



The Investigation and Analysis of the Relation of Implementation of European Foundation Quality Management (EFQM) with the Performance Improvement of the Employees (Case Study: Imam Reza Hospital of Kermanshah of Iran)

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ABSTRACT: The present study aimed to evaluate the relation between EFQM and performance improvement of the employees of Imam Reza hospital of Kermanshah. The present study was applied in terms of goal and descriptive-correlation in terms of method. For data collection, the questionnaire was applied. The study population was all the employees of three sections of nutrition, medical documents and surgery in 2012 as 92 people. The data analysis was done by descriptive and inference statistics. The results of the hypothesis test showed that there is a positively significant association between the implementation of EFQM and components (improving the ability, improving the job identification, organizational support, motivation and adaptability of the employees) and there was no significant relationship between EFQM and components of increasing the feedback and validity of the decision making. Finally, some recommendations were presented for the results of the study.

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INTRODUCTION

The philosophy of the organization depends upon the life of human beings. The human beings act like the spirit of the organizations and move them or manage them. The organizations are meaningless without people and their management is not possible. Human resources are the most important knowledge capital of an organization and it is considered as the creativity source in organization. The knowledge capital of the employees is one of the effective components in organization performance but it is one of the inadequate factors of human resources and it increased the application of the tangible assets and it activates the intangible assets. The increase of the capabilities of the employees had direct effect on improving the financial results of the organization.

Human resources are an important factor in an organization in terms of thinking power and creativity and any productivity of the change and improvement in the technical, organizational systems and processes are done by the people. Using the organization employees' empowerment and thinking capabilities that is called the hidden capital requires creating the structures directing the capabilities of the employees of the

organization to achieve the current and future goals of the organization (Yaghubi et al., 2009). In most of the Iranian organizations, the inefficiency of some of the current systems not only improved the organization, but also made the performance indices, satisfaction and employees' productivity worse (Mok, 2003). Until now, many models are presented to evaluate the performance of the organizations to improve the performance. One of the models is European Foundation Quality Management (EFQM) being applied by 60% of the European countries in health services. To improve the productivity of the hospitals, it is selected as excellence model of the hospitals from health ministry. The experience of implementation of EFQM model in health is applied highly and it improves the quality in the hospital and improves the health quality of the patient (Masuri et al., 2011).

The present study emphasized on implementation of the organization excellence model as an important factor on improvement of the performance of the employees and evaluated the relation between the implementation of organizational excellence model with improvement of the performance of the employees in sub-specialized Moheb and Shahid



Hasheminejad hospital in Tehran. TO do this, seven sub-hypotheses are defined evaluating the relation of implementation of EFQM model with (improving the ability of the employees, increasing the identification of the employees (clarity of the role), increasing the organizational support of the employees, increasing the motivation of the employees, increasing the performance feedback to the employees, improving the validity of decision making of the employees and increasing the environmental adaptability of the employees) in Imam Reza hospital of Kermanshah. The most important question in the present study is that: Is implementation of EFQM model associated with the improvement of the performance of the employees in Imam Reza hospital of Kermanshah or not?

The theoretical framework of the study

EFQM model is non-perspective practical framework enabling the organizations to evaluate themselves and find where their position in excellence path is and help them to understand the most important weaknesses and strengths regarding the organization mission and vision.

From the view of excellence organizational model, the satisfaction of the beneficiaries is met. EFQM is responsible for controlling, evaluation and continual modification. The mission of this model is based on the identification of the existing condition of the organization and its comparison with the aims, indices and standards of performance and continual improvement of the organization performance based on the industrial and commercial nature of EFQM and to adapt the model with the health organization affairs, the benefits were used and the limitations were reduced to be more tangible in this field. From economical aspects, health care of a commodity determines its value during the activities of the purchasers and sellers in the market. Thus, this model is used in health sector. To achieve the score, it is required to promote the hospital promoters and the turn the results of empowerment to the services and present them to the patients (Masuri, 2011).

Tabibi in a study titled "The study of the effective factors on productivity of human resources in the hospitals of Medical Sciences University identified the effective factors on productivity of human resources in Shiraz in the model and the execution sectors were investigated from the view of the employees. From the view all the items with confidence interval $1-\alpha = \%95$ affected the human resources productivity and motivational, performance feedback (evaluation), organizational support variables are three factors with

the highest effect from the view of the employees. Alaolmaleki in a study titled "the identification and comparison of the methods of increasing the productivity and human resources performance in Medical Sciences University of Semnan stated that:

The following items were effective in increasing and improving the human resources performance: materialistic condition, motivation, organizational structure, job skills and training in the organization and inclination of the employees to increase the required productivity, their inclination to extra affairs and doing them without supervision. The researchers showed that the employees with high level of job satisfaction and skills of job had high productivity compared to their co-workers. Another study showed that some activities as evaluation had important role on productivity (Yaghubi et al., 2009).

There are various methods for evaluation of the performance of human resources and the important thing is that a suitable performance evaluation system should have the required real criteria for evaluation. Achieve model introduced 7 factors as the main factors in performance of human resources and it is one of the most comprehensive models. Therefore, the researcher by this model evaluated the relationship of the implementation of EFQM model with improving the performance of the employees in Imam Reza hospital of Kermanshah.

Conceptual model

The conceptual model of the study is based on the EFQM organizational excellence model and improving the performance of the employees. In this study, the EFQM is used as independent variable of improving the performance of the employees and its components are considered as dependent variables.

EFQM model

EFQM model is based on 9 criteria. Five criteria of this model are about the empowerment and showed the constituents of an organization their interaction with each other and four other criteria showed the results of the organization performance and the best results of implementation of empowerments were introduced (Klefsjo et al., 2008).

Leadership:

The excellent leaders formulated the ideal and mission of the organization and facilitated achieving them. They develop organizational *values and systems* required for sustainable success and implement these via their appropriate actions and behaviors. (Osseo et al., 2005).



Figure 2. The organizational excellence model.
Source: (Klefsjo et al., 2008)

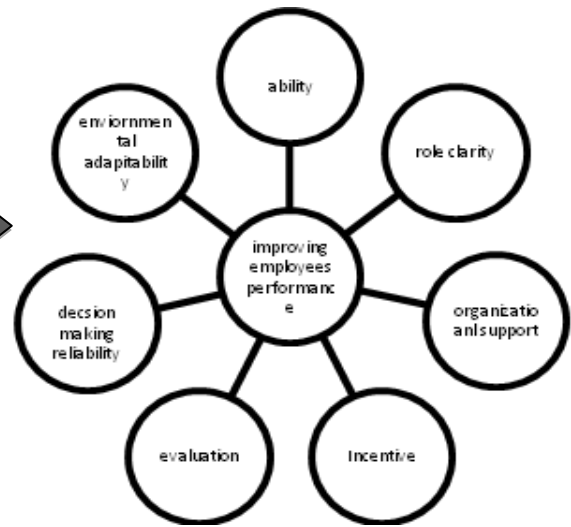


Figure 1. Performance improvement.
Source: (Hersey and Goldsmith, 1980)

Strategy and Policy:

In excellent organizations policies, plans, objectives, targets and processes are used to fulfill the strategy (Masuri, 2011).

People: The excellent organizations manages, develops full potential of its people at an individual, team-based and organization-wide level. They promoted justice and equity and participated the employees and gave power to them. These organizations considered their employees and communicated and encouraged them and for them their skills and knowledge are created in organizational benefits (Mohebi Moghadam, 2009).

Partnership and resources:

The excellent organizations of extra organizational companies manage the internal providers and resources to support the policy and strategy and effective implementation of the processes. During the planning and management of the partnerships and resources to balance between the current and future needs of the organization, society and environment (Najmi, 2004).

Processes : The excellent organizations designed and improved their processes for full satisfaction and creating the value for the customers and other beneficiaries (Kanji and Tambi,199)

Costumer results: The excellent organizations comprehensively measured the most important results related with the customers and achieve them (Vaezi and Vosughi, 2009).

People results:

In this criterion, the result of using the structure, plans and management plans of human resources are evaluated. Management plans of human resources should create and improve participation, satisfaction, motivation, organizational communications, improvement recommendations and team works (Alinejad et al., 2010).

Society results:

The excellent organizations comprehensively measured the important results associated with the society and achieve them (Hori et al., 2009).

Key performance results:

The excellent organizations comprehensively measure the important results of the main elements of policy and strategy and achieve them (Najmi, 2004).

Performance concept

Various definitions are presented of job performance but the common concept is the method of activities and responsibilities. Some people considered human resources performance as work productivity but it should be said that performance has a concept exceeding the input and output. Performance is the sum of the behaviors people show in relation to the job (Moorhead and Griffin, 1995). Achieve model: This model was developed by Hersey and Goldsmith (1980) that the managers can identify the factors affecting the performance of the employees and formulate some strategies to solve the productivity problems to improve the performance of the organization based on the first words of the followings:

A:Ability, C:Clarity, H:Help, I:Incentive, E:Evaluation, V:Validity, E:Environment

Ability (knowledge and skill): Ability is the knowledge and skills of the followers (the ability for achievement of a task) of the employees with better training who can use the better capital as efficiently and deliver more products. Improvement in productivity is not occurred with miracle and it should be planned (Hersey and Blanchard, 2003).

Help (organizational support): The help is the organizational help that the follower needs to complete the effectiveness of the task. Some of the factors of organizational support are as budget, the facilities be need to complete the duty and the required support from other centers, accessibility of the product and its quality and adequate reservation of the human resources (Hersey and Blanchard, 2003).

Incentive (motivation or inclination): The incentive is the motivation of doing the work from the followers or motivation to complete the specific task as successful (Mehdizade, 2010).

Clarity (understanding or role imagination): Clarity is the understanding the work method, location and method of doing I t. In order that the followers have complete understanding of the problem, the major goals, the way to achieve the goals and the priorities of the goals should be clear (Mehdizade, 2010).

Evaluation (Training or performance feedback): The studies on performance feedback are done for a long time and they are good documents. This concept is applied in various fields. The performance feedback is defined by various methods in organizational environments and the definitions include the information about the past performance, the information for work actors about the way to do the works and the information about regulating the performance based on the job needs (Govaerts et al., 2012).

The timely feedback let the subjects to be aware of their works continually. If the people are not aware of their performance, this imagination is not real to expect of them the suitable performance (Sarfarazi et al., 2012).

Validity (the valid and legal actions of the personnel): The managers should be ensure that the decision of the legal issues and policies of the company is in accordance with the legal standards. If the validity is defect, the managers should know the legal

procedures are obvious in management (Mehdizade, 2010).

Environment (environmental consistency): The environment is the external factors affecting the performance even with having the factor of ability, clarity, support and motivation for job. The key elements of environmental factors are competition, market conditions change, state regulations, procurement, etc (Abaspour and Barutian, 2009).

Study hypothesis

Main hypothesis: There is a significant relationship between the implementation of EFQM model and improving the performance of the employees in Imam Reza Hospital of Kermanshah.

Sub-hypothesis:

Sub-hypothesis 1: There is a significant relationship between implementation of EFQM model and improving the ability of the employees in Imam Reza Hospital of Kermanshah.

Sub-hypothesis 2: There is a significant relationship between implementation of EFQM model and improving the job identification by the employees in Imam Reza Hospital of Kermanshah.

Sub-hypothesis 3: There is a significant relationship between implementation of EFQM model and increasing the organizational support of the employees in Imam Reza Hospital of Kermanshah.

Sub-hypothesis 4: There is a significant relationship between implementation of EFQM model and increasing the motivation of the employees in Imam Reza Hospital of Kermanshah.

Sub-hypothesis 5: There is a significant relationship between implementation of EFQM model and increasing the performance feedback of the employees in Imam Reza Hospital of Kermanshah.

Sub-hypothesis 6: There is a significant relationship between implementation of EFQM model and improving the validity of the decision making of the employees in Imam Reza Hospital of Kermanshah.

Sub-hypothesis 7: There is a significant relationship between implementation of EFQM model and increasing the environmental consistency of the employees in Imam Reza Hospital of Kermanshah

Analytical model of the study the study methodology

The study was applied in terms of the goal and it was descriptive-survey- descriptive in terms of the method. The study population was all the employees of three sections of nutrition, medical documents and

surgery of Imam Reza Hospital of Kermanshah in 2012 as 92 people. The data collection instrument of the questionnaire was 42 questions. Of which, 22 questions were dedicated to the performance improvement of the employees and 20 questions were dedicated to the organizational excellence model. To design these questions, five-item Likert scale was applied.

The questionnaire was including three sections:

In the first section, there were demographic questions and the questions of the organizational features and in the second section of the questionnaire questions were (Two main sections of the questions of performance improvement and the questions of organizational excellence model) and in the third section, the open questions were presented.

The validity of the questionnaire was evaluated based on content and face validity. To be ensuring of the validity of the study measure, the experts' comments were used and the questionnaire was distributed among 12 employees of three sections (nutrition, surgery and medical documents). Also, in the estimation of the reliability of the questionnaire, Cronbach's alpha method was used. The Cronbach's alpha value in the questionnaire for the questions of performance improvement of the employees (22 questions) was 0.911% and for the questions of organizational excellence model (20 questions) was 0.87%. The reliability coefficient was greater than 0.7 and it showed the acceptable reliability of the questionnaire. To collect the required data, 105 questionnaires were distributed among the employees of three sections, of which 92 questionnaires were returned. To investigate the normality of the collected data, Kolmogorov -Smirnov (KS) test was used and the normality of the data was rejected and to study the information, non-parametric tests were applied. To test the hypothesis, Spearman correlation method and SPSS software were used.

The analysis of the results and hypothesis test
The descriptive results:

The results of this part of the questionnaire were including the personal-job characteristics of the respondents (age, gender, education and job experience). Of 92 respondents, 1.5% had Diploma, 7.5% associate, 35.7% BA and 26.3% MA and 27% PhD. 22.4% of the respondents were below 30 years old, 36.4% of the respondents were ranging 30 to 40 years old, 22.7% forty to fifty years old and 17.3% had more than 50 years old. 31.5% of the respondents had below 5 years work experience, 35.5% had five to ten years, 18.5% had 10 to 15 years and 14.5% had 15 or above

work experience. The highest ratio of the respondents, 64.8% was women and the lowest value was 35.2% men.

RESULTS

The main hypothesis findings:

There was a significant relationship between the implementation of EFQM model and performance improvement of the employees in Imam Reza hospital of Kermanshah.

The confidence interval was 99% and α (error) was 0.01. Sig (the significance level) was calculated as zero. Generally, if significance level is great than error value $\alpha=0.01$, null hypothesis is supported and if the significance level is smaller than error value, hypothesis 1 is supported. As the significance level is zero and smaller than error value, 0.01, H1 is supported. By Spearman correlation coefficient and the value 0.437, it can be said that at confidence interval 99%, in Imam Reza Hospital of Kermanshah, there was a correlation between the implementation of organizational excellence model and performance improvement of the employees. Thus, H0 is rejected and the main hypothesis is supported (Table 1).

Table 1. The result of Spearman test for the main hypothesis.

Performance improvement of the employees model	EFQM model			
**0.437 0.000 92	1.000 0 92	Correlation coefficient Significance level (two ranges) Frequency	EFQM model	Spearman test
1.000 0 92	**0.437 0.000 92	Correlation coefficient Significance level (two ranges) Frequency	Employees performance improvement model	

** Correlation at error level 0.01 (two ranges) is significant.

The results of the first sub-hypothesis:

There is a significant relationship between implementation of EFQM model and improving the ability of the employees in Imam Reza Hospital of Kermanshah.

As significance level is zero and smaller than error value, 0.01, H1 is supported. By Spearman correlation coefficient as 0.390, it is said that at confidence interval 99% in Imam Reza Hospital of Kermanshah, there is a significant correlation between the implementation of excellence model and improving the ability of the

employees. Thus, H0 is rejected and the first sub-hypothesis is supported (Table 2).

Table 2. The result of Spearman test for the first sub hypothesis.

Improving the employees ability	EFQM model			
**0.390 0.000 92	1.000 0 92	Correlation coefficient Significance level (two ranges) Frequency	EFQM model	Spearman test
1.000 0 92	**0.390 0.000 92	Correlation coefficient Significance level (two ranges) Frequency	Improving the employees ability	

** Correlation at error level 0.01 (two ranges) is significant.

The results of the second sub-hypothesis:

There is a significant relationship between implementation of EFQM model and improving the identification of the job of the employees in Imam Reza Hospital of Kermanshah.

As significance level is zero and smaller than error value, 0.01, H1 is supported. By Spearman correlation coefficient as 0.466, it is said that at confidence interval 99% in Imam Reza Hospital of Kermanshah, there is a significant correlation between the implementation of excellence model and improving the job identification of the employees. Thus, H0 is rejected and the second sub-hypothesis is supported (Table 3).

Table 3. The result of Spearman test for the second sub hypothesis

Improving the job identification	EFQM model			
**0.466 0.000 92	1.000 0 92	Correlation coefficient Significance level (two ranges) Frequency	EFQM model	Spearman test
1.000 0 92	**0.466 0.000 92	Correlation coefficient Significance level (two ranges) Frequency	Improving the job identification	

** Correlation at error level 0.01 (two ranges) is significant.

The results of the third sub-hypothesis:

There is a significant relationship between implementation of EFQM model and increasing the organizational support of the employees in Imam Reza Hospital of Kermanshah.

As significance level is zero and smaller than error value, 0.01, H1 is supported. By Spearman correlation coefficient as 0.463, it is said that at confidence interval 99% in Imam Reza Hospital of Kermanshah, there is a significant correlation between the implementation of excellence model and increasing the organizational support of the employees. Thus, H0 is rejected and the third sub-hypothesis is supported (Table 4).

Table 4. The result of Spearman test for the third sub hypothesis.

Increasing the organizational support	EFQM model			
**0.463 0.000 92	1.000 0 92	Correlation coefficient Significance level (two ranges) Frequency	EFQM model	Spearman test
1.000 0 92	**0.463 0.000 92	Correlation coefficient Significance level (two ranges) Frequency	Increasing the organizational support	

** Correlation at error level 0.01 (two ranges) is significant.

The results of the fourth sub-hypothesis:

There is a significant relationship between implementation of EFQM model and increasing the motivation of the employees in Imam Reza Hospital of Kermanshah.

As significance level is zero and smaller than error value, 0.01, H1 is supported. By Spearman correlation coefficient as 0.300, it is said that at confidence interval 99% in Imam Reza Hospital of Kermanshah, there is a significant correlation between the implementation of excellence model and increasing the motivation of the employees. Thus, H0 is rejected and the main hypothesis is supported (Table 5).

Table 5. The result of Spearman test for the fourth sub hypothesis.

Increasing the motivation of the employees	EFQM model			
**0.300 0.004 92	1.000 0 92	Correlation coefficient Significance level (two ranges) Frequency	EFQM model	Spearman test
1.000 0 92	**0.300 0.004 92	Correlation coefficient Significance level (two ranges) Frequency	Increasing the motivation of the employees	

** Correlation at error level 0.01 (two ranges) is significant.

The results of the fifth sub-hypothesis:

There is a significant relationship between implementation of EFQM model and increasing the performance feedback of the employees in Imam Reza Hospital of Kermanshah.

As significance level is greater than error value, 0.01, H1 is supported. Thus, H0 regarding the lack of significant correlation between the implementation of excellence model and increasing the performance feedback of the employees is supported. Thus fifth sub-hypothesis is rejected (Table 6).

Table 6. The result of Spearman test for the fifth sub hypothesis.

Performance feedback of the employees	EFQM model			Spearman test
-0.106 0.313 92	1.000 0 92	Correlation coefficient Significance level (two ranges) Frequency	EFQM model	
1.000 0 92	-0.106 0.313 92	Correlation coefficient Significance level (two ranges) Frequency	Performance feedback of the employees	

The results of the sixth sub-hypothesis:

There is a significant relationship between implementation of EFQM model and improving the validity of the decision making of the employees in Imam Reza Hospital of Kermanshah.

As significance level is greater than error value, 0.01, H1 is supported. Thus, H0 regarding the lack of significant correlation between the implementation of excellence model and improving the validity of the decision making of the employees is supported. Thus sixth sub-hypothesis is rejected (Table 7).

The results of the seventh sub-hypothesis: There is a significant relationship between implementation of EFQM model and increasing the environmental consistency of the employees in Imam Reza Hospital of Kermanshah.

As significance level is smaller than error value, 0.01, H1 is supported. Thus, by spearman correlation coefficient as 0.353, it is concluded that at confidence interval 99% in Imam Reza Hospital, there is a significant correlation between the implementation of excellence model and increasing the environmental consistency of the employees. Thus, H0 is rejected and Thus seventh sub-hypothesis is supported (Table 8).

Table 7. The result of Spearman test for the sixth sub hypothesis.

improving the validity of the decision making of the employees	EFQM model			Spearman test
0.110 0.297 92	1.000 0 92	Correlation coefficient Significance level (two ranges) Frequency	EFQM model	
1.000 0 92	0.110 0.297 92	Correlation coefficient Significance level (two ranges) Frequency	improving the validity of the decision making of the employees	

Table 8. The result of Spearman test for the seventh sub hypothesis.

improving the validity of the decision making of the employees	EFQM model			Spearman test
0.353** 0.297 92	1.000 0 92	Correlation coefficient Significance level (two ranges) Frequency	EFQM model	
1.000 0 92	0.353** 0.297 92	Correlation coefficient Significance level (two ranges) Frequency	improving the validity of the decision making of the employees	

**Correlation at error level 0.01 (two ranges) is significant.

DISCUSSION

Despite the fact that improving the performance of the employees in the organizations is a complex issue and is inspired of various factors, the present study evaluated only one of the effective factors on improving the employees performance and found that there is a positively significant association between implementation of the organizational excellence model and performance improvement of the employees in Imam Reza hospital.

Implementation of the organizational excellence model in various organizations including the hospitals had important role in developing the service and is effective in absorbing the participation in services and optimum use of the resources and improving the quality of the hospital services and this can be improved with the support of the top management and developing the

training in absorbing the participation and improving the attitude of the quality.

It is recommended to the researchers to do a comparative study regarding the increase of productivity of human resources in other sectors and organizations. It is recommended to study the successful models in the countries in the world regarding the implementation of the organizational excellence model that by more knowledge in implementation eliminate the problems and do the continual improvement.

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