

Prediction of empowerment based on organizational structure and knowledge management among the employees of the General Department of Health Insurance of Fars province

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Keywords: <i>Empowerment, organizational structure, knowledge management</i>	Abstract Background and purpose: Today, paying attention to the organizational structure in empowering employees is very important. The organizational structure is a set of ways through which the activities of the organization are divided and coordinated into known tasks. Therefore, the main goal of the research was to predict empowerment based on organizational structure and knowledge management among the employees of the General Department of Health Insurance of Fars province. Methodology: The descriptive research method was correlation type. For this purpose, among the General Department of Health Insurance of Fars province employees in 2014, 117 people were selected by simple random sampling method. The samples were evaluated using Short and Reinhardt's empowerment questionnaire, Robbins' organizational structure, and Joseph Haddad's knowledge management. The obtained data were evaluated using the regression method. Results: The results showed that organizational structure dimensions predict employee empowerment; It also predicts the dimensions of knowledge management and empowering employees. Conclusion: According to the correlation coefficient matrix, the influence of the two variables of knowledge creation and knowledge sharing did not affect the empowerment variable. Therefore, by performing regression, the presence of knowledge deployment and knowledge registration variables in the model was reported to be significant.
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How to Cite:

Soleimani, S., & Mahmoudi, M. (2021). Prediction of empowerment based on organizational structure and knowledge management among the employees of the General Department of Health Insurance of Fars province. *International Journal of Innovation in Management and Organizational Behavior*, 1(2), 12-21.

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Introduction

Today, empowerment is considered a useful tool for improving employees quality and increasing organizational effectiveness. In order to succeed in today's changing business environment, organizations need their employees' knowledge, opinions, energy, and creativity, from front-line employees to senior managers. In order to achieve this, organizations act through relevant empowerment to encourage them to take the initiative without exerting pressure, honoring the collective interests of the organization with the least supervision and performing their duties as the organization's owners. Empowering employees enables them to be more resilient and flexible in facing problems and threats. Therefore, it can be useful as a resource that prevents the vulnerability of employees and sows the seed of hope in crises, including the destruction of financial capital and the loss of human life (Pak Taynet and Fathizadeh, 2008). Paying attention to the organizational structure is particularly important in empowering employees. The organizational structure is a set of ways to divide and coordinate the organization's activities into known tasks. The structure is both the creator and the creature at the same time. It defines the structure of mutual relations between members and can affect the commitment, creativity, and innovation of people. Bureaucratic organizational structures need to be more responsive in the rapidly changing and competitive world and turbulent environments. In addition, specialist employees are among the factors that deal with bureaucracy. Professional employees should not be so caught in bureaucracy that they cannot use creativity. The strategies based on bureaucratic control, i.e. the application of regulations and laws, procedures and instructions, policies and hierarchies of authority and standardization of affairs, are for uniformity and coordination of behaviors, and it causes employees not to express their opinions and thoughts and creates injustice in the distribution of power. Finally, it causes the inability of employees. Therefore, the organizational structure should be designed according to the organizational goals and the level of employees' capabilities. Since human power is the most important capital of organizations, the more this capital has the desired quality, the more likely the organization's success, survival, and improvement will be. In this way, much effort should be made to improve the quality of human resources because this work is for the organization's and its employees' benefit. A capable human force is one of the main indicators of the superiority of an organization compared to other organizations. The first step for empowering employees is to know the factors affecting them. Research results show that organizational structure is the most important factor affecting employee empowerment (Nefari & Omidfar, 2010). Public and private organizations and the environment in which these organizations operate have changed drastically. Organizations must revise their structure to adapt to the changing and competitive environment. For this purpose, they must show more flexibility in the face of

environmental changes. They also need more sophisticated methods and techniques to manage their knowledge capital.

Knowledge management consists of creating, modernizing, using, and leveraging knowledge and other intellectual capital assets subtly and systematically to maximize the knowledge-based effectiveness and efficiency of employees and the organization (Salavati, 2010). In organizations where the knowledge management system is well applied, people's learning takes place, and the change of people's views is reflected in the form of formal and informal changes in the organization's performance; knowledge becomes beneficial when it is shared among all. Knowledge management is a wide range of activities that are used to manage, exchange, create or promote intellectual capital at a macro level.

Knowledge management is the intelligent design of processes, tools, structures, etc., to increase, renew, share, or improve the use of knowledge, which appears in each of the three elements of intellectual capital, i.e., structural, human, and social. Knowledge management is a process that helps organizations to identify, select, organize and disseminate important information and skills that are considered organizational memory and usually exist in an unorganized form. This enables the management of organizations to solve learning problems, strategic planning, and dynamic decision-making efficiently and effectively. In knowledge organizations, knowledge is easily transferred and available to all employees. When employees access organizational knowledge, they can know their environment and make it meaningful. They can find new and better ways of doing things, work together, fill knowledge gaps, increase productivity, satisfy customers, and ultimately gain the ability to compete effectively. Organizations that act to produce new knowledge through research and development or more informal learning processes have an advantage over organizations that operate based on the knowledge of others. Knowledge management deals with organizational adaptation, survival, and the ability to face increasing environmental changes. In fact, knowledge management aims at the synergistic combination of processable information, information technology, and the creative ability of humans (Adli, 2010). According to the issues raised, the researcher seeks to answer whether the dimensions of organizational structure and knowledge management significantly predict the empowerment of employees of the General Department of Health Insurance of Fars province.

Methodology

The method of the current research is correlational. Using this method, the distribution and relationships between predictor variables and research criteria will be investigated in society, and finally, the multivariate regression method will be used to predict the criterion variable. The present study's statistical population included all the Fars Education Department employees, whose number was 450 (67 women and 383 men) according to the

statistics obtained. Among these, 205 people were selected as the sample group based on Morgan's table and by simple random sampling. In this research, in addition to descriptive statistics (mean, standard deviation, etc.), inferential statistics (correlation coefficient) were used to analyze the data. It should be noted that SPSS 19 software was used for data analysis.

Materials

1- Organizational structure questionnaire. In this research, the organizational structure questionnaire of Robbins and Ivancevich, which has three dimensions of formality, complexity, and focus, was used to collect information related to organizational structure. It was modified by Esmi (2006) under the supervision of the professors of Shiraz University and adapted to the educational and administrative organization. This questionnaire has 15 questions that are based on a Likert scale that measures different aspects of organizational structure and has three dimensions: formality (questions 1 to 5), complexity (questions 6 to 10) and focus (questions 11 to 15). The content validity of the organizational structure questionnaire was confirmed by Esmi (2006) with the opinion of Shiraz University professors and master's and doctoral students, and he also accepted its structural validity in his research. The reliability of the questionnaire in the present study was obtained for the entire questionnaire and dimensions of formality, complexity, and focus, respectively, through Cronbach's alpha method of 0.78, 0.65, 0.72, and 0.70.

2- Knowledge management questionnaire. In this research, the knowledge management questionnaire designed by Joseph Haddad (2006) was used to measure the knowledge management variable. This questionnaire measures four dimensions of knowledge management, which are: knowledge creation, knowledge establishment, knowledge registration, and knowledge sharing. This questionnaire is scored based on the Likert scale. The validity and reliability of this questionnaire were confirmed by Azizi (2007) in his research. In this study, the reliability of knowledge management, knowledge creation, knowledge establishment, knowledge registration, and knowledge sharing was obtained through Cronbach's alpha method, respectively, 0.81, 0.66, 0.63, 0.79, and 0.74, which shows the good reliability of the questionnaire.

3- Empowerment questionnaire. Short and Reinhardt coined employee empowerment in 1995. This tool has 38 items and includes six dimensions of the base, professional growth, self-efficacy, influence, decision-making, and autonomy. The empowerment questionnaire is based on a 5-point Likert scale (completely agree, agree, have no opinion, disagree, completely disagree) (Abtahi, 2007). In his research, Daranjani (2010) confirmed the questionnaire's validity and reliability, and Cronbach's alpha of the whole questionnaire was calculated as 0.93. In the present study, the reliability of the questionnaire and its dimensions was obtained through Cronbach's alpha method for all dimensions above 0.70, which means that the questionnaire has good reliability.

Results

Regarding demographic characteristics, the sample of the present study included 51% men and 49% women, 90% had a bachelor's degree, and the majority had work experience between 10 and 20 years.

Table 1: Descriptive data of research variables

	N	Min	Max	Mean	Max Possible	Standard deviation
Base	117	12	30	22/38	30	3/34
professional development	117	6	30	18/99	30	4/28
Efficiency	117	8	30	20/16	30	3/86
influence	117	9	27	20/04	30	3/92
Decision making	117	11	43	26/94	50	6/32
autonomy	117	5	19	12/08	24	2/86
formality	117	8	18	14/35	25	2/03
Focus	117	9	20	18/03	25	2/09
Complexity	117	10	23	16/46	25	2/69
knowledge creation	117	8	25	23/47	30	2/41
Establishment of knowledge	117	7	23	14/66	25	3/53
Registering knowledge	117	6	16	21/16	25	3/20
Sharing knowledge	117	7	22	13/5	25	4/66
General empowerment	117	38	166	120/09	190	20/77

As can be seen in the above table, the average score of empowerment in the dimension of the base is higher than in other cases (according to the highest possible score and equalization of the scale); The average score of the organizational structure has the highest score in the dimension of concentration; The average score of knowledge management in the dimension of knowledge registration (according to the highest possible score and equalization of the scale) has the highest score. Moreover, according to the calculations

made regarding the general empowerment variable, it was found that 48.7% of the employees have obtained a score above the average.

Table 2: Matrix of Pearson correlation coefficients to examine the relationship between research variables

Row	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	formality	1													
2	Concentration	.214	1												
3	Complexity	*.71	.259	1											
4	Base	.135	.364	.266	1										
5	professional development	.215	.395	.229	.*74	1									
6	efficiency	.121	.213	.181	.824	.746	1								
7	influence	.046	.058	.077	.644	.561	.742	1							
8	Decision making	.193	.129	.109	.505	.671	.668	.718	1						
9	autonomy	.002	.096	.007	.529	.569	.702	.779	.753	1					
10	knowledge creation	-.072	.253	-.061	.383	.419	.393	.253	.277	.390	1				
11	Establishment of knowledge	.198	.243	.045	.525	.612	.601	.526	.609	.588	.322	1			
12	Registering knowledge	.050	.306	-.064	.526	.548	.532	.391	.390	.496	.605	.537	1		
13	Sharing knowledge	-.088	-.109	-.171	.082	.013	.134	.181	.069	.217	.119	.113	.132	1	
14	Empowerment	.125	.234	.169	.807	.827	.888	.829	.871	.814	.239	.661	.559	.147	1

*:P<0.05

In order to get a general insight into the relationship between research variables, Pearson's correlation coefficient matrix was used, and the results are shown in table (2).

Hypothesis 1: Organizational structure dimensions significantly predict employee empowerment.

According to the correlation coefficient table, the effect of the two variables of formality and complexity on the empowerment variable is significant ($P < 0.05$). Considering that the dependent variable, the level of employee empowerment, is quantitative, and the independent variable of concentration is also quantitative, we use simple linear regression

to analyze the above hypothesis. In order to check the quality of the model, we use the coefficient of determination index (R²), whose value is equal to 0.055. This means that the independent variable predicts up to 5.5% of the changes in the empowerment variable. Finally, we use the following regression table to identify the regression model.

Table 3: Univariate linear regression test

Criterion variable	predictor variables	B	t	P(sig)	R ²	F	df
Empowerment	Constant	77/16	4/67	0/0001	0/05	6/53	1
	Concentration	2/34	2/55	0/012			

The variable that can predict the dependent variable (empowerment) is concentration, whose presence in the model is significant. $P = 0.012 < 0.05$, and considering that regression p is equal to 0.001, this model can be generalized to society. Using the equation of the regression line, it can be concluded that part of the first hypothesis is confirmed in this research.

Hypothesis 2: The dimensions of knowledge management significantly predict employee empowerment.

According to the correlation coefficient table, the effect of the two variables of knowledge creation and knowledge sharing on the empowerment variable is insignificant ($p < 0.05$). Considering that the dependent variable, the level of employee empowerment, is quantitative, and the independent variables of knowledge establishment and knowledge registration are each quantitative variables, we use simple linear regression and the simultaneous method to analyze the above hypothesis. In order to check the quality of the model, we use the coefficient of determination index (R²), whose value is equal to 0.49. This means that the independent variables predict up to 49% of the changes in the empowerment variable.

Table 4: Comparing the productivity of organizational tasks of employees according to education

Criterion variable	Predictor variables	B	t	P(sig)	R ²	F	df
Empowerment	Constant	34/93	3/73	0/0001	0/49	53/50	2
	Establishment of knowledge	3/13	6/27	0/0001			
	Registering knowledge	1/84	3/57	0/001			

The presence of two variables of knowledge establishment and knowledge registration in the model is significant ($p < 0.05$). Considering that $p(\text{regression})$ is equal to 0.0001, this model can be generalized to society. Therefore, by using the regression line equation, it can be concluded that part of hypothesis 2 is confirmed in the present research.

Discussion and Conclusion

The main goal of this research was to predict empowerment based on organizational structure and knowledge management among the General Department of Health Insurance of Fars province employees.

The results of Table 3 showed that only the dimension of concentration among the organizational structure dimensions could predict empowerment. Moreover, according to the correlation coefficient table, the influence of the two variables of formality and complexity on the empowerment variable is significant ($P > 0.05$). In explaining this finding, it can be said that according to the theory of Robbins (2006), although the organizational structure is a fact and every person has an impact in the organization, it should be known that the more or less abstract concept has caused the definitions to be different from each other. However, the organizational structure can be imagined as including how the tasks of the organization's people are coordinated. Organizational structure is the selection of people at different points of an organizational chart, in social positions and positions that affect people's organizational relationships. One of the applications of the above definition is the division of labor. Inside the organization, different jobs are given to people. Another use of it is that the organization has a hierarchy of responsibilities. Organizational structure is related to patterns of authority, communication, and workflow. It is understood from the set of definitions of this article that every definition of the organizational structure must have dimensions that describe this concept of the organization well. One of these dimensions is concentration, which in this research, the dimension of concentration increases empowerment. Concentration refers to the extent to which decision-making is concentrated in a single point in the organization. The concentration of power in one point indicates concentration, and lack of concentration or low concentration indicates a lack of concentration. Concentration is more controversial than the other two components of the organizational structure. According to most theorists, the extent to which decision-making is concentrated in a single point in the organization is called concentration.

The results of Table 4 showed that only the dimensions of knowledge establishment and knowledge registration among the dimensions of organizational knowledge management could predict empowerment. The influence of the two variables of knowledge creation and knowledge sharing is insignificant according to the correlation coefficient table on the empowerment variable. In explaining this hypothesis, it can be stated that empowerment is not giving power to people; people have power because of their knowledge and motivation. In fact, empowerment is releasing this power. Empowerment is a feeling. Empowerment provides potential capacities for exploiting the source of human abilities that are not fully utilized. In a strong organization, employees are the main driving force; they are the employees who implement their best innovations and thoughts with a sense of excitement, ownership, pride, and responsibility. At the same time, leaders cannot empower their

followers; unless they sympathize with them and give them motivation and encouragement and be honest, loyal, and realistic with them. Therefore, empowerment requires a different type of ethical and social behavior and the use of teamwork and collaborative tools, ease of access to information sources, and exploitation of mutual ethical relationships among employees. Knowledge management is one of the effective factors in empowering knowledge management. Knowledge management consists of creating, modernizing, using, and leveraging knowledge and other intellectual capital assets subtly and systematically to maximize the knowledge-based effectiveness and efficiency of employees and the organization. Buckman believes that one of the main purposes of knowledge management is to facilitate communication in all areas of the organization so that the members can identify hidden challenges and opportunities through cooperation. Regarding the importance of culture in organizational knowledge and its dissemination, it can be said that culture creates synergistic harmonizing environments. If values and cultures encourage learning and knowledge building in an organization, all the functions of the organization will change. Finally, the last stage of knowledge management is the process of using or applying the power of knowledge, which is the most important process from the point of view of most researchers. They state that the competitive advantage does not belong to the organizations with the best knowledge assets but to the organizations that use their knowledge in the best practice (Abtahi, 2007). If knowledge does not become active and organizational activities are not based on organizational knowledge, all knowledge management activities and processes are sterile and ineffective. The application of knowledge causes the gap between knowing and doing to disappear, and the important loop of feedback, learning by doing, and application is created. Also, applying knowledge makes it possible to create a learning scenario based on applying knowledge. Although learning in this way is very difficult, it is very important in creating knowledge because it requires meta-analysis and evaluation of processes. For this reason, it is often forgotten in organizations. Meanwhile, the components of the dimensions of knowledge establishment and knowledge registration are related to empowerment. The knowledge registration component causes information to be stored in the organization, and people can use this information at all times. This increases empowerment in the organization. The last component indicates that knowledge should be deployed throughout the organization so that people can easily access this knowledge at any time.

Ethics

This research observed ethical standards, including obtaining informed consent and ensuring privacy and confidentiality. Also, while completing the questionnaires while emphasizing completing all the questions, the participants were free to withdraw from the

research at any time and provide individual information. They were assured that the information would remain confidential, which was strictly adhered to.

Acknowledgement

The cooperation of all participants in the research is thanked and appreciated.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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