

# **RELATIONSHIP BETWEEN THE KNOWLEDGE MANAGEMENT PROCESSES AND THE ADMINISTRATIVE EMPOWERMENT WITH THE EMPLOYEES OF THE MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH- JORDAN**

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## **Abstract**

This study aimed at identifying the practice degree of the knowledge management processes and their relationship with the administrative empowerment strategy with the employees of the Ministry of Higher Education and Scientific Research in Jordan. The study sample consisted of all the administrative employees at the directorates and departments of the Ministry of Higher Education (n=153) in the University academic year 2011/2012. Two tools were utilized for data collection. First, to measure the employees' practice degree of the knowledge management process. Second, to measure the degree of the employees' empowerment. The means, standard deviations and Pearson correlation coefficients were employed as well. The study results demonstrated that the practice degree of the knowledge processes management was high, and the employees' empowerment degree was high either. Furthermore, there was a statistically signification relationship between the knowledge management process and the employees' empowerment degree. In the light of the results, the researcher recommended holding training courses and workshops for the applications of the knowledge management processes; working toward establishing trust among the employees to empower them and reinforces their inter-communication, since they are deemed the intellectual capital and the success base of the Ministry work, through investing and in and developing their energies and cognitive capabilities.

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**Keywords** : Knowledge management, administrative empowerment, Ministry of Higher Education and Scientific Research.

## **Introduction**

The educational institutions are living an age in which the knowledge is growing at un-preceded levels, and workers in such institutions cannot advance without taking up with this education and knowledge development. Therefore, knowledge management became one of the basic developments in thought and managerial practice, and the most suitable for coping with the accelerating changes in the twenty-first century. This world, in which the production, eliciting, employment and utilization of knowledge the dominant property, and one of the indicators through which we can measure the degree of the institution advancement and its ability to achieve worthiness and excellence, in a world that heavily draws in its economy on cognition. As such, these educational institutions viewed their workers as the base to depend upon in realizing the various objectives, through their administrative empowerment by means of training, boosting their abilities, granting them disposition freedom, decision taking, and achieving the effective participation in managing these institutions.

Knowledge, or cognitive management, as well as the administrative empowerment concepts are new in the educational management science, in which interest had been increasing over the past decades. This resulted in the emergence of many practices of these concepts, which differed by the specializations of the researchers and their views. Such concepts are still in the development and exploration stage. The application of the method of knowledge management and administrative empowerment of the workers in the modern educational institutions seems to provide new abilities and distinct competitive possibilities. This method provides broad potentials of information technology and information management, avails for it an accurate system for management and practice of the various occupational processes. It further comprises a complementary and integrative part of the management philosophy, notions, culture, entrances, and trends in practicing and managing its works (Al-Qatarneh, 2006).

As though, the international commissions and its specialized developmental organizations are interested in the cognitive gap, which became separating between the advanced countries and third world countries. The studies and reports of the expertise had shown that the vast majority of these countries populations, as well as their organizations, are suffering a cognitive poverty, considering this poverty and drought are the main cause of the weakness of the inter-countries investment, and the severest obstacle facing the comprehensive and sustainable development (Honsel & Bell, 2001).

Knowledge management today is the more acceptable entrance of the academics and administrative people to develop the age organizations, treat their problems, enable their leaderships, and qualify their employees in order to become knowledgeable, and contribute in filling the gap between what they know and what they apply. It was also supported by the research centers, expertise houses and international consultations, after seeing the positive results that were achieved by many companies and organizations which adopted them in advance. Knowledge management includes, as described by Awan & Ghaziri (2004), the following processes:

- Knowledge Generation: the pool of processes that include knowledge production, discovery, purchase, absorption, inventions, possession, gaining and creation from its different sources, such as experts, specialists, international knowledge centers, databases and documents, using many means, methods and tools.
- Knowledge Sharing: exchange of thoughts, skills, experts and practices among the workers and customers so as to grow and augment with them.
- Knowledge Application: knowledge organizing through best knowledge taxonomy, indexing, categorizing methods, and retrieval of knowledge by availing the field before the workers and clients to have an access to knowledge, easily and rapidly.

Due to the importance of knowledge in the higher education institutions, its management importance emerged. Knowledge management is represented in the methodological process to orient the knowledge processes and ensure its effectiveness. It is a gate to add or create added value through the amalgamation or composite among its processes, so as to find cognitive synthesis, better than what they currently are, such as data or information, by launching the intellectual capacities and cognitive abilities of the workers of the Ministry of Higher Education and Scientific Research, at all levels. That is to build and develop the required abilities to deal with the variables and increase identification of the change problems, and anticipate them at an early point, which allows the Ministry to be ready to face them and avail the chance for their growth and development toward the best (Laudon & Laudon, 2007).

The empowerment concept first emerged in the late 1980s, and enjoyed promotion and popularity in the 1990s, which resulted of the increasing focus on the human factor inside the educational institutions of the various types. This concept is crystallized as a result of the development of the modern administrative thought, particularly in the transformation process from the control and command institution into the empowering one, as well as the ensuing

changes in the environment of the organization. There are also changes in the administrative concepts which had an impact on the twenty-first century organizations, in their race for excellence, and for achieving the competitive characteristic. Such race perhaps does not exclude any single organization, as they are influenced by these changes and transformations and that race for applying new concepts, as well as adopting developments such as transformation into the educated organization, organization of knowledge and administrative empowerment, the total quality management programs, and other developments in the administrative concepts. Such concepts are no longer deemed academic concepts, rather they are perceived as managerial practices in the organizations that seek development, renovation and excellence (Abdel Wahab, 2006).

Administrative empowerment is the most assurance of the survival and continuity of the organization. It contributes in raising the morale and satisfaction of the employees, as they feel having availed the opportunity to show their abilities. They further listen to the higher management praise and trust in them. This satisfaction, in turn, contributes to the guaranteed disposal freedom in enriching the creative thinking and endeavor to improve performance. Moreover, empowerment leads to the speed of attending the complaints, suggestions and problems of the students and local community. It is a basic factor in the educational institutions success and to continue existence as effective and successful, particularly, the governmental educational institutions became amidst an ascending competitive environment with the special educational institutions (Wilkinson, 1998).

The empowerment concept is a modern one in the administrative thought, and one of the methods that help the management release the potential powers of the employees, i.e. their knowledge, experience and efforts. It also helps in providing a healthy organizational environment characterized by sharing, understanding, opinion freedom, respect of the individuals, and availing the chance for the individuals to provide the best of their experiences and efforts (Nateman & Snell, 2002).

The administrative empowerment secures performance effectiveness of the workers based on the knowledge management processes, utilization of the human resources more efficiently, development of the service provided and quality thereof, and improvement of the workers motivation and commitment as regard to the work implementation. It further enhances the positive feeling with the workers and provide them with a sense of personal and professional of balance, and providing them an opportunity to practice the cognitive exercises, in order to find the alternatives and effective methods to implement the works, in addition, enhancing the occupational satisfaction of the workers. In this aspect, Daft (2001)

suggested four dimensions to form the managerial empowerment with the workers and their success:

- Information: providing information about all the features of the organization and reporting the same to the working individuals.
- Knowledge and Skill: workers' possession of knowledge and skill is an important and basic factor in the area of applying the empowerment strategy, securing its success, and contribution in shared efforts to achieve the goals of the organization.
- Power: possession of the individuals the power required to take the core decisions seems essential in applying the empowerment strategy, as this power offers freedom to take the daily decisions, whenever needed, and take the steps without the need for direction.
- Rewards: i.e. rewarding the employees for their distinguished performance in the organization.

Yet, the development of the Ministry of Higher Education and Scientific Research requires an integrated matrix of the modern administrative methods, such as: carrying out the knowledge management processes, workers' administrative empowerment, which helps addressing the challenges and solving the problems. It also helps in administrative development and excellence in a world characterized by the renewed and accelerating changes. In this concern, the Ministry of Higher Education and Scientific Research developed its strategic plan (2011-2013) within the framework of seeking the completion of what had been done during the implementation period of the former plan (2007-2010) for the first time, especially those programs and projects concerning supporting the independency of the official institutions of the higher education. Furthermore, the Ministry is seeking for the development of the quality of the services provided and how to deliver to the concerned parties, and establishment of the interactive competitiveness concept. All the works, of their different positions and levels, equally worked during the last two years to seek ways to develop the individual and institutional function in the Ministry, toward achieving the goals of the higher education, and reinforcement of the core values of the Ministry, at the foremost is the values of impartiality, transparency, avant-gardes and excellence in providing services to realize the satisfaction of the recipient of the service of the Ministry, within the framework of carrying out knowledge management processes, which needs empowerment of the workers at their worksites.

The Ministry of Higher Education and Scientific Research further aims at organizing and developing the higher education sector in Jordan, and supervising the higher education

institutions. Since then, the Higher Education Council is moving into that direction through setting policies and preparing strategies that added to the direction and organization of work with the higher education sector and its institutions in Jordan. The Ministry, through its directorates, had a number of committees specialized in implementation of the general policies of the higher education, offering student grants and loans in the public universities, recognition of the Non-Jordanian higher education institutions, equivalence of their certificates, conducting cultural and scientific agreements concerning the higher education with the brotherly and friendly countries, attending the affairs of the students studying abroad, as well as the incoming students to the Jordanian higher education institutions, representing the Kingdom in the conferences, seminars and activities related to the higher education, both inside and outside the Kingdom, providing the Education Council with any studies, information or data, and providing all types of support of human resources, supplies and equipment. This is in addition to projects built on developing the work of the higher education sector or the Ministry. This makes it in need for applying a knowledge management processes strategy through:

- Adherence to the knowledge management and spreading out awareness in its importance.
- Understanding the internal and external knowledge needs.
- Collection of the required data and information, and analyzing them for the purpose of making use of.
- Publishing and circulation of knowledge.
- Maintenance of the confidentiality and security of the information.
- Proper planning and implementation of the knowledge management.
- Controlling an evaluation of the knowledge management strategy.

To achieve this, work should be done toward empowering the workers of the Ministry of Higher Education and Scientific Research through providing the appropriate training, knowledge and powers related to the nature of their work and the supplies required to enable them carry out their tasks to the best possible extent. The vision of the Ministry of Higher Education and Scientific Research lies in providing a distinguished higher education through the mission of the Ministry, providing "enabling the higher education institutions focus on their basic tasks and responsibilities, through support and follow-up implementation of the policies and strategies of the higher education, establishing the criteria of and reinforcement mechanisms of the accountability, fairness and transparency in providing the support and distinguished services for the higher education students, and finally, adoption of creativity

and excellence within a shared concept with the public sector (Ministry of Higher Education and Scientific Research).

The Ministry is also known for the services provided directly to its clients of students and their guardians, most of these services are related to individual needs. This requires the Ministry to observe the fairness and transparency criteria, and thus the Ministry carried out a knowledge management processes program concerning the development, improvement and computerization of the services provides. The beginning came in the academic year 2010/2011, when it developed the unified acceptance processes to become a full electronic service process and for all its stages, starting with submitting the admittance application, until the announcement of the results. Furthermore, work is in its way to develop and computerize all the directorates, units and departments of the Ministry, so that it will include the service for the Non-Jordanian certificates equivalence, as well as all whatever concerns the scholarships, grants and loans offered to the students..

Mgbeke (2007) sees that the successful adoption of empowerment as a strategy is the basic factor in increasing the organizational and competition effectiveness in the business environment. It is also possible to look to empowerment as an effective strategy, especially in the knowledge management domain. Therefore, the efforts of the academics and administrators efforts resulted in the development of a modern input for the human resources management, that is the workers' administrative empowerment in the educational institutions for the purpose of applying and implementing the knowledge management processes, and putting them into conceptual framework good enough for actual application, and increases the activities of the educational institutions, among which is the Ministry of Higher Education and Scientific Research. As such, this study had been made to spot the lights on the relationship between the knowledge management processes with the workers and their administrative empowerment in the Ministry of Higher Education and Scientific Research.

### **Study Problem**

Application of the knowledge management processes is a modern administrative, educational concept, which had spread out with the beginnings of the twenty-first century in the educational, service institutions. Even though, many of these institutions lack a clear vision and mission; because the perception of the importance of relationships between the application of the knowledge management processes and administrative empowerment strategy for the workers, through their ability of innovating new methods to perform the works of the institution, is still limited. Furthermore, most of the managers, especially in the developing countries, are still holding the notion that providing knowledge to the workers in

the institution will enable and empower them both cognitively and psychologically, a case that (they believe) will be at the cost of their (the managers) power and authority. This is mirrored in the weakness of trust in the workers, and availing no chances before them to develop their skills and express their creative abilities at work. Through the follow-up of the policies of the Ministry of Higher Education and Scientific Research, its executive programs and work systems, we can anticipate that there are several parameters in applying the knowledge management processes, without making sure of their relatedness and contribution in the administrative empowerment of the workers. Thus, the study problem could be coined in the following question: "What is the relationship between the knowledge management processes and the administrative empowerment strategy with the workers of the Ministry of Higher Education and Scientific Research in Jordan?"

### **Study Questions**

- 1) What is the practice degree of the knowledge management processes by the workers in the Ministry of Higher Education and Scientific Research in Jordan?
- 2) What is the administrative empowerment degree of the workers in the Ministry of Higher Education and Scientific Research in Jordan?
- 3) Is there a statistically significant relationship at ( $\alpha=0.01$ ) level between the practice degree of the knowledge management and administrative empowerment degree of the workers in the Ministry of Higher Education and Scientific Research in Jordan?

### **Study Objective**

This study aimed at identification of the relationship between the practice degree of the knowledge management process by the workers in the Ministry of Higher Education and Scientific Research and its relationship with their administrative empowerment.

### **Study Importance**

It is anticipated that this study will benefit the workers in the Ministry of Higher Education and Scientific Research, particularly the directors of the departments and heads of sections, for the purpose of employing these results to develop their potentials and abilities in the administrative educational work domain. It also benefits the workers, through its results, in the administrative training fields, by employing it in preparing the educational programs. In addition, to instruments had been constructed, which validity and reliability had been ensured, that could be used in future research and studies.

### **Study Limits**

This study had been limited to the workers in the Ministry of Higher Education and Scientific Research during 2011/2012, and its results can be defined by the validity and



reliability degree of the instruments employed in the study, as well as the responses of the individuals thereof.

### **Procedural Definitions**

**Knowledge Management:** is the methodological process for providing knowledge and getting it accessible in the higher education sector, which will, in turn, provide an opportunity for increasing knowledge, through availing the data and information and publishing knowledge and information (Laudon & Laudon 2007).

**Administrative Empowerment:** meaning the administrative strategy based on offering the workers in the Ministry of Higher Education and Scientific Research the authority of disposition, decision taking, and actual participation by their part in managing their works. It also means their problem solving, creative thinking, accepting the administrative responsibility and self-control while performing their duties.

### **Literature Review**

The researcher examined a number of previous management and administrative empowerment-related studies, including:

Alma'ani's (2009) study aimed at identification of the workers envision of the workers toward the administrative empowerment concept and its effect in their administrative creativity. Employing the qualitative method, the results of the study indicated that workers feel a moderate level of empowerment, for many reasons including: injustice and un-objectivity of the promotion system; meager participation in decision making, low level of the information system, and lack of adopting clear training plans.

Al-Mata'ani's (2008) study which aimed at exploration of the factuality of the knowledge management in the higher education institutions in the Sultanate of Oman, then construction of a pattern for these institutions. One of the most important results was: that the application degree of the knowledge management at the higher education institutions of the Sultanate of Oman was medium throughout all the knowledge management processes.

Feliciano (2007) conducted a study aimed at identifying the technological and organizational aspects of the knowledge systems success criteria, and focusing on the process for building an organizational knowledge base for the practical reuse in the organizations that apply knowledge management in the United States of America. The results of the study showed that there are many empowerment factors that make knowledge management more effective, and encourage the knowledge workers for more interaction with the knowledge base, such as the criteria for transparency, adaptation and reliability.

The study of Abdelghafour (2007) aimed at defining the extent of observing the knowledge management requirements in the university teaching. This was achieved through a questionnaire included the utilizations requirements of the knowledge management in the university study. The study population was (134) of the faculty of AnNajah National University, Arab-American University, and the branches of Jerusalem Open University in Nablus, Tulkarim and Jenin. The study concluded that the observation degree of applying the knowledge management in the university teaching was medium at the institution level.

McCarthy's (2006) study aimed to assure whether the knowledge management already applied in trade and industry is applicable in the higher education domain. The study made sure of integrating the knowledge management activities into the organizational culture of the higher education institutions in the United States of America through the use of the case study method. The result showed that the development of knowledge management was of noticeable benefit for the workers in the higher education institutions, especially in the scientific research domain. Further, the study outlined the weaknesses of knowledge performance in specific points, especially those aspects that require knowledge sharing with the different departments.

Al-Assaf (2006) conducted a study aimed at revealing the empowerment level of the academic leaderships in the public Jordanian universities, their relationship with the organizational commitment, and occupational stability of the full time Jordanian faculty members of the public Jordanian universities. The study sample included (541) faculty members and indicated that the occupational empowerment practice degree with the academic leaderships of the public Jordanian universities was medium. The results further revealed a positive statistically significant relationship between the practice degree of occupational empowerment by the academic leadership of the public universities and the occupational commitment of the faculty members of these universities.

Comm and Mathasisel's (2005) study aimed at identifying the importance of empowerment and participation in the development and innovation processes in the American public universities. The study, which was a field study, included (18) public universities in the United States of America. It indicated the importance of empowerment and participation in the success of the universities and their excellence. It further showed that the change and innovation initiatives in the universities must be based on an effective and constructive basis, founded on the spirit of initiation and objective change.

Keeley (2004) made a study aimed at defining the extent of the effectiveness of knowledge management in developing the planning and decision taking in many kinds and

styles of the higher education institutions in the United States of America. The study concluded that there is a strong relationship between the effective institutional, organizational education and the existence of an effective official program and the support of the knowledge management, such as the infrastructure of systems, equipment and multimedia.

Finally, Al-Keelani (2002) made a study aimed at developing a strategic plan to accommodate the values resulting from application of the cognitive economy in the educational management. The study resulted in setting a basic plan through defining the values of the cognitive economy, estimation of the needs, planning procedures and how to obtain the validity of the procedures and employment.

It is worth noticing that the previous studies did not examine the relationship between the knowledge management and administrative empowerment procedures for the workers directly. Therefore, this study was made to compensate the shortage of studies in this area. It further addresses a community in a service ministry concerned in the higher education and scientific research, which distinguishes this study from other studies.

### **Methodology**

The study pursues the correlation survey method and utilized the questionnaire as means of data collection about the two variables of the study.

### **Study Population and Sample**

The study population consisted of all the administrative workers in the directorates and sections of the Ministry of Higher Education and Scientific Research (n=212) during the academic year 2011/2012.

They were all administered the questionnaire and (153) were returned bringing about a 72% of the total study population.

### **Study Management**

The researcher developed a questionnaire depending on the theoretical framework and related previous studies. The questionnaire was constructed in two parts. First, statements included the domains of the knowledge management, (27) items, with their different dimensions, consisting of three areas: knowledge generating, shared knowledge, and knowledge application. Second, statements include the administrative empowerment, (22) items, with their various dimensions. Thus, the questionnaire included 49 items. Each had been given a graded value as per the Likert five-point scale to estimate the agreement degree, namely: very high (5), high (4), medium (3), low (2), and very low (1).

### **Validity of the Instrument**

For the purpose of realizing the validity of the instrument, the researcher followed the content validity method. The instrument had been presented to (12) competent, experiences

and specialized arbitrators in the field of educational management, in order to make their views about the instruments in terms of:

- Item measurement for the purpose they were prepared to measure.
- Clarity degree of the item and correct wording thereof.
- Any amendments or additions.

The remarks and views of the arbitrators were taken into account and followed as well. In this concern, the total items were (54), and the researcher amended them in the light of the views of the arbitrators, to become (49) only. Accordingly, the views, remarks and item amendments of the arbitrators were deemed sufficiently assuring the validity of the instrument for the purpose of study application.

### **Study Reliability**

To assure the study instrument reliability, the internal consistency coefficient was calculated among the questionnaire items, as per Gronbach Alpha coefficient. These values were sufficient for the purposes of the study, as clearly shown in Table (1).

**Table (1): Values of the Internal Consistency of the Study Variables**

| No | Item No | Variable                       | Gronbach Alpha Coefficient |
|----|---------|--------------------------------|----------------------------|
| 1) | 1-27    | Knowledge Management Processes | 0.89                       |
| 2) | 28-49   | Administrative Empowerment     | 0.87                       |
| 3) | 1-49    | The Overall Performance        | 0.90                       |

These values are sufficient for the purposes of the study instrument.

### **Statistical Processing**

After the data collection process from the study sample individuals was completed, the data, the means and standard deviations were posted about the first and second questions. Pearson Correlation Coefficient was employed to answer the third question. The means were then grouped in order to determine the practice degree of the knowledge management and administrative empowerment processes, as per the following: (less than 2.33=few), ( from 2.33 to 3.66=medium) and (higher than 3.66=high).

### **Study Results and Discussion**

Question No. 1: What is the practice degree of the knowledge management processes by the workers in the Ministry of Higher Education and Scientific Research?

To answer this question, the means and SD's of the estimations of the study sample individuals were calculated on the items of each of the aspects, separately, within the following domains:

**First: Knowledge Generating****Table (3): Means and SD's of the Items on the Knowledge Items of Knowledge Management Generation a, Arranged in a Descending Order by the Mean values**

| Rank | No. | Items  | Mean | SD   | Level  |
|------|-----|--|------|------|--------|
| 1    | 5   | The Ministry follows a strategic plan for its knowledge management processes.  | 4.25 | 1.19 | High   |
| 2    | 6   | The ministry depends on educational, geographical and service information systems.   | 4.23 | 0.98 | High   |
| 3    | 10  | The Ministry uses the scientific research method to create and innovate the new knowledge concerning its strategic plans.                              | 4.20 | 0.95 | High   |
| 4    | 9   | The ministry works toward categorizing the knowledge related to its activities.  | 4.20 | 1.12 | High   |
| 5    | 1   | The Ministry encourages the workers to generate creative and innovative ideas.   | 4.11 | 1.17 | High   |
| 6    | 4   | The Ministry depends on its workers as a source of knowledge needed for its activities.  | 4.02 | 1.21 | High   |
| 7    | 2   | The Ministry owns the tools that enable it discover knowledge.   | 4.01 | 1.18 | High   |
| 8    | 11  | The Ministry carries our systematic and continuous monitoring of knowledge available and renewable form its various sources.                           | 3.91 | 1.11 | High   |
| 8    | 2   | The Ministry seeks to recruit experts in the field of knowledge management related to its activities, such as the unified university admittance system | 3.85 | 0.94 | High   |
| 10   | 7   | The Ministry provides an independent electronic page for each administrative unit for knowledge publishing.  | 3.63 | 0.89 | Medium |
| 11   | 8   | The Ministry depends on its clients as a source of knowledge for it.   | 3.61 | 1.15 | Medium |
|      |     | Knowledge Generation Domain  | 4.00 | 1.14 | Medium |

Table (2) demonstrates that the means ranged between 3.61 and 4.25, with Item (5) providing: "The Ministry follows a strategic plan for its knowledge management processes" ranking first with a (4.25) mean. Meanwhile, item No. (8) providing: "The Ministry depends on its clients as a source of knowledge for it" ranking last with a (3.61) mean. The mean of the knowledge generating domain was (4.00) as an overall.

**Second: Knowledge Sharing:****Table (3): Means and SD's of the Items on the Knowledge Sharing Area, Arranged by a Descending Order by the Mean values**

| Rank | No. | Items   | Mean | SD   | Level |
|------|-----|---|------|------|-------|
| 1    | 18  | The Ministry is committed to providing necessary knowledge for its manager and workers. | 4.13 | 1.21 | High  |
| 2    | 14  | The Ministry is subscribing in specialized Global Databases.                            | 4.11 | 1.20 | High  |
| 3    | 19  | The Ministry provides the multimedia that enhances the effective knowledge sharing.     | 4.10 | 1.11 | High  |

|   |    |  |      |      |        |
|---|----|--|------|------|--------|
| 4 | 20 | The Ministry uses modern technological equipment in publishing the information within it.  | 4.02 | 1.15 | High   |
| 5 | 17 | The Ministry maintains the knowledge in an easily accessible manner.   | 3.75 | 1.19 | High   |
| 6 | 16 | The Ministry supports knowledge openness and sharing   | 3.72 | 1.08 | High   |
| 7 | 15 | The Ministry works toward redefining the knowledge to ensure its effective usage   | 3.61 | 1.22 | Medium |
| 8 | 12 | The Ministry supports building mutual trust among the works through knowledge exchange among them  | 3.54 | 1.11 | Medium |
| 9 | 13 | The Ministry adopts an organizational culture that encourages expert and knowledge exchange and sharing through the various seminars, publications, reports. | 3.31 | 0.98 | Medium |
|   |    | Knowledge Sharing Field  | 3.81 | 0.94 | High   |

Table (3) shows that the means ranged between 3.31 and 4.13, with Item (18) providing: " The Ministry is committed to providing necessary knowledge for its manager and workers" ranking first with a (4.13) mean. Meanwhile, item No. (13) providing: " The Ministry adopts an organizational culture that encourages expert and knowledge exchange and sharing through the various seminars, publications and reports " ranking last with a (3.31) mean. The mean of the knowledge sharing domain was (3.81) as an overall.

**Table (4): Means and SD's of the Items on the Knowledge Application Area, Arranged by a Descending Order by the Mean values**

| Rank | No. | Items   | Mean | SD   | Level  |
|------|-----|---|------|------|--------|
| 1    | 23  | The Ministry presents its advertisements and decision through its electronic sites.                         | 4.25 | 0.94 | High   |
| 2    | 26  | The Ministry follows clear procedures to safeguard the intellectual rights of their owners.                 | 4.13 | 0.98 | High   |
| 3    | 21  | The Ministry assures the importance of knowledge use and application.                                       | 4.07 | 1.12 | High   |
| 4    | 22  | It utilizes new knowledge to help in the improvement of work procedures and amendments of the instructions. | 3.84 | 1.07 | High   |
| 5    | 25  | The Ministry follows-up all the processes associated with the application of the new knowledge ideas.       | 3.70 | 1.18 | High   |
| 6    | 24  | The Ministry employs knowledge through turning it into new services   | 3.65 | 1.05 | Medium |
| 7    | 27  | The knowledge management performance control and revision is done periodically.                             | 3.61 | 0.91 | Medium |

|  |  |                              |      |      |      |
|--|--|------------------------------|------|------|------|
|  |  | Knowledge application field. | 3.89 | 0.98 | High |
|--|--|------------------------------|------|------|------|

Table (4) shows that the means ranged between 3.61 and 4.25, with Item (23) providing: " The Ministry presents its advertisements and decision through its electronic sites " ranking first with a (4.25) mean. Meanwhile, item No. (27) providing: " The knowledge management performance control and revision is done periodically " ranking last with a (3.61) mean. The mean of the knowledge application domain was (3.89) as an overall.

Table (5) also illustrates the means and SD's of the practice of the knowledge management processes in a descending order by the means of the domains

**Table (5): Means and SD's of the Items on the Practice of the Knowledge Management Processes, Arranged in a Descending Order by the Mean values**

| Rank | No. | Items                 | Mean | SD   | Level |
|------|-----|-----------------------|------|------|-------|
| 1    | 1   | Knowledge Generation  | 4.00 | 1.14 | High  |
| 2    | 3   | Knowledge Application | 3,89 | 0.98 | High  |
| 3    | 2   | Knowledge Sharing     | 3.81 | 0.94 | High  |
|      |     | Overall Performance   | 3.93 | 0.93 | High  |

Table (5) indicates that the means ranged between 3.81 and 4.00, with the knowledge generation ranking first, with a (4.00) mean, and knowledge sharing ranking last, with a (3.81) mean. The mean of the overall knowledge management processes areas amounted 3.93 with a high degree. This may be attributed to that the Ministry of Higher Education and Scientific Research had provided appropriate conditions to practice the knowledge management processes, for the aim of approaching a distinguished performance in the shape of remarkable knowledge outputs. In this concern, the Ministry is seeking to utilize the individual and group creation processes in generating and producing knowledge; the policy of the Ministry included programs and processes working toward knowledge recruiting and generating from all its internal and external resources, and make use of the knowledge and information networks and international databases, sharing, and then applying them through supporting the higher management of the Ministry. The aim here is to exert sufficient efforts to change and develop new intellectual and cultural patterns that are capable to understand the relationship between the knowledge management processes, in order to ingrain the values and trends supporting the practice of these processes and sharing them as well. It is worth mentioning here that the results of this study disagreed with that of the studies of Al-Mata'ni (2008) and Abdelghafour (2007).

**Second Question:** What is the administrative empowerment degree of the workers in the Ministry of Higher Education and Scientific Research in Jordan?

For answering this question, the means and SD's of the estimations of the study sample had been calculated on the items, as shown in Table (6).

**Table (6): Means and SD's of the Items on the Workers Administrative Empowerment, Arranged in a Descending Order by the Mean Values**

| Rank | No. | Items   | Mean | SD   | Level  |
|------|-----|---|------|------|--------|
| 1    | 31  | The Ministry evaluates training programs shared by the workers.   | 4.59 | 1.10 | High   |
| 2    | 30  | The Ministry provides training courses to develop its workers' skills.  | 4.50 | 1.12 | High   |
| 3    | 28  | The Ministry follows a clear strategy for training and developing the abilities of the workers.                                     | 4.44 | 1.07 | High   |
| 4    | 40  | Accuracy and objectivity in data collection.  | 4.27 | 1.05 | High   |
| 5    | 36  | Workers have the technical experience and skills required to perform their works.   | 4.25 | 1.01 | High   |
| 6    | 42  | The Ministry considers applying technology a strategic choice to achieve avant-garde and distinction.                               | 4.25 | 0.99 | High   |
| 7    | 33  | The Ministry follows the latest technological systems to develop and improve the performance of its workers.                        | 4.11 | 0.87 | High   |
| 8    | 32  | Workers possess the sufficient know-how for the use of internal and external communications to coordinate their work-related tasks. | 4.00 | 0.74 | High   |
| 9    | 29  | The Ministry encourages workers to exchange experts among them.   | 3.87 | 0.79 | High   |
| 10   | 47  | The regulations and directions help me to develop my skills in work.  | 3.81 | 0.95 | High   |
| 11   | 38  | Decision taking process is founded on previous data and studies.  | 3.76 | 1.21 | High   |
| 12   | 49  | The Ministry provides an integrative methodology to build and enhance the organizational culture that supports knowledge.           | 3.75 | 1.31 | High   |
| 13   | 34  | The Ministry sets up clear criteria for assessing he distinguished performance of the workers.                                      | 3.71 | 1.11 | High   |
| 14   | 46  | The Ministry provides the self stimulation for the workers to contribute in achieving its objectives.                               | 3.71 | 0.87 | High   |
| 15   | 48  | There is a sufficient level of high trust among the workers throughout the work environment.  | 3.68 | .94  | High   |
| 16   | 35  | Workers possess sufficient freedom and independency in performing their works.  | 3.67 | 0.85 | High   |
| 17   | 44  | The Ministry appreciates the efforts of the workers at work.  | 3.59 | 1.16 | Medium |
| 18   | 43  | Workers' efficiency is an important criterion in the promotion system.  | 3.59 | 1.15 | Medium |
| 19   | 45  | Justice and objectivity are the basis of the promotion system of the Ministry.  | 3.57 | 0.79 | Medium |
| 20   | 39  | Decision taking process begins with proposals and complaints by the workers and service recipients.                                 | 3.55 | 0.94 | Medium |
| 21   | 41  | The Ministry delegates the decision taking process.   | 3.54 | 0.95 | Medium |



|    |    |                                   |      |      |        |
|----|----|-----------------------------------|------|------|--------|
| 22 | 37 | Workers share in decision making. | 3.52 | 1.16 | Medium |
|    |    | Administrative Empowerment.       | 3.90 | 1.14 | High   |

Table (6) shows that the means ranged between 3.52 and 4.59. and item (31), stating: " The Ministry evaluates training programs shared by the workers", ranking the first, with a (4.59) mean. Meanwhile Item (37) stating: " Workers share in decision making", ranking the last, with a (3.52) mean. The mean of the administrative empowerment was (3.90) as an overall. The researcher explains this by that the Ministry of Higher Education and Scientific Research is concerned in training on a continuous basis; works toward realization of the administrative development and self independency in performing their works; provides them with suitable communication channels to run the works; and increases understanding and cooperation among the workers. As such, the researchers sees that there is a proximity in the vision of the study population about their administrative empowerments; such proximity is clear in their responses to the training, communication, information flow, work teams and power delegation items. This result reflects the success of the modern trends in the educational management in general, a method that the Ministry of Higher Education and Scientific Research followed. This is quite vivid through the processes of change and development in its management of the workers, including authority delegation and orientation toward non-centralization at work, in order to practice the administrative empowerment, which will increase their motive, and stimulate their morale and ability to achieve the objectives and vision of the mission of the Ministry of Higher Education and Scientific Research. This study results differed from those of Al-Assaf (2006) and Al-Ma'ani (2009).

**Third Question:** the results concerning the answer of the third question: Is there a statistically significant relationship at ( $\alpha=0.01$ ) level between the practice degree of the knowledge management and administrative empowerment degree of the workers in the Ministry of Higher Education and Scientific Research in Jordan?

To answer this question, Pearson Correlation Coefficient was calculated to illustrate the relationship between the two variables: knowledge management and administrative empowerment with the workers. Table (7) shows this relationship.

**Table (7): Values of the Correlation Coefficient between the Practice Degree of the Knowledge Management and Administrative Degree Processes among the Workers of the Ministry of Higher Education and Scientific Research.**

| Knowledge Management Processes  | Knowledge Generation | Knowledge Sharing | Knowledge Application | Tool        |
|---------------------------------|----------------------|-------------------|-----------------------|-------------|
| Administrative Empowerment      |                      |                   |                       |             |
| Pearson Correlation Coefficient | <b>0.93</b>          | <b>0.82</b>       | <b>0.90</b>           | <b>0.91</b> |

\* Statistically significant at the ( $\alpha=0.01$ ) level.

Table (7) shows that there is a positive correlation at the ( $\alpha=0.01$ ) level, between the degree of knowledge management processes practice and administrative empowerment degree of the workers, which was (0.91). This result may be interpreted by that practicing the knowledge management processes such as generating, sharing and applying thereof will positively reflect on the empowerment degree of the workers of the Ministry of Higher Education and Scientific Research. Since it is an influential factor of the empowerment requirements for: training, decision taking, independency, trust, self-stimulation, and motivation increase with the workers. This result is an indicator for the importance of practicing the knowledge management processes for increasing the administrative empowerment with the employees. Thereby, this might positively reflect on the performance of the directorates and divisions of the Ministry to achieve its goals effectively and with high efficiency. The results of this study are in agreement with that of Feliciano (2007).

### **Recommendations**

Based on the results of the study, the researcher recommends:

- Holding training courses and workshops to apply the knowledge management processes throughout the different educational institutions.
- Working toward building trust between workers to empower them and enhance joint communication among them by investing their knowledge energies and abilities, and develop them being the intellectual capital of the Ministry.
- Conducting further field studies about the knowledge management processes and administrative empowerment to include another population and variables.

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