

Examining the Barriers and Problems of Employee Performance Appraisal Systems and Their Ranking in Qazvin University of Medical Sciences

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Abstract

Background: Measuring the employee's performance and examining their behaviors and capabilities are among the principal responsibilities in managing human factors in organizations. A performance appraisal system meets specific barriers. It is required to recognize these barriers to decrease their influences to a satisfactory level to take proper measures to decrease their influences in any organization. This research aims to examine the executive barriers of Article 81 of the Civil Service Act concerning the appraisal of personnel's performance in Qazvin University of Medical Sciences. **Methods:** This research is a kind of applied based on the used objective. Basically, 11 factors were recognized to analyze the barriers (strategic congruence, thoroughness, practicality, meaningfulness, specificity, recognizing efficient and inefficient performance, validity, acceptability and fairness, inclusiveness, openness and ethicality) utilizing literature review and expert's view and included in the questionnaire. This questionnaire was distributed among 350 university employees after discovering its validity and reliability. The data were analyzed using the Nonparametric Binomial Test and Friedman method after checking for being parametric (Kolmogorov–Smirnov test). **Results:** The results revealed that except for the three variables of being ethical ((mean 4.13), openness (mean 4.46) and acceptability and fairness (mean 4.46), other variables were not recognized as barriers; Consequently, **Conclusion:** It is required to take proper measures in the mentioned organization to decrease the influences of these barriers to enhance the productivity of the organization.

Keywords: Performance management; Performance appraisal system; Performance improvement; Human resource management

Introduction

Since qualified human resources are the most precious capital of today's organizations and companies, measuring their performance helps basically to provide and maintain a competitive advantage as well as realizing organizational performance.^{1, 2} Designing and establishing a performance appraisal system is an efficient mechanism to develop the organization's performance and

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employees. Performance appraisal presents a structured and efficient management instrument to convert the organization's purposes into individual ones and realizing them.^{2,3} The performance appraisal process is a method that any organization can apply it gradually to promote and encourage optimal performance. This method is a beneficial instrument to recognize the employee's strengths and weaknesses in the organization.² Performance appraisal can cause both positive and negative influences, depending on the employee appraisal method. First, it is needed that the performance appraisal center describes and explains the objectives to its agents. This is arranged to assure that the objectives of performance appraisal are recognized.⁴ When an employee feels that he or she is being measured according to his or her performance, not according to his or her occupational description, the person does not recognize and perceive the positive influences.⁵ Two positive and negative perspectives are raised on performance measurement. There is a negative perspective when employees concentrate only on their personal interests and affairs, and the performance appraisal process concentrates only on individual benefits. And another perspective is when the performance is measured based on group performance and the organizational number of individuals.⁵

Hence, it is remarkably significant to examine the advantages and disadvantages of performance appraisal in the organization. Ahmadi et al. also highlighted this issue and demonstrated that the examination of the advantages and disadvantages of appraisal could be efficient in recognizing the barriers to performance measurement.⁶ In the eleventh chapter and according to Article 81 of the Civil Service Management Act, the executive bodies are compelled to implement performance appraisal and evaluation programs and productivity rates in their units by setting a performance management system including performance appraisal of the organization, management, and employees, based on the regulations

approved by the board of directors proposed by the organization and report the achieved results to the organization in addition to providing regular reports.⁷ After setting the performance appraisal system to be informed of its implementation's accuracy, it is essential to recognize its executive barriers.^{8,9} Barriers that, if not recognized timely, will guide the organization to early destruction and will impose a retrogressive process on the organization. Consequently, one of the most significant measures that successful organizations take to enhance their effectiveness is to recognize the barriers correctly and timely. Recognizing the barriers accurately and time enables managers to continuously be informed of the current issues and problems of their organization and prevent them from becoming serious.^{10,11}

Although different studies have been conducted in Iran in this respect, for example, in a study conducted by Mousavi et al. in Abhar, 14 factors were regarded as a barrier to the productivity of the performance appraisal system.¹² This situation was varied in different organizations. One factor was recognized as a barrier in a study conducted by Hamedi et al. conducted on organizations under the Civil Service Law of Qazvin.¹³ This shows that the executive barriers to the performance appraisal system in employees under the Civil Management Services Law depend largely on the nature of the studied organization. This research should be conducted independently in each organization so that organizations improve their performance through these measures, via negotiation, prejudice, discipline, rewards for design and consultation, or the removal of any factor that is recognized as a barrier. Hence, the principal objective of this research will be to determine whether the employee's performance appraisal system in Qazvin University of Medical Sciences is implemented accurately and what are the executive barriers to the employee's performance appraisal system of Qazvin University of Medical Sciences and what are the ranks of each one.

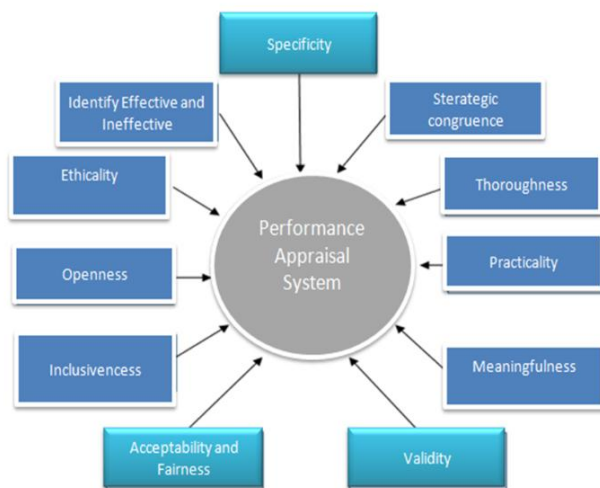


Figure 1. Conceptual model of research

Methods

This research is a cross-sectional and descriptive study that was conducted from 2015 to 2016 in Qazvin University of Medical Sciences. 11 factors were first recognized to investigate the barriers based on literature review and consultation with experts. These factors cover strategic congruence, thoroughness, practicality, meaningfulness, specificity, recognizing efficient and inefficient performance, validity, acceptability and fairness, inclusiveness, openness and ethicality. Figure 1 exhibits a conceptual model of the mentioned variables.^{12, 13}

Determining the sample size

The statistical population of this research included all employees of Qazvin University of Medical Sciences ($n=4150$). Charles Cochran's method was applied to determine the sample size of 350 employees, in which p and q were considered 5.0 as a success and failure ratio. The value of $Z\alpha / 2$ was considered equal to 96.1 at the error level of 05.0. The value of error d was also considered to be 05.0. Equation 1 explains the formula to calculate the sample size.

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left[\frac{z^2 pq}{d^2} - 1 \right]} \quad (1)$$

Data collection instrument

A questionnaire method has been used to collect information in this research. The questionnaire was designed according to the significant and influential parameters on the barriers to measuring performance. In this research, the questions of the questionnaire were designed in the form of 11 factors including strategic congruence, thoroughness, practicality, meaningfulness, specificity, recognizing efficient and inefficient performance, validity, acceptability and fairness, inclusiveness, openness and ethicality in the form of a Five-Point Likert scale (from very low to very high). The questionnaire was distributed among 13 experts and professors of the university and human resources executives to the narrative assessment. The content validity ratio was calculated to be optimal and 0.73 after collecting their ideas utilizing the Lawshe method. The questionnaire was distributed among 40 individuals of the statistical population to assess the reliability and Cronbach's alpha coefficient was calculated using SPSS software ($\alpha=0.7$)

Statistical analysis of data

Descriptive and inferential statistics were utilized to analyze the data in this research. Frequency distribution tables were used in descriptive statistics to describe and summarize the demographic characteristics, including gender, work experience, degree of education, and organizational position. A non-parametric binomial test was applied to generalize the research findings from the sample to the population, and all factors were then ranked using the Friedman test. We compare the achieved mean with the assumed mean to determine which factors are the barriers to measure. If the acquired means' value is less than the assumed mean, the studied variable will then be recognized as a barrier. All statistical analyzes were performed using software SPSS version 19 and (P -value < 0.05) was regarded as a significant level.

Table 1. Binomial to parametric test in investigating each of the variables

Variable	Group	Class	Number	Viewed Ratio	Expected Ratio	P-value
Strategic congruence	Group 1	≤ 3	131	0.37	0.5	$P < 0.05$
	Group2	> 3	219	0.63		
	total		350	1.00		
Thoroughness	Group 1	≤ 3	108	0.31	0.5	$P < 0.05$
	Group2	> 3	242	0.69		
	total		350	1.00		
Practicality	Group 1	≤ 3	128	0.37	0.5	$P < 0.05$
	Group2	> 3	222	0.63		
	total		350	1.00		
Meaningfulness	Group 1	≤ 3	142	0.41	0.5	$P < 0.05$
	Group2	> 3	208	0.59		
	total		350	1.00		
Specificity	Group 1	≤ 3	167	0.48	0.5	0.423
	Group 2	> 3	183	0.52		
	total		350	1.00		
Identifying effective and ineffective performance	Group 1	≤ 3	186	0.53	0.5	0.262
	Group2	> 3	164	0.47		
	total		350	1.00		
Validity	Group 1	≤ 3	139	0.4	0.5	$P < 0.05$
	Group2	> 3	211	0.6		
	total		350	1.00		
Acceptability and fairness	Group 1	≤ 3	226	0.65	0.5	$P < 0.05$
	Group 2	> 3	124	0.35		
	total		350	1.00		
Inclusiveness	Group 1	≤ 3	151	0.43	0.5	0.12
	Group2	> 3	199	0.57		
	total		350	1.00		
Openness	Group 1	≤ 3	214	0.61	0.5	$P < 0.05$
	Group2	> 3	136	0.39		
	total		350	1.00		
Ethicality	Group 1	≤ 3	252	0.72	0.5	$P < 0.05$
	Group 2	> 3	98	0.28		
	total		350	1.00		

Group 1 means those who score their Likert spectrum $3 \leq$
 Group 2 means those who score $3 >$

Results

This research revealed that female employees with 69.4% created the highest rate and male employees, with 30.6% the lowest rate of the sample size. In terms of work experience, 13% of respondents had 1 to 6 years of experience, 26% had 7 to 12, and 28 % had 13 to 18, 17% had 19 to 24 years of experience, and 15% of them had an experience more than 25 years. In terms of education, 3% of the respondents had a degree under the diploma, 8% had a bachelor's degree, 16% had an associate's degree, 46% had a bachelor's degree, and 27% had a master's degree.

Concerning the employment status in the studied sample, 33% of the respondents were under -a-

contract, 28% contractual, 10% permanent examination civil employed, and 29% were permanent civil employed. 72% of respondents operated in non-managerial organizational positions, and 28% operated in managerial positions. The results of the Kolmogorov–Smirnov test to verify the normality of the studied variables showed that all research hypotheses were rejected, considering that (P -value < 0.05) in all variables (strategic congruence, thoroughness, practicality, meaningfulness, specificity, recognizing efficient and inefficient performance, validity, acceptability and fairness, inclusiveness, openness and ethicality) were true; consequently, a non-parametric binomial test was used to generalize

the research findings from a sample to population Table 1.

Table 2. Ranking the variables under investigation based on Friedman method

Variable	Average Rating
Strategic congruence	7.44
Thoroughness	7.38
Practicality	6.62
Meaningfulness	6.15
Specificity	5.62
Identifying effective and ineffective performance	5.84
Validity	6.97
Acceptability and fairness	4.46
Inclusiveness	6.95
Openness	4.46
Ethicality	4.13

For example, in the case of strategic compatibility according to Table 1, because the number of success modes of the compatibility variable is higher than 3; that is, the observation ratio of successful responses has been greater 63% than the expected ratio of the test (5.0), also considering that the significance level (sig) is less than 5%. Accordingly, we conclude that more people have selected above mean responses; therefore, it can be stated that this factor affects the research as desirability and has not been considered a barrier. This process was performed for all variables, as presented in Table 1. According to the results obtained by examining the research questions, the barriers to measuring the employee's performance at Qazvin University of Medical Sciences in terms of the respondent's perspective include ethical/morality, openness and acceptability, and fairness. There is no barrier to identifying efficient and inefficient performance and indexability in the employee's performance appraisal system of Qazvin University of Medical Sciences. Eventually, the Friedman method was applied to rank the test variables, that Table 2 indicates its results in the order of being a barrier.

Discussion

This study aimed to determine and rank the barriers to the performance appraisal system of Qazvin University of Medical Sciences. The existing

deficiencies in the performance appraisal system can be eliminated. The employee's productivity of Qazvin University of Medical Sciences can be progressed after recognizing the barriers and allocating the necessary resources to implement and support. The results achieved by the Friedman test showed that barriers, in order of priority, include ethicality, openness and acceptability, and fairness. On the other hand, the indices' desirability included strategic congruence, thoroughness, validity, inclusiveness, practicality, and meaningfulness respectively. In similar research conducted by Mousavi et al., the barriers to performance appraisal were studied, emphasizing the Civil Services Management Act. They recognized 14 factors as barriers to examining the performance appraisal system. These factors included strategic congruence, openness, performance differentiation, conceptualization, validity, acceptability, impartiality, comprehensiveness, openness, ethicality, feedback, correction and uniqueness, and prominence. Their study revealed that the mentioned indices in Abhar had not been implemented completely and correctly.¹²

In another study, Hamedi et al. recognized 9 factors to examine the barriers to the performance appraisal system. Their results revealed that all the factors related to the performance appraisal system were rejected except for impartiality (fairness). Only this factor (impartiality with a mean 2.75) was distinguished as a barrier from the respondents' perspective. Among these nine factors, conceptualization with a mean of 3.92 was recognized as the most desirable factor among these factors.¹² As can be observed, barriers in different organizations can vary considerably depending on the organization's feature. HATRY et al. also emphasized this point in a study and believed that it is substantially significant to recognize barriers to performance appraisal in any organization. The management of these barriers can develop and promote the organization's performance. As a result of such measures, the organization can achieve high productivity.¹⁴ GOLIZADEH and et al.

explained in a study that the organization has certain barriers to its performance appraisal system that these barriers can affect the performance appraisal system and the adverse effects caused by these barriers can be controlled at a satisfactory level by timely identification and taking some measures against them.⁷

After recognizing the barriers, suggestions were presented for the mentioned organization according to the achieved results. It should be stated regarding ethics that the indices and criteria that human resource managers' experts have considered about the performance appraisal system should be improved and be free from any errors and mistakes and have proper ethical standards. Besides, supervisors should not consider their interests in measuring employee's performance and should only consider the dimensions of employee's performance. According to the achieved results, it can be emphasized to the managers of the organization that an improvement should be the manager's objective in the appraisal process. They should not address this issue arbitrarily. The following items are proposed in the organization in terms of openness according to this fact that there is no confidential case in the employee's measurement. Employees' performance should be routinely measured, and feedback on the results should be delivered to them consistently and permanently. In this method, employees are continually informed of the quality of their performance. Supervisors should also consider that employee's performance appraisal is a two-way communication process in which information is exchanged. That information is not presented to employees without any feedback from supervisors. Moreover, appraisal standards must be clear and transparent and continually delivered to employees.

It is recommended to utilize the method of asking the participants to examine the acceptability and fairness of the performance appraisal system, in fact, we can ask about distributive justice; distributive justice involves the perception that the results of the

performance appraisal are equal to the performed work and the perception that the received rewards are equal to the made measurement. If there is not much difference between the performance and the appraisal and the appraisal with the rewards received, the appraisal system is acceptable and fair; therefore suggestions to eliminate these barriers include acceptable performance appraisal that should be recognized fairly by all participants and the only way to examine the fairness of the system is to ask the participants. In other words, distributive and procedural justice must be observed in the organization.

Conclusion

The results revealed that except for the three variables of ethicality, openness and acceptability and fairness, other variables were not recognized as barriers; consequently, it is required to take proper measures to decrease the influences of these barriers to enhance the productivity of the organization. According to the mentioned contents, this research has been conducted using a sample group related to the Qazvin University of Medical Sciences, hence considering that the employee's performance appraisal system in different organizations may be varied; therefore, we should be cautious in generalizing the results to other companies and organizations.

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References

1. Merchant KA, Van der Stede WA. Management control systems: performance measurement, evaluation and incentives: Pearson Education; 2007.
2. Akinbowale MA, Lourens ME, Jinabhai DC. Role of performance appraisal policy and its effects on employee performance. *European Journal of Business and Social Sciences*. 2013;2(7):19-26.
3. McDavid JC, Huse I, Hawthorn LR, Ingleson LR. Program evaluation and performance measurement: Sage; 2012.
4. de Waal A, Frijns M. Longitudinal research into factors of high performance: the follow-up case of Nabil Bank. *Measuring Business Excellence*. 2011;15(1):4-19.
5. Liu X, Batt R. How supervisors influence performance: A multilevel study of coaching and group management in technology-mediated services. *Personnel Psychology*. 2010;63(2):265-98.
6. Ahmadi E. Pathology of employee performance evaluation system in Abadan Refinery. *Exploratory Studies in Law and Management*. 2015;2(1).
7. Golizadeh H, Fard KD. Pathology of implementing staff performance evaluation system in the law of countrywide service management (Case Study: Ministry of Economic Affairs and Finance). *International Journal of Humanities and Cultural Studies (IJHCS)*. 2016;1(1):2354-64.
8. Jackson SE, Schuler RS, Werner S. Managing human resources: South-Western Cengage Learning Mason, OH; 2009.
9. Florence G. Factors Affecting the Effectiveness of Performance Appraisal of Teaching Staff in Institutions: The Case of Kenya Polytechnic. Kenya University. 2009.
10. Hamidianpour GJF, Ahmadi E. Pathology of Employee Performance Evaluation System in Abadan Refinery. *Journal of Exploratory Studies in Law and Management*. 2015;2(2)..
11. Arvey RD, Murphy KR. Performance evaluation in work settings. *Annual review of psychology*. 1998;49(1):141-68.
12. Mousavi S, Reza. Pathology of Employees Performance Appraisal System with emphasis on the State Service Management Law in Public Organizations of Abhar City. Islamic Azad University of Qazvin 2010.
13. Hamed Q, Mehrabi J, Atai M, Rahmani H. Study of the Obstacles to Implementation of Performance Appraisal System for Employees Subject to the State Service Management Law (Case Study of Organizations Subject to the State Service Management Law in Qazvin Province).
14. Hatry HP. Performance measurement: Getting results: The Urban Insitute; 2006.