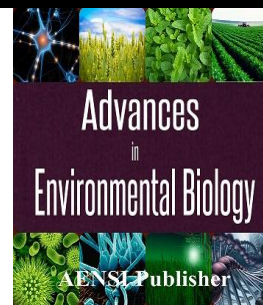




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Knowledge Management and Its Relationship to Academic Achievement in Students (Case Study at Islamic Azad University of Kermanshah)

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ABSTRACT

Knowledge management is a process that help organizations to find, select, organize and publish important information and is a proficiency is essential for activities such as problem solving, dynamic learning and decision making. Knowledge management can to improve a range of characteristics of organizational performance by enabling the company for subtle performance, but that alone is not enough, because knowledge management for be useable, requires employees to be committed to the organization and their profession, that accept management of knowledge with their heart and execute it [13]. Given the importance of this issue, current research was aimed to investigate the relationship between knowledge management and students' academic achievement of Azad University of Kermanshah city. Formation of the present study was based on the question, regarding the importance of students' academic achievement, what relationship is between knowledge management and academic achievement. Population of the study includes 465 students of Islamic Azad University of Kermanshah, based on a stratified random sampling 210 of them were selected as sample and to be more certain of respond to and the questionnaires and collecting them, the larger sample was considered and finally 246 questionnaires were collected and analyzed, For data analysis, SPSS software was utilized and also by means of average tests of a population, Kolmogorov - Smirnov, coefficient of correlation of Spearman and Friedman test were used.

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INTRODUCTION

Knowledge management seriously entered into organizational issues in the early 1990s, although the debate about the knowledge had started much earlier, in 1965 Marshall claims that much of the capital includes knowledge. He also believes that knowledge is the most powerful engine of production and thus, organizations should increasingly focused on its management [2] emphasizes that knowledge is intrinsically the common property of a group. In 1972 Habrm remarks that the knowledge should not be considered as an abstract entity, but is a product based on the intention and sometimes human's unconscious activity [5]. Complexity and breadth of the concept of knowledge management has made the same attitude about knowledge management is not shape. So, many pundits viewed from different angles and have define it. Despite this fact, some of the most common definitions of knowledge management are presented here: knowledge management is introduced as a set of organizational systematic and regular activities to achieve a greater value through the available knowledge. Available Knowledge includes experience and learned by individuals of an organization and all documents and reports within an organization [7].

Knowledge management involves human behavior, attitudes and human capabilities, business philosophies, patterns, practices, procedures, and complex technologies [13].

In another definition, knowledge management have been considered as a business activity with two major aspects:

- Consideration of knowledge element in the business activities: so that in all strategies, policies and implementation of the principles, knowledge element shows itself significantly.

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- Creation of intellectual capital of organization: that involve both obvious capital (recorded) and tacit assets (personal knowledge) and its positive results is on the agenda. Practically, knowledge management have been considered outside the organization as identification and specification of intellectual capital and creating new knowledge for competitive advantage on the world stage and within the organization also to facilitate access to information, sharing appropriate processes and access to information and communication technology [12].
- Knowledge management is the process of creating and sharing, transfer and retention of knowledge in such a manner that it can be used effectively in the organization [5].
- According to Simon, [12] knowledge management is a clever design of processes, tools, structures, etc., with the intention of improving, renovating, improving or sharing the knowledge that appears in each of the three components of intellectual capital, namely, structural, social and human. Management knowledge means improvement of knowledge and work processes. Improving knowledge work requires to be decrease the involvements of top-down. Employees should have the freedom and independence they need in their work to employ their knowledge for solving problems and make decisions. [9] designed a model is called the "model of base (building blocks) for building knowledge management" for knowledge management. The designers of this model see knowledge management as a dynamic cycle that is in constant rotation. The process of the model consists of eight components consisting of two external and internal cycles.

A) The outer cycle:

1. Determination of purposes of knowledge: knowledge management objectives should be derived from the organization's key objectives and identified in the two strategic and operational levels.
2. Assessment of Knowledge: how to achieve a specific purpose and use of the results as feedback, to determine or modify the purpose, relates in this section.

B) The internal cycle:

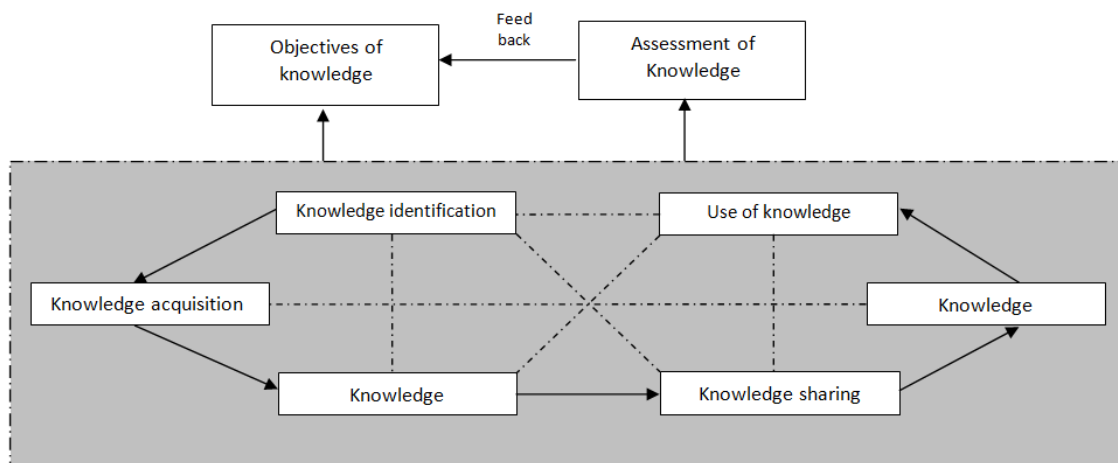
1. Identification of knowledge: external knowledge is to analyze and describe the environmental knowledge. Lack of transparency can be made inefficiency of decisions and repeat mistakes.
2. Knowledge Acquisition: Many companies import a considerable part of his knowledge from outside sources. Relationships with customers, suppliers, competitors and partners in a cooperative and collaborative work has a remarkable capacity to provide knowledge.
3. Development of Knowledge: How to create new specialties? Development of Knowledge is the cornerstone that is complementary of process of knowledge acquisition. Its main focus is on the development of new skills, new products and better ideas and more efficient processes.
4. Sharing and distribution of knowledge: how can knowledge be placed in its proper place? The basic requirement is to convert information and separate experiences to what the whole of organization is able to use it. At this stage the basic prerequisites are:
 - Everyone should know how much knowledge and with what level about the problem is and be able to do it.
 - How can we facilitate the sharing of knowledge?

Not necessary that everyone should know everything. So, the principle of division of individuals' capabilities in the area of distribution and sharing of knowledge must be defined significantly. The most important step her is analysis how the transfer of knowledge from the individual to groups and organizations.

5. Use knowledge: how can we ensure that knowledge is being used? The general concept of knowledge management is to ensure that the knowledge in an organization was employed effectively and fruitfully in favor of the organization.
6. Maintenance of knowledge: how can we ensure that we do not lose our knowledge? Skills obtained will not be available forever. Maintenance and selection of information, documentation and experience require management. Organizations often complain of the fact that the reorganization causes they lose some of their memory, so the process of selecting, storage, and regular updating of knowledge in which the future will be worthwhile should be organized carefully. If this is not performed the valuable expertise inadvertently excluded [9].

Filius [6] distinguished five main areas of knowledge management such as:

- Knowledge acquisition
- Knowledge Capture
- Knowledge Transfer
- Knowledge Creation
- Application of knowledge



Source: [9]

Fig. 1: Model of Basics for Knowledge Management.

According to Simon [12], knowledge management is a clever design of processes, tools, structures, etc., with the intention of improving, renovating, improving or sharing the knowledge that appears in each of the three components of intellectual capital, namely, structural, social and human.

According to Saint solution of puzzle of knowledge management definition is that remove what knowledge management does not fit in that article. Knowledge management including knowledge creation, Knowledge Acquisition, knowledge storage, knowledge publishing, knowledge sharing and finally knowledge application [3].

Management knowledge support and strengthening the following functional and important elements in formidable organization [10]:

Processes of discovery or making new knowledge and refining knowledge existing and create availability knowledge;

2- Knowledge sharing between individuals and across all organizational boundaries managing the flow of knowledge;

3- The creation and use of knowledge as a part of people's daily work and as a part of decision making of the application of knowledge.

Create effective system of knowledge management is one of the key factors in improve processes business. Often, needs of management knowledge only exist implicitly and conversion them to the clear formats is a difficult affair and meanwhile is vital. Special organizational structures are formed in order to management and distribution of knowledge and necessary processes is created to promote knowledge management. In the structures is spend a large cost to promote members effectiveness. This is true especially about virtual business systems that exchange information using the Internet (Knowledge management shapes models of the interaction between technologies, techniques and individuals. For example, information technology well act in regard to the collection, storage and dissemination, but it is powerless in the expression [2].

Research Objectives:

In this research according to context of knowledge management and its relationship to academic achievement, follows these objectives:

The main objective:

Determine the relationship between knowledge management and academic achievement in students of Islamic Azad University of Kermanshah

According to the main purpose of the study, following sub-objectives are raised:

1. Determine the relationship between knowledge acquisition and academic achievement in students of Islamic Azad University of Kermanshah

2. Determine the relationship between knowledge registration and academic achievement in students of Islamic Azad University of Kermanshah

1. Determine the relationship between knowledge transferring and academic achievement in students of Islamic Azad University of Kermanshah

1. Determine the relationship between knowledge creation and academic achievement in students of Islamic Azad University of Kermanshah

1. Determine the relationship between knowledge application and academic achievement in students of Islamic Azad University of Kermanshah

Hypothesis:

According to the research objectives, the hypothesis in form of a main hypothesis and five particular hypothesis based on the relationship between major indicators of knowledge management and academic achievement has been formulated as follows:

The main hypothesis:

There is a significant relationship between knowledge management and academic achievement of the students of Islamic Azad University, Kermanshah.

Particular hypothesis:

There is a significant relationship between knowledge management and academic achievement of the students of Islamic Azad University, Kermanshah.

There is a significant relationship between knowledge registration and academic achievement of the students of Islamic Azad University, Kermanshah.

There is a significant relationship between knowledge transferring and academic achievement of the students of Islamic Azad University, Kermanshah.

There is a significant relationship between knowledge creation and academic achievement of the students of Islamic Azad University, Kermanshah.

There is a significant relationship between knowledge application and academic achievement of the students of Islamic Azad University, Kermanshah.

MATERIALS AND METHODS

Because in this study, researchers sought to identify and evaluate knowledge management and its relationship with students' progress in the Islamic Azad University of Kermanshah, this study is based on materials and methods is a descriptive research of survey.

The population size is 465 people. Based on random stratified sampling, among them 210 sample were selected and in order to ensure further completion and collection of the questionnaires, the larger population were collected and eventually 246 questionnaires were collected and analyzed.

Information needed to conduct this study was obtained from the two following methods.

The library method:

In order to collect information about the literature and history of the study, books, theses, articles, databases and Internet sources were used.

Field method: in the field, counseling tools such as questionnaires and interviews with experts in the field of design and analysis of questionnaire have been used. In the present study, the main tool for assessment is questionnaire that is a common research tool and a direct method for obtaining the research data. To evaluate the variables, knowledge management questionnaire have been used which has composed of 33 questions that study the knowledge management based on the model Filius [6]. In this study while referring to the confidentiality of individual student, their academic achievement standards was total GPA of graduated semesters in college that were reported by the subjects.

As well in this study, to describe and analyze the collected data, descriptive and inferential statistics were used, the test applied in this study will be the Spearman correlation coefficient (Rs) for assumptions with regard to that in this study the relationship between two variables will be measured that shows the intensity of the relationship and the type of relationship, direct or reverse.

The hypothesis test:

The main hypotheses test:

There is a significant relationship between knowledge management and academic achievement of the students of Islamic Azad University, Kermanshah.

The statistical theory of the assumption is:

There is no significant relationship between knowledge management and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_0 : \rho = 0$
There is a significant relationship between knowledge management and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_1 : \rho \neq 0$

By performing test, at a confidence level of 95%, p_ vale is equal to 0.016 and less than 0.05 and consequently H0 is rejected and at a level more than five percent H1 is verified. In other words, there is a

significant relationship between knowledge management and academic achievement of the students of Islamic Azad University, Kermanshah.

The first specifically hypothesis test:

There is a significant relationship between knowledge acquisition and academic achievement of the students of Islamic Azad University, Kermanshah.

The statistical theory of the assumption is:

There is no significant relationship between knowledge acquisition and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_0 : \rho = 0$
There is a significant relationship between knowledge acquisition and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_1 : \rho \neq 0$

By performing test, at a confidence level of 99%, p -value is equal to 0.001 and less than 0.01 and consequently H_0 is rejected and at a level more than five percent H_1 is verified. In other words, there is a significant relationship between knowledge acquisition and academic achievement of the students of Islamic Azad University, Kermanshah.

The second sub-hypothesis: there is a significant relationship between knowledge registration and academic achievement of the students of Islamic Azad University, Kermanshah.

The statistical theory of the assumption is:

There is no significant relationship between knowledge registration and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_0 : \rho = 0$
There is a significant relationship between knowledge registration and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_1 : \rho \neq 0$

By performing test, at a confidence level of 95%, p -value is equal to 0.622 and less than 0.05 and consequently H_0 is not rejected. In other words, there is no significant relationship between knowledge registration and academic achievement of the students of Islamic Azad University, Kermanshah.

The third sub-hypothesis: there is a significant relationship between knowledge transferring and academic achievement of the students of Islamic Azad University, Kermanshah.

The statistical theory of the assumption is:

There is no significant relationship between knowledge transferring and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_0 : \rho = 0$
There is a significant relationship between knowledge transferring and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_1 : \rho \neq 0$

By performing test, at a confidence level of 95%, p -value is equal to 0.321 and less than 0.05 and consequently H_0 is not rejected. In other words, there is no significant relationship between knowledge transferring and academic achievement of the students of Islamic Azad University, Kermanshah.

The fourth sub-hypothesis: there is a significant relationship between knowledge creation and academic achievement of the students of Islamic Azad University, Kermanshah.

The statistical theory of the assumption is:

There is no significant relationship between knowledge creation and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_0 : \rho = 0$
There is a significant relationship between knowledge creation and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_1 : \rho \neq 0$

By performing test, at a confidence level of 95%, p -value is equal to 0.763 and less than 0.05 and consequently H_0 is not rejected. In other words, there is no significant relationship between knowledge creation and academic achievement of the students of Islamic Azad University, Kermanshah.

The fifth sub-hypothesis: there is a significant relationship between knowledge application and academic achievement of the students of Islamic Azad University, Kermanshah.

The statistical theory of the assumption is:

There is no significant relationship between knowledge application and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_0 : \rho = 0$
There is a significant relationship between knowledge application and academic achievement of the students of Islamic Azad University, Kermanshah.	$H_1 : \rho \neq 0$

By performing test, at a confidence level of 95%, p -value is equal to 0.014 and less than 0.05 and consequently H_0 is rejected and H_1 is approved. In other words, there is a significant relationship between knowledge application and academic achievement of the students of Islamic Azad University, Kermanshah.

Results and Conclusions:

Now, universities should be able to achieve the needed knowledge for innovation in their learning materials and improve the business processes and publish among their students and apply in all their daily activities. Due to the importance of knowledge management, knowing impact factors in facilitating this process is necessary [4].

Also according to the definitions of academic achievement, it seems because of that both the concept emphasis on students' interactions and communications and their success, it is necessary to test the degree of influence of the academic achievement from the knowledge management in the university.

Due to the above and the importance of academic progress, the researcher in this study aims to investigate and study academic achievement among students of Islamic Azad University of Kermanshah, examine its relationship with knowledge management. According to the study purpose, a particular hypothesis and five main hypotheses were tested and raised. These hypothesis were tested by Spearman correlation test.

The results of students' progress of Islamic Azad University of Kermanshah show that students are at a higher level than average and this indicates the suitable situation, but however according to confirm of relationship between knowledge management and students' progress and according to the research results of the researchers such as: [8,11,12] and the observations of the researchers during the study, recommendations for improving the status of cultural components are raised as follows:

According to the research objectives and the results obtained and researchers' observation during the study, the following recommendations are proposed:

- holding training courses and seminars tailored to the students' needs leads to greater dynamism in direction of the implementation of knowledge management in organizations.
- Possibility of access to internet by providing free Internet to students for using in the University and outside of classroom hours in order to updating their knowledge.
- Attend training classes by experienced teachers who have left university and have retired. Which in turn leads to a more dynamic atmosphere for learning the learning methods.
- Taking into account the intellectual property rights for previous findings and knowledge of students, for example, if a project based on the students' research has gone acceptable level, continuation of the path under the management or supervising the same individuals and if there is no possibility of organization, benefit from the cooperation of the group.
- Create a database (such as intranet sites) to inform students from other students' performance and benefit from their knowledge and abilities.

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