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Relationship between knowledge management and organizational learning among physical education teachers

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ABSTRACT

Learning is the fundamental human process by which information and knowledge are generated, distributed and used. Increasingly, learning is also seen as a characteristic of organizations, linked to the key features of an organization's internal environment such as its culture, structure, management style and practices, and critically, the impact of formal and informal learning processes. Based on this, the purpose of this research was to examine the relationship between knowledge management and organizational learning among physical education teachers in Isfahan city. For this purpose, a total of 220 physical education teachers from Isfahan city participated in this research. There were 100 men and 120 women, and their ages ranged from 25-39 years-old. To data collection, all subjects filled in a Knowledge Management questionnaire (KMQ) and Organizational Learning Questionnaire (OLQ). The results showed that the correlation between knowledge management and overall organizational learning was that significant at the level of P<0.05. Furthermore, the correlation between knowledge management and organizational learning sub-scales was significant at the level of P<0.05. Thus, the strength of the correlations obtained in the present research suggests that the overall organizational learning and its sub-scales have a significant role in knowledge management.

Key words: Knowledge Management, Organizational learning, Physical Education Teachers, Organization

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INTRODUCTION

The growing importance of information and knowledge to organizational success and the need to manage the generation and distribution of these key resources are now a well-established feature of hi-tech companies [1-2].

Knowledge management (KM) is the planning, organizing, motivating, and controlling of people, processes and systems in the organization to ensure that its knowledge-related assets are improved and effectively employed [3]. Knowledge-related assets include knowledge in the form of printed documents such as patents and manuals, knowledge stored in electronic repositories such as a "best-practices" database, employees' knowledge about the best way to do their jobs, knowledge that is held by teams who have been working on focused problems and knowledge that is embedded in the organization's products, processes and relationships. The processes of KM involve knowledge acquisition, creation, refinement, storage, transfer, sharing, and utilization [5]. The KM function

in the organization operates these processes, develops methodologies and systems to support them, and motivates people to participate in them. The goals of KM are the leveraging and improvement of the organization's knowledge assets to effectuate better knowledge practices, improved organizational behaviors, better decisions and improved organizational performance [5-6].

Although individuals certainly can personally perform each of the KM processes, KM is largely an organizational activity that focuses on what managers can do to enable KM's goals to be achieved, how they can motivate individuals to participate in achieving them and how they can create social processes that will facilitate KM success. Social processes include communities of practice – self-organizing groups of people who share a common interest – and expert networks – networks that are established to allow those with less expertise to contact those with greater expertise. Such social processes are necessary because while knowledge initially exists in the mind of an individual, for KM to be successful, knowledge must usually be transmitted through social groups, teams and networks [4]. Also, King (2009,2008) argued that KM processes are quite people-intensive, and less technology-intensive than most people might believe, although a modern knowledge-enabled enterprise must support KM with appropriate information and communications technology [3-4].

On the other hand, learning is the fundamental human process by which information and knowledge are generated, distributed and used. Increasingly, learning is also seen as a characteristic of organizations, linked to the key features of an organization's internal environment such as its culture, structure, management style and practices, and critically, the impact of formal and informal learning processes [7]. An organization that dynamically deals with a changing environment should not only process information efficiently, but also create information and knowledge [8-9]. Nonaka et al. (1994) stated that analyzing the organization in terms of its design and ability to process information constitutes an important approach to interpreting certain aspects of organizational activities [8]. Organizational learning (OL) is considered to be one of the most promising concepts in the modern managerial literature [10].

Meany researchers such as Bapuji and Crossan, (2004) and Crossan and Guatto (1996) have seen exponential growth of interest in organizational learning, apostrophizing its importance, providing numerous definitions and many perspectives to the field [11-12]. Wall (1998), Nonaka and Takeuchi, (1996) and Dimovski (1994) stated that the research in the field of organizational learning resulted in numerous definitions and models that can be differentiated through criteria of inclusiveness, width and focus. Most definitions are partial, because they deal with organizational learning from only one theoretical perspective, disregarding the holistic conceptual view [13-15].

Also, Senge (1990) defines organizational learning as 'a continuous testing of experience and its transformation into knowledge available to the whole organization and relevant to their mission', while Huber (1991) sees it as a combination of four processes: information acquisition, information distribution, information interpretation and organizational memory [16-17]. Argyris and Schön (1996) are even less restricting in their definition, declaring that organizational learning emerges when organizations acquire information (knowledge, understandings, know-how, techniques and procedures) of any kind by any means [10]. In recent years there has been a growing interest in the relationship between organizational learning and knowledge management through complexity theory (19-21). The fusion of these seemingly quite disparate discourses provides new insights, not only into their fusion, but into each of the disciplines themselves. While the fusion of the fields has become the 'flavor of the month' in some quarters, little empirical work has been undertaken to identify the ways in which complexity clarifies or strengthens understanding of the experience of learning and its interaction with knowledge in work contexts [18-22]. Based on these documents, the purpose of this research was relationship between knowledge management and organizational learning among physical education teachers in Isfahan city.

MATERIALS AND METHODS

This study was the correlation study decision. Participants included 220 physical education teachers from Isfahan city. There were 100 men and 120 women, and their ages ranged from 25-39 years-old.

Instruments

To data collection, all subjects filled in a Knowledge Management questionnaire (KMQ) and Organizational Learning Questionnaire (OLQ). The Knowledge Management questionnaire (KMQ) was used to determined knowledge management in participants. The KMQ have 13 questions in 5- point Likert scale. Also, the

Organizational Learning Questionnaire (OLQ) asks about impact of various elements of organizational learning process and innovations on organizational performance. The questionnaire itself has three main parts. The first part assesses various elements of organizational learning process in organization. The second part addresses the issue of innovativeness. The third part aims to assess performance of organization. This questionnaire consist 85 questions in 5-point Likert scale. Also, the collected data was analyzed by descriptive (mean and standard deviation) and inferential (Pearson's correlation test) statistical tests at the P<0.05 significant level with SPSS Version 15.

RESULTS

In this research, table 1 shows the means (M) and standard deviations (SD) of knowledge management and organizational learning sub scales among physical education teachers.

Table1. Means and Standard Deviations variables used in this research

Variables	Means (M)	Standard Deviations (SD)
Knowledge Management	**50.5**	**1.5**
Overall Organizational Learning	**271.5**	**4.5**
Elements Of Organizational Learning	**124.5**	**2.4**
Issue Of Innovativeness	**75.3**	**2.8**
Performance Of Organization	**71.5**	**2.6**

In addition, the matrix correlation among all variables that used in this research presented in table 2. Results showed that the correlation between knowledge management and overall organizational learning was significant at the level of P<0.05. Furthermore, the correlation between knowledge management and organizational learning sub-scales was significant at the level of P<0.05.

Table 2. Matrix correlation between knowledge management and organizational learning

Variables	Overall Organizational Learning	Elements Of Organizational Learning	Issue Of Innovativeness	Performance Of Organization
Knowledge Management	**0.87***	**0.69***	**0.75***	**0.80***

** Significant at the level of P<0.05*

CONCLUSION

Results showed that the significant and meaningful correlations between knowledge management and organizational learning sub-scales (see table 2). Thus, the strength of the correlations obtained in the present research suggests that the overall organizational learning and its sub-scales have a significant role in knowledge management.

Based on these results, knowledge management (KM) is a divergence from the literature on the organizational learning [23]. Learning in organizations requires individual personal knowledge to transform into information that other members of the organization can use [24-25]. KM refers to the process in which organizations assess the data and information that exist within them, and is a response to the concern that people must be able to translate their learning into usable knowledge [26]. During the KM process the knowledge goes through different changes, and there are knowledge losses, both desirable and undesirable, where undesirable losses should be minimized as much as possible [27].

In the knowledge – based economy, knowledge is a major source of competition. The success of any organization rather than being depended on physical resources, capital, and assets, could be subject to intellectual capital [28-29]. Successful knowledge management is believed to have the potential of enhancing an organization's competitive advantage, customer focus, employee relations and development, innovation, and lower costs [30].

Knowledge is continually being created in any group, corporation or organization since the very interaction among people generates knowledge [31]. This knowledge also can enhance organization's ability to absorb and create knowledge which is a key to gaining competitive advantage and develop new products and services. One of the theories presented about knowledge conversion is Nonaka's spiral of organizational knowledge. Personal knowledge can become organizational knowledge through the dynamic interaction between tacit and explicit knowledge. This dynamic process is the essence of knowledge creation in an organization. These interactions will lead to four modes of conversion: socialization, externalization, combination, and internalization [8, 32].

Huber (1991) and Garvin (1993) stated that organizational learning process is a sequence of three phases: information acquisition, information interpretation, and behavioral and cognitive changes. Companies that have developed a strong learning culture are good at creating, acquiring and transferring knowledge, as well as at modifying behavior to reflect new knowledge and insight [17, 33]. Hence, organizations stressing learning must first acquire information, interpret it to fully understand its meaning and transform it into knowledge. At the same time, they must not forget the most important part – to implement behavioral and cognitive changes – in order to convert words into action [9, 33]. Furthermore, learning, through better knowledge and understanding, facilitates behavior changes that lead to improved performance [34-35].

A culture must be established that enables each organization to operate within its knowledge demands. What must be emphasized here is that each enterprise has a different environment that requires specialization [36]. Tidd et al. (2001) indicate that culture is an artifact of what people believe and how they behave; if there is a good fit, it will enable and reinforce innovative behavior. If it is contradictory to these beliefs for instance, restricting communication, stressing hierarchy—then it is likely to act as a brake on creativity and innovation [37].

Actually, if an organization's culture is centered on learning, and its structure is such that the actors within the organization can transmit knowledge, then human resources are more likely to feel empowered to learn. It is important for an enterprise to establish an environment that is apt to create and renovate its knowledge to keep pace with innovation. A knowledge-oriented culture challenges people to share knowledge throughout the organization. An organization can promote and reinforce an environment that enables learning, and hence leads to innovative capacities, through its cultural framework. The way this is done is going to be determined by the makeup and management style of each organization. Each organization has its own set of variables that must be taken into account [36-37].

On the other hand, Knowledge management (KM) and organizational performance are essential of the success in business. The different results in literatures that declare KM affects organizational performance positively [38]. In Darroch (2005) research, the results support some KM process positively affects performance. She claims that knowledge acquisition doesn't positively affect performance directly, and knowledge dissemination doesn't positively affect performance, either. Accordingly, the first objective of this paper is to re-examine the relationship between KM and organizational performance [39]. Since KM is an important antecedent, organizations should implement KM thoroughly. In practices, KM implementation almost means the construction KM system. This study suggests that KM implementation is the ability of organization to acquire, converse, and apply their knowledge. Generally, this research provides attention to the relationship among knowledge management and organizational learning. We hope it intrigues researchers to clarify the important relationship among capability behavior patterns, and measures of organizational performance, and leads to more comprehensive investigations.

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