

ORIGINAL ARTICLES

The relationship between Organizational Culture Parameters and Knowledge Management: A Case in Tehran Farabi Hospital, Iran

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ABSTRACT

Knowledge management and organizational culture are two effective parameters on the success of organizations in today's changing and competitive world. Some researchers believe that knowledge-based culture includes different values and beliefs of members about information and knowledge concepts. Therefore, knowledge management is the most important factor in further success. This study aims to evaluate organizational culture at Tehran Farabi Hospital located in Iran according to Denison model and examine its relationship with knowledge management. This study was cross sectional and measuring type. The considered statistical population of this research includes all occupied personnel at Tehran Farabi Hospital. At first, stratified random sampling was used to ensure that adequate numbers of personnel were represented from different sections. Then, following simple random sampling procedures, the samples in each group were selected. In total 150 questionnaires were distributed but 130 cases were returned. Data collection tool was a questionnaire designed in three parts including demographic information, organizational culture, and knowledge management items. The SPSS Software version 18 was used along with regression test for further data analysis. The findings of the study showed that there is a significant relationship between knowledge management and organizational culture and its dimensions namely cooperation, compatibility, compliance and duty ($p < 0.001$). Furthermore, there is a middle level of knowledge management and organizational culture in this hospital. Therefore, all persons in charge are obliged to consider that in order to have effective performance of knowledge management, organizational culture is more important than other factors such as technological tools.

Key words: Knowledge Management, Organizational Culture, Farabi Hospital, Cooperation, Compatibility, Compliance, Duty.

Research Background:

It is useful to obtain an accurate understanding about the role of knowledge at different organizations for finding a good reply to this question that why some of the organizations are always successful? It means to understand which factors may provide a survival situation for the organizations. There is a close relationship between such an understanding and the real meaning of knowledge as well as its application in organization (Davenport, T., 2000). A knowledge-based organization will find great facilities for changing small forces into great ones. Knowledge management means the modern effort of current century named as knowledge age for maintenance, handling and considerable increasing of knowledge-based investments of organizations. This may represent that any investment in knowledge will make the best and highest benefits (Alvani, S.M., 2001).

On the other hand, organizational culture is effective on all aspects of an organization including common beliefs and values. It may enable the organization and will be effective on personal behavior, motivation, job satisfaction and level of human force obligation, designing of structure, organizational systems, goal making, writing and performing of policies and different strategies (Saeednejad, S., 2006). Only with a clear evaluation and creating a suitable and reflective organizational culture, it might be possible to change any interaction pattern among the people in an organization and also benefit from knowledge management as a competitive advantage accordingly (Bhatt, G.D., 2001). As a result, since changing is the most important feature of competing world, there are no more chances for organizations and companies to rely only upon the persons at their organization as the most important capital. They should encourage their personnel to find a good understanding and find new findings and ideas accompanied with practical usage of these ideas in promotion of the organizational ideals. Such an activity needs to have a knowledge-based culture since it is a part of the

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personality of organizations and so much effective on the personnel's behavior. On the other hand, due to the changing of health care systems in current century, there are a lot of challenges for these organizations such as increasing of costs and financial pressures, increasing of customers' knowledge, competitive market and increasing the quality and costs of effective services. The mentioned changes need an increase in dividing of information and knowledge and benefiting from knowledge management techniques. Lack of required division of knowledge and lack of understanding great advantages of knowledge management among the personnel are the most important obstacles for effective application of knowledge management in different organizations. Therefore, all persons in charge of health and therapeutic services fields are able to benefit from knowledge management tools for changing the hospitals into learning ones and find required facilities as well.

The researchers of this study intend to evaluate organizational culture of Tehran Farabi Hospital according to Denison Model and then find out its relationship with knowledge management. Since this hospital intends to make great changes in its structure, the obtained results will provide an appropriate situation for implementation and betterment of optimization techniques in this hospital and upgrading its output. Furthermore, with a sufficient knowledge about organizational culture of hospital, managers are able to remove any probable shortages and make it ready for optimization and successful changes.

Materials and Methods

The considered population of this study which was made on cross sectional and measuring type includes all occupied personnel at Tehran Farabi Hospital, Iran. The whole sample of the study was 150 persons so that 150 questionnaires were distributed but 130 cases were returned. At first, stratified random sampling was used to ensure that adequate numbers of personnel were represented from different sections. Therefore, official and contractual personnel were classified into four groups of supporting, nursing, para-clinical and physicians. Then, following simple random sampling procedures, the samples in each group were selected. Data collection tool was a 3-part questionnaire. The first part was related to general demographic items. The second part included different items about organizational culture and the third part was about relevant items of knowledge management. In order to evaluate knowledge management, Probst, Raub and Romhardt's knowledge management structural model was employed (Probst, G., 2000). Moreover, Denison's cultural model was used for further study of organizational culture (Denison, D.R., 2000).

Denison's (2000) questionnaire of organizational culture has been designed in 29 items (Denison, D.R. 2000). The items were designed on a five-point Likert scale of agreement, where 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree. The cooperative culture parameter includes enrichment, team making and development of facilities. Compatibility culture parameter includes fundamental values, agreement and coordination. Compliance culture includes making a change, customer-base and organizational learning, and duty culture refers to strategic way, goals and landscape. Moreover, knowledge management questionnaire consists of 21 items for measuring eight parameters of knowledge management. The items were designed based on five-point Likert scale of agreement as well. The parameters of knowledge management include knowledge goals, knowledge recognition, knowledge obtaining, knowledge development, knowledge dividing, benefiting from knowledge, knowledge maintenance and knowledge evaluation. Moreover, to see the internal reliability of the questionnaires, Cronbach's alpha coefficient was calculated for both questionnaires. The coefficients were found to be 0.90 for knowledge management questionnaire and 0.93 for organizational culture questionnaire. The obtained coefficient indicated a good internal reliability for the the questionnaire. SPSS software including regression tests was used also for data analysis.

Findings:

Analysis of the obtained data showed that two-third of the respondents were male and one-third of them were female. From the whole respondents, about 38 persons (29 %) had associate degree, 81 persons (62 %) had Bachelor of Science degree and 11 persons (8 %) had Master of Science degree. About 57 persons (44 %) were lower than 30 years old, 41 persons (32 %) were 30-40 years old and 29 persons (22 %) were between 40-50 years old. Furthermore, about 3 persons (2 %) were more than 50 years old. The working experience of 48 persons (37 %) was below five years, 29 persons (22 %) between five to ten years, 22 persons (17 %) between ten to fifteen years, 16 persons (12 %) between fifteen to twenty years, and 15 persons (12 %) more than twenty years.

According to the findings, it is obvious that knowledge management index is average at Farabi hospital with an average rate of 44.77 % and organizational culture index of 53.92 %. Furthermore, all dimensions of organizational culture have a middle level. It was also concluded that all parameters of organizational culture have a positive relationship with knowledge management. Therefore, duty parameter has the highest correlation with knowledge management. The parameters of cooperation, compatibility and compliance respectively have the lower correlation with knowledge management.

The insurance distance of 95 % insurance has been calculated by non-parameter percentile self-management method.

Table 1: The average rate, violation and insurance distance for grades of questionnaire and its dimensions.

Index	Average	Violation criterion	Insurance distance
Knowledge management	44.77	15.01	(42.11,47.19)
Cooperation	50.69	17.13	(47.71,53.48)
Compatibility	53.27	18.16	(49.94,56.38)
Compliance	57.86	16.59	(54.81,60.47)
Duty	53.85	22.17	(50.10,57.44)
Organizational culture	53.92	15.82	(51.14,56.50)

Table 2: Insurance distance and theory test for any relationship between knowledge management and organizational culture and its dimensions.

Index	Correlation	Insurance distance (High level, Low level)
Cooperation	0.68	(0.57,0.76)
Compatibility	0.67	(0.54,0.77)
Compliance	0.57	(0.42,0.69)
Duty	0.69	(0.57,0.79)
Organizational culture	0.76	(0.66,0.84)

The insurance distance of 95 % insurance has been calculated by non-parameter percentile self-management method.

In fact, there is a significant relationship between knowledge managements and all dimensions of organizational culture including cooperation, compatibility, compliance and duty ($p \leq 0.001$).

Discussion and Conclusion

The findings of this research showed that there is a significant relationship between knowledge management and organizational culture as well as all its dimensions. Therefore, there is a positive significant relationship between cooperation dimension as one of the parameters of organizational parameters and knowledge management. It means that upon establishment of cooperation culture among personnel in an organization, there is an enrichment of knowledge management as well. The results of this study are in accordance with Tafavogh's (2007) findings (Tafavogh, M. 2007). In his study which was conducted at Shahid Beheshti University, Tehran, Iran, Tafavogh (2007) examined the relationship between organizational culture and knowledge management from the viewpoints of professors of management at governmental universities of Tehran, Iran. The results his study confirmed the effects of organizational culture like cooperation on knowledge management (Tafavogh, M. 2007). As a result, by establishment of common knowledge culture (cooperative) at an organization, it is possible to modify knowledge management accordingly.

The findings of this study also showed that there is a positive significant relationship between compatibility and knowledge management. These findings were also in agreement with Keshavarzi and Ramezani's (2011) findings in which they concluded that there is a significant relationship between knowledge management and compatibility index and disagreement phenomenon as an index of organizational culture (Keshavarzi, A. 2011). It means that more betterment of compatibility or betterment of values and relevant systems of powerful culture of organization will be resulted to more betterment of knowledge management as well.

The findings also showed that there is a positive significant relationship between compliancy and knowledge management process meaning that if the organization implements compliancy culture which is providing business requirements in practice, then all people will be more compatible with environment and find more compliancy power as well. Such relationship results in betterment of knowledge management process in the organization. In their research which was conducted in New Zealand, Pavlin and Mason (2002) also concluded that if an organization prefers to consider organizational knowledge management, it should apply some compliance managerial methods in order to have understandable and operational concepts of knowledge management at organizational level (Pauleen, D., 2002).

Duty dimension is another dimension of organizational culture which was studied in this research. The analysis of the results showed that there is a positive significant relationship between duty dimension and the knowledge management process. It means that upon establishment of duty culture by an organization and specifying a long-term procedure for it and simultaneous enrichment, it is possible to make better knowledge management process. The results of this study were in agreement with Pavlin and Mason's (2002) findings. They also concluded that if an organization intends to apply organizational knowledge management, it should find a suitable procedure to reflect knowledge management in organizational strategy (Pauleen, D., 2002).

Finally, this research showed that there is a positive significant relationship between organizational culture and knowledge management process. In his research, Karami (2005) also referred to the existence of significant relationship between organizational culture and establishment of knowledge management at Bahman Motor

Center, Iran (Meghdad, K. 2000). Moreover, DeLang and Fahey (2000) concluded that organizational culture is an effective factor in implementing knowledge management. In fact, they stated that effective knowledge management has a direct relationship with organizational culture (DeLong, D.W., 2000). Since knowledge management is critical for survival of organizations, it is proposed to recognize all effective factors on this process for better and more powerful implementation of knowledge management process as well as creating a suitable cultural space in which the organization is encouraged to create, develop, utilize, publish, maintain, reserve and evaluate any new knowledge. Therefore, with regard to this fact that organizational culture has a positive significant relationship with knowledge management process, all persons in charge should consider this fact that organizational culture is more important than IT for further effective performance of knowledge management.

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