



Predicting Job Performance Based on Knowledge Management

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ARTICLE INFO

Article history:

Received 17 July 2020

Received in revised form 09 Aug 2020

Accepted 19 Sept 2020

Keywords:

Knowledge Management,

Job Performance,

Librarians

ABSTRACT

The objective of this research is to predict job performance based on knowledge management. The methodology of this research was applied according to its objective and descriptive-correlational based on the execution method. The statistical population of this research is all the librarians from public libraries of Mazandaran province with 265 members by full-census manner. 179 questionnaires were turned back. The research tool was Hosseinzadeh (2019) personal knowledge management questionnaire and Hosseini job performance questionnaire (2013). Cronbach's alpha coefficient was used to estimate the face and content validity, and reliability of the questionnaire was estimated according to professors and specialists' ideas which were obtained higher than 0.7 in all questionnaires. Data was analyzed using SPSS 18 software. The results of this research showed that the components of knowledge management have a positive and significant effect on job performance ($P < 0.01$). Moreover, 37.6% of changes caused by job performance are predicted by the components of knowledge management. According to the obtained results, some suggestions are offered to improve the research variables.

1. Introduction

Today, organizations have quick and unpredictable changes in the environment. The global incremental competitiveness, information technology and development, changes in the demographic characteristics of human force, and customers are the core of changes (Rezaeian, 2017). In such conditions, managers do not have many opportunities to control the employees and should spend their maximum time and force to identify the internal and external environments and assign the other daily responsibilities to the employees. Therefore, the most important resource of competitive advantage in organizations is the committed, motivated, and responsible employees with high performance (Boxell, 1996). The most essential issue in each organization is job performance. Achieving the organizations' goals is somehow tied to the proper and correct performance of human resources (employees). As a result, organizations in today evolving conditions have to focus on their human resources efficiently to obtain more effectiveness and efficiency and finally obtain the determined goals. Maybe, the most important dependent variable in an organization is the variable of job performance (Kahya, 2009). The importance of job performance has moved researchers toward research as much as possible. The performance has different definitions and each scholar has referred to the specific aspects of it. Job performance encompasses the obtained result of work as well as the vital behaviors in the process of obtaining these results (Qin & Jiang, 2011). Performance means the measurement of results and to know whether doing it is good or not (Robins, translated by Parsian and Arabi, 2016). Job performance means an action of completing or executing a task (Griffin, 2012). Job performance has been always considered as one of the important factors in employees' management (Sethela & Rosli, 2013; quoted by Masoud Maraghi and Ostavar, 2014).

The performance can be divided into task performance and contextual performance and these two are separable (Arabfeyzabadi et al., 2014). The part of the performance which is usually in the description of the official job is called task performance. Contextual performance is defined as a helping behavior to the organizational effectiveness by the impact on the psychological, social, and organizational contexts of job (Bermeno Matavodidel, 1993; quoted by Barati et al., 2009).

One of the effective factors on job performance is knowledge management. In this era, the meaning and concept of knowledge have been so changed that many authorities of management science in the organization have established a new title called "knowledge management" (Afruz, 2005). Today, the gap between nations and communities is awareness and non-awareness. In this regard, the main challenge is the challenge of wise and capable humans (Galini,

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DOI: <https://doi.org/10.24200/jmas.vol8iss04pp34-38>

2010). Knowledge management is a regular and integrated process that uses a proper combination of information technologies and human interaction to identify, manage, and distribute the information capital of the organization. These assets include data banks, documents, policies, and procedures. In addition, it includes the explicit and implicit knowledge of employees and uses varied and extensive methods to conquer, store, and distribute knowledge inside an organization (L.Roy and Firestone, 2003; quoted by Ahmadi A., et al., 2014). Bhatt (2001; quoted by Alvani et al., 2007) knows the knowledge management cycle including acquisition, transfer, creation, and application of knowledge in the organization. Peter Drucker announced a new type of organization using these terms where mind power governs instead of body power. According to this idea, communities can expect development in the future which has more knowledge (quoted by Eskandari and Aghazadeh, 2016). Therefore, knowledge management is the main priority of investment in many organizations (Rezaei et al., 2017).

Public libraries are one of the main tools for cultural development in the present communities and can play a principal role in the development of human force. The main responsibility of the public libraries is providing all the essential resources to remove various groups and people's needs of the society to eliminate their educational and information needs by studying and spend their leisure time healthily. The public libraries have a significant role in increasing the social knowledge level and flourishing talents of society's members and are considered as the infrastructure of cultural, social, and political development (Mazinani, 2002). Meanwhile, libraries are considered as one of the important and strategic centers for knowledge management in each state. These centers have a key role in gathering knowledge (explicit) as well as its management and are considered as the storage and production place of knowledge. The researchers have known knowledge management as a new blood injection in libraries' culture which leads to the reciprocal trust, open-exchange of data, sharing, and development of technics designing libraries' knowledge. Knowledge management is worthwhile because it can act as a central point of utilizing technology to add value to many information processing environments particularly libraries (Gandhi, 2004). Thus, based on what was mentioned, the problem of this research is predicting the job performance of librarians based on knowledge management.

2. Literature

2.1. Job performance

Job performance is a collection of behavioral and performance models including knowledge, skills, management competence, consciousness, and perceptual abilities in the workplace (Fu & Deshpande, 2015). Job performance is defined by an expected value of organizational from desperate behavioral events that people do in a specific period (Khan et al., 2015). Ratman defines job performance as a multidimensional structure that shows the employees' job performance, invention, and tact to solve problems, and methods of using their existed resources as well as using time and energy to do their job responsibilities (Amini Sabegh and Valaei, 2010). In other words, job performance is a collection of behavioral and performance models including knowledge, skills, management competence, consciousness, and perceptual abilities in the workplace. Job performance is one of the most important criterion variables in industrial and organizational psychology, and its importance is vivid both for people and organizations (Gomez-Mejia, Berrone & Franco-Santos, 2016). Job performance is actually an obtained yield of an individual employee in an organization including service or production. In addition, it is influenced by two factors of employees' ability to do their job responsibilities and their motivations. If people have the required ability and motivations, they do their jobs well. Organizational operations and job conditions increase these personal characteristics or help to remove obstacles in job performance (Spector, translated by Mohammadi, 2015).

2.2. Knowledge management

There are various definitions of knowledge management that several of them are explained as follows:

Knowledge management is defined as a management of creation, storage, access, and publication of the intellectual resources or an organization (Jesus et al., 2020). Knowledge management is a systematic and integrated process of acquisition, creation, storage, sharing, publication, and development of knowledge by people and groups to achieve the main organizational goals (Singh & Sharma, 2011). Bounfour (2003) believes that knowledge management is a collection of the designed technical and managerial methods, infrastructures, and tools to create, share, and utilize information and knowledge inside an organization. Alternatively, knowledge management is a general description of the existed culture, processes, infrastructures, and technologies in an organization that make the absorption, growth, and optimization of an organization knowledge capital possible to accomplish the strategic goals (Handley & Masle, 2010). Bontis (2015) knows knowledge as the process of creation, sharing, distribution, and application of knowledge. According to his idea, knowledge management has two physical and non-physical aspect. The provided definition by Davenport & Prusak (translated by Rahman Seresht, 2000) is agreed by many researchers which say knowledge management includes the "utilization and development of an organization knowledge assets to accomplish the goals of that organization". It is a managed knowledge and includes two explicit and implicit types of knowledge. Management of this knowledge includes all the related processes by identifying, sharing, and creating knowledge and needs a system to produce and to maintain knowledge storages as well as sharing and simplifying knowledge sharing and organizational learning. Successful organizations know knowledge as an organizational capital and develop organizational regulations and values to create and share knowledge (Davenport & Prusak, 1998). The sophistication of knowledge concepts as well as various approaches to knowledge management has formed a united approach for it. Knowledge management is placed in several studied principles (Yung, 2008). Jashapara defines knowledge management in the core of four-loop cycle based on various reassembled aspects of it as "the effective learning processes tied to the creation, organization, and exchanging knowledge (both explicit and implicit which are accomplished by the proper use of cultural environment and technology) whose application promotes the organizational intellectual capital and improves it (Ahmadi and Salehi, 2019). Definition of Akhavan and Bagheri (2010) about knowledge management was that knowledge management is the process of creation, sharing, and application of knowledge to achieve the organizational goals. Alex and David Bentt (2003) defined knowledge management as the process of creation, protection, and raising organizational knowledge to utilize the personal and collective knowledge and to get collective emission.

2.3. Tool and methods

The methodology of this research is descriptive-correlational based on its topic and the objectives. The statistical population of this research is based on the statistics unit report in all the librarians (265 people) of the public libraries of Mazandaran province. All the employed managers and librarians in the public libraries of Mazandaran province were examined as the statistical sample for the limitation of the statistical population. The questionnaire had 179 items that the following tools were used to evaluate the research variables:

The standard questionnaire of personal knowledge management was used to measure it that was adjusted by Hosseinzadeh (2019).

The adjusted standard questionnaire about job performance by Hosseini (2013) was used to measure the job performance. The initial sample with a volume of 30 people has been used to evaluate the reliability of the questionnaire. The calculated Cronbach's alpha coefficient was higher than 0.7 in all cases which shows the high validity of both questionnaires.

Multiple regression analysis in SPSS software was used to analyze data.

3. Findings

Table 1 shows the results of multiple regression analysis to predict job performance based on the components of knowledge management.

Table 1. Results of multiple regression analysis to predict job performance based on the components of knowledge management

The predictor variable	R	R ²	Adjusted R ²	F-value	P-value
components of knowledge management	0.63	0.397	0.376	18.884	0.000

Criterion variable: job performance

The role of the components of knowledge management in the determination of job performance is 37.6 based on Table 1. The calculated F-value for the predictor variable is significant in the $P < 0.01$ level. Therefore, the components of knowledge management predict the components of knowledge management significantly.

Table 2. Regression coefficients of the components of knowledge management in predicting job performance

Predictor variable	Non-standardized coefficient		Standardized coefficient	T-value	P-value
	β	Estimation error	β		
Fixed coefficient	0.702	0.232		3.020	0.003
Acquisition	0.372	0.088	0.551	4.215	0.001
Analysis	0.258	0.076	0.649	-2.584	0.038
Knowledge creation	0.341	0.048	0.433	-3.374	0.022
Knowledge storage	0.228	0.055	0.215	2.185	0.015
Knowledge exchange	0.422	0.063	0.160	3.015	0.041
Knowledge application	0.255	0.044	0.352	-2.032	0.044

Regression coefficient of the predictor variable shows that acquisition with $\beta=0.551$, analysis with $\beta=0.649$, knowledge creation with $\beta=0.433$, knowledge storage with $\beta=0.215$, knowledge exchange with $\beta=0.160$, and knowledge application with $\beta=0.352$ alone can explain the changes of job performance positively and significantly ($P < 0.01$).

4. Discussion and conclusion

The results of this research showed that the components of knowledge management totally predict 37.6% of the related changes to job performance. These results mean that the components of knowledge management have a positive effect on job performance. The results of this research are in agreement with the results of Najafi (2019), Aghaei (2017), Golchinnezhad (2016), Hosseini (2013), Ugwu, Nannyonjo (2019), Biswakarma (2018), and Xiaojun (2017) research. It can be claimed to explain these findings that the personal knowledge management that is focused on improving the scholars' personal productivity in the workplace shows the responsibility to grow and learn for themselves, processes development, and evaluation tools for situational knowledge and then completion of their knowledge gaps. The nature of knowledge management includes combining information resources, efficiency improvement, and competitiveness increase. Zhao et al. believe that these skills enable people to select conscious decisions and solve the problems quickly (Mohammadi and Bagheri, 2013). In today world, factors such as specialization of activities and enlarging agencies' and organizations' scale have

doubled the need for the specialized human force. In this regard, job performance and improvement have been the most important concerns or organizations in recent decades. In addition, this has changed to the global concern today. Undoubtedly, any discussion about the job performance needs to identify the improvers in the first step including personal knowledge management, because personal knowledge is used as a powerful and effective factor for people in various life, work, and academic aspects (Mohammadi et al., 2013). According to the results of this research, there is a significant relationship between the personal knowledge management and its components including knowledge acquisition, analysis, knowledge creation, knowledge storage, knowledge sharing, and exchange, and knowledge application in librarians of the public libraries in Mazandaran province. Any of these factors improves the job performance of librarians in libraries. It means that the skill of personal knowledge management guides librarians to do their formal work tasks better such as providing membership service, organizing resources, information, and essential guidelines to select the proper mentioned resources, timely, precise, and full services to the referees along with the libraries tasks, strengthening the spirit of research in clients and helping to foster creativity and talent, holding cultural programs, observing professional rules and regulations and principles. These improve and promote their responsibilities. On the other hand, having the skill of personal knowledge management promotes their non-formal task levels and interpersonal relationships in information sharing and exchange. The obtained results are reflected in the relationship between the components of personal knowledge management and job performance. The work objectives and responsibilities are developed by the skill of knowledge acquisition through enabling people to access to their needed knowledge using various methods; by analysis skill through increasing people power to discover and detect the incorrect and misleading information from the existed realities and awareness from the first and second-hand information and using their and their professors' experiences and ideas which are the most important abilities to solve the working problems in librarianship job; by knowledge storage skill through increasing people ability in classifying information and knowledge in the proper time and place to do tasks based on schedule; by the skill of knowledge exchange and sharing with others about the information and ideas through sharing knowledge and information among people which flourish people's minds to discover new and creative solutions to reach their job tasks and responsibilities. Finally, the skill of knowledge application is using the provided knowledge and information in various formats such as librarians' activities to promote job performance. Therefore, these skills can influence the performance of librarians. Thus, it is inferred from the obtained results that attempt to promote the skill of personal knowledge management as much as possible significantly helps to improve the service quality of the librarians and can promote the library to achieve its developmental goals.

Totally, the obtained results from this research show the high role and importance of knowledge management to promote the job performance of the public libraries in Mazandaran province. Hence, it is suggested to this institution to reinforce the knowledge management of its librarians. There are usually some limitations in research as if a researcher cope with them, its results will be more précised. This research is not exceptional. For example, a self-report questionnaire has been used in this research to collect data, and the statistical population of this research only includes all librarians of the public libraries of Mazandaran province and has a low comprehensiveness. Therefore, its results should be generalized cautiously. In this regard, using the qualitative interview instead of the questionnaire in other organizations and companies can be useful to increase the power of its results generalization.

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