The Relationship between Organizational Culture and Knowledge Management in Hamedan's Jihad- Agriculture Applied-Scientific (HJAAS) Higher Education Center

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Abstract

The main purpose of this study was to investigate the relationship between organizational culture and knowledge management in Hamedan's Jihad- Agriculture Applied-Scientific higher education center (HJAAS). Denison's Organizational Culture Model and the Building Blocks of Knowledge Management Model were used for finding this relationship. A descriptive-correlative methodology was used. The statistical population of the study consisted of 80 teachers in HJAAS with at least four years experiences until 2010-2011 academic years. A number of 65 teachers were selected randomly based on the Cochran formula. Data gathering tool for measuring organizational culture was Denison's standard questionnaire and for measuring knowledge management a new questionnaire was developed. Cronbach's Alpha test showed a reliability of 0.89 for organizational culture questions and 0.83 for knowledge management questions. The results showed mission culture as the highest and adaptability culture as the lowest dimensions. Among the knowledge management factors, the highest rank belonged to knowledge identification and knowledge goal and the lowest was knowledge measurement. Results on one hand showed a strong relationship between either mission culture and knowledge goal, or, adaptability culture and knowledge development in the higher education center of HJAAS, on the other hand a weak relationship between involvement culture and knowledge measurement.

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INTRODUCTION

Today, tangible properties of organizations such as money, building, and equipments do not make any advantage point. The most important property, today, is human resources who have knowledge and intellectual equity. Today employees come into the center of focus as interests of knowledge. Knowledge management as a tool can collect, control and retrieve the existing knowledge, then distribute it into the whole organization. The leading organizations of the global market are those that are able to collect the most reliable and up- to- date knowledge, then optimize it for their businesses (Alem-Tabrizi and Mohammad-Rahimi, 2009).

Danport and Prosock (2001) define knowledge management as a concept for those processes that an organization uses to develop, organize and share knowledge; with the goal of reaching competitive advantage.

Afraze (2006) define knowledge management as the process of identification, acquisition, development, making, sharing, preservation, measurement and use of proper knowledge in proper time by proper people, that this process makes a connection between human resources and information and communication technology. Knowledge management process builds an appropriate structure for reaching organizational goals.

Culture is another important concept that needs to be explained. Culture has several definitions and based on different views has different definitions (Asif, 2011). It is claimed that the word culture is one of the most two or three complex words in English (Jay Y, 2008).

Organizational culture is the character of an organization. One strong and positive organizational culture has advantages such as, shaping employee's behavior, synchronizing behaviors, building common beliefs, making job obligation, making organizational identification for employees, determining the outline of employees, it stops chaos in organizations, decreases out-control and increases self-control, decreases polarity and costs of job dissatisfaction, and finally improves activity and increases productivity (Rahmani and Baghinasrabadi, 1998).

Organizational culture can be the point of advantage. Organizational culture is a rave phenomenon, because every organization has its own specific culture that cannot be forged (Moshabaki, 2001).

Successful process of knowledge management and knowledge creativity in an organization needs appropriate mental and cultural situations.

According to Gandhi (2004) one of the most important empowerments of knowledge management is an open culture of an organization that encourages people to exchange ideas and experiences. He believes that organizational culture that does not have partnership encouragement, trust, knowledge sharing, acquisition and creativity, can not help on the development and practice of a successful knowledge management project.

A successful project of knowledge management needs effective and comprehensive changes in behavior and organizational culture, this means that we need an atmosphere for knowledge distribution. Whereas most of knowledge processes are volunteers and knowledge is personal so an organization needs to develop the culture of motivation, collectivism, variability, belonging, empowerment, acquisition and trust. Universities produce subjects of knowledge management; higher education by its nature can empower itself by using principles of knowledge management and consequently increases its influence, so knowledge management is one of the best choices for helping universities.

The main aim of this study was to explore the building blocks of knowledge management and organizational culture based on Denison's model. By investigating the results, strong and weak point and also poverty and solution of organizations will show off.

Probst *et al*. (2002), made a basic model for knowledge management that is called the building blocks of knowledge management, this model has all advantages of previous models. Designers of this model believe that knowledge management is a dynamic cycle always in the move. It steps consist of eight building blocks that make two cycles .Inner circle and outer cycle. The inner cycle consists of identification, acquisition, de-
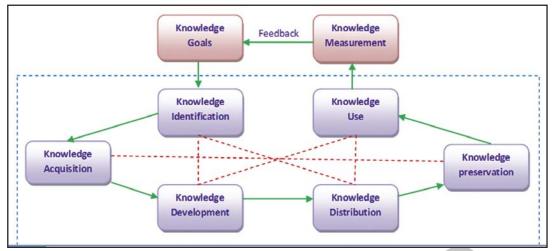
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Figure 1: The building blocks of knowledge management model (source: Probst *et al*., 2000)

velopment, use and preservation of knowledge. The outer circle consists of knowledge goals and measurements, which conduct the way knowledge management. Feedback is the complement of these two cycles (Abbasi, 2008). (Figure 1).

Kazeminejad *et al*. (2011) conducted an investigation to elaborate the current situation of knowledge management based on the building blocks of knowledge model in faculties of Social science, Economy and management of Alzahra University. In this study the only building block that was above the average was knowledge identification, other factors of knowledge management were below the average.

Mohammadi Ostani *et al*. (2011) conducted a research with this title: Possibility of doing knowledge management in Isfahan University Libraries based on Berkowitz and Wiliams Model. Finding showed that knowledge finding and knowledge use got the most score (3.07) and (3.064) respectively and knowledge acquisition the least score (2.57).

Larijani and Nouri-Asl (2010), considered knowledge management in the four factors of behavior, organizational, distribution and knowledge use in public libraries of Azarbaijan Sharghi based on the Newman and Conrad model. Finding shows that high mean belongs to knowledge use (3.63) and low mean belongs to exchange of knowledge (2.92), also means of knowledge behavior and management are close together (3.15), (3.07) in order.

After considering other methods of investigating

organizational culture, the authors decided that to use Denison's model for this study. The reasons why we choose this model is that, because this is more modern than previous models, it is based on behavior, it can be used at all levels of or the organization its indexes of measurement are complete and it evaluates different model is its graphic diagram that specifies features of organizational culture in 12 indices, Also it contains two vertical and horizontal axis that dived this model into four quadrants. Vertical axis contains degree and kind of organizational culture, this axis ends at one side to External focus and at the other end to internal focus. The horizontal axis shows the flexibility of the organization. This axis end at one end to stable culture and at the other end of the flexible culture (Denison2000). (Figure 2).

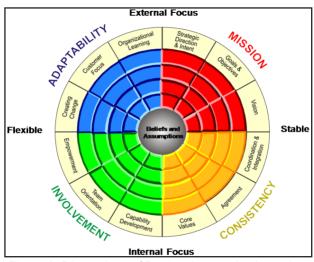Gillespie *et al*. (2008), conducted a study to

Figure 2: Dimensions of Denison's organization culture
Source: (Denison, 2009)

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find the relationship between organizational culture and customer satisfaction in building industry and car sales. They used Denison's model. Their results show that the most score in the building industry is gained by involvement culture and mission culture, and the least score in adaptability culture. The results about car sales show that maximum score belongs to consistency culture and the minimum score to adaptability culture. Viriyakul (2011), in a similar study about organization culture affecting knowledge management for organizational effectiveness in Thailand showed that organizational culture on all aspects is highly related to knowledge management.

Yilmaz and Ergan (2008), Studied the impact of Denison's culture organization model for the organization's performance. Results showed that adaptability culture had maximum score and consistency culture had minimum score. The results also showed that mission culture had the most impact on increasing performance. Companies' capabilities for producing new products are under heavy impact of adaptability and consistency culture.

Mobely *et al*. (2005), studied Denison's model in the different Chinese organization. In furniture maker organizations maximum score belonged to vision index and the minimum score belonged to capability development. In insurance companies organizational learning index was high and the customer focus index was lower. At the end high – tech companies' organizational learning index was high and Capability development index was low.

Ardalan *et al*. (2009), in their study tried to study the relationship between organizational culture with Person – Organization Fit with the help of Denison's model in the state universities of west of Iran. They showed that all of 4 cultural dimensions of Denison's model exist in west of Iran State- Universities, Also this study showed that mission culture had more Correlation with organizational indices of Person – Organization Fit. Involvement culture has the least Correlation with indexes of Person – Organization Fit.

Allameh *et al*. (2011), conducted a study to find the relationship between organizational culture and knowledge management in Isfahan University with the help of an organizational culture model of Comeron and Quinn. The study showed that hierarchical culture got the maximum score (2.93) and developmental culture got the minimum score (2.31) in Isfahan university among organizational culture dimension. Among the indexes of knowledge management, maximum score belonged to knowledge storage (2.97) and minimum score to knowledge organization (2.72). Also this study showed that the strongest relationship existed between hierarchical culture and knowledge organization (0.852) and the least amount of relationship between hierarchical culture and knowledge storage (0.605).

MATERIALS AND METHODS

The geographic area of this research was in Hamedan province of Iran at the Hamedan's Jihad- Agriculture Applied-Scientific Higher Education center. The research has used a correlation- descriptive methodology because the correlations between organizational culture and knowledge management in Hamedan's Jihad- Agriculture Applied-Scientific Higher Education center has been measured. A statistical population in this study was all 80 teachers in the mentioned higher education center with at least four years of teaching experience. Sample selection is based on a Cochran formula with knowing N as total participants. This formula determined 65 people as participants and these people selected randomly. Denison 2000 standard questionnaire was used as an instrument for collecting data for organizational culture. Also researchers had developed their own questionnaire for data collection instrument of knowledge management. Validity of developed questionnaire was confirmed by management specialists. For testing reliability of questionnaire at first we collected comments of 20 teachers of that higher education, and then we calculated Cronbach's Alpha with SPSS program. Reliability for organizational culture and knowledge management is (0.89), (0.83) respectively. This shows that instruments are reliable. 65 questionnaires were distributed, 60 returned completely answered. Denison's organizational culture questionnaire contains 60

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questions. Every dimension of organizational culture was tested by 15 questions and every 5 questions relates to one index of organization culture. Knowledge management questionnaire contains 35 questions, every 5 questions relation to one index of knowledge management (Considering distribution and development is one index). Both questionnaires questions are based on a five level scale of Likert in a spectrum from totally disagree, disagree, no comment, agree, and totally agree. Totally disagree assigned number 1, disagree 2, no comment 3, agree 4, totally agree 5. For analyzing the data of this study we used SPSS software, because this study needed sophisticated mathematical specialty.

For analyzing the data we used descriptive indexes such as percentage, mean and standard deviation. In analytical part, the parametric tests like one sample t-test and Pearson correlation-coefficient were used. The parametric tests usually use when statistical samples' distribution is both normal and more than 30 people ($n>30$). In addition, the level of variables' measurement has to be either nominal or ordinal. In this study the parametric tests have been used because both the sample s' size were 65 ($n=65$) and the hypothesis of normality the statistical population was accepted. One sample t-test was performed to test the amount of existence of knowledge management factors in Hamedan's Jihad- Agriculture Applied-Scientific higher education center. Also correlation-coefficient was performed to determine the kind and degree of relationship between organizational culture dimensions and indexes of knowledge management.

RESULTS

Demographic findings of this research showed that 42 men (70%) and 18 women (30%) took part in this research. The minimum age was 27 and maximum age 58. Among participants 57 had M.A, two people were Ph.D students.

Mean and standard deviation of participants are shown based on four dimensions and 12 indexes of organizational culture.

As seen in table 1, university has the best situation in the mission and consistency culture. Involvement and adaptability culture are not in a good position. The university puts emphasis on consistency. Indices of strategic direction and intent and core values got the most score. This shows of strategic tendencies for organizational goals of universities. Each member can take part in that tendency and members of organization have common beliefs in equity that make their identifications and expectations. On the other hand research finding shows that customers focus and team orientation got the least score. Based on this finding, higher educational institute does not appreciate students and clientele needs in advance and never tries to fulfill them in advance. Also, higher education does not appreciate a team orientation based on common goals. Following diagram shows the organizational culture dimensions based on percentage (Figure 3).

In table 2 knowledge management factors in HJAAS have been shown in terms of mean and standard deviation.

Findings for knowledge management for the HJAAS show that higher scores belong to knowledge identification (3.65) and knowledge goals. This shows that these are good factors in

Table 1: Features and indices in HJAAS in terms of mean and standard deviation

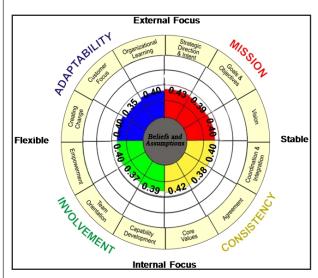|	Mission culture			Adaptability culture			Dimensions Consistency culture			Involvement culture		
Mean	2.022			1.927			2.004			1.945		
St.Dev	0.360			0.366			0.360			0.340		
Mean	Vision	Goals & Objectives	Strategic Direction &Intent	Organizational Learning	Customer Focus	Creating Change	Coordination &Integration	Agreement	Core Values	Capability Development	Team orientation	Empowerment
St.Deviation	2.010	1.937	2.123	2.010	1.757	2.017	2.003	1.891	2.120	1.950	1.890	1.997
	0.441	0.484	0.422	0.414	0.472	0.456	0.424	0.466	0.446	0.445	0.402	0.444

Figure 3: Profile of organizational culture in Hamedan's Jihad- Agriculture Applied-Scientific higher education center (HJAAS)

the eyes of teachers. Knowledge measurement (2.18) and knowledge acquisition (2.33) got the minimum score. This shows that higher education is not in a very good situation and high level administrators did not constantly compare university situation with other similar universities also, there is no specific system for recognizing up-to-date teachers, these kinds of teachers do not know where they can find their needed information.

In analytical part of this study, one sample t-test was used to prove hypotheses. This type of

t-test is used to compare whether the calculated mean value is higher than the predicted mean value (M=2.5) or not. Therefore, one sample t-test was used for comparing all factors of knowledge management to the predicted mean value (M=2.5). The results are shown in table 3.

This table shows that knowledge management factors such as knowledge acquisition, knowledge development and distribution, knowledge use and preservation did not get the last score of t-test in certainty level ($p < 0.05$, t= - 1.645). Certainty t-value level of these factors is (0.00) which is less than the maximum error value (0.05), so knowledge management and its factors such as, knowledge acquisition, development, distribution, use, preservation and measurement are lower than the middle level in this higher education. For knowledge identification and goals t-value is more than certainty level is higher than the error value (t = - 1.645, $p < 0.05$) and t-value in certainty level is higher than the error value (0.05). So these factors in this higher education at least equals to middle level.

Pearson's correlation coefficient shows that there is a meaningful relationship between organizational culture dimensions and knowledge management factors at Error level of 0.05. This

Table 2: knowledge management factors in HJAAS in terms of mean and standard deviation

			Knowledge management factors				
Factor	**Measure**	**Use**	**Preservation Development & distribution**	**Acquisition**		**Identification**	**Goals**
Mean	2.18	2.85	2.57	2.62	2.33	3.65	3.02
Std. Deviation	0.390	0.395	0.473	0.459	0.347	0.483	0.555

Table 3: One sample t-test results, compare knowledge management to predict the mean value (N= 60)

Factors	**Mean**	**SD**	**Mean Difference**	**Std. Error Mean**	**df**	**t**	**p**
Knowledge management	2.747	0.192	0.2528-	0.0248	59	-10.214	0.00
Knowledge goals	3.023	0.555	0.2333	0.0716	59	0.326	0.082
Knowledge identification	3.653	0.483	0.6533	0.0623	59	10.483	0.148
Knowledge acquisition	2.333	0.347	-0.6667	0.0448	59	-14.893	0.00
Knowledge development &distribution	2.617	0.459	-0.3833	0.0592	59	-6.471	0.00
Knowledge preservation	2.567	0.473	-0.4333	0.0611	59	-7.093	0.00
Knowledge use	2.853	0.359	-0.1467	0.0510	59	-2.879	0.00
Knowledge measurement	2.183	0.390	-0.8167	0.0504	59	-16.212	0.00

Table 4: Relationship among four dimensions of organizational culture and seven elements of knowledge management

	Knowledge management factors						
	Measurement	Use	Preservation	Development &distribution	Acquisition	Identification	Goals
Involvement	0.451*	0.583*	0.484*	0.567*	0.5090*	0.512*	0.538*
Consistency	0.541*	0.537*	0.568*	0.592*	0.473*	0.538*	0.575*
Adaptability	0.518*	0.507*	0.462*	0.614*	0.572*	0.437*	0.584*
Mission	0.496*	0.522*	0.475*	0.563*	0.547*	0.593*	0.631*

*P < 0.01

shows that we can trust results and statistics. As shown in the following table, there is a moderate positive relationship between all factors and dimensions. A maximum correlation exists between mission culture and knowledge goals (0.631), after this between adaptability culture and knowledge development, distribution (0.614). Also the least amount of correlation exists between involvement culture and knowledge measurement (0.451).

CONCLUSIONS

This study was an attempt to find the relationship between organizational culture and knowledge management in Hamedan's Jihad- Agriculture Applied-Scientific higher education center.

For this purpose the study used Denison's organizational culture model and the building blocks of knowledge management model. Results showed that the mentioned higher education center has the maximum score in mission culture (2.022), which is coinciding with Gillespie *et al.* (2008) results about the relationship between organizational culture and customer in construction industries, but Yilmaz and Ergan's (2008) results about the effect of Denison's organizational culture model of performance of organizations don't prove our result because they revealed that the adaptability culture as the maximum score. Mobley *et al.* (2005) results also is coping with Yilmaz and Ergan's (2008) results.

Successful organizations have a clear view of their goals and their paths toward those goals. These organizations define their organizational and strategic goals. They make a clear perspective for the organization. This subject has been approved about mission culture in this higher ed-

ucation. The results of this study showed that Hamedan's Jihad- Agriculture Applied-Scientific Higher Education Center (HJAAS) had the minimum score in adaptability culture (1.927). These results indicate that HJAAS must create chances for encouraging creativity, knowledge distribution and capability development.

It is therefore, necessary to identify external environment, to reply current stimulants and to surpass future changes. Higher education must perceive their students, answers them, tries to fulfill their needs forehead and tries to satisfy them. This result confirms Gillespie *et al*. (2008) about the relationship between organizational and customer focus in construction industries and car dealers. In Gillespie's research minimum score belonged to adaptability culture.

The Hamedan's Jihad- Agriculture Applied-Scientific higher education center (HJAAS) had the maximum score in knowledge identification (3.653) which is coinciding with Kazeminejad, *et al*. (2010) study, about evaluation of knowledge management in Al-Zahra University, in which knowledge identification got the maximum score. Also the results of this study are confirmed by the research conducted by Mohammad Ostani *et al*. (2011) in which they studied knowledge management in the university libraries of Isfahan based on the Berkowitz and William's model. Ostani's et al. Research showed that knowledge identification had the maximum score. This shows that higher education teachers are exactly aware of their knowledge and capabilities, their needed information and knowledge for their job.

Also, teachers know how to use references and information bases and they are interested in attending seminars and educational courses. In

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another study Allameh *et al*. (2011) about the relationship between organizational culture and knowledge management in Isfahan University, knowledge preservation got maximum score.

Results showed that Hamedan's Jihad- Agriculture Applied-Scientific Higher Education Center (HJAAS) got the last score in knowledge measurement (2.183) and knowledge acquisition (2.333), therefore it is suggested that this higher education center should revise its systems and update its instructions through new tasks and activities.

Organizational performance measurement systems try both to support knowledge development and distribution and to analyze success and failure for their usage in the future. This higher education center must supply access of information to their teachers. In such a way that they have unlimited access to information sources and unlimited internal and email. This result confirms the results of Kazeminejad, *et al*. (2010) research about investigating the current situation of knowledge management based on the building blocks of knowledge management in Al-Zahra university, whereas in Mohammad Ostani *et al*. (2011)'s research in university libraries in Isfahan based on Berkowitz and Williams model, knowledge acquisition got the last score; In Allameh *et al*. (2011)'s research about the relationship between organizational culture and knowledge management in Isfahan university, knowledge categorization got the last score.

Correlation's results about the relationship between organizational culture dimensions and knowledge management factors in Hamedan's Jihad- Agriculture Applied-Scientific higher education center showed that there was a strong relationship between mission culture and knowledge goals. Results indicated that the higher education center must have a clear vision of its goals and the way toward those goals; It must define organizational and strategic goals and draw its perspective; after that, knowledge management in higher education were considered as an equity, and this increases activities based on knowledge making and use; Gathered information from different sources merges together

and this speeds up the decision making process. Next strong relationship belongs to adaptability culture and knowledge development, distribution. This relationship shows that the higher education center must adapt to the environment, takes risks, takes advice from its mistakes, makes environment ready for change and constantly improves its capability to respect students and clientele. After that the possibility of information transaction with other university teachers increases; Teachers trust their colleagues to share their information; also teachers care about the bylaws and documents of knowledge transaction to raise their knowledge. At the end it is clear that the weakest relationship in Hamedan's Jihad- Agriculture Applied-Scientific Higher Education Center (HJAAS) exists between involvement culture and knowledge measurement. Also in Allameh (2011)'s research in Isfahan University the weakest correlation was seen between hierarchical culture and knowledge preservation and the strongest correlation seen between hierarchical culture and knowledge classification.

For future studies the following subjects can be reviewed and studied: other management models about organizational culture and knowledge management should be used and their capacities compared to this research in practice. Furthermore, other studies like this research can be conducted in a broader statistical population, i.e. reviewing on the relationship between organizational culture and knowledge management in west universities of Iran. Moreover, in the non-educational center such research areas can be implemented and the results compared to the educational centers. The perceptions of other groups like employees, employers, and managers involved in both academic and administrative centers can be reviewed for future studies.

REFERENCES

1- Abbasi, Z. (2007). Reviewing on Models of Implementing Knowledge Management in Iran. Paper presented at an international conference on knowledge management, Tehran, July 2007.

2- Afraze, A. (2006). Knowledge Management (Concepts, Models, Measurement and Implementation).

Tehran: Amir-Kabir Industrial University Publications.

3- Alem-Tabrizi, A. & Mohammad-Rahimi, A.R. (2009). Knowledge Management and Human Resource Planning (HRP) an information system view. Tehran: The Saffar-Eshraghi publication.

4- Allameh, M., Zamani, M. & Davoodi, S.M. (2011). The Relationship Between Organization Culture and Knowledge Management (A case study: Isfahan University). Procedia Computer Science, 3: 1224-1236.

5- Ardalan, M., Salimi, G., Rajaeepour, S. & Molavi, H. (2009). Analysis of Relationship Between Person – Organization Fit and organizational culture in West Country governmental universities (Hamedan, Kermanshah and Kurdistan). Quarterly Journal of Research and Planning in Higher Education, 14 (1): 97-131.

6- Asif, F. (2011). Estimating the Impact of Denison's (1996), What is the difference between organizational culture and organizational climate? a native's point of view on a decade of paradigm war. Journal of Business Research, 64: 454-467.

7- Danport, T. & Prosock, L. (2001). Knowledge Management (Translated by: Rahmanseresht). Tehran: Saiko publication.

8- Denjison, D.R. (2000). Organizational Culture: Can It Be a Key Lever for Driving Organizational Change? International Handbook of management development and Climate.

9- Gandhi, S. (2004). Knowledge Management and Reference Services. The Journal of Academic Librarianship, 30(5), 368-381.

10- Gillespie, A.M., Denison, D. Haaland, S., Smerek, R. & Neale, W. (2008). Linking Organizational Culture and Customer Satisfaction: Result from Two Companies in Different Industries. European Journal of Work and Organizational Psychology, 17(1), 112-132.

11- Jay Y.W. (2008). A General Behavior Model and New Definitions of Organizational Cultures. The Journal of Socio-Economics, 37 (6), 2535-2545.

12- Kazeminejad, N., Mehranfar, F., & Bagheri, S. (2011). Assessing the Current Status of Knowledge Management Based on the Building Blocks of Knowledge Management Model. Quarterly Journal of Technology Parks and Incubators, 23.

13- Larijani, H. & Nouri-Asl, M. (2009). A Feasibility Study of Implementing Knowledge Management in Public Libraries in Azarbayjan Sharghi Province. Quarterly Journal of Knowledgeology, 2 (5), 73-80.

14- Mobley, W.H., Wang, L., & Fang, K. (2005). Organizational culture: Measuring and Developing it in your organization). Harvard Business Review China, 128 – 139.

15- Mohammadi Ostani, M., Shaabani, A. & Rajaeepour, S. (2011). Feasibility Assessment and Implementing Knowledge Management in University Libraries of Isfahan City Based on Berkowitz and Wiliams model. Pajoohesh-Name in Library and Information science, 1 (1): 23-44.

16- Moshabaki, A. (2001). Organizational Behavior Management: An Applied Analysis of human Behavior Value. Tehran: Termeh publications.

17- Probst, G. Raub, S. & Rmhardt, K. (2000). Managing Knowledge (Building Block of Success). John Wliley Ltd.

18- Rahmani, J. & Baghinasrabadi, A. (1998). Organizational Behavior and Culture. Tehran: Moallef Publications.

19- Viriyakul, P. (2011). Organization Culture Affecting Knowledge Management for Organization Effectiveness: A Case Study of Industrial Entities in Chachoengsao Industrial Estate. International Journal of Arts and Sciences 4 (6): 100-112.

20- Yilmaz, C. & Ergan, E. (2008). Organizational Culture and Firm Effectiveness: An Examination of Relative of Cultural Traits and the Balanced Culture Hypothesis in an Emerging Economy. Journal of World Business, 43 (3): 290-306.