Sindhological Studies, ISSN: 1032-6759, 2017 (1): 61-69

Identifying and Weighting Indexes of Evaluation of Personnel Performance of Operational Units of Mahshahr Razi Petrochemical Company based on Methodology of Analytical Hierarchy Analysis (AHP)

Mohammad Zafari[1'2] , Dr Ali Kangarani Farahani[2]*

1. Department of Management, KhouzestanScience and Research Branch, Islamic Azad University, Ahvaz, Iran
2. Department of Management, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran

***Corresponding Author Email**: alifarahani29@yahoo.com

Abstract: This paper aims to identify, weight and prioritize the indexes of evaluating performance of staffs of operational units of Razi petrochemical company. This paper is practical by purpose and exploratory by nature. It is worthy to mention that this paper is carried out in three main phases. In first phase, indexes of evaluation of staff performance are identified through reviewing study literature by polling 76 experts including professors, experts and professionals regarding staff performance evaluation. In this phase, 32 indexes are identified for evaluating personnel performance. Second phase is related to confirming andfinalizing the identified indicators within previous phase. In this phase, statistical population of this paper is consisted of all personnel of operational units of Razi petrochemical company which their total is announced to be 373 people. Along this, based on Kerjesi & Morgan table and drawing on randomized stratified methods with proportional distribution, the required sampling is done. In this step, after collecting data, the required analysis is done by SPSS software. In third phase, weighting and prioritizing each one of main criteria and identified indexes in previous steps are calculated through analytic hierarchy process (AHP) and by polling 67 experts by Expert Choice and Excel software.
Finally, results of study leads to identifying 4 main criteria and 25 indexes and their final and general weights are calculated.
Keywords: performance evaluation indexes, operational units staff, Mahshahr Razi petrochemical company, analytical hierarchical process.

INTRODUCTION

Enhancing occupational performance is among most important objectives that managers of organizations consider because it entails enhancement of productivity within society (Moshabaki, 2007) and it gives occasion to enhancing national economy as well as building up the quality of services and production of organizations (Spector, 1999). Occupational performance is a degree of carrying out missioned duties (Tahir Soleman, 2006). Performance is defined by activities which usually are a part of one's job and he should carry them out (Zakerfard, 2009). Researchers introduce ability and tendency as one's performance and productivity. That is, to which extent one can carry out a task (in terms of knowledge, skill, experience and qualification) and to which extent he has tendency to do it (motivation, interest, commitment and confidence) (Qolipur, 2007).

Problem statement

Evaluating performance in facilitating effectiveness of organization is considered as one of the important tasks of human resource management. In recent years, the role of performance evaluation has been considerably addressed. As experts posit, an effective system of performance evaluation can grant a lot of advantages for organizations and their staff. Longenecker and Nykodym (1996) posit that performance evaluation system a)provides a specified performance feedback for improving staff performance, b) determines employee apprenticeship requirement, c) it sets the stage for personnel development, d) it establishes a close relation between personnel conclusion and performance, e) it increases personnel motivation and productivity. Similarly, Roberts and Pavolak (1996) believe that performance evaluation is used for various purposes of directorship and development such as a) for individual performance evaluation interms of organization needs, b) anticipating feedback to personnel for improving or fostering their behaviors and c) assigning reward and occupational promotion. Meanwhile, today a lot of human and managerial resource systems don't seem to be appropriate and

they are considered as ineffective obsolete patterns. Over recent decade, a lot of organizations have found out that in practice they lack performance evaluation system which can transfer its priorities and objectives to personnel to improve them. One is sensitive due to extensiveness of cognitive contexts and use of various tools such as feeling, observation, perception, experience and belonging power and thinking in different subjects especially in evaluating and interpreting behavior and performance of personnel and sum of these factors influence on managers' access to effective performance evaluation (Stredwick, 2005). Mahshahr Razi petrochemical company also doesn't take exception to this rule and in spite of adopting its own performance evaluation methods, none of levels and occupational ranks active in this set are not satisfied of this system and they believe that existing performance evaluation system has lost sight of some aspect of their profession and address the performance evaluation of a series of highly general aspects and sometimes irrelevant to their occupational class. Existence of such hitch in this huge and strategic and petroleum-related company calls us upon to accurately examine and use a scientific and systematic methodology to identify performance evaluative regional indexes which in fact is consistent with real status of Mahshahr Razi petrochemical company in all respects. Then we will determine the weighted model of these indexes too based on degree of importance and influence. It is worthy to say that due to importance of operation units in this complex as well as view of company managers, this paper is carried out on operation units of Razi petrochemical company and regional performance evaluation indexes of these units are identified and weighted so that through this paper one of essential problem of this company would be solved in the context of human resources and specifically performance evaluation. By this discussion, in this paper, one attempts to answer to following questions:

Which are personnel performance evaluation regional indexes in operational units of Razi petrochemical company?
How on can classify the identified indexes in the form of more general dimensions?
How is the weight of each one of dimensions and identified indexes?

Continuous improvement of personnel and organization performance bring about a huge synergy force that this can support development program and give occasion to organizational excellence. Governments and organizations and institutes try to do their best in this respect. Without inquiring and information about amount of progress and achieving to objectives and without identifying challenges facing the organization and acquiring feedback and knowing the level of implementing devised policies and identifying some cases which call for serious reform, one cannot attain the continuous improvement of performance. All discussed concepts are not possible without measuring and evaluation. About necessity of measurement, English physicist, Lord Kelvin says: whenever we could measure what we talk about and brings them into numbers, we can claim that we know something about the discussed subject, otherwise our knowing is deficient and it never reach to maturity (Rahimi, 2006).

Management science also sheds light on mentioned discussions. When we fail to measure something we can't control it and when we cannot control sometime it is impossible to manage. The main subject of all organizational is performance and its improvement calls for measurement and thus it is hard to imagine an organization without performance evaluation. Similarly, experts believe that performance evaluation is a cornerstone in all organizational analysis and one cannot consider an organization without performance evaluation and measurement. Performance evaluation gives occasion to system intelligence and motivating people for desirable behavior and it serves as an essential part of devising and implementing the organizational policy.

Performance evaluation and measuring sets forth required feedback performance in following items:

By following the degree of advancement to determined objectives, it can be specified whether devised policies are put into action successfully or not.

By measuring the expected organizational results as well as personnel and customers evaluation and satisfaction, it can be specified whether policies are devised properly or not.

Evaluating and measuring performance set the stage for identifying the areas to which managers should pay more attention and it assists in identifying opportunities and limitations.

Performance evaluations brings about for managers in managerial decision making, because a great part of required information for managerial decision making is provided through measuring and evaluating the performance system.

Any endeavor in order to achieve success should have framework and improvement of organizational performance is based on performance cycle. Any program of organizational performance should be started from the performance measuring and evaluation (Elahi, 1999), therefore design of an efficient model of performance evaluation which accurately fit the organization status serves as the first step in having an efficient evaluation system.

STUDY METHODOLOGY

This paper is practical by purpose and an exploratory by nature. It is worthy to mention that this study is carried out in three phases.

First phase (identifying indexes): this step includes indexes that have been identified personnel performance evaluation through reviewing study literature, polling 67 experts and professors in the area of personal performance evaluation. In this step, 32 indexes are identified for evaluating personnel performance.

Second phase (confirming and finalizing indexes): second phase of study is related to confirmation and finalization of identified indexes in previous phase. In this phase, statistical population of this study is consisted of all personal of operational unit of Razi petrochemical which are 373 people. Along this, based on Kerjesi 7 Morgan table and using randomized stratified method by proportional partition, required sampling is obtained (sample size n=190). Data collection is done through researcher-made questionnaire and data from questionnaire are analyzed using SPSS software in descriptive and inferential statistics. In this phase, for confirming and classifying indexes, singe t-test and exploratory factor analysis (EFA) are used.

Finally, study results lead to identifying 4 main criteria and 25 indexes.

Third phase (weighting and prioritizing indexes): in third phase, weighting and prioritizing of each one of main criteria and identified indexes in previous phaseare calculated based on Analytical Hierarchy Process (AHP) and by polling of 67 experts using Expert Choice and Excel software. In this study, for weighting and prioritizing main criteria and sub criteria, pairwise comparison questionnaire of main criteria and sub criteria are used.

Analytical hierarchy analysis process is multi-index decision making technique that was used for the first time by Thomas L. Saaty in 1970's decade. This method can be used when a decision making faces several competing decision making options and indexes. These indexes can be either qualitative or quantitative. Basis of this decision making is on pairwise comparisons. The decision maker establishes a decision hierarchy tree and shows the evaluated competing options of decision. Then, a series of pairwise comparisons takes place. These comparisons specify weight of each factor within competing options. Finally, hierarchy analysis logic conflates the matrices from pairwise comparison with each other to obtain the optimum decision.

Using this method calls for following four main steps:

Modeling

In this step, problem and objective of decision making in hierarchy are derived from decision components which interrelated with each other. Decision components include decision making indexes and decision options. High level suggests the main objective of decision making. Second level implies the main indexes which may break down to more subsidiary indexes. The last level is decision options (Mehrgan, 2004).

Preferential judgment (pairwise comparisons)

After designing decision problem hierarchy, decision maker should establish set of matrixes which measures the relative importance and preferences of indexes numerically with each other and each option of decision with regard to indexes in comparison with other options. This task is done by pairwisecomparisons among decision components and through assigning numerical scores which suggest the preference or importance between two decision components. For doing so, comparison of options with ith option with respect to jth options or indexes are usually used which are shown in following table the manner of valuating indexes to each other.

Table 1. valuing indexes with regard to each other

Preferential value	Status of comparison of i with regard to j	description
1	Equal importance	Ith option or index with regard to jth has equal importance and is of no preference to each other
3	Relatively more important	Ith option or index is slightly more important than jth one.
5	More important	Ith option or index is more important than jth one.
7	Highly important	Ith option or index is highly more important than jth one.
9	Fully important	Ith option or index is absolutely more important than jth one.
2,4,6,8		They suggest intermediate values between preferential values for example 8 denotes an importance more than 7 and lower than 9 for i.

Calculating local priority

In the hierarchical process components of each level are compared in pair with regard to respective components in higher level and their weight is calculated. These weights are named relative weight. Next step in hierarchical analyses process is required calculation for determining priority of each ne of components of decision using pairwise comparisons matrix information.

Merging local priorities

For ranking decision options, in this study, one should multiple relative weight of each component to weight of higher ones to obtain the final weight. By doing so for each option, final weight amount is obtained which is named absolute weight.

Consistency in judgments

Almost all calculations related to AHP take place based on primary judgment of decision maker which come out in the form of pairwise comparisons matrix and any kind of error or inconsistency in comparing and determining importance among options and indexes impair the final result. Inconsistency rate (I.R) which will be discussed in the following, this specifies the consistency and shows to which extent one can trust the priorities of comparisons. The experience is shown that if the inconsistency rate is less than 0.1, the consistency of comparisons is acceptable, otherwise comparisons should be revised. Following steps are used for calculating the inconsistency rate:

Step 1: calculating weight sum vector: multiple the matrix of pairwise comparisons to column vector of relative weight, name the new vector obtained in this way as weighted sum vector (WSV).

Step 2: calculating the consistency vector: divide weighted sum vector component by relative priority vector. Name the resultant vector as consistency index (CI).

Step 3: obtaining λmax, obtain the average of consistency vector components λmax.

Step 4: calculating consistency index: consistency index is defined as follows:

$$CI = \frac{\lambda_{\max} - n}{n-1}$$

N denotes the number of existing option in the problem.

Step 5; calculating the consistency ratio: consistency ratio is derived by dividing consistency index on random index (RI).

$$CR = \frac{CI}{CR}$$

Consistency ratio 0.1 or less suggests the consistency among comparisons (Mehrgan, 2004).

Research findings

Identifying indexes

In the first step of study, identifying the indexes of evaluating personnel performance has been done through distributing open questionnaires among people in expert groups. Finally, considering the results of open questionnaires and reviewing literature, 32 indexes have been identified for evaluating personnel performance. In this paper, single sample one-sided t-test is used for confirming indexes.

Since the questions of questionnaire have been devised by five values Likert spectrum, one assumes that an index is confirmed by respondents when the mean of respective answers to each index is average to high. That is to say, it is greater than 3. In this case, null and alternative hypothesis will be for each one of indexes as follows:

H0 **:**$\mu \leq 3$ (mean of population less or equal to 3 index is not confirmed)

H1 **:**$\mu > 3$(mean of population is greater than 3)

In this step, data of questionnaire are analyzed in SPSS software which the results are shown in the following. In this test, error level is considered to be 5%.

Table 2. single sample t-test result

Identified indexes		Confidence level 95% high	low	Mean difference	Level of significance	T statistic
1-	Low level of workplace absence	.93	.66	.795	.000	11.883
2-	Teaming tendency and interest in teamwork	.76	.51	.638	.000	9.991
3-	Education degree	.25	-.05	.103	.177	1.357
4-	Discipline in coming and leaving workplace	.68	.41	.546	.000	8.174
5-	Workplace order	.67	.43	.551	.000	9.219
6-	Proportion of level of personal skills with missioned responsibilities	.79	.55	.670	.000	11.066
7-	Openness to criticism	1.16	.87	1.016	.000	13.712
8-	On the job training	.85	.58	.719	.000	10.506
9-	Complying with organizational hierarchical rules.	.72	.45	.584	.000	8.438
10-	Proper use of organizational resources and equipment	.89	.65	.768	.000	12.566
11-	Interest and perseverance in properly doing the tasks	1.14	.90	1.022	.000	17.071
12-	Preventing environmental pollution	.37	-.08	.146	.202	1.279
13-	Taking on time and appropriate decisions	.91	.62	.762	.000	10.380
14-	Attempt and interest in learning more about technical things related to the job	.89	.66	.778	.000	13.225
15-	Ability and skill of solving organization problems	.94	.68	.811	.000	12.119
16-	Presenting required reports in the due time with high quality	.78	.49	.638	.000	8.802
17-	Accurately studying and proper reaction to received reports	.72	.48	.600	.000	9.478
18-	Creation and innovation	1.18	.88	1.027	.000	13.574
19-	Observing individual safety during work	.99	.76	.876	.000	14.619
20-	Commitment	1.39	1.13	1.259	.000	19.130
21-	Being of required skill for proper reaction in critical and emergency conditions.	.95	.68	.811	.000	11.812
22-	Proper relation with the director (	.35	-.05	.146	.150	1.445
23-	Client orientation	.20	-.23	-.016	.880	-.151
24-	Decent behavior	1.18	.92	1.049	.000	15.873
25-	Accurately observing technical instructions	.80	.55	.676	.000	10.911
26-	Accurate familiarity with description of tasks	.10	-.25	-.076	.390	-.861
27-	Observing non individual safety (collective, equipment, repairmen etc.)	.84	.60	.719	.000	11.846
28-	Transferring technical knowledge to colleagues and especially new comers	.79	.55	.670	.000	10.648
29-	punctuality	.87	.62	.746	.000	11.427
30-	transparency	.34	-.09	.130	.236	1.190
31-	Appropriate relation with colleagues	1.11	.88	.995	.000	16.682
32-	Presenting productive suggestions for improving workplace technical and public conditions.	.31	-.11	.103	.333	.971

Considering above table it is obvious that level of significance for indexes 3, 12, 22, 23, 26, 30 and 32 is greater than 0.05, then for these indexes, H1 is rejected and null hypothesis is accepted. As a result, these indexes are identified as weak and are ruled out. For rest of indexes, because level of significance is less than 0.05, then t value is positive, therefore for them, H1 suggesting being greater than 3 is accepted and these indexes are confirmed (25 indexes are confirmed.)

Exploratory factor analysis

Along with answer to first question of study for identifying the main dimensions of study data exploratory factor analysis is used for identifying influential factors and clarifying the contribution of variance by these factors as well as their priorities. In interpreting factors, measure of factor loads (correlation coefficients between questions and factors) helps us in our interpretation.

Data matrix for factor analysis should contain significant information. Significance of information in a matrix is established through Chi square test (x^2). Significance of (x^2) and Bartlett test are least necessary condition for factor analysis.

Table 3. measure of adequacy of KMO sampling and Bartlett test in research respondents

KMO sampling adequacy measure		.803
Bartlett test	Chi square	2319.126
	Degree of freedom	300
	Level of significance	.000

Considering the earlier discussion and obtained values for KMO index with of 0.803 and level of significance 0.000 in Bartlett test, questionnaire is of required confidence for doing the exploratory factor analysis. After doing above two tests, analysis of exploratory factor has been conducted for examining and identifying the main factors and revealing special features and their interested relations. 25 indexes of performance evaluation have been classified in 4 main factors. These main factors are: 1- individual-characteristic factor 2- technical-expertise factor 3- workplace order factor 4-directorship factor.

Comparing the degree of importance of indexes of each one of study variables using AHP:

AHP and Expert Choice software are used for answering to third question for weighting dimensions and indexes of personnel performance evaluation. After identifying dimensions and indexes of performance evaluation in previous steps, atfirst the structure of dimension hierarchy structure has been designed. Questionnaires of pairwise comparisons of main criteria and indexes which have been filled by expert group have been transferred to Excel software by geometrical mean in hybrid (compound) manner and in the form of a single questionnaire summarizing all questionnaires has been analyzed in Expert choice software.

Table 4. main criteria weight

Indexes	weight	priority
Individual-characteristic	0.156	3
Workplace order	0.275	2
Technical-expertise	0.465	1
directorship	0.104	4

Table 5. individual-characteristic criteria sub-indexes weight

indexes	weight	priority
Openness to criticism	0.112	4
Creativity and innovation	0.301	2
Commitment	0.424	1
Decent behavior	0.163	3

Table 6. weight of sub-indexes of workplace order criteria

Indexes	weight	priority
Low rate of workplace absence	0.066	7
Order in coming and going to workplace	0.142	3
Workplace order and tidiness	0.046	8
Observing organization hierarchical rules	0.125	4
Properly use of organizational resources and equipment	0.073	6
Observing individual safety within working	0.263	1
Observing non individual safety (collective, equipment and repairmen etc.).	0.179	2
punctuality	0.107	5

Table 7. weight of sub-indexes of technical criteria

indexes	weight	priorities
Proportion of level of one's skill with the missioned job	0.036	8
Receiving and adopting on-the-job training	0.037	7
Dedication and perseverance in carrying out the tasks	0.187	2
Attempt and interest in learning further in technical arena of the job	0.114	4
Presenting required reports in the due time with high quality	0.052	6
Accurate study and proper reaction to received reports	0.076	5
Having required skill for proper reaction in critical and emergency conditions	0.293	1
Observing accurately technical and occupational instructions	0.175	3
Transferring technical knowledge to colleagues and especially newcomers	0.028	9

Table 8. weight of sub-indexes of directorship criteria

indexes	weight	priority
Collective work and team working tendency	0.441	1
Adopting on-time and appropriate decisions	0.328	2
Ability and skill of solving organizational problems	0.099	4
Appropriate relation with colleagues	0.132	3

Based on obtained results it has been attempted to design and propose a new for as personnel performance evaluation fro in Razi petrochemical operational units. For testing the presented tool as well as promoting it in the organization under study, one has evaluated the personnel performance of operation unit of district 1 of Razi

petrochemical company (63 employees) through this tool. Results of evaluation are presented in the following table.

Table 9. results of performance evaluation of personal using new tool in a real setting

Main criteria	Subsidiary indexes	Mean of index score from 5	Mean of index score from 100	Final score of index	Sum of indexes scores	Final score of main criteria	Final score of evaluation from 100
Individual-characteristic	Openness to criticism	3.63	72.6	8.13	**76.32**	11.9	78.6
	Creativity and innovation	3.28	65.6	19.75			
	Commitment	4.02	80.4	34.1			
	Decent behavior	4.4	88	14.34			
Workplace order	Low level of workplace absence	4.35	87	5.74	**83.4**	22.94	
	Order in time of coming and going to workplace	4.4	88	12.5			
	Order and tidiness of workplace	4.14	82.8	3.8			
	Observing organizational hierarchy and rules	4.14	82.8	10.35			
	Using proper organizational resources and equipment	3.8	76	5.55			
	Observing individual safety over work	4.24	84.8	22.3			
	Observing the non-individual safety(collective, equipment, repairmen so on)	4.06	81.2	14.5			
directorship	punctuality	4.05	81	8.67	**76**	7.9	
	Tendency to team working	3.9	78	34.4			
	Taking on time and appropriate decisions	3.67	73.4	24.1			
	Ability and skill of solving organizational problems	3.3	66	6.53			
	Appropriate relation with colleagues	4.14	82.8	10.93			
Technical aspect	Proportion of one's skill to missioned tasks	3.9	78	2.8	**77.1**	35.86	
	Receiving and adopting on-the-job services	3.8	76	2.8			
	Dedication and perseverance in doing missioned tasks	3.98	79.6	14.9			
	Attempt and interest in learning more technical aspect of the job	4.05	81	9.23			
	Presenting required reports in due time with high quality	4.03	80.6	4.2			
	Accurately study and proper reaction with received reports	3.8	76	5.8			
	Having required skill for proper reaction in critical and emergency conditions	3.6	72	21.1			
	Accurately observing of workplace and technical instructions	3.86	77.2	13.5			
	Transferring technical knowledge to colleagues especially newcomers	3.46	69.2	1.94			

STUDY RESULTS

Answer to study questions

Question 1: "what are regional indexes of personnel performance evaluation in operational units of Razi petrochemical firm?

In this study, finally after summarizing data obtained from primary open questionnaire and doing t test on them, 25 indexes have been identified as final indexes of performance evaluation on operational units of Razi petrochemical firm which is presented in the following table:

Table 3 answers to study question 1

Identified indexes	
Collective work and teamwork	Skill of solving organizational problems
Low level of workplace absence	Presenting required reports in due time with high quality
Order in going and coming time to workplace	Accurately studying and proper reaction to received reports
Proportion of one's skill with missioned tasks	Proper use of organizational resource and equipment
Receiving and adopting on-the-job training	Having required skill for proper reaction in critical and emergency conditions
Openness to criticism	Observing individual safety during work
Creativity and innovation	Observing non individual safety (collective, equipment, repairmen etc.).
Interest and perseverance in doing properly missioned tasks	Appropriate relation with colleagues
Taking on time and suitable decisions	Commitment
Order and tidiness in workplace	Appropriate treatment
Attempting and interest in learning more technical arenas related to the job	Accurately observing the technical instructions
Observing organizational hierarchical rules punctuality	

Question 2: how identified indexes can be classified within more general dimensions?
For answering this question, exploratory factor analysis is used and the analysis showed that indexes can be categorized in four classes. Thus, considering the type of ranked indexes, experience of researcher in the company in the study and taking the advisor professor, these four classes are classified as follows:

Table 4. Answering question 2

dimensions	indexes
Individual-characteristic	Openness to criticism Innovation and creativity commitment Decent behavior
Work order	Low level of workplace absence Order in going and coming time to workplace Order and tidiness of workplace Observing organizational hierarchy rules Using appropriately of organizational resources and equipment Observing individual safety within work Observing non-individual safety (collective, equipment, repairmen etc.) punctuality
Technical-expertise	Proportion of one's skill with the missioned task Receiving on-the-job training Interest and perseverance in doing properly missioned tasks Interest and attempt in learning more technical arenas related to the job Presenting required reports in due time with high quality Accurately study of proper reaction to received reports Having required skill for proper reaction in critical and emergency conditions Observing accurately the technical instructions Transferring knowledge to colleagues and especially newcomers
directorship	Collective work and team working Taking on time an appropriate decisions Skill of solving organizational problems Appropriate relation with colleagues

Question 3: how is weight of each one of identified dimensions and indexes?
For answering to this question, AHP and pairwise comparison questionnaire are used and finally after analysis, weight of dimensions and indexes are obtained in following table:

Table 5, answer to question 3

Main criteria	Subsidiary indexes	Each of index in the group	Main criteria weight
Individual characteristic	Openness to criticism	0.112	0.156
	Innovation and creativity	0.301	
	commitment	0.424	
	Decent behavior	0.163	
Workplace order	Low level of workplace absence	0.066	0.275
	Order in going and coming time to workplace	0.142	
	Order and tidiness of workplace	0.046	
	Observing organizational hierarchy rules	0.125	
	Using appropriately of organizational resources and equipment	0.073	
	Observing individual safety within work	0.263	
	Observing non-individual safety (collective, equipment, repairmen etc.)	0.179	
	punctuality	0.107	
directorship	Collective work and team working	0.441	0.104
	Taking on time an appropriate decisions	0.328	
	Skill of solving organizational problems	0.099	
	Appropriate relation with colleagues	0.132	
Technical-expertise	Proportion of one's skill with the missioned task	0.036	0.465
	Receiving on-the-job training	0.037	
	Interest and perseverance in doing properly missioned tasks	0.187	
	Interest and attempt in learning more technical arenas related to the job	0.114	
	Presenting required reports in due time with high quality	0.052	
	Accurately study of proper reaction to received reports	0.076	
	Having required skill for proper reaction in critical and emergency conditions	0.293	
	Observing accurately the technical instructions	0.175	
	Transferring knowledge to colleagues and especially newcomers	0.028	

REFERENCES

Elahi, S., (2009). Triangle of organizational performance, proceedings of 2nd festival of Shahid Rajaei, evaluating performance of domestic administrative institutions, Tehran: country administrative and recruitment affairs organization.

José R. Goris , (2014) "Self-appraisals in Mexico: Assessing the self-enhancing tactician perspective", International Journal of Commerce and Management, Vol. 24 Iss: 2, pp.152 – 166.

KlemmVerbosAmy , Janice S. Miller , AshitaGoswami , (2014) "Employee social cognition and performance evaluation process reactions", Personnel Review, Vol. 43 Iss: 4, pp.515 – 535.

Longenecker, Clinton O. and Nykodym, Nick (1996). Public Sector Performance appraisal effectiveness: A Case Study, Public Personnel Management. Vol. 25. No. 2, Summer.

Moshabbaki, A., (2007). A new look to concept of faith morale in enhancing the level of organization productivity, Journal of economy and management (32), p 131-143.

Qolipur, A., (2007). Organizational behavior management (individual behavior), Tehran: Samt.

Roberts, Gary E. and Pavlak, T. (1996). Municipal government Personnel Professional and Performance appraisal: Is there a consensus on the characteristics of an effective appraisal system? Public Personnel Management, Vol. 25. No. 3, Fall.

Spector, P., (2008). Industrial and organizational psychology (translation of S. Mohamadi), Tehran: Arasbaran.

Stredwick John (2005) An Introduction to Human Resource Management. Elsevier Ltd.