A study to measure the impact of organizational culture and organizational excellence

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A R T I C L E I N F O	A B S T R A C T
	Organizational culture plays an important role on increasing organization excellence and there are many evidences through different studies on this relationship. In this paper, we re-examine this relation between organizational culture and six other important factors including quality of leadership, quality of different strategies, quality of human resources, quality of participating in organizational resources, quality of organizational processes and methods of assessment. The study was held among 70 employees of one of distance learning universities located in province of Esfahan, Iran. The study uses Pearson correlation ratio as well as linear regression technique to investigate the relationships. The results confirmed that there are positive and meaningful relationship between organizational culture and quality of leadership, quality of different strategies, quality of human resources, quality of participating in organizational resources, quality of organizational processes but it does not find any meaningful relationship between organizational culture and methods of assessment.

1. Introduction

For many years, there have been substantial attempts on developing different quality based techniques on increasing productivity of organizations including the Deming prize in Japan, the Malcolm Baldrige national quality award model in the United States of America, and the European quality award or EFQM excellence model in Europe (2003). One of the basic concerns on implementing these models is to study the impacts of implementing such methods on firms' characteristics (Westlund, 2001; Inman, 2011). Kull and Wacker (2010) investigated the effect of culture on implementation of total quality management (TQM) in Asian countries. They reported some changes of quality management among the East Asian cultures of China, South Korea, and

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Taiwan and reported that specific cultural dimensions were statistically related to quality management effectiveness.

TQM is one of popular techniques used to increase the performance of firms and it has various meanings (Yoo & Donthu, 2001; Prajogo & Sohal, 2004; Rahman, 2004). TQM is categorized as soft and hard, where the soft one is associated with human resource management and focus more on leadership, teamwork, training, and employee involvement (Yusof & Aspinwall, 2000; Yong & Wilkinson, 2001; Rahman & Bullock, 2005). The hard issues are concerned by increasing production techniques and operations and attempt to establish a working framework through the establishment of well-defined processes and procedures to create possible the continuous improvement of services to customers.

Zhang (2000) investigated a framework of quality management techniques and evaluated their effects on business performance for a real-world case study. He reported that the optimal management of TQM core concepts would lead to better organizational performance. According to Sun (1999), the soft and hard components of TQM implementation must accompany each other to obtain good results. TQM presents better value to the customer by determining customers' expressed and latent requirements, responsiveness to changing markets, as well as through increasing the efficiency of the processes, which generate the product or service (Reed et al., 1996).

Organizational culture plays an important role on increasing organization excellence and there are many evidences through different studies on this relationship. MacIntosh and Doherty (2010) investigated the effect of organizational culture on job satisfaction and decision to leave the organization by studying fitness staff. Organizational culture is commonly recognized as the values, beliefs and basic assumptions, which could help guide and coordinate member behavior. MacIntosh and Doherty (2010) developed the Cultural Index for Fitness Organizations (CIFO) to measure organizational culture in the fitness industry. Exploratory factor analysis disclosed eight factors, which represent cultural dimensions common to this context including staff competency, atmosphere, formalization, connectedness, sales, etc. They also used path analysis to examine the relationship among the organizational culture factors, job satisfaction and intention to leave.

Kwantes and Boglarsky (2007) discussed perceptions of which aspects of organizational culture were associated with leadership and personal effectiveness using archival data from Canada, Hong Kong, New Zealand, South Africa, the United Kingdom, and the United States. They reported that organizational culture was strongly perceived as being associated with both leadership effectiveness and personal effectiveness. They also reviewed different aspects of organizational culture, which could promote employee fulfillment and satisfaction and reported that they were positively associated with leadership and personal effectiveness. According to their survey, the perceived relationship across instances was stronger between organizational culture and leadership effectiveness than between organizational culture and personal effectiveness.

Aktaş et al. (2011) investigated the factors affecting organizational efficiency by considering their relative importance. In this study, organizational culture was the primary factor and the impact of the types of organizational culture on organizational efficiency is investigated. In this study, they investigated relationship between organizational culture and organizational efficiency and the impact of stability or variability of internal and external environment on this relation. Kim et al. (2011) investigated the impact of leadership and organizational culture on the organizational effectiveness of radiological technologist's working environments.

Salehi Mobarakeha (2011) investigated the relation between the organizational culture and creativity of managers and experts of Khuzestan physical education organization. Their results showed that there was a significant positive correlation (P<0.045) between the organizational culture and creativity of Physical Training Organization's managers. They also reported that among components

of the organizational culture, power of the organizational culture (P<0.010) and attention to clients (P<0.029) had a linear relation with creativity. Therefore, they may be implemented for prediction of creativity. However, no substantial relationship was noted among components of the organizational culture including achievement of goals, adapting to changes and coordination of work groups and creativity.

In this paper, we study the relationship between organizational culture and organizational excellence in one of the private schools located in province of Esfahan, Iran. The organization of this paper first presents the proposed model in section 2. Section 3 presents the results of the survey and finally concluding remarks are given in the last to summarize the contribution of the paper.

2. The proposed model

The proposed study of this paper studies the relationship between organizational culture and organizational excellence. The main hypothesis of this paper is as follows,

Main hypothesis: There is meaningful relationship between organizational culture and organizational excellence.

Sub-hypothesis

1. There is a meaningful relationship between organizational culture and quality of leadership.
2. There is a meaningful relationship between organizational culture and quality of different strategies.
3. There is a meaningful relationship between organizational culture and quality of human resources.
4. There is a meaningful relationship between organizational culture and quality of participating in organizational resources.
5. There is a meaningful relationship between organizational culture and quality of organizational processes.
6. There is a meaningful relationship between organizational culture and methods of assessment.

In this paper, we first use Pearson correlation ratios to calculate the relationship between each independent variable and organizational culture. Next, we use a regression analysis to study the effects of different variables on organizational culture. The regression model is as follows,

$$OE_i = \beta_1 E_1 + \beta_2 E_2 + \beta_3 E_3 + \beta_4 E_4 + \beta_5 E_5 + \beta_6 E_6 + \varepsilon_i \tag{1}$$

where E_1 is quality of leadership, E_2 is quality of different strategies, E_3 is quality of human resources, E_4 is quality of participating in organizational resources, E_5 is quality of organizational processes and E_6 represents methods of assessment. In addition OE_i is organizational excellence and it is considered as dependent variable and ϵ_i is error term. The proposed study was executed among the employee of one of distance learning universities in province of Esfahan, Iran. The sample size is determined as follows,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N-1) + z_{\alpha/2}^2 \times p \times q}, \tag{2}$$

where N is the population size, $p = 1 - q$ represents the yes/no categories, $Z_{\alpha/2}$ is CDF of normal distribution and finally ε is the error term. Since we have $p = 0.5, Z_{\alpha/2} = 1.96$ and N=95, the number

of sample size is calculated as n=70. The questionnaire was designed in Likert scale, it was distributed among all employees, and it covered questions associated with all six components of this survey. In terms of their educational background, five people maintained 12 years of educations, 1 had 14 years, 41 received bachelor degree, 11 people finished master degrees of science, three people hold PhD degrees and nine people did not mention any response.

3. The results

The proposed study of this paper uses a sample of 70 people who participated in our survey. We first calculate the Pearson correlation ratios between organizational culture and six factors including quality of leadership (E1), quality of different strategies (E2), quality of human resources (E3), quality of participating in organizational resources (E4), quality of organizational processes (E5) and methods of assessment (E6) are calculated in Table 1 as follows,

Table 1
The results of Pearson correlation ratios between organizational culture and six variables

Variables	E1	E2	E3	E4	E5	E6
Pearson correlation	0.692	0.708	0.689	0.650	0.588	0.176
Sig.	0.000	0.000	0.000	0.000	0.000	0.144

As we can observe from the results of Table 1, the first five components E1 to E5 are statistically meaningful when the level of significance is one percent. However, there is no meaningful relationship between organizational culture and methods of assessments. Based on the results, we can conclude that as the organizations increase the culture of sharing more people in decision making, looking for more excellence, making more sophisticated decisions to become more creative and innovator, there will be more organizational excellence.

The proposed study of this paper has also performed a regression analysis and Table 2 summarizes the results of the survey.

Table 2
The results of regression analysis

Y_i/X_i	R	R^2	adjusted R^2	F	Sig.	β_i	t-student	Sig.
OE	0.707	0.501	0.493	68.143	0.000	0.707	8.255	0.000
E$_1$	0.692	0.479	0.471	62.491	0.000	0.692	7.905	0.000
E$_2$	0.708	0.501	0.494	68.294	0.000	0.708	8.264	0.000
E$_3$	0.689	0.474	0.467	61.358	0.000	0.689	7.833	0.000
E$_4$	0.650	0.422	0.414	49.690	0.000	0.650	7.049	0.000
E$_5$	0.588	0.345	0.336	35.858	0.000	0.588	5.988	0.000
E$_6$	0.176	0.031	0.017	2.180	0.144	0.144	1.477	0.144

As we can observe from the results of Table 2, except E6, all other coefficients maintain meaningful t-student values. In addition, F value also meaningful when the level of significance level is five percent, which means the relationship between dependent variable and dependent variable, is linear. The adjusted R^2 means that the regression results represent approximately fifty percent of the changes on organizational excellence.

4. Conclusion

In this paper, we have presented an empirical study to examine the relationship between organizational culture and organizational excellence. To test this main hypothesis, we have studied six sub-hypotheses between organizational culture and quality of leadership, quality of different strategies, quality of human resources, quality of participating in organizational resources, quality of

organizational processes and methods of assessment. The study used Pearson correlation ratio as well as linear regression technique to investigate the relationships. The results confirmed that there were positive and meaningful relationship between organizational culture and quality of leadership, quality of different strategies, quality of human resources, quality of participating in organizational resources, quality of organizational processes but it did not find any meaningful relationship between organizational culture and methods of assessment.

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