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The Impact of Learning Culture on Organizational Development among the Members of the Educational Complex of Zabol University of Medical Sciences

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Abstract

Nowadays, the survival of organizations and especially universities are depended on this issue that how they accept changes, improve their services and increase their competitiveness. Organizational learning is the main way for creating job together with knowledge and also improving the organizational performance. The present study was performed to assess the influence of learning culture and training courses on Organizational Development among the faculty members of Educational Complex of Zabol University of Medical Sciences in 2015. This research is descriptive and based on survey and correlational. The Statistical population of this research are all 30 faculty members of Educational Complex of Zabol University of Medical Sciences. In this study, two standard questionnaires of learning culture and organizational development were used for collecting of data. The construct validity and reliability of questionnaires were determined using confirmatory factor analysis and using Cronbach's alpha coefficient, respectively. Reliability coefficients for learning culture questionnaire was determined 0.90 and for organizational development questionnaire was determined 0.93. Descriptive statistical methods like mean and standard deviation and also inferential statistical methods like One Sample T-Test and structural equation modeling were used for data analyzing.

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All done statistical methods revealed that components status of Learning Culture ($t = -2.494$; $p = 0.019$) was not at an optimum and average level but components status of organizational development ($p = 0.003$; $t = 3.268$) was in optimum and average level. These results also were shown that the effect of learning culture on organizational development ($r = 0.588$; $t\text{-Values} = 3.621$) is positive and significant. So there is hope that with the establishment of learning culture within every organization, increase organizational development in its.

Keywords: Learning culture; Organizational development; Training courses; Cronbach's alpha coefficient.

1. Introduction

Nowadays, changes in the working environment occurs with high speed. So, in competition with the other global working environments, organizations are required to have favorable response to these changes or be eliminated. Therefore soon, business world will change from the dominance of capital to predominance of knowledge [1].

An organization in order to transcend from other organizations should develop its human resources and also increase the amount of information and knowledge of them. In the other words, Employees and knowledge in their heads, are an excellent resource for every organization. So, knowledge is the most important strategic resource of the organization that must be managed and be developed and fortunately in recent years the organizational learning and knowledge production is considered [2].

Studies about various factors affecting on organizational learning revealed that suitable culture for learning is one of the influencing factors in development of organizations [3]. Also large number of researchers, such as Cummings and Worley in 2005 and Brown and Gray in 2004 had same opinion about the culture as an important issue which can help to boosting of organizational learning and leading the organization towards a learning organization [4]. In the organizational literature, the cultural orientation towards learning is called Learning-oriented culture or learning culture and it is cultural that every learning organization must have [5].

The organizational learning culture which is core of the learning organization, can improve individual learning, group learning and organizational learning, so, it can increase the organizational performance [6]. Also, organizational learning culture Plays an important role as a predictor for large number of variables belong to the human resource development such as learning, performance, satisfaction, change, creativity, innovation, efficiency and effectiveness [7].

Therefore, because of important role of learning culture on both organizational development and also conversion of organization to the learning organization, we try to understand that how is the relationship between learning culture and organizational development among the faculty members of Educational Complex of Zabol University of Medical Sciences. The results of this study can help managers at various levels of the organization to have good awareness about the importance of learning culture in organizational performance improvement and thinking about necessary measures for strengthen of this variable and providing the further growth for this institution.

2. Methods

Present research is an applied research that its data are collected by descriptive manner, and also correlation exists between the research variables. The population of this research are all 30 faculty members of educational complex of Zabol University of Medical Sciences in 2014-2015, that by Census method all of them answered to the questionnaires. For data collecting, two standard questionnaires include Learning Culture questionnaire and Organizational Development questionnaire were used. Also, the reliability of questionnaires were evaluated using confirmatory factor analysis (CFA) method, and according to Cronbach's Alpha coefficients, the obtained reliability for Learning Culture was 0.90 and for Organizational Development was 0.93.

Learning Culture questionnaire is designed by Young in 2003; it is contain 21 questions in seven core dimensions such as continuous learning, improvement of question and discussion, group learning, creating of systems for learning sharing, empowerment, relationship of organization with environment and strategic leadership. Every dimension have three items.

The **Organizational Development questionnaire** is translated by Moqimi and Ramazan, and in that 35 questions about evaluate aspects of purpose, leadership, attitude toward change, rewards, relationships, structure and mechanism of efficiency is included.

even though, both of used questionnaires are standard, and their reliability have been determined in previous researches, but in this research through CFA method their reliability and validity of them were checked and with pilot implementation of the questionnaires, their reliability were determined by Cronbach's alpha coefficient. For both questionnaire, five continuous Likert-type scale is used, which are: completely disagree, disagree, neither agree nor disagree, agree or strongly; where, the score of completely disagree is 1 and the score of strongly agree is 5. In this research, all used statistical methods are descriptive and illative. Descriptive statistic is used for determining of the demographic characteristics and also the frequency of given responses to each items. For this purpose, the frequency distribution tables, frequency percentage tables and their charts are used. In inferential statistics, for evaluation of the reliability of the responses, the confirmatory factor analysis is used, for estimate of the condition of research variables, the One Sample T-Test is used, and finally for assessment of the research hypothesis, Structural equation modeling (SEM) is used.

3. Results and Discussion

Table 1 shows the frequency distribution of the four different variables such as: gender, age, education and work experience of the respondents. The population of this research is 30 faculty members of educational complex of Zabol University of Medical Sciences.

As be seen in table 1, about 73% of the persons who participated in this research are between 25 to 40 years old. On the other hand, nearly 73% of them have work experience less than 10 years. Thus, **the first hypothesis** can be raised: The learning culture situation among the faculty members of Educational Complex of Zabol University of Medical Sciences would be desirable.

Table 1: The frequency distribution of the four different variables

		Number	Percentage	The cumulative percentage
Gender	Man	16	53.3	53.3
	Woman	14	46.7	100
	Total	30	100	
Age	Under 25 years	4	13.3	13.3
	25 to 40 years	22	73.4	86.7
	Over 40 years	4	13.3	100
	Total	30	100	
Education	Postgraduate	16	53.3	53.3
	Doctoral (PhD)	14	46.7	100
	Total	30	100	
Experience	Under 10 years	22	73.3	73.3
	10 to 15 years	7	23.4	96.7
	16 to 20 years	1	3.3	100
	Total	30	100	

But according to table 2 and obtained T value ($t = -2.494$, $P < 0.05$), there is a significant difference between the average value of learning culture score and the Benchmark score. On the other hand, the average value of learning culture score is lower than the Benchmark score, therefore, can be deduced that learning culture among the faculty members of Educational Complex is not in desirable condition.

Table 2: Comparison of the average value of learning culture score and the Benchmark score

Variable	Number	Average of scores	Standard deviation	Benchmark score	T-value	Degrees of freedom	P-value
learning culture	30	2.70	0.65	3.00	-2.49	29	0.019

However, **the second hypothesis** can be raised. The organizational development situation among the faculty members of Educational Complex of Zabol University of Medical Sciences would be desirable.

Table 3: Comparison of the average value of organizational development score and the Benchmark score

Variable	Number	Average of scores	Standard deviation	Benchmark score	T-value	Degrees of freedom	P-value
learning culture	30	3.34	0.57	3.00	3.27	29	0.003

According to table 3 and obtained T value ($t = 3.368$, $P < 0.05$), there is a significant difference between the average value of organizational development score and the Benchmark score. And because, the obtained value for this variable is bigger than the Benchmark score so can be conclude that organizational development variable among the faculty members of Educational Complex of Zabol University of Medical Sciences is in suitable and desirable condition.

And finally, **the Third hypothesis** can be raised. Learning culture would have a positive, direct and significant effect on Organizational development of the faculty members of Educational Complex of Zabol University of Medical Sciences. For checking of third hypothesis, the structural equation modeling (SEM) and path analysis are used. Also, due to the very low volume of the samples, the SmartPLS software is used for this analysis. For this purpose, confirmation of the preliminary structural model is required, which consists of three parts: Confirmation of measurement models, Confirmation of the structural model and Total confirmation of model that their results are given below.

For **confirmation of measurement models**, first, items with value under 0.4 are deleted and then, standard coefficients for relevant variables are calculated.

The results of the measurement models Analysis are shown in Tables 4 and 5. Cronbach's alpha coefficient and combinational reliability coefficient of both learning culture and organizational development and their subscales are more than 0.7 which represent the appropriate reliability of measurement models. Also the average variance extracted (AVE) for all items are larger than 0.5, which confirm the suitable validity of measurement models.

Because, appropriate values for Cronbach's alpha coefficient is 0.7 (Cronbach, 1951), for combinational reliability coefficient is 0.7 (Nunnally, 1978) and for AVE is 0.5 (Fornell & Larcker, 1981), thus, all variables in table 4 have the appropriate amounts.

Therefore, by these amounts, the suitability of reliability and the convergent validity of this research model, are confirmed. Also for checking of the divergent validity of the model, the level of correlation of one variable with others is shown in table 5.

Table 5 is derivative from the Fornell and Larcker method (1981). In this table, the correlation value of variables that are at the main diagonal of matrix, are more than the correlation value of variables that are at the left and low of the diagonal of matrix. In the other words, it can be concluded that in the above model, the interaction of same variables is more than the interaction of different variables. So, the divergent validity of this model is in good condition. For confirmation of the structural model, the t-Value coefficients and factor loading coefficients are used and their results are shown in figure 1.

In Figure 1, the t-Value coefficients are shown in parentheses and all of them are greater than 1.96. So it can be concluded that the meaningful relationships between variables in this model are in error level 0.05 or confidence level 0.95. Other confirming indicators for structural model and also total goodness of Fit (GOF) for model are shown in Table 6.

Table 4: The results of the three criteria: Cronbach's alpha coefficient, combinational reliability coefficient and convergent validity

variables	Cronbach's coefficient	alpha	combinational coefficient	reliability	average extracted	variance
	>0.7		>0.7		AVE>0.5	
Continuous learning	0.76		0.86		0.68	
Improvement of question and discussion	0.71		0.83		0.63	
Group learning	0.84		0.91		0.76	
Creating of systems	0.83		0.90		0.76	
Empowerment	0.73		0.85		0.65	
Relationship of organization with environment	0.74		0.85		0.65	
Strategic leadership	0.84		0.90		0.75	
Learning culture	0.91		0.89		0.55	
Purpose	0.86		0.90		0.64	
Leadership	0.82		0.87		0.58	
Attitude toward change	0.76		0.84		0.51	
Rewards	0.81		0.87		0.58	
Relationships	0.80		0.86		0.56	
Structure	0.83		0.88		0.60	
Mechanism of efficiency	0.80		0.86		0.56	
Organizational development	0.94		0.91		0.60	

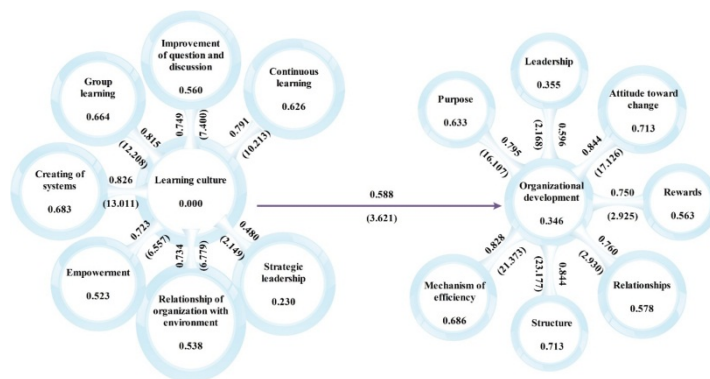


Figure 1: Confirmation of the research structural model

Table 5: Results of divergent validity

Variables	Continuous learning	Purpose	Leadership	Attitude toward change	Rewards	Relationships	Structure	Mechanism of efficiency	Improvement of question and discussion	Group learning	Creating of systems	Empowerment	Relationship of organization with environment	Strategic leadership	Organizational development	Learning culture
Continuous learning	0.82															
Purpose	0.33	0.80														
Leadership	0.42	0.25	0.76													
Attitude toward change	0.21	0.64	0.42	0.71												
Rewards	0.49	0.31	0.68	0.51	0.76											
Relationships	0.51	0.34	0.67	0.52	0.59	0.75										
Structure	0.36	0.77	0.23	0.70	0.38	0.38	0.78									
Mechanism of efficiency	0.37	0.68	0.21	0.68	0.34	0.35	0.59	0.75								
Improvement of question and discussion	0.52	0.23	0.55	0.38	0.53	0.53	0.32	0.30	0.79							
Group learning	0.53	0.46	0.32	0.25	0.26	0.28	0.43	0.46	0.46	0.87						
Creating of systems	0.56	0.43	0.36	0.20	0.29	0.31	0.39	0.42	0.45	0.58	0.87					
Empowerment	0.55	0.23	0.23	0.23	0.38	0.39	0.34	0.36	0.48	0.33	0.35	0.81				
Relationship of organization with environment	0.52	0.22	0.20	0.22	0.35	0.36	0.32	0.34	0.51	0.36	0.36	0.58	0.81			
Strategic leadership	0.39	0.07	0.51	0.23	0.48	0.49	0.12	0.14	0.57	0.30	0.33	0.07	0.08	0.87		
Organizational development	0.49	0.70	0.60	0.64	0.75	0.74	0.74	0.73	0.51	0.46	0.45	0.40	0.37	0.36	0.77	
Learning culture	0.69	0.41	0.48	0.33	0.52	0.54	0.46	0.48	0.65	0.71	0.73	0.72	0.73	0.48	0.59	0.74

As seen in table 6, the t-Value coefficient for every path in this model, is greater than 1.96, and this means that existing paths within the 95% confidence level are meaningful. Also, the amounts of R Square for the organizational development variable and its subscales are greater than 0.33, and this result confirms the structural model. The amount of Q² for organizational development variable is equal 0.31 and for other variables is greater than 0.3, thus according to the verification domains of model, can declare that the model has good predictive power.

The **total goodness of Fit (GoF) of model** is calculated and evaluated using the formula No 1.

$$GoF = \sqrt{Communalities \times R^2} \quad (1)$$

The Communalities amount is obtained from the average of the shared values of all variables, and R^2 amount is obtained from average of the R Squares related to all variables of model. According to the three verification domains 0.01, 0.25 and 0.36, that determine weak, medium and strong situation for GoF [8], and also according to the obtained GoF value for model (0.59), goodness of Fit for total of model is confirmed.

Table 6: Indicators for confirming of model

Indicators		Verification domain		Obtained value for model	Result
		Medium	Strong		
t-Value	Learning culture → Organizational development	t > 1.96	t > 2.58	3.621	Verified path
Confirmation of structural model	R Square	R ² > 0.33	R ² > 0.67	0.346	Verified model
Predictive Power	Q ²	Q ² > 0.15	Q ² > 0.35	0.31	Verified model
Total goodness of Fit (GoF)	GoF	GoF > 0.25	GoF > 0.36	0.59	Verified model

In figure 1, amount of t-Value= 3.621 for pathway of learning culture effect on organizational development is greater than 2.58, also, factor loading coefficient for this pathway is 0.588; thus, within the 99% confidence interval, learning culture have a significant and positive effect on organizational development among the faculty members of Educational Complex of Zabol University of Medical Sciences. This means that the null hypothesis is rejected and the research hypothesis is accepted.

4. Conclusions

The most valuable asset of any organization is its human resource, and if any organization wants to become a learning organization, should develop learning capacity of own employees [9]. Basically, the purpose of learning in the organization is development of human resource in different aspects such as intellectual, attitude, perception, behavior and job. So, continuous and effective education of them can leads to the performance improvement and provides the growth for the organization [10]. In a study that was done by Yeo (2007), findings showed that shared vision, flexible systems and team dynamics, are important keys for organizational learning [11]. In the other study that was done by Weldy (2009), findings showed that the relationship between learning organization and education could lead to the maximum performance and also, in the current unstable

economic situation, can help to any organization to be strong and stay in competition with other international organizations [12].

In this research the effect of learning culture on organizational development among the faculty members of Educational Complex of Zabol University of Medical Sciences is evaluated. All results showed that there is a positive and significant relationship between learning culture and organizational development. Referring to the findings of this research we can propose that managers and officials of university, with promotion of level of learning culture and institutionalization of this culture can increase the organizational development between the faculty members.

Changes based on learning is key of the organization's success. Probably, deficiency of learning culture among the faculty members of Educational Complex is related with the bureaucratic sovereignty in this university. For elevating of learning culture, first, less flexible hierarchy should be eliminated and then, creativities, energies, ideas and other factors affecting on this variable be strengthened. Also, by reinforcement of continuous learning, creation of change culture, fallibility culture, support of innovative ideas, clearer and faster relationships and support of learning by officials and etc. can be increased the level of this variable in university. Limitations of this study were: the lack of similar studies with this subject in higher education and hiding of real opinions by some members. In the end, we propose that the current research be conducted at other universities, to find the best methods for increasing the learning culture in universities and further development of them in the coming years.

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