

**Research Article**

**EFFECTS OF PERFORMANCE EVALUATION ON EMPLOYEES’  
EFFICIENCY AND PRODUCTIVITY  
CASE STUDY: GAS COMPRESSOR STATIONS OF GACHSARAN OIL  
and GAS PRODUCTION COMPANY**

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**ABSTRACT**

The role and importance of performance evaluation is of employees’ efficiency and productivity requirements. This research is aimed at studying the correlation between performance evaluation and employees’ efficiency and productivity in Gas Compressor Stations of Gachsaran Oil and Gas Production Company. The statistical population includes 200 employees of this company. According to Krejcie and Morgan’s table, 132 were selected as the sample and to collect the required data, Moghimi and Ramezani’s (2011) performance assessment scale and Hajizadeh’s (2005) efficiency questionnaire with reliability of 0.75 and 0.86 were employed. Inferential statistic techniques such as Pearson test and regression were practiced to analyze research hypotheses. Research results revealed that there is a significant correlation between performance assessment and its components (competence, clarity, feedback, and authority) and employees’ efficiency and productivity.

**Keywords:** *Employee Performance Evaluation, Employees’ Efficiency, Competence, Clarity, Feedback and Authority*

**INTRODUCTION**

Performance evaluation is a process by which employees are formally assessed at regular intervals. The process is conducted as to identify efficient employees, grant award, and motivate them to have better performance. Performance evaluation was traditionally carried out by managers to control employees’ works. The guiding and leading perspective of this, however, is now a matter of the greater importance (Saadat, 1996). Information obtained by accurately evaluating employee’s performances help job programming, administrative decisions, punishments and awards to have legally acceptable and justifiable principles. As a result, competence would be applied to employees’ service status and their occupational fate and organizations would be operated under logical and fair occasions. Domination of competence and creation of an excellent environment depend on effectiveness of tasks and achieving organizational objectives. These activities increase organizational efficiency and productivity and facilitate more rapid growth and prosperity (Saadat, 1996). According to experts, an effective performance evaluation system has a great deal of benefits to offer organizations and employees (Gary *et al.*, 1996):

- A. It provides a defined performance feedback in order to improve employees’ performance;
- B. It specifies training requirements for employees;
- C. It sets the ground for employees to grow;
- D. It depicts a close relation between employees’ working results and performances; and
- E. It increases employees’ motivation and productivity.

Since last decade, many organizations have understood that they are lack of a performance evaluation system to convey their priorities and objectives to employees and take a step toward their improvement. Because of the spread of cognitive areas and use of different tools such as feeling, observation, perception, experience and the power of thinking, human being has always been sensitive to different subjects especially in evaluation and interpretation of behavior and performance and a collection of these factors have affected managers in effectively assessing employees’ performances (Stredwick, 2005).

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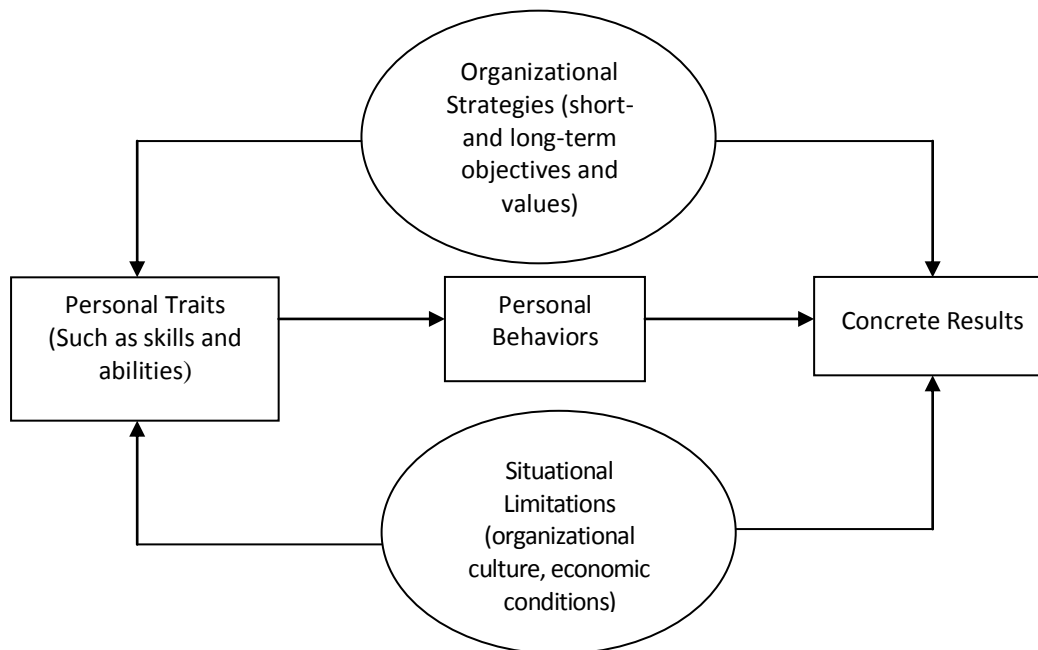
Accordingly, this is to answer this question that if performance evaluation affects employees’ efficiency and productivity.

**Research Literature**

*Performance Evaluation*

Performance evaluation is defined as a process of assessing and communicating with employees in how they can improve their performances. This not just allows them to evaluate their own performances, also affects their efforts and futures (Byars and Rue, 2008). Employee assessment is a formal process to measure and give feedback to them on their qualities, performances and recognition of their potentiality to grow them in future (Foot and Hook, 1999).

Noe *et al.*, (2008) believe that performances are arising from personal traits, skills and other factors. As seen in figure 1, these traits are converted by employees’ behavior into concrete results. Employees can, in fact, show their behavior when they have required knowledge, skills, and other requirements for a job.



**Figure 1: Performance Evaluation Model for organizations (Noe *et al.*, 2008)**

**Functions of Performance Evaluation**

Information obtained by performance assessments are employed as follows:

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Information obtained by a well-designed evaluation system can accurately reveal organizational weaknesses and strengths. Evaluation makes it clear that if a person has required skills, specialties and requirements to take the pertinent position or beyond that or if he/she is not competent enough even for his/her current position. If we know that the problem had nothing to do with training or it was impossible to find solution for an employee’s inefficiency and less working, there would be no solution except for replacement, degradation or even giving them sack (Fombrun, 1984).

**Recruitment and Selection**

Results achieved by evaluation of current performances can be helpful in prediction of future performances of ones whom we want to employ (Saadat, 2003).

**Reliabilities of Recruitment and Selection Tests**

Performance assessment results, as a useful index, can be employed to determine the validity and reliability of recruitment and selection tests. They help organizations and designers of such tests to make the required correction (Saadat, 2003).

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### ***Employee Development and Training***

Performance assessment results play an important role firstly in defining educational needs and secondly in determining the type of skill that organizations need the most (Saadat, 2003).

Performance evaluation, also, make clear that which unit in where needs what type of training. This does not mean that a performance evaluation system guarantees training competent employees. Information, however, facilitates understanding the training needs (Saadat, 2003).

### ***Determining Career Route***

Employees' performance is an indicator of their potentialities, weaknesses and strengths. By assessing employees and achieving the required information, their career route in organizations is depicted (Saadat, 2003).

### ***Wages and Benefits***

One effective factor in increasing payment is the information obtained by evaluating one's performance. Today, many managers and officials believe that it is a good idea to grant employees a sensible award by increasing their wages and benefits. This can be a good incentive to keep on their worthwhile performances. And if competent employees are paid the same as inefficient or average employees, they will lose their motivation and will turn into ordinary employees (Saadat, 2003).

### ***Recognizing Employee's Potential Talents***

As it is said that "past is a light for future", when performances are assessed, talents and abilities are at the same time evaluated. Accordingly, positions that a person may be good at them are appointed to him/her (Saadat, 2003).

### ***Purposes of Performance Evaluation***

Performance evaluation not only provides managers with valid and correct information, it also gives information to employees. As a result, they would be informed of their job performances and behaviors and understand their weaknesses and strengths. The purposes of performance evaluation are generally listed as below:

- Estimating the productivity;
- Determining the efficiency (the ratio of works done to consumed resources) (Rezaeian, 1993);
- Effectiveness (level of success in achievements and purposes);
- Fair categorization of employees (Abbaspour, 2003);
- Identifying employees' capacities (Mirsepasi, 1994);
- Improving performances (Abbaspour, 2003);
- Establishing a fair promotional system (Mirsepasi, 2001);
- Motivate competent employees (Mirsepasi, 1997);
- Determining the validity of recruitment and selection tests (Mirsepasi, 2001)
- Human resources planning (Saadat, 2003);
- Training employees (Mirsepasi 2001);
- Improving communication between managers, supervisors and employees (Abbaspour, 2003);
- Adhering to the rules of performance assessment (Abbaspour, 2003); and
- Setting the ground for group participation of employees, convergence of individuals' and organizations' purposes, organizational superiority, financial awards (Raj and Harry, 1997).

### ***Benefits of Performance Evaluation***

Jazayeri (1999) states that performance evaluation is followed by benefits and advantages for organizations and employees:

- Setting the ground for competent employees to grow and progress;
- Reducing dissatisfaction of non-normative or unintentional discrimination;
- Quantitative and qualitative estimation of human resources to supply human needs;

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- Talent-finding and motivating perseverant employees;
- Guiding training programs;
- Self-understanding (awareness of weaknesses and strengths);
- Determining the validity and correcting recruitment criteria;
- Managers or supervisors' awareness of employees' performance (top-down theory) and employees' awareness of managers and supervisors' performance (down-top theory);
- Recognizing behavioral normality and abnormalities; and
- Minimizing tensions, contrasts, and conflicts between managers and employees.

### **Efficiency**

Efficiency refers to well-implemented tasks in organizations or decisions that are made to reduce costs, increase production and improve the quality of products. Efficiency means the ratio of real output to the standard and expected output or the ratio of works which are carried out to works which should be done (Taheri, 2008). Organization efficiency is resources that are consumed to produce a unit of products. It can be calculated based on the ratio of consumption to products. If an organization can reach its objective by consuming fewer resources, it is said that it has more efficiency. To put it simpler, efficiency is the minimum time or energy devoted to the maximum work (Abtahi and Meruzhan, 1992).

### **Ways to Increase Efficiency**

Training: Today, big organizations that are struggling for maximizing their efficiency has started to establish university institutions. Since the era of industrial revolution in which production levels reached a record high by means of machines rather than human resources, specialty and the principle of division of work have become a matter of the utmost important. As we know, for administrating an organization, this is to management team to train employees and motivate them to learn technical know-how. In-service courses for managers and employees are the fastest and most helpful training measures that can help them qualitatively and practically improve (Mirsepasi, 1997).

### **Job Rotation**

Job rotation is common method that requires moving employees from one position to another one to raise their experiences. Many of major companies look for multi-purpose employees so that their human resources would offer more dynamism and exchangeability. As such, employees are needed who inclines to devote more intelligence, creativity and energy to the operation of companies. Employees should like to change their position to learn more new skills. Job rotation, especially when it is accompanied by promotion, would bring about satisfaction and in consequent higher efficiency (Mirsepasi, 1997).

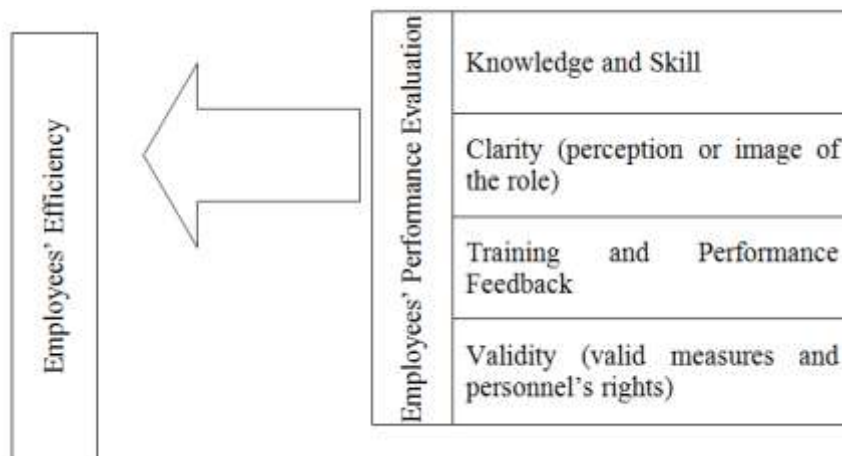
### **Job Enrichment**

Job enrichment is an attempt to motivate employees by giving them the opportunity to use the range of their abilities and to grow, recognize, and progress. Job enrichment is based on this fact that a career should be enriched, meaningful and with sufficient authorities. Practitioners can, hence, feel independence, control over their works and a favorable ground is provided for growth and creativity. According to this approach, by granting more authorities and responsibility without adding to tasks, the job is profoundly developed (Mirsepasi, 1997).

### **Enabling Employees**

An enabled workplace is an environment in which groups of people are working together and cooperating with each other. Such organizations totally differ from ones where any employee is competing with others. In an enabled organization, instead of carrying out works independently, anyone can rely on his/her co-workers. Such place benefits from employees with high emotion and best thoughts and inventions. Moreover, they responsibly commit to their works and prefer the interests of organization to their own. To create an enabled working place, managers' role should be turned from a mental framework of commanding and controlling into a supporting role which is based on responsibility and commitment. Accordingly, all employees have an opportunity to do their job as good as possible.

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**Figure 2: Research Conceptual Model**

**Research Hypothesis**

*Leading Hypothesis*

There is a significant correlation between employees’ performance evaluation and their efficiency in Gas Compressor Stations of Gachsaran Oil and Gas Production Company.

*Subsidiary Hypotheses*

1. There is a significant correlation between employees’ performance evaluation and their efficiency in Gas Compressor Stations of Gachsaran Oil and Gas Production Company.
2. There is a significant correlation between the clarity of employees’ performance evaluation and their efficiency in Gas Compressor Stations of Gachsaran Oil and Gas Production Company.
3. There is a significant correlation between the feedback of employees’ performance evaluation and their efficiency in Gas Compressor Stations of Gachsaran Oil and Gas Production Company.
4. There is a significant correlation between the validity of indices of employees’ performance evaluation and their efficiency in Gas Compressor Stations of Gachsaran Oil and Gas Production Company.

**MATERIALS AND METHODS**

**Research Methodology**

This study was of descriptive correlational and applied type in terms of the purpose and the identity of research. And this is a cross-sectional study with statistical population including all 200 employees of Gas Compressor Stations of Gachsaran Oil and Gas Production Company, among which 132 were selected as the sample volume. Pearson correlational coefficient and regression test were employed to look over the research hypotheses. As such, Moghimi and Ramezan’s performance assessment scales with 39 questions and Hajizedeh’s questionnaire (2005) with 16 questions were practiced.

**Table 1: Distribution of questions based on traits**

Row	Questionnaire	Variables	Questions	Cronbach’s Alpha	References
1	Employees’ Performance Evaluation	Abilities (knowledge and skills)	3-4-9	0.78	(Moghimi and Ramezan, 2011)
2		Clarity (perception or image of the role)	2	0.82	
3		Evaluation (training and performance feedback)	5-6-7-8-10-11	0.79	
4		Validity (legal measures and personnel’s rights)	1	0.73	
5	Employees’ Efficiency	Employees’ Efficiency	1-16	0.86	(Hajizadeh, 2005)

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**Data Analysis**

*Correlational Coefficient Matrix*

Correlational coefficient shows the intensity and the type (direct or inverted) of correlation. The coefficient is between 1 to -1. It would be zero when there is no correlation between two variables (Kordlooei and Alipour, 2014).

**Table 2: correlational matrix between components of performance evaluation and employees’ efficiency**

Variables		Correlation Coefficient				
		Knowledge and Skill	Clarity	Training and Feedback	Validity	Efficiency
Knowledge and Skill	Correlational Coefficient	1	0.648	0.909	0.602	0.377
	Level of Significance (p-value)	132	0.000	0.000	0.000	0.000
Clarity	Correlational Coefficient	0.648	1	0.685	0.595	0.373
	Level of Significance (p-value)	0.000	132	0.000	0.000	0.000
Training and Feedback	Correlational Coefficient	0.909	0.685	1	0.774	0.453
	Level of Significance (p-value)	0.000	0.000	132	0.000	0.000
Validity	Correlational Coefficient	0.602	0.595	0.774	1	0.394
	Level of Significance (p-value)	0.000	0.000	0.000	132	0.000
Efficiency	Correlational Coefficient	0.377	0.373	0.453	0.394	1
	Level of Significance (p-value)	0.000	0.000	0.000	0.000	132

*Leading Hypothesis*

There is a significant correlation between employees’ performance evaluation and their efficiency.

**Table 3: Correlation between employees’ performance evaluation and their efficiency**

Pearson Value	Number	Level of Significance
48.0	132	0.00

According to table 3, as the level of correlation of Pearson test is less than 0.05 (sig<0.05), there is a significant correlation between employees’ performance evaluation and their efficiency. That is to say, the more accurate the evaluation, the higher the employees’ efficiency would be. The leading hypothesis is, thus, verified.

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*Subsidiary Hypotheses*

First Hypothesis: There is a significant correlation between managers’ attention to employees’ skills in performance evaluation and their efficiency.

**Table 4: Correlation between managers’ attention to employees’ skills in performance evaluation and their efficiency**

Pearson Value	Number	Level of Significance
37.0	132	0.00

According to table 4, as the level of correlation of Pearson test is less than 0.05 ( $\text{sig} < 0.05$ ), there is a significant correlation between managers’ attention to employees’ skills in performance evaluation and their efficiency. That is to say, the more attention managers pay to employees’ skills, the higher the employees’ efficiency would be. The first subsidiary hypothesis is, thus, verified.

Second subsidiary hypothesis: There is a significant correlation between the clarity of employees’ performance evaluation and their efficiency.

**Table 5: Correlation between the clarity of employees’ performance evaluation and their efficiency**

Pearson Value	Number	Level of Significance
37.0	132	0.00

According to table 5, as the level of correlation of Pearson test is less than 0.05 ( $\text{sig} < 0.05$ ), there is a significant correlation between the clarity of employees’ performance evaluation and their efficiency. That is to say, the more the clarity of employees’ performance evaluation, the higher the employees’ efficiency would be. The second subsidiary hypothesis is, thus, verified.

Third subsidiary hypothesis: There is a significant correlation between the feedback of employees’ performance evaluation and their efficiency.

**Table 6: Correlation between the feedback of employees’ performance evaluation and their efficiency**

Pearson Value	Number	Level of Significance
45.0	132	0.00

According to table 6, as the level of correlation of Pearson test is less than 0.05 ( $\text{sig} < 0.05$ ), there is a significant correlation between the feedback of employees’ performance evaluation and their efficiency. That is to say, the more the feedback of employees’ performance evaluation, the higher the employees’ efficiency would be. The third subsidiary hypothesis is, thus, verified.

Fourth subsidiary hypothesis: There is a significant correlation between the validity of employees’ performance evaluation and their efficiency.

**Table 7: Correlation between the validity of employees’ performance evaluation and their efficiency**

Pearson Value	Number	Level of Significance
39.0	132	0.00

According to table 7, as the level of correlation of Pearson test is less than 0.05 ( $\text{sig} < 0.05$ ), there is a significant correlation between the validity of employees’ performance evaluation and their efficiency. That is to say, the more the feedback of employees’ performance evaluation, the higher the employees’ efficiency would be. The fourth subsidiary hypothesis is, thus, verified.

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**Table 8: Regression analysis results of predicting performance evaluation**

Model	R	R <sub>2</sub>	Adjusted R <sub>2</sub>	The Estimate of Std. Error	R <sub>2</sub> Change	F	Df <sub>1</sub>	Df <sub>2</sub>	Sig.
Feedback on Performance Evaluation	0.453	0.205	0.199	0.611	0.205	33.569	1	130	0.000

Table 8 shows that 5.20 percent of changes made in employees of Gas Compressor Stations of Gachsaran Oil and Gas Production Company arise from showing feedback.

**Table 9: Regression analysis coefficient of predicting employees’ performance**

Model	Unstandardized coefficients B	Std. Error	Standardized Coefficients Beta	t	sig
Constant	513.1	281.0		390.5	00.0
Feedback on evaluation of performances	780.0	135.0	453.0	794.5	0.00

Table 9 presents coefficients of Beta of predicting evaluating employees of Gas Compressor Stations of Gachsaran Oil and Gas Production Company. Accordingly, the regression equation is as follows:  
 $Y = 513.1 + 453.0x_1$

**Table 10: variables extracted from regression analysis of evaluating performances**

Model		Beta in	t	Sig.	Partial correlation	Co-linearity Statistics
1	Reliability	107.0	868.0	387.0	-076.0	402.0
2	Clarity of Evaluation	118.0	103.1	272.0	-097.0	530.0
3	Managerial Attention to Skills	-198.0	-054.1	294.0	-092.0	174.0

Table 10 reveals that reliability, clarity of evaluation and managers’ attention to employees’ skills are all predictors of employees’ performance in Gas Compressor Stations of Gachsaran Oil and Gas Production Company.

**RESULTS AND DISCUSSION**

Given the research results, there is a positive and significant correlation between employees’ performance and their efficiency. To improve employees’ efficiency, the following points can be considered:

1. According to first subsidiary hypothesis, there is a significant and direct correlation between employees’ performance evaluation and their efficiency. Regarding the above components, by designing and implementing a system based on employees’ capacities, organizations can analyze positions and appoint employees to do different jobs. Such system can motivate individuals and build up their efficiency.
2. According to second hypothesis ( $r = 0.37$ ), there is a significant correlation between the clarity of employees’ performance evaluation and their efficiency. One important way for organizations to grow and develop is to understand and admit this method. Overlapping of this method with efficiency would lead organizations to develop based on predefined standards and take step toward their goals as good as possible.



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3. As to third hypothesis ( $r = 0.45$ ), there is a significant correlation between the feedback of employees' performance evaluation and their efficiency, organizations can motivate employees and build up their efficiency by looking for a way to grow and improve employees regarding feedbacks on their performance and their promising working future.

4. And finally, in fourth hypothesis, there is a significant correlation between the validity of indices of employees' performance evaluation and their efficiency. Managers, therefore, are responsible to adhere to rules and regulation, codes, circulars, and orders issued by government and ministries. They have to understand that rule-based decisions, abiding by regulations and enforcing rules not just increase their efficiency, also indicate that organizations always act in obedience to laws.

### **Suggestions**

CEOs impose some limitations on getting ranks of performance evaluation. The question is that in an organization where many of employees are assessed as excellent or beyond expectations, how can managers differentiate them and select one person? Doesn't such measure have any negative effect on the spirit, motivation and efficiency of other employees who have worked as well as him/her? Isn't such evaluation considered a type of discrimination?

This is one drawback of this system in the pertinent company and at the same time in oil ministry. Respondents of the questionnaires usually called the evaluation as meaningless, unfair and a predefined scenario. Thus, to increase motivation and efficiency, some modifications are recommended. As managers assess people according to predefined forms, they are proposed to implement the required measures such as being informed of what parameters should be considered, prioritizing indices, helping them to reach excellence, holding training courses relating to performance evaluation and other required courses.

### **REFERENCES**

- Abbaspour A (2003).** *Advanced Management of Human Resources: Approaches, Processes, and Applications*, first edition (Tehran: Samt).
- Abtahi SH and Mehrujan A (1992).** *Management of Wages (Categorization and Evaluation of Jobs)*, (Tehran, Saba).
- Bazaz Jazayeri SA (1999).** *Necessity of Performance Evaluation in Organizations*, (Tadbir Press) 98
- Byars LI and Rue LW (2008).** *Human Resource Management*, 9th Edition (New York: Mc Graw Hill).
- Fombrun Charles J, Noelm Tichy and Maryo Anne Devanna (1984).** *Strategic Human management*.
- Foot M and Hook C (1999).** *Introducing Human Resource Management* (Longman).
- Hajizadeh, H., (2005), An investigation on relations affecting employees' efficiency of employees in Fars Industrial Group. M.A theses, Tehran University.
- Jean RK and Trayndis C (2002).** *Management v. Non-Manageable, Tehran* (translated and published by Educational and Research Institute of Defense Industry)
- Longenecker CO and Nykodym N (1996).** Public Sector Performance appraisal effectiveness: A Case Study. *Public Personnel Management* 25(2).
- Mirsepasi N (1994).** *Management of Human Resources and Working Relations, Center for Educating State Management*, (Morvarid Press) thirteenth edition.
- Mirsepasi N (1997).** *Management of Human Resources and Working Relations*, (Morvarid Press), nineteenth edition. Tehran, : Mir Press
- Mirsepasi N (2001).** *Management of Human Resources and Working Relations, Center for Educating State Management*, (Morvarid Press), nineteenth edition.
- Moghimi SM and Ramezan M (2011).** *Journal of Management* 5 Tehran, Rahdan Press
- Noe RA, Hollenbeck JR, Gerhurt B and Wright PM (2008).** *Human Resource Management: Gaining Competitive Advantage* (New York: Mc GrawHill) 4 80-116.
- Raj KJ and Harry Triandis C (1997).** *Managing Research, Development and Innovation: Managing the Unmanageable Hardcover* July 6, 2010 3rd Edition.
- Rezaeian A (1993)** *Management of Organizational Behavior* (Tehran Management University Press).

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**Saadat E (1996).** *Management of Human Resources*, (Tehran: Organization, Samt), first edition 354.

**Saadat E (2003).** *Management of Human Resources*, (Tehran: Organization, Samt), seventh edition.

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

**Taheri SH (2008).** *Exploiting and Analyzing of Organizations*, (Tehran, Hastan Press) fourteenth edition.