Original Article

The role of knowledge management on organizational innovation among faculty members of AJA University of medical sciences

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ABSTRACT

The realization of knowledge management (KM) among the faculty members of the Iranian universities, according to the specific conditions and special requirements of this institution, is of particular importance to other organizations and institutions of the society. Higher education as the center of science, thinking and innovation has important responsibilities such as the promotion of science and training and supplying the necessary human resource. The present study aims to investigate the effect of KM on organizational innovation in faculty members. This descriptive-analytical study was conducted on 110 faculty members of AJA University of Medical Sciences. The tool used in this study was a questionnaire. Data were analyzed using Pearson correlation test and independent t-test. Based on the results, the mean scores of KM and organizational innovation are 2.89 and 2.60 respectively. Given the smaller mean of the theoretical average (average value 3), it is concluded that the status of KM as well as organizational innovation among faculty members of the university are at a low level; therefore, the strengthening of KM and its components directly leads to improved organizational innovation in faculty members at AJA University.

Keywords: Knowledge Management, Organizational Innovation, AJA University, Iran, Medical Sciences, Management, faculty members.

Introduction

Today, knowledge is considered as the most important capital and the main factor in the competitive advantage of organizations. Unlike other organization assets, this capital is becoming more valuable due to its use; therefore, the management of this vital capital has become one of the important goals of those organizations and institutions seeking competitive advantage [1]. Higher education systems in most countries have started the establishment of KM systems since the beginning of the third millennium in order to pay more attention to the quality of education, research, provision of specialized services and the maintenance of competitive advantage [2].

Globalization, the knowledge-based economy, the development of ICTs and the increase in student populations are among the main causes [2, 3]. Wong and Aspinwall defined KM as a combination of knowledge-based systems, artificial intelligence, business process development, human resource management, and organizational behavior concepts [3] which provides an opportunity for organizations to improve employee performance, gain sustainable competitive advantage, enhance decision making, improve the effectiveness and efficiency of the organization, improve innovation and creativity, and accelerate service delivery to the community [4-6].

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Levan & Sainan and Tindal argue that KM is the holy grail of modern companies, slogans being chanted usually and rarely considered. Organizations are increasingly interested in KM because they have found that the effective use of knowledge assets and resources enables them to innovate, meet customer requirements and survive in the economy [7]. KM includes all the ways through which the organization manages its own knowledge assets, that is how to collect, store, transfer, utilize, update, and create knowledge [8]. There are several definitions and perceptions of KM processes [9-11]. According to various studies on acquisition, identification, development, distribution, use and storage of knowledge as central processes of KM, Knowledge exploration and exploitation are the main KM objectives [12]. In expressing the research necessity in the field of KM at universities, Monacko believes that, despite the popularity of KM in the field of trade and economics, it has not yet achieved its place in the universities. Universities, with research centers, are considered as the source of knowledge production and should be the pioneers in using KM in society [13]. KM in universities is seeking continuous learning through the process of sharing knowledge and experience among all involved in education and research [14]. KM in educational institutions includes the process of acquiring, storing, sharing, transferring, applying, inventing, combining and disseminating knowledge [15, 16].

Researchers have provided many reasons for the use of KM innovations, including the prevention of loss of knowledge (Quits, retirement, Job rotation), gaining more competitive advantages, reorganizing organization, Continuous learning, preventing the limited dissemination of knowledge, preventing isolation of the department / people / organization, coordinating with other organizations, increasing professional services and meeting the needs of consumers [17]. Environmental threats endanger the survival of educational systems in general and universities in particular because of the presence of these organizations in a dynamic and changing environment with complex scientific and technological developments. Universities must therefore recognize their current status, analyze their strengths and weaknesses, rely on opportunities based on strengths and prepare themselves to face threats [18].

Innovation refers to the successful and useful implementation of creative ideas within the organization [19]. According to Senich (2004), innovation means using novel profitable ideas in the business market to build wealth and create value. In his view, innovation is a permanent and dynamic process, not part-time and once-for-all [20].

Nowadays, technology innovation is necessary for organizations, and most organizations are looking for new ideas [21]. If innovative, employees will be able to offer new and useful ideas in products (product innovation), performance (process innovation), services or organization practices (administrative innovation); As a result, building and using new ideas enables the organization to adapt to changing market conditions and respond to threats and opportunities and thereby grow and develop [22, 23].

The importance of innovation is reflected in its tremendous impact on the life of organizations, the survival of organizations depends on their reconstruction, and the needs of customers change over time. In the absence of coordination with these needs, the organization, while bearing a huge expense, may not be able to achieve its goals [24]. In the literature, the concepts of creativity and innovation are used synonymously [25, 26]; while each of these concepts has a certain meaning.

Regarding the difference between creativity and innovation, Kahin believes that "creativity is making something out of nothing, while innovation generates it as services and products" [27]. Identifying the factors influencing the creativity and innovation of organizations and strengthening those factors provides a suitable basis for the development and excellence of the organization [28].

According to relevant literature, creativity and innovation are the most important educational goals of the university and one of the most important missions of educational institutes. Creative and innovative management is the most effective factor in developing and enhancing creativity in educational organizations; therefore, investigating the relationship between the variables of KM and organizational innovation among faculty members - as those who are in charge of training the specialist human resources required for economic, social, cultural, and political development - on the one hand, and the university - as a place of production and distribution of thought and science - on the other hand, it is necessary.

In this regard, while studying the status of KM and organizational innovation, this study was conducted with the general purpose of investigating the relationship between KM and the organizational innovation among the faculty members of AJA University of medical sciences.

Literature review

In a research entitled "Investigating the relationship between KM and creativity and organizational innovation in staff of educational hospitals of Tehran University of Medical Sciences", conducted on 120 teaching staff in 2014-2015, Dargaahi et al. (2018) concluded that there was a statistically significant relationship between KM with organizational creativity ($p < 0.001$, $r = 0.661$) and organizational innovation ($p < 0.001$, $r = 0.325$), indicating the greater impact of KM variables on organizational creativity compared to organizational innovation [29]. The results showed that creativity and organizational innovation increase with improvement of KM; therefore, policymakers, hospital leaders and managers should work to establish a KM system in order to enhance the creativity, innovation, and ultimately the efficiency and effectiveness of the hospital.

Abbasi Mouslo et al. (2009) in a research entitled "Investigating the Role of KM in Promoting the Creativity of Employees of Government Organizations [30]; Case Study: Shahid Sadoughi Hospital in Yazd City" concluded that organizational creativity had a positive correlation with organizational KM and its processes and proper organizational knowledge management can improve creativity among employees of organizations.

According to the KonjkavMonfared and Ardakani's study (2014) entitled "An Analysis on the Status of KM in Higher Education Institutions and investigating its Relationship with Innovation", conducted on 344 faculty members of Yazd University, There is a positive and significant relationship between KM and all its components with innovation [31]. In addition, the results of regression analysis showed that culture and technology, among the above dimensions, have the greatest impact on the development of innovation. However, the state of the above dimensions is undesirable at Yazd University.

Jen-Lin et al. (2012) in a study entitled "Turning Knowledge Management into Innovation in the High-Tech Industry" showed that KM is recognized as an effective factor in innovation [32].

In a study entitled "The relationship between KM and organizational innovation in a company," Taleghani et al. (2012) found that there are significant relationships between knowledge creation, knowledge storage, and knowledge transfer and knowledge utilization with organizational innovation [33].

The results of Hashemi et al. (2016) study, entitled "Investigating the Impact of HRM on KM and Organizational Innovation", showed that HRM has an impact on organizational innovation, strategic HRM affects KM, and KM also has an impact on organizational innovation [34].

DalirPour and Yaghoubi (2013) in a research paper entitled "Providing a Model for Investigating the Impact of KM on Organizational Learning and Innovation: Case Study of Asia Insurance Company" examined the impact of KM on organizational learning and innovation [35]. Findings indicated a positive and significant relationship between organizational learning with KM and organizational innovation, and KM had also a positive and significant effect on organizational innovation.

Martin and Ciabuschi (2013) found in their research, "Knowledge ambiguity, innovation and subsidiary performance," that KM can be effective on innovative performance through the deployment of organizations with an effective framework for implementing their innovative strategies [36].

Aramburu and Sáenz (2011) in a research entitled "Structural capital, innovation capability, and size effect: An empiritical study" and Castro et al. (2013) in an article titled "Linking Human, Technological, and Communication Resources to Technological Innovation: Discovering a New Approach" concluded that KM processes such as knowledge acquisition, knowledge sharing, knowledge creation, and other knowledge assets such as human capital and organizational relationships and structure affect innovation [37, 38].

Materials and Methods

This cross-sectional study was conducted in 2017-2018. The statistical population of this research includes all faculty members of AJA University of medical sciences (159 subjects). Stratified random sampling was conducted among faculty members of the university, working in medical, paramedical, nursing, aerospace and dental schools, and other visiting professors were excluded from the study. The sample size for this study was calculated using Morgan table. A total of 110 faculty members were selected. Regarding the unaccountability of 5 faculty members, 105 data were analyzed. The purpose of this study was to investigate the relationship between KM and organizational innovation, as presented in the conceptual model in Fig. 1.

The data gathering tool was Gold, Malhotra and Segars Knowledge Management Questionnaire (2001) and Organizational Innovation Questionnaire (a combination of Jimenez- Jimenez et al. (2008), Penyard (2006), Pyrago and Sohel (2006)). The KM questionnaire consists of 25 items in four areas of knowledge creation, knowledge sharing, knowledge utilization and knowledge storage. Items were scored using a 5 point Likert Scale from 1 "Very Low" to 5 "Very High".

The face and content validity of the tool was evaluated by the panel of experts, with a reliability of 0.78 in the present study. The second tool is an organizational innovation questionnaire, containing 17 questions in three areas of manufacturing innovation, process innovation, and administrative innovation. Items were also scored using a 5 point Likert Scale from 1 (Totally Disagree) to 5 (Totally Agree). The face and content validity of the tool was evaluated by the panel of experts, with a reliability of 0.81 in the present study. The busy faculty members were among the research limitations, which made the researcher make the necessary follow-up to adjust the issue and provided more time for faculty members to answer the questionnaires.

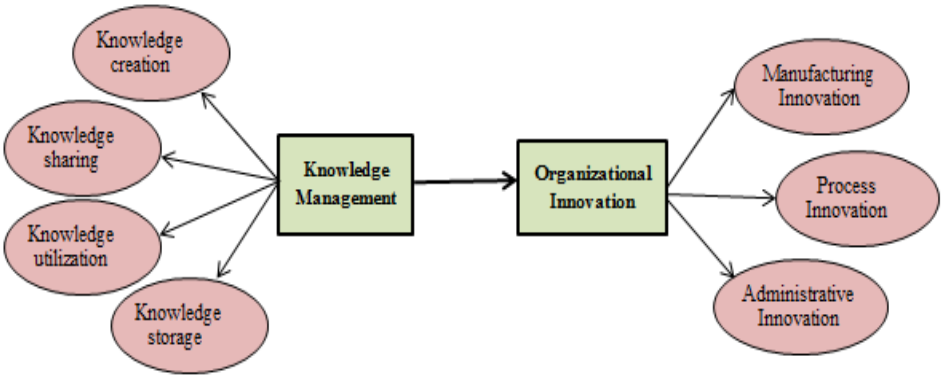

Figure 1. Theoretical model of the study

Analysis Method

Data were analyzed using SPSS statistical software version 21 and descriptive statistics (mean, standard deviation, percentage and frequency), and inferential tests (t-test and Pearson correlation coefficient).

Results

Of the 110 faculty members working at AJA University of Medical Sciences, 105 subjects completed questionnaires. According to descriptive statistics, faculty members were mostly male (66.7%), and in the age group of 46-55 years old (47.6%), 45-35 years old (26.7%), 65-65 years old (22.9%) and 75-66 years old (8.2%). Faculty members consisted of associate professors (54.3%) and assistant professors (45.7%). Regarding the values of skewness and kurtosis of KM (-0.069 and -0.153), its components including knowledge creation (-0.012, -0.259), knowledge sharing (-0.133, -0.248), knowledge utilization (0.446, -0.520), and Knowledge storage (-0.256, -0.344) and Organizational Innovation (-0.315 and -0.175) and its components including manufacturing innovation (-0.430, 0.019), process innovation (0.127, -0.404), and administrative innovation (-0.192, -0.414) are at the range of -2 to +2 , the data have a normal distribution (at a level of 0.05). To test the status of KM and Organizational Innovation among faculty members of the AJA University of Medical Sciences, a single sample t test has been used. Table 1 shows the descriptive information and the results of a single sample t-test to examine the status of KM and Organizational Innovation among the faculty members of the university. According to the results, the mean scores of KM and Organizational Innovation were 2.89 and 2.60 respectively. As seen, the value of the t statistic for KM and Organizational Innovation with a degree of freedom of 104 is equal to -7.309 and -16.001, respectively, and its significance level is less than 0.01. Given that the obtained mean value is lower than that of the theoretical mean value (=3), It is concluded that the status of KM as well as Organizational Innovation is low among university faculty members.

Table 1. The results of a single sample t-test to examine the status of KM and Organizational Innovation

Statistical index	Obtained mean	Theoretical mean	t	Degree of freedom	Significance level
KM	2/89	3	-7/309	104	0/001
Organizational Innovation	2/60	3	-16/001	104	0/001

Table 2 shows the correlation between KM and Organizational Innovation. According to the results, the correlation coefficient between KM and Organizational Innovation is 0.403 and significant at the alpha level of 0.01. Positive correlation coefficients indicate a direct relationship between these variables and shows that Organizational Innovation increases as KM and organizational learning increase.

Table 2. Matrix of correlation coefficients between KM and Organizational Innovation

Variables	1	2
1. KM	1	
2. Organizational Innovation	0.403*	1

* Significance at the level of 0.01

Structural equation analysis was used to investigate the relationship between KM and Organizational Innovation.
Figures 2 show the standard coefficients of the proposed model, in order to investigate the relationship between KM and Organizational Innovation.

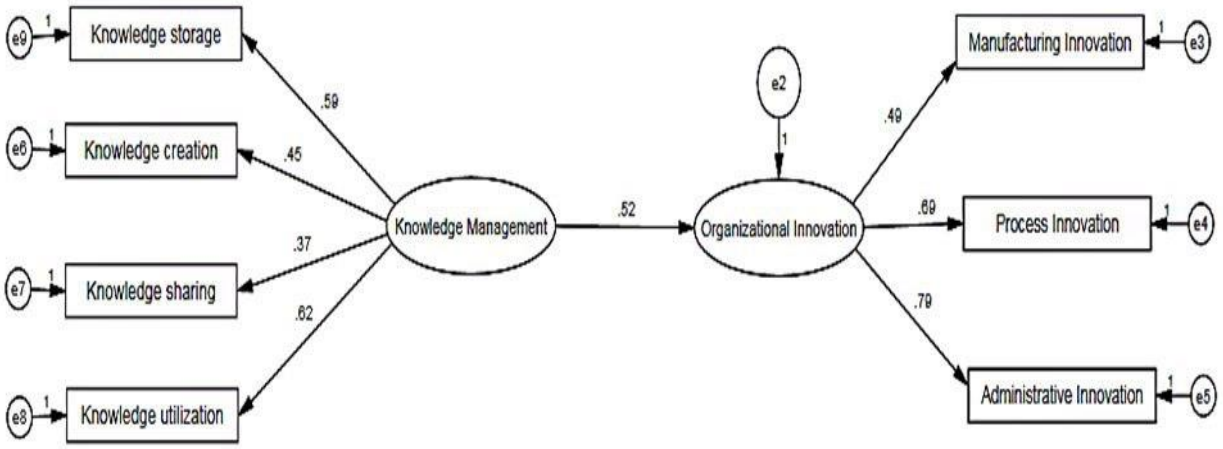

Figure 3. Standard coefficients of the proposed model for examining the relationship between KM and Organizational Innovation

According to Table 2, and considering that all significant values are higher than 1.96, the significant effect of the variables on each other is verified, and since all the standard coefficients have a positive sign, these effects are positive; therefore, all hypotheses will be accepted. As seen, all path coefficients are significant.

Table 3. Structural model coefficients of the variables used in the model

			Non-standard coefficients	Standard coefficients	t-values	p
KM	→	knowledge storage	1	0/596		
KM	→	Knowledge creation	0/759	0/453	3/076	0/01
KM	→	Knowledge sharing	0/549	0/371	2/674	0/01
KM	→	Knowledge utilization	0/815	0/616	3/482	0/01
Organizational Innovation	→	Manufacturing innovation	1	0/490		
Organizational Innovation	→	Process innovation	0/741	0/690	4/040	0/01
Organizational Innovation	→	Administrative innovation	0/983	0/796	3/951	0/01

Table 4. The model Goodness of Fit Index

Fit index	Covered Domain	The observed value	Fit Index Assessment
df/2χ	3≥	1/22	Suitable
RMSEA	0/08>	0/046	Suitable
SRMR	0/08>	0/060	Suitable
CFI	0/9<	0/972	Suitable
GFI	0/9<	0/958	Suitable
IFI	0/9<	0/974	Suitable

Table 4 presents the fitting indices of the model. The chi-square ratio index on the degree of freedom (df / 2χ) confirms the fitting of the model, Df / 2χ below 3 indicates fitting the model to the data.

The root mean square error approximation (RMSEA) is 0.046 and the second root mean square residual (SRMR) is 0.060, which is smaller than the criterion (0.08) and therefore confirms the fit of the model. Finally, the IFI, CFI and GFI indices are also higher than the desired criterion (0.9). In general, and considering the sum of the calculated indices, the model fitting to the data is confirmed.

Table 5. The path coefficient of the relationship between KM and Organizational Innovation

Path			Non-standard coefficient	Standard coefficient	t- Statistics	Significance level
KM	→	Organizational Innovation	0/73	0/52	2/956	0/009

According to Table 5, the non-standard coefficient is 0.73, the standard coefficient is 0.52 and the test statistic value is greater than 1.96.

Given the significance level obtained below the 0.05, the Null Hypothesis is rejected and the research Hypothesis, that is, the positive relationship between KM and Organizational Innovation is confirmed.

Conclusion

The purpose of this study was to investigate the effect of KM on Organizational Innovation. According to the results, the correlation coefficient between the variables of KM and Organizational Innovation is 0.403, which indicates a direct correlation between KM and Organizational Innovation with all aspects among faculty members. The results of the hypothesis test by path analysis method show that the coefficient of determination is 52% (2r=52%), indicating the causal relationship between KM and Organizational Innovation; therefore, the research hypothesis is confirmed. The study results are consistent with the results of Dargaahi et al. (2018),

Abbasi Mouslo et al. (2009), KonjkavMonfared & Ardakani (2014) and Jen-Lin (2012) [29-32]. The results of the research show a significant relationship between KM and Organizational Innovation among faculty members of the AJA University of Medical Sciences; this implies that if there is an incentive to exchange ideas and encourage the use of the web, value new ideas and discuss these thoughts and provide the necessary information in a transparent manner, faculty members will use innovative methods. The result of this research section is consistent with the researches of Taleghani et al. (2012), Hashemi et al. (2016), DalirPour and Yaghoubi (2013), Martin and Ciabuschi (2013), Aramburu and Sáenz (2011) and Castro et al. (2013) [33-38] . The results of the present study indicate not well-suited KM among the faculty members of the AJA University of Medical Sciences with an average of 2.89.

Dargahi et al. (2018) among the staff of educational hospitals of Iran University of Medical Sciences [29], Tayebi et al. (2008) at Zanjan University of Medical Sciences, Shirvani et al. [39] in Isfahan University of Medical Sciences, Sadeghi et al. (2010) in selected hospitals of Iran University of Medical Sciences assessed the status of KM and its components as moderate and below average, which is consistent with the results of this study. Tayebi et al. (2009) reported KM status in the teaching hospitals of Tehran University of Medical Sciences, 3.40 out of 5, which is inconsistent with the present study. The results of this study showed a low organizational innovation among faculty members of AJA University of Medical Sciences with a mean of 2.60.

Dargahi et al. (2018) assessed the creativity of employees among the staff of educational hospitals of Iran University of Medical Sciences, Sadeghi et al. (2012) at Shahid Hashemi Nejad Hospital in Tehran [40], Nekouyi Moghadam et al. in Kerman hospitals to be moderate and undesirable levels, which is almost consistent with the results of this study [41]. The centralized organizational structure and the lack of delegation of authority and decision to employees, and the lack of individual autonomy, show the results consistency [38]. Perhaps this may be attributed to the lack of exploitation of new ideas, as there is no flexible competitive structure and rapid learning environment and there are no conditions for using the tacit knowledge of the organization in the universities. As shown in Figure 2, knowledge utilization with the standard coefficient of 0.62 and knowledge sharing with a coefficient of 0.37 has the most and least effect on KM, respectively. Also, administrative innovation with the standard coefficient of 0.79 has the highest impact and Manufacturing innovation with 0.49 has the least impact on Organizational Innovation. These results are consistent with the results of Taleghani et al. According to the research findings, innovation is a key factor in universities to create a sustainable competitive advantage and value. Organizations will be more successful through innovation, responsiveness to changing environments, and the creation and development of new capabilities that will allow them to perform better.Therefore, the organization needs to create a climate contributing to clear knowledge sharing so that faculty members are more willing to share their new knowledge and utilize it. It is recommended that organizations pay special attention to creating new knowledge, acquisition customer knowledge and developing new services and integrating a variety of resources and knowledge, to enhance the impact of KM on Organizational Innovation. They should also pay attention to the transfer and refinement of organizational knowledge. Using knowledge to solve new problems, such as knowledge distribution across the organization and stakeholders, a standard reward system for sharing knowledge and facilitating it, promoting collaborative culture, and creating a knowledge-based working group to minimize the role of individual biases are recommended. In addition, the use of in-house networks for knowledge sharing, the continuous training of professors to innovate and carry out tasks in new ways, discuss the ideas of faculty members and organize ideas, provide information as clearly as needed, are among the other recommendations of this study. It is also strongly recommended that organizations provide a written and coherent summary of their experiences, and document the results so that they can play an effective role in the advancement of Organizational Innovation.

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References

1. Mahmoud zadeh, Seyyed Mojtaba and Sedaghat, Maryam. (2014). the relationship between knowledge management and organizational performance in the hotel industry. Journal of Tourism Management Studies, vol.8, No.24, pp.89-112.
2. Hosseini Shavoun, Amin; Uzbashi, Alireza; Seraji, Roya Nazl. (2016). KM status and factors affecting its establishment in Tehran University of Medical Sciences. Journal of Culture Strategy. vol.8, No.3, pp. 159-137.
3. Wong, KY. and Aspinwall, E. (2005). An Empirical Study of the Important Factors for Knowledge-Management Adoption in the SME Sector", Journal of Knowledge Management, vol.9, No.3, pp. 64-82.
4. Gupta, J; S. Sharma. (2014) Creating Knowledge Based Organizations. Boston: Iden Group Publishing. ISBN 1-59140-163-1.
5. Filemon A, Uriarte JR. (2008). Introduction to knowledge management. National academy of science and technology. Japan: published by ASEAN foundation.

6. Zaied, A; Soliman Hussein, G., & Hassan, M. (2012). The role of knowledge management in enhancing organizational performance. International Journal of Information Engineering and Electronic Business, vol.4, No.5, pp. 27-35. Retrieved from www.mecspress.org/ijieeb /ijieeb-v4-n5/IJIEEB-V4-N5-4.pdf
7. Hashemi, Parvin, Khadivar, Amena and Shami Zanjani, Mehdi (2018). Process oriented ontology development for knowledge management technologies. Research and Information Processing and Management. vol.33, No.3, pp.1153-1176.
8. Monnavarian A, Amini A. (2010). Do Interaction Within Network Lead To Knowledge Management?. Business Strategy Series. vol.10, No.3, pp. 139- 155.
9. Alavi, M., Leidner, D.E. (2001). knowledge management and knowledge management systems: conceptual foundations and research issues. MIS Quarterly, vol.25, No.1, pp.107–136.
10. Coombs, R., Hull, R. (1998). Knowledge management practices' and path-dependency in innovation. Research Policy, vol.27, pp.237–253.
11. Probst, G., Raub, S., Romhardt, K. (1999). Managing Knowledge, Wiley, London
12. Cantner, U., Joel, K., & Schmidt, T. (2011). The effects of knowledge management on innovative success – An empirical analysis of German firms. Research Policy, vol.40, No.3, pp. 1453-1462.
13. Monacko, N.J. (2008). Knowledge management in universities, Journal of Academy of U.P.M University, vol.10, No.42.
14. Prusak l. (2001). Knowledge and trainning: the missing connection. Newyourk: Mc Graw-Hill, pp.4-60.
15. Tian J, Nakamori Y, Wierzbicki AP. (2009). Knowledge management and knowledge creation in academia: a study based on surveys in a Japanese research university. Journal Knowledge Management. vol.13, No.2, pp. 76-92.
16. Laal M. (2011). Knowledge management in higher education. Procedia Computer, science Direct. vol.3, pp. 544–9.
17. Karimi Mouneghi, Hossein, Hassianian, Zahra Marzieh; Ahanchian, Mohammad Reza. (2014). A Survey on Knowledge Management Status in Medical Sciences, Journal of Medical Education Development. vol.7, No.6, pp. 94 - 106.
18. Keivan Ara, Mahmoud; Yazdkhashti, Ali; Bahrami; Susan; Masudian, Yousef. (2011). the Relationship between Knowledge Management and Organizational Intelligence Components in the Schools of Isfahan University of Medical Sciences. Journal of Health Information Management, vol.5, No.5, pp. 673-680.
19. Racela, O. C. (2014). Customer orientation, innovation competencies, and firm performance: A proposed conceptual model. Procedia-Social and Behavioral Sciences, vol.148, pp. 16-23.
20. Barringer. Bruce R. Ireland. R. (2013) Entrepreneurship: Successfully Launching New Ventures. Translated by Jafari Moghadam, Saeed Momeni, Anagar and Momeni, Nuna. (2013). First edition, Tehran: Saffarashraqi Publishing House.
21. Hervas-Oliver, J. -L., & Sempere-Ripol, F. (2015). disentangles the influence of technological process and product innovations. Journal of Business Research, vol.68, pp. 109-118.
22. Ganji K, Taghavi S & Azimi F. (2015). The meta-analysis of variables associated with creativity. Journal of Quarterly Innovation and Creativity in Human Sciences, vol.4, No.4, pp. 1-49.
23. Asadi,Sedigheh, Dargahi,Hossein; Fallah Mehrabadi, Esmaeel, Heidari Dastjerdi, Nahid. (2018). The Relationship between Organizational Innovation and Creativity among the Staff of TUMS General Hospitals . Journal of Paramedical Sciences, Tehran University of Medical Sciences (PIAWARD HELVET). vol.11, No.5, pp. 578-587
24. Griffin RW. (2016). Management. 12th ed. USA: South-Western College Pub; pp. 18-29.
25. Moghimi, Seyed Mohammad. (2006). Organization and Management: A Research Approach. Tehran: Terme Publishing.
26. Martins, E.C. and Terblanche, F. (2003). Building Organizational Culture that Stimulates Creativity and Innovation. European Journal of Innovation Management, vol.6, No.1, pp. 64-74.
27. Cumming, Braian S. (1998). Innovation overview and future challenges. European Journal of Innovation Management, vol.1, No.1, pp. 21-29.
28. Storey C. (2002). Innovation in services. Aust Market Journal, vol.10, No.1, pp. 59-70.
29. Dargaahi H, Asadi S, ahmadi B, Mahmoudi M. (2018). Survey of the Relationship of Knowledge Management and Organizational Creativity and Innovation among the Employees of Tehran University of Medical Sciences. Journal of hospital. vol.17, No.1, pp. 95-106
30. Abbasi -Mouslo K, Taheri-Damne M, Jalilyan N. (2009). Examining the role of knowledge management in promoting creativity of employees of government agencies. Second National Conference of creativity, TRIZ and Innovation of Engineering and Management.
31. Konjkav-Monfared A, Ardakani S. (2014). Analysis of the status of knowledge management in higher education institutions and a comparison with innovation. Quarterly

Journal of New Approaches in Educational Administration, vol.3, No.1, pp. 103-120.

32. Jen-Lin R, Rong-Huei C, Chiu-Yau T. (2012). Turning knowledge management into innovation in the high tech indenstry. Industrial Management, vol.112, No.1, pp.42-63.
33. Taleghani, Gholamreza; Anvari, Ali; Eftekhari, Leila. (2012). The Relationship between Knowledge Management and Organizational Innovation in an Insurance Company (Insurance Industry): vol.27, No.1, pp. 151-171.
34. Hashemi, Sayed Hamed, Ekhadi, Ehsan, Yousefi, Minoo. (2016). Investigating the Impact of Human Resource Management on Knowledge Management and Organizational Innovation. Journal of Dental Studies. vol.2, No.8, pp.1-20.
35. DalirPour, Mostafa and Yaghoobi, Saeed. (2013). A Model for Assessing the Impact of KM on Organizational Learning and Innovation. 10th International Conference on Industrial Engineering. Tehran.
36. Ciabuschi, B., & Martin, O. (2012) Knowledge ambiguity, innovation and subsidiary performance. Baltic Journal of Management, vol.2, No.7, pp. 143-166.
37. Aramburu, N., & Sáenz, J. (2011). Structural capital, innovation capability, and size effect: an empirical study. Journal of Management and Organization, vol.3, No.17, pp. 307-325.
38. Castro, G. M., Delgado-Verde, M., Amores-Salvadó, J. & Navas-López, J.E. (2013). Linking human, technological, and relational assets to technological innovation: exploring a new approach. Knowledge Management Research & Practice, vol.2, No.11, pp. 123-132.
39. Shirvani A, Safdariyan A, Alavi A. (2009). The role of knowledge management process authority in Isfahan University of Medical Sciences. Health Information Management Journal, vol.6, No.1, pp. 75-82.
40. Sadeghi A, Khamarniya M, Darzi-ramandi S. (2013). Investigate the situation elements of knowledge management in selected hospitals of Iran University of Medical Sciences. Sadra Medical Journal, vol.1, No.4, pp. 1-102.
41. Nekuee Moghadam M, Behzadi F, Keshavarz H. (2012). Aspect of organizational culture: Missionary, participatory, flexibility and burencratic in organizational success indices flexibility, cohesiveness, speed and innovation in public hospitals of Kerman Province 2009. Journal of Hospital, vol.11, No.1, pp. 73-82.