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The Relation between the Requirements of Knowledge Management and the Academic Human Resources Development in the Colleges of Education in the Jordanian Public Universities

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Abstract

This study aimed at identifying the level of the relation between the requirements of knowledge management and the academic human resources development in the colleges of Education in the Jordanian public universities. The population of the study consisted of (409) academic staff and the sample of the study, which was selected according to the stratified random sample method, consisted of (200) academic staff. And to achieve the objectives of the study, two instruments of the study were used to reveal the availability degree of knowledge management requirements and the extent of human resources development in the Jordanian public universities from the academic staff's perspective in the colleges of Education. The validity and reliability of the instruments of the study were asserted. The results of the study showed that the level of human resources development in colleges of Education was medium in all the fields and the degree of the availability of the requirements of knowledge management was medium in all the fields. The results also revealed the there was positive statically significant relation between human resources development and the requirements of knowledge management in the Colleges of Education in the public Jordanian universities. The study recommendation the necessity to have an incentive system that encourages the academic staff to apply their knowledge and expertise and the necessity to have more studies in this field in the future.

Keywords: Knowledge Management, Human Resources , Colleges of Education , Public Jordanian Universities .

I. Introduction

The current era is characterized by the quick change, accumulation of knowledge, the spread of the means of communication, ease of access to information and acceleration of technical terms. As result, contemporary living conditions pose a set of challenges in addition presence of any individuals with creative and innovative properties, who can adapt to the technological developments of time being. They have a sharp look to the future. This kind of individuals needs a modern management and is keen to raise their levels of knowledge.

In order to meet these challenges, including: scientific research, acceleration of technology, and performance of improvement, the application of knowledge management is regarded as the best way the organizations can adopt to adapt such considerable changes. Actually, this is carried out through conducting re-education workforce and training on knowledge management. In addition, building the knowledge base, undertaking the activities and practices, and adopting new policies and programs can help such organization do so.

As their role to produce knowledge, universities are most sensitive to such requirements of the development. The adoption of strategies and techniques of knowledge management at universities

is crucial and inevitable since, if applied effectively, it will improve the decision-making process, curriculum development, and scientific research

It could be argued that the resources whether they are available, technological, physical and organizational, they remain in an urgent need to the human resources in order to invest them so as t serve the objectives of universities. So, the investment of human resources is more important than that of the other resources. This study is intended to determine the relationship between knowledge management requirements and the development of human resources in the education faculties at all of the Jordanian universities. In addition, it looks into its relationship with the variables of academic rank and years of experience.

1.1 The concept of knowledge management and human resource development

There are many definitions which tackle the concept of knowledge management and human resource development including:

Knowledge Management: The Methodological Operation which provides knowledge to all employees in different sectors, through providing data and information and disseminating knowledge and information [1]. On the other hand [2] claims that it is

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a process through which the cognitive capital of the organization is invested so as to make efficient decision to provide the institution the needed experience.

1.2 Dimensions of knowledge management

There are three basic dimensions of knowledge management, namely [3]:

- 1 Technological Dimension: which means software, networks, databases of management of intellectual capital and unique technologies?
- 2- Organizational and Logistical dimension: which means getting the knowledge, management, storage, dissemination, process, and re-use in addition to the methods, procedures, facilities, and operations used [4].
- 3 The Social Dimension: which means sharing knowledge between human resources and the formation of groups of knowledge makers? In addition, it establishes a community and organization culture which is supportive to the regulatory knowledge along side with sharing and participation in personal experiences and building networks between individuals [5].

It is noted that in all of these dimensions, the knowledge management is seeking to provide solutions to the management through investing knowledge and resources, building knowledge memory, focusing on the exchange of knowledge and participating them through systematic access.

1.3 Knowledge management requirements:

The knowledge management requires the provision of infrastructure for each of: communication and information, human resources, the conviction and satisfaction, organizational culture, e-government and creativity[6]. The Knowledge management and project management are recognized to be of supreme importance to the competitive advantage of organizations as well as a major agent of change in the new era of the knowledge economy[7].

The justifications of applying the knowledge management on the institutions of higher education:

The regulatory environment for higher education institutions, especially the universities, is regarded as most suitable environments for the application of knowledge management and the ones of most need to apply the concept as compared with other institutions. That is because of the nature of their role assigned to them in the community. Besides, they, including all of their types and patterns, are responsible for preparing and creating the qualified human resources that are the vital element for all operations of community development, both at the level of the public sector and the private one. Thus, this necessitates the need for attention to adopt methods and practices of modern concepts, management, which contribute to raising the level of performance (education, research, and innovation) and lead to upgrade the quality of their output [8].

1.4 The relationship between knowledge management and human resource development

The emergence of knowledge management depends on human resources management which is associated with information technology in order to facilitate the process of multi-human interactions. The role of human resource management in the knowledge management is to disseminate knowledge among several methods including: workshops, conferences, seminars, etc.

1.5 Problem and questions:

The problem with the study discloses the relationship between knowledge management requirements and the development of human resources in the education faculties at the official Jordanian universities. Through to answer the following questions:

- 1. To what extent the human resources are developed in the education faculties at the public Jordanian universities?
- 2. To what extent the knowledge management requirements are available at the education faculties at the public Jordanian universities?
- 3- Is there a significant correlation between the requirements management and human resources development in the education faculties at the public Jordanian universities?

1.6 Objective of the study:

This study aimed at revealing the relationship between knowledge management requirements and the development of human resources n the education faculties at the official Jordanian universities from the viewpoint of professor.

1.7 The significance of the study:

The significance of the study gushes from the possibility of getting benefit of its results by the following institutions:

- 1. The public Jordanian universities:
- This study deals with this modern and contemporary issue, which is of great importance for universities due to its significant role in the process of human resources management.
- The results of this study cope with questioning the subject of scientific knowledge management and its impact on the performance of human resources at the Jordanian public universities and their outputs.
- A set of findings and recommendations could contribute to the effectiveness and efficiency of knowledge management and human resource management and could remedy the problems and challenges faced by the universities.
- 2. Researchers interested in this field.

II. Literature review

The impact of cultural factors on knowledge management through a literature review of knowledge management (content analysis) at the University of

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John U.S. for the year 1998-2002. The key findings of the study maintained that cultural factors that influence the management of knowledge are: information systems, organizational structure, rewards, operations, personnel, leadership[9].

The extent and effectiveness of the practice of knowledge management in the development planning and decision-making processes in the institutions of higher education. The sample was (450) people. The Key findings of the study indicated that providing infrastructure for the application of knowledge management has a positive impact on the development planning and decision-making along with the development of work and improving performance[10].

But investigating the relationship between human resource management and knowledge management at American universities, by reviewing research papers linking human resource management with knowledge management. The results indicated the most important need for further research is on the relationship between human resource management and knowledge management[11].

The effect of technological and cultural factors on social consolidation of the concept of knowledge management in Iranian university "Azad". The researchers selected a random sample of (162) individuals. The key findings determined that information technology had a significant role in establishing and adopting knowledge management. Yet, human resources management does not have a role to do so[12].

But on the other hand [13] aimed at revealing the relationship between knowledge management requirements and the impact of this relationship on organizational performance excellence in the Ministry of Higher Education. The study sample consisted of (300) individuals. The main results indicated a correlation between the requirements of knowledge management and operations on one hand, and staff satisfaction, institutional learning and growth, and the efficiency of internal processes on the other.

The human resources management and its relationship to knowledge management in the faculties of Physical Education at the Jordanian public universities from the point of view of faculty members. The study sample consisted of (75) faculty members. The main results showed a correlation between human resource management and knowledge management [14].

The identifying the factors, affecting the application of knowledge management in Jordanian universities on the unity of the human resources in the middle and upper management. The study sample consisted of (163) individuals. The key findings showed that the degree of implementation of knowledge management at the University of Jordan was moderate[15].

The role of knowledge management in the development of human resources Academy at Palestinian universities in Gaza and its relationship with the years of experience. The study sample consisted of (196) professors. The results showed that the degree of knowledge management practice for academics were moderate [16].

2.1 The community and sample of the study

The study population consisted of (409) subjects who were selected randomly. Questionnaires were distributed to all members of the sample, and 200 responses have been recovered, which account for (90.9%) of the overall total questionnaires and forms (48.8%) of the community. Table (1) shows the distribution of the sample study by both the university and years of experience.

Table (1): repetitions and percentages due to the study variables

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The variables	Categories	Repetition	%	
	Less than 5 years	26	13.0	
Experience years	5-10 years	61	30.5	
	More than 10 years	113	56.5	
	Professor	31	15.5	
Academic Rank	Associate professor	63	31.5	
	Assistant professor	88	44.0	
	Full-time lecturer	18	9.0	
	Sum	200	100.0	

2.2 The variables of the study

The study includes a number of variables, namely:

First: intermediate variables

- Rank and levels are: Professor, Associate Professor, Assistant Professor, and Lecturer.
- The number of experience years and levels are: (less than 5 years, from 5 10 years, 11 years and over). Second: the dependent variable: The relationship between the requirements of knowledge management and human resource development in the education faculties at the public Jordanian universities.

III. The Study Tools

To achieve the objectives of the study, two tools were designed to study and reveal the relationship between knowledge management requirements and the development of human resources. The first part included the academic rank and years of experience. The second part of the study tool included the questionnaire of development of human resources management of (28) items distributed on (5) areas: human capital, training and skills development, the system of incentives and rewards, participating in decision-making, and performance evaluation and follow-up. In addition, a

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questionnaire of the requirements of knowledge management is consisted of (27) items distributed on (3) areas: infrastructure and information technology, organizational culture and logistics of knowledge, and the organizational structure of knowledge. It has been used five graded scale of (very high, high, medium, low, very low), by grades (5, 4, 3, 2, 1), respectively.

3.1 Validity of study tools

To verify the validity of the tools, they were presented to the university professors who specialize in educational administration and information technology. They were (7) arbitrators in the Balqa Applied University and the University of Jordan. Their observations were taken into account, regarding to the amendment, deletions, additions, and re-drafting by (75%).

3.2 Reliability of the study tools:

To ensure the reliability of the study tools, the internal consistency was calculated on a retrospective sample from outside the study sample consisting of (10) subjects by Cronbach's alpha equation. Table below shows these coefficients. These ratios considered appropriate for the purposes of this study.

Table (2) internal consistency coefficient Cronbach
Alpha

Alpha		
Fields	Internal	
	consistency	
Human Capital	0.76	
Skills Training and Development	0.79	
Incentives and awards Systems	0.78	
Pariticpation in decison making	0.75	
Assessment of performance and	0.78	
follow-up		
Improving the human resourcses as	0.88	
a whole		
Infrastudcture of IT	0.84	
The reguklatory cutltyre and	0.83	
Information logistic		
The regulatory system of	0.87	
knowedlge		
The fields	0.92	

IV. Statistical treatments

To answer the study questions, a statistical package (SPSS) was used. In addition, averages and standard deviations were also used. Further, Pearson correlation coefficient between the development of human resource management and knowledge management requirements in the education faculties in the public Jordanian universities was used.

4.1 Findings and discussion:

The study results will be discussed according to its questions, depending on three levels. The levels of this term are as follows:

- From 1 2.33, The level practice is weak.
- From 2.34-3.67, The level practice is average.
- From 3.68-5, The level practice is high.

The first question: To what extent the human resources are developed in the education faculties at the public Jordanian universities?

To answer this question, averages and standard deviations for the development of management Human Resources in the education faculties at the public Jordanian universities were calculated. and Table (3) shows that.

Table (3) averages and standard deviations for the development of human resources management in the education faculties at the public Jordanian universities in a descending order

No	Field	Average	Standard deviation	Level
1	Human Capital	3.52	.725	Averag e
2	Skill Training and develop ment	3.32	.643	Averag e
5	Perfoem ncae assessme nt and follow up	3.27	.715	Averag e
4	Particapt ion in decision making	3.14	.791	Averag e
3	Incentiv es and wards systems	3.04	.687	Averag e
		3.27	.558	Averag e

The second question: "To what extent the knowledge management requirements are available at the education faculties at the public Jordanian universities?" To answer this question, the averages and standard deviation were calculated for the availability requirements of knowledge management in the faculties of education at public Jordanian universities Jordanian. The table (4) shows that.

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Table (4): averages and standard deviation for the performance of a sample study on the

No	Items	Averag es	ST	Level
3	Structure of Knowledge Management	3.45	.67 2	Avera ge
1	Infrastructure of Information Technology	3.41	.65 2	Avera ge
2	organizational culture and logistics management of knowledge	3.30	.70 9	Avera ge
Requirements of knowledge management as a whole		3.38	.62 7	Avera ge

requirements of knowledge management in descending order

The third question: Is there a significant correlation between the requirements management and human resources development in the education faculties at the public Jordanian universities?

To answer this question, Pearson correlation coefficient between the development of human resource management and knowledge management requirements in the education faculties in the public Jordanian universities was calculated. Table (5) shows that.

Table (5): Pearson correlation coefficient of the relationship between the development of human resource management and knowledge management requirements in the education faculties in the public Jordanian universities

iversities					
The field	Correlation Coeffeciant	IT infrastucture	Cultural organizational and logistical knowledge	The organizational structure of the knowledge	the requirements of knowledge management as a whole
Human capital	Correlation coefficient	.824**	.742**	.747**	.837**
	Significance	.000	.000	.000	.000
	No	200	200	200	200
Skills training	Correlation coefficient	.722**	.733**	.602**	.752**
and	Significance	.000	.000	.000	.000
developm ent	No	200	200	200	200
Incentive s and awards systems	Correlation coefficient	.201**	.374**	.214**	.285**
	Significance	.004	.000	.002	.000
	No	200	200	200	200
Particpati on in	Correlation coefficient	.750**	.809**	.634**	.801**
decison	Significance	.000	.000	.000	.000
making	No	200	200	200	200
Performa nce	Correlation coefficient	.792**	.832**	.715**	.849**
evaluatio	Significance	.000	.000	.000	.000
n and follow-up	No	200	200	200	200
Develop ment of	Correlation coefficient	.830**	.879**	.738**	.890**
Human	Significance	.000	.000	.000	.000
resources	No	200	200	200	200

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V. Conclusions

Knowledge managements is fast becoming a key success factor for many universities, Using a system of incentives to encourage academics to apply their knowledge ,expertise and participate with each others. Linked to the system of incentives and rewards actually how creativity and innovation knowledge practiced by academics so that the distinction between academic and according to the level of the exercise of knowledge, all of which encourages academics whatever academic rank Use the process of evaluation for academics according to their knowledge sharing especially tacit knowledge, and not only by traditional methods of assessment.

The human capital is the key to the success of any university, and exploited well give colleges of education a decisive competitive advantage between them and other colleges. There is a weakness in the system material and moral incentives in the university in general and in the Faculty of Education in particular, and the lack of support to the developments and the economic crisis we are living at the present time.

Organizational structure of knowledge in the university is flexible and the ability to keep up with the use of renewable knowledge, and facilitate the exchange and sharing of knowledge among all employees at the college. On the other hand, provides an organizational culture that supports and assists practices and knowledge management applications through participation and exchange of experiences and information and cooperation through several methods (workshops, conferences, and seminars ...)

Grants to a positive relationship between the development of human resource management and knowledge management requirements in the colleges of education official Jordanian universities. And the reason may be due to the fact that the application of knowledge management enhances the use of human resources in the university environment, and the preparation and the creation of qualified human resources and the Directorate necessarily requires attention to the methods and management practices such as knowledge management A healthy interaction between knowledge management efforts and the existing organizational culture will undoubtedly result in changes to that culture, which may indeed lead to the competitive and successful application of knowledge management initiatives.

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