

Relation between EFQM and Quality of Work Life and Tendency to Change among Faculty Members (Case study: Departments of Physical Education at Islamic Azad Universities)

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ABSTRACT

The purpose of this study is to investigate the relation between EFQM and Quality of Work Life (QWL) and Tendency to Change (TC) among the faculty members of Physical Education Department at Islamic Azad University units (Iran) and through identifying influencing factors of universities Excellence, better planning in order for increasing the efficiency of these units will be accomplish. The Research method is correlative description. In this study, we used two questionnaires of EFQM and QWL and also a researcher-made questionnaire about TC. Reliability coefficient of so-called questionnaire for EFQM, QWL, and TC were 0.96, 0.94, and 0.72, respectively. We took the advantages of different methods including *Kolmogorov-Smirnov* Test, Correlation Coefficient, Leven's Test, One-way ANOVA, Simultaneous Multiple Regression, and Path Analysis Method. Results show that there are significant positive relationships between EFQM and its components (Enablers and results) with QWL and TC of faculty members. Also, Path Analysis results showed that the academic unit, work experience, tendency to change, academic ranking, quality of work life, participation in EFQM workshops and level of education, define nearly 80% of changes in EFQM. Research results suggest that two factors of QWL and TC of faculty members have greatest impact on Excellence of departments and faculties of physical education. The relation pattern between these factors helps managers as guide to understand the influencing factors and utilizing the pattern in order for taking the best advantages of EFQM Model and also promoting their organizations.

KEY WORDS: European Foundation of Quality Management (EFQM); Quality of Work Life (QWL); Tendency to Change (TC); Faculty member; Physical Education.

INTRODUCTION

Relation between EFQM and Quality of Work Life and Tendency to Change among Faculty Members of Physical Education Departments Quality is the starting point to achieve organizational Excellence. One of the mechanisms to create and institutionalize the process of improving quality in organizations is to use European Foundation of Quality Management (EFQM) Model as a tool that helps organizations to measure their position in the route of organizational Excellence (Riahi, 2004). This model is based on nine criteria. The first five components that make up the Enablers are leadership, staff, policy and strategy, partnerships and resources, and processes, and four other criteria that make up the results are employees', customers', societies' and main performances' results (National Committee for Quality Management Society of Iran, 2005). Research shows that if organizations do not make changes in quality of their internal structure, they not only must pay considerable expenses, but also endanger their ability to compete (Luke E. Weber Hirsch, 2001).

A look into the mission and vision of quality development in universities and the requirement of state universities to have highly efficient instructors, has forced the researchers to highlight the issues such as relation between Quality of Work Life (QWL) and EFQM. Greenberg and Baron (1997) recognized QWL as tactic for organizational Development. Also, Jamshidi (2000) stated that QWL development is a key factor toward success and is considered as tool for organizational excellence. Suhaiza (2009) is also refers to a significant relationship between Total Quality Management (TQM) and QWL. Walton in 1974 in an article expressed eight components of QWL as fair payment, safe and healthy environment, providing opportunities for growth and stable security, law abiding in work organization, social affiliation of work life, and general atmosphere of life, integrity and social cohesion, and development of human capabilities.

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In line with the importance of QWL of faculty members in improving their performance and also their organization, the issues regarding their tendency to change (TC) should also be considered. If managers have a poor performance in motivating and increasing the tendency of people toward change, though be strong in the planning and execution, their plan for change may still fail; because their resistance to change is a natural reaction against it (Conner, 1998). In other words, if an organization does not have required tendency and readiness to implement change initiatives (such as the implementation of EFQM model), it is condemn to failure (Akbari, 2007). Cliampa (1992) expressed that TC and ability to adapt to change, is an important characteristic in determining the potential success of implementing a comprehensive quality management process.

Because of the importance of physical education in universities, doing research on the measurement of excellence in departments and faculties of physical education as service organizations and assessment of factors affecting them, such as QWL and scale of TC, is of a significant necessity. Therefore, in this study we examined the relationship between EFQM and QWL and TC among faculty members of Physical Education Department, at Islamic Azad University, and eventually presented a model of the variable's impact on each other so that the managers in addition to have better understanding of the system and using the model as a guide, attempt to implement the EFQM model and improve their organization.

METHODS

Considering that this study aims to find the relationship between EFQM and QWL and TC among faculty members of Physical Education Department, at Islamic Azad University, therefore the research type is correlative description.

Subjects

Statistical Population of the study is composed of the faculty members of physical education units with BA and MA or MA and PhD degrees.

The total number of faculty members in these colleges and educational groups is 106, including Professors, Associate Professors, Assistant Professors and coaches (managers=13 and faculty members=93) that due to fewness of statistical population, total number was counted and subjects of the same population were determined.

Measures

In this study, two standardized questionnaires of EFQM and QWL of Walton and a researcher-made questionnaire of TC were used for data collection. The 50-item questionnaire of EFQM composed of nine factors including leadership, strategy, staffs, partnerships and resources, processes, results of staff, customer results, society results and key performance results; the first five and the next four factors are related to enablers and results, respectively.

A 29-question questionnaire concerning QWL measures eight factors that include: fair payment, safe and healthy environment, providing opportunities for development and continued security, law abiding in work organization, social affiliation of work life, the general atmosphere of life, integrity, social cohesion and development of human capabilities.

Analysis of exploratory factor was also performed on questionnaire of TC. The KMO (Kaiser, Meyer, Olkin Measure of Sampling Adequacy) (0.746) and Bartlett ($P < 0.000$) Tests confirmed research data for running factor analysis. Following to rotation of factor loading, the questions having the lowest influence were removed from model of questionnaire and TC questionnaire were conventionally determined in three components.

Scree Diagram also approved the selection of this component and defined the eigenvalue of each component. Also, the reliability coefficients in the research questionnaires for EFQM, QWL and TC were 0.96, 0.94 and 0.72, which suggests that the questionnaires have acceptable internal consistency.

Procedures

In order for organizing and classifying the raw scores and describing sample sizes, descriptive statistics (including mean, percentages, frequency, SD, diagrams and tables) has been used. We also made use of *Kolmogorov-Smirnov* test to determine the Gaussian distribution of data, Leven's Test and One-way ANOVA to define the homogeneity of variances, and Pearson Correlation Test and Simultaneous Multiple Regression in inferential statistics for analysis of the research hypotheses. However, with an emphasis on modern methods of structural equation pattern finding, to provide a pattern and also to set factors affecting EFQM, the Path Analysis Method using Amos Graphics software was used.

RESULTS

Kolmogorov-Smirnov test results showed that in all the variables of research $p > 0.05$ which indicates that all data are normal. Therefore, in order to test research hypotheses, parametric statistics (Pearson Correlation Test) was used.

Hypothesis test results show that there is a positive and significant correlation coefficient between variables (see Table 1). Also, simultaneous multiple regression determined that there is a high, positive and significant correlation between three variables of EFQM, QWL, and TC ($p = 0.000$, $r = 0.75$) and independent variables (QWL and TC) can explain the changes in the dependent variable (EFQM) very well (see Table 2). The regression equation is as follows:

$$EFQM = 1.04 \times (QWL) - 0.07 \times (TC) + 50.25$$

Table 1: Results of research hypothesis test

Hypothesis	Sig.	Pearson Correlation Coefficient	Result
There is no relationship between EFQM & QWL of faculty members.	0.001	0.75	Positive & Significant Relationship
There is no relationship between EFQM & TC of faculty members.	0.001	0.35	Positive & Significant Relationship
There is no relationship between QWL & Enablers of EFQM.	0.001	0.76	Positive & Significant Relationship
There is no relationship between QWL & Results of EFQM.	0.001	0.67	Positive & Significant Relationship
There is no relationship between TC & Enablers of EFQM.	0.001	0.36	Positive & Significant Relationship
There is no relationship between TC & Results of EFQM.	0.001	0.29	Positive & Significant Relationship

Table 2: Relationship between variables using simultaneous multiple regression

Dependant Variable	Predictor variables	B	Beta	t	Sig.	R	R Square
EFQM	TC	1.30	0.35	3.80	0.001	0.35	0.12
EFQM	QWL	1.03	0.75	10.88	0.001	0.75	0.56
EFQM	TC	0.07	0.021	0.27	0.787	0.75	0.56
	QWL	1.04	0.762	9.34	0.001		

Also, the results of variance equality test with regard to demographic data and related concepts (EFQM, QWL and TC) showed that there is no homogeneity of variance among working place of subjects in relation to concepts, and significant difference is observed ($P < 0.05$). But considering other individual characteristics (such as education level, gender, academic ranking, work experience, and participation in EFQM workshops) there is homogeneity of variance in connection with the concepts ($P > 0.05$). Consequently, there is no significant difference between groups. Regarding the path analysis, the results of estimating parameters about the relationship between factors affecting EFQM was shown following to exclusion of paths whose influence coefficients have no significant difference with zero or adding a parameter to the quotation is shown through adding regression weight or through correlating error variables (see Table 3).

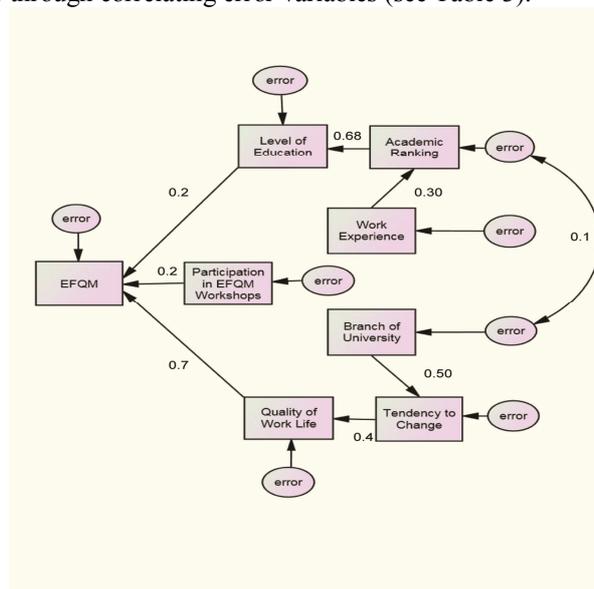


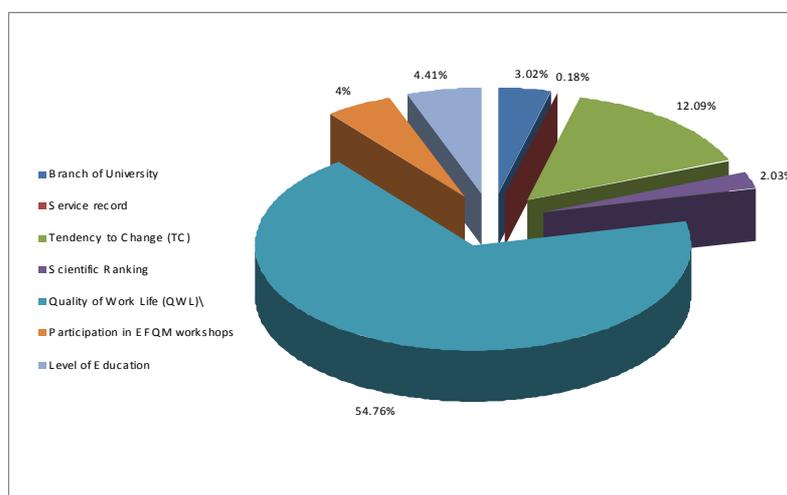
Figure 1: Path of factors affecting EFQM

Table 3: Estimation of affecting factor in path analysis

Path	Parameter estimation	S.E.	C.R.	P
Effect of service record on scientific ranking	0.279	0.085	3.276	0.000
Effect of scientific ranking on level of education	0.888	0/093	9.576	0.000
Effect of level of education on EFQM	5.974	1.665	3.589	0.000
Effect of university branch on TC	1.291	0.219	5.905	0.000
Effect of TC on QWL	1.275	0.231	5.529	0.000
Effect of QWL on EFQM	0.992	0.079	12.484	0.000
Effect of workshop participation on EFQM	11.246	3.332	3.375	0.000

The results show that all variables listed in the table, directly and indirectly have a significant relationship with EFQM and three factors including QWL, education level and participation in EFQM workshops are the most important variables affecting EFQM. Direct and indirect effects of variables on EFQM are shown following to reformation of model (remove or add the necessary parameters) (see Figure 1).

All listed indexes in Goodness of Fit Statistic of the model verified the developed model. Therefore, model is appropriate from fit indexes point of view (chi-square = 21.45, P=0.37). Results from path analysis also showed that the academic branch, work experience, TC, academic ranking, QWL, participation in EFQM workshops and education level determine about 80% of the changes in EFQM (See figure 2).

**Figure 2: Percentages of Determining Variance of Model**

DISCUSSION

As research findings showed, there is a significant and positive relationship EFQM and QWL and TC among faculty members. Some researchers have pointed out the result of this study in their research and manuscripts (Cliampa, 1992; Suhaiza, 2009; Dargahi, 2005; and Moradian 2003).

Although linear regression results confirmed existence of a significant correlation between EFQM and TC of faculty members, but since this relationship was not strong enough, in the conducted path analysis, its indirect effect was considered through QWL. It was also shown that working place indirectly affects the QWL. The result is that the working place of faculty members has a great influence on the extent of their tendency to change and thus their perception of the presented services. The pattern had suggested that QWL has the greatest influence on EFQM, therefore, considering QWL programs of faculty members in physical education departments, can be effective in increasing motivation and enhancement of their performance and quality of their organizations.

Applying the pattern obtained from research and evaluation of factors affecting EFQM can also significantly help in planning for improving the quality of universities that, in turn, will enhance the efficiency and effectiveness of physical education departments at different branches of Islamic Azad University.

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