is due to sampling so this item has inconsistency with ISO10015 standard's criteria in National Iranian Gas Company's employees' view.

Table 17: Descriptive statistic of identifying solution to close the competence gaps phase

identifying solution to close the competence gaps phase	N	M	SD	SE
	40	3.28	0.847	0.196

Table 18: one sample t-test of identifying solution to close the competence gaps phase

identifying solution to close the competence gaps phase	Theoretical mean = 3					
	T	DF	Sig	Means difference	95% Confidence interval	
					LL	UL
	2.054	39	0.47	0.275	0.03	0.82

To analysis identifying solution to close the competence gaps step based on inferential statistic we used one sample t-test with mean in SPSS software and to calculate identifying solution to close the competence gaps step we use the amounts of item number 20-1 (listed in Table) that its analysis has shown in Tables 17 and 18. According to the Table, empirical mean was (3.280), standard deviation (0.847), T amount (2.054), theoretical mean (3.00), the mean difference between empirical and theoretical means (0.275) and significance level was (p= 0.470). Since significance level was more than 0.05 so null hypothesis was confirmed and must be acknowledged that the difference between means (0.275) wasn't significant so we can conclude that identifying solution to close the competence gaps step that is fifth step of training needs assessment process has inconsistency with ISO10015:1999 international standard's criteria among National Iranian Gas Company's managers and training specialist.

6th partial question: Does exists any significant difference between respondents' views toward consistence or contradiction of needs assessment component with requirements and documentation of ISO10015:1999 standard based on demographic variables (education, career position and tenure) in National Iranian Gas Company?

In terms of education: ANOVA test was used to answer this part of question based on Table 21. The results of this table show that F was equals to (0.521) and significance level was equals to (0.671). Given that F amount wasn't meaningful at 0.05 level so it can be said that there is no significant difference between respondents' view about observance amount of requirements and documentation of ISO10015:1999 standard in terms of education.

In terms of career position: ANOVA test was used to answer this part of question based on Table 22. The results of this table show that F was equals to (8.088) and significance level was equals to (0.000). Given that F amount was meaningful at 0.05 level so it can be said that there is significant difference between respondents' view about observance amount of requirements and documentation of ISO10015:1999 standard in terms of career position. We use Tukey post hoc test, to do pair wise comparison and to determine that meaningfulness of the results has been caused by the difference between which group of individuals. The result of Table.23 shows that the difference between training managers' view with training masters has been meaningful and also the deference between training assistants' view with training masters and training experts wasn't meaningful. It means there is no significant difference between training masters' view with training experts' view about observance amount of requirements and documentation of ISO10015:1999 standard.

In terms of tenure: ANOVA test was used to answer this part of question based on Table 24. The results of this table show that F was equals to (5.051) and significance level was equals to (0.005). Given that F amount was meaningful at 0.05 level so it can be said that there is significant difference between respondents' view about observance amount of requirements and documentation of ISO10015:1999 standard in terms of career position.

Finally we use Tukey post hoc test, to do pair wise comparison and to determine that meaningfulness of the results has been caused by the difference between which group of individuals. The result of Table.25 shows that the deference between views of employees with less than 7 years tenure with views of employees with 15 to 20 years tenure and between views of employees with 15 to 20 years tenure with views of employees with more than 20 years tenure was significant. Results of other pair wise comparisons weren't significant.

CONCLUSION

Purpose of this study was investigating the consistencies of training needs assessment process with requirements of international training ISO10015:1999 stand in National Iranian Gas Company's training unit So in this study we tried to investigating current situation in National Iranian Gas Company's employees training needs assessment process with answering to an overall question and 6 sub questions at first and then its consistencies and inconsistencies explained in comparison to ISO10015 international training standard. Results of overall question in this study suggest that training needs assessment process is consistent with training process cycle criteria of ISO10015:1999 international standard from National Iranian Gas Company's training managers and experts view.

First partial question's result indicates that defining the needs of organization's step that is first cycle of training needs assessment process is consistent with ISO10015:1999 international standard from National Iranian Gas Company's training managers and experts view. Also second partial question's result shows that defining and analyzing competence requirements step that is second cycle of training needs assessment process is consistent with ISO10015:1999 international standard from National Iranian Gas Company's training managers and experts view. Third partial question's result indicates that reviewing competence step that is third cycle of training needs assessment process is inconsistent with ISO10015:1999 international standard from National Iranian Gas Company's training managers and experts view. Results of fourth partial question suggest that defining competence gaps step that is fourth cycle of training needs assessment process is inconsistent with ISO10015:1999 international standard from National Iranian Gas Company's training managers and experts view. Fifth partial question's result indicates that identifying solution to close the competence gaps step that is fifth cycle of training needs assessment process is inconsistent with ISO10015:1999 international standard from National Iranian Gas Company's training managers and experts view. . In terms of education the sixth sub question's analysis shows that there is no significant difference among the respondents' view with different education. Also in terms of career position there is a significant difference among the respondents' view with different career position. Tukey post-hoc test's result shows that the difference between training managers with training masters and training experts was meaningful also the deference between training assistants with training masters and training experts wasn't meaningful. It means there is no significant difference between training masters' view with training experts' view about observance amount of requirements and documentation of ISO10015:1999 standard. In terms of tenure result also shows that there is a significant difference between employees with different tenure's view. Tukey post-hoc test's result shows that there is a significant difference between employees with less than 7 years tenure's view with employees with 15-20 year tenure and between employees with 15-20 year tenure with employees with more than 20 year tenure. Other pair wise comparison wasn't meaningful.

In order to evaluate training needs assessment process and according to these results we argue that despite overall consistency between training needs assessment process with Iso10015 required in some steps there is no consistency with Iso10015 required international standard in National Iranian Gas Company. This important notice should be placed on the managers and trainers' agenda. According to these results, we have some recommendation in table form to National Iranian Gas Company's training unit and its senior managers, in order to improve employees training conditions.

The main findings of the study

Some items in analyzing competence requirements step that is one of important step in training needs assessment process have inconsistency with Iso10015 required standard (items 9-1 and 14-1).

Reviewing competence step is another important training needs assessment process step. Evidence indicates that National Iranian Gas company's training unit has some weaknesses in this issue (items 16-1 and 17-1).

Identifying solution to close the competence gaps step is another important training needs assessment process step. Findings show that National Iranian Gas company's training unit has some weaknesses in this issue (item 20-1).

Applied suggestions to improve

- 1) Personnel rotation; In the case of temporary employees positive displacement should be done based on competence and seasonal changes.
- 2) Researching in the marketplace to determine or predict the new demands of customers.
- 3) Any records that shows merit list of each employee be considered systematically and accurately
- 4) To review the employees' competences, interviews, questionnaires, observation and group discussion techniques should be used.
- 5) The differences about competence can be removed by training or other actions such as redesign the processes, hiring employees that fully trained, use of outsourcing, improve other sources, Job rotation or modify Procedures.

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