

Investigating the mutual effects of preferential organizational measures and the value of the staff on the tendency towards knowledge management (case study: Payam Noor University, Semirom Branch)

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Abstract: Knowledge is defined as the reality or state of knowing some things or skills by experiencing or representing. In other words, knowledge is something new and novel for an organization, unconsciously created or engendered from external resources and facilities. Knowledge management is considered as managing and learning main skills and concepts. The main objective of the present study is to investigate the effect of the preferential organizational measures and the value of the staff on the tendency towards knowledge management. The method of the research is descriptive and the method of data collection is survey study. The population of the research includes all operators and staff working in Payam Noor University, Semirom Branch along with all professors teaching there. A sample with 100 participants was selected using purposive sampling method. The instrument for collecting analytical data of the present research includes three researcher-made questionnaires including the Preferential Measures Questionnaire, the Value of Staff Questionnaire, and the Enterprise Knowledge Management Questionnaire. The degree of the reliability of questionnaires were measured via Cronbach's alpha as 0.82, 0.85, and 0.97 respectively. To analyze data, in addition to descriptive statistics, inferential statistics such as linear regression coefficient and Durbin-Watson test were used. The findings of the present study based on participants' attitudes indicated that the performance of teamwork, incentives for knowledge management, and continuous learning in increasing the tendency of the staff towards knowledge management in the organization, as well as the staff's flexibility were effective on the relationship between continuous learning and the staff's tendency towards knowledge management. But the staff's development and promotion in relationship between the performance of teamwork and the staff's tendency towards knowledge management and the staff's flexibility were not effective on the relationship between the incentives for knowledge management and the staff's tendency towards knowledge management.

Key words: *Staff's value; Preferential organizational measures; Staff's flexibility; Performance of teamwork, Knowledge management*

1. Introduction

In the age of new technologies, among the different countries owning different industries, those are relatively more successful that they can achieve a kind of knowledge for advancing via these technologies; therefore, knowledge management in organizations are a kind of management applied in the line with making the staff reach the level at which they can use new achievements along with creativity and indicating their own value, known as the value of staff, help in the development and dynamicity of organizations. This because principally, knowledge management is a framework or system designed for assisting organizations to be able to have a better and more rapid decision makings and provide the grounds for improving and promoting the level of organizational performance in the complicated world of today via gaining experiences, analyzing, applying and using

knowledge, as well as directing organizational learning (Al-Azami, 2010). According to Nonaka and Takeuchi (1995), knowledge management is a process during which an organization produces wealth from its own knowledge or intellectual capitals to improve its own organizational performance.

Knowledge management not only covers information producing, but also includes recording data in resources, transferring and analyzing data and also the relation of the information based on the data to which it can be applied. Further, the value of staff and particular measures an organization can have in line with learning and training can have significant effects on the tendencies towards using up-t-date organizational knowledge in the form of knowledge management. However the role of the staff's human variables are effective in this regard and the development and promotion of the staff along with reflexivity in doing tasks, learning and acceptance of the responsibility of implementing tasks, as well as encouraging the disciplined and

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successful staff by organizations can help the tendency of the staff towards knowledge management. If success can confirm knowledge management as a strategic instrument, individuals should be considered as the owners of knowledge and organizational processes should be in such a way that knowledge should be promoted in the whole organization. However, the plan for organizational knowledge and learning should be consistently preferred to organizational hierarchy and there always should be an intimate knowledge of the target activity which is required by organizational dynamicity and operationally there should be strategies for cooperation and participation of organizational parts regarding knowledge management (Saif and Karami, 2004).

2. Statement of the problem, and significance of the study

Knowledge has a close association with jobs, personal performance, knowledge distribution and etc. and does not simply get common among other work fields unless knowledge distribution be reinforcing (Holowetzki, 2003). Different researchers have introduced different sets of these measures and there is no agreement between organizational measures related to knowledge management (Al-Hakim & Hassan, 2011).

But knowledge management is defined as a process by some scholars and others investigate it with focusing on spiritual capital (Harorimana, 2009). In general, knowledge management includes a group of processes during which the data and gained experiences for introducing strategies which help organizations to attain their own objectives are changed into knowledge (Sulainman & Burke, 2009).

Davenport & Prusak (1998) proved their previous idea regarding knowledge management, by stating this issue that values and beliefs of the staff have a profound effect on knowledge management. In the process of the effect of values, it is expected that values which control individuals' thoughts, emotions and performances, should control their intervention in knowledge management. Human resources and management can have fundamental and significant roles in increasing the efficacy of each organization. Most organizations tend to have a general view towards their staff and their management style. They tend to focus on methods and styles which is true of organizational staff. But, the nature of human resources should not be considered simplistic and a general management model should be adopted for all staff, in such a way that the value of the staff can be considered as one of the factors of the success of human resources items in organizations. Unique values of the staff in intra-organizational activities have important roles in promoting different units in organizations and move them towards improvement. But it seems that the importance of the issue of knowledge management and identifying its components can be considered important from another perspective related to

teamwork as well because teamwork paves the path of accessing the incentives of knowledge management and continuous learning and separates values from attitudes in addition to emphasizing the didactic nature of them. Accordingly, the present study emphasizes the importance of the profound effect of cooperation and participation of the staff in an organization for tending towards knowledge management.

3. Literature review

Sarboland and Azizi (2013), in "investigating the relationship between the maturity of knowledge management and productivity and the value of human resources of insurance branches of Social Security Organization in Southern Tehran" consider knowledge management as one of the achievements of information and knowledge age. Regarding its characteristics, nowadays, organizations seriously are in search of utilizing its results for improving the productivity of human resources. The final results of the findings of the study indicated that there is a positive and significant correlation between the maturity of knowledge management and its dimensions and the productivity of human resources along with the values of the staff working in insurance branches of Social Security Organization in Southern Tehran.

Salajagheh and Daneshpajuh (2013), in a research with the objective of "investigating the relationship between knowledge management and productive staff of the departments of Power Distribution North of Kerman Province" indicated that there is a positive and significant correlation between knowledge management and its components (acquiring knowledge, sharing knowledge, and applying knowledge) and the characteristics of productive staff at significance level 95%.

Salajagheh and Karimi (2014), in a research with the aim of "investigating the effect of moral behaviors and the values of the staff on knowledge management in the Office of Roads and Urbanization of Iranshahr" indicated that there is a correlation between knowledge management and the staff's moral behaviors.

Roger (1996), in research with the aim of "investigating the effect of the role of passing of participation and the type of activities of the members of a team in organizations for tendency towards knowledge management" indicated the effect of teamwork of the members of organizations due to increasing work motivation on knowledge management based on new learning.

Newman and Write (1999), in a research titled as "investigating the effect of development and promotion of the staff on the tendency towards organizational knowledge management" indicated that values of development and promotion facilitate interpersonal attractions and this issue per se results in cooperation and teamwork and as a results, to the

tendency of the staff towards learning knowledge management further.

O'wely et al. (2009), in a research aiming at investigating the relationship between the facilities of knowledge and behaviors of the staff knowledgeable at knowledge management using an experimental study, indicated that there is a correlation between main facilities of knowledge (teamwork or knowledge-based incentives and learning opportunities, objective norms of the staff and their attitudes), towards knowledge management. In addition, the mentioned variables are explicitly effective on the tendency of organizational staff towards knowledge management and their efforts to increasing knowledge management.

Stone et al. (2010), in a research aiming at investigating the influence of teamwork and participatory performance of the staff and the value of the staff as well as its effect on the tendency towards organizational knowledge and management knowledge, indicated the unique effects of teamwork performance on increasing the staff's tendency towards learning knowledge and consequently organizational and management knowledge. In addition, it was identified that the value of the staff and their personality and moral features are other variables affecting the increase in the tendency for learning organizational knowledge.

Kumar Rai (2011), in a study titled as "the role of morality and the values of the staff in tendency to knowledge management" indicated that when the staff trust each other and the environment of organizations are moral, they share important information and as a results, the efficacy of knowledge management are improved, and the staff are motivated to increase their knowledge and acquire organizational knowledge.

4. Research hypotheses

Main hypothesis

Organizational preferential measures by being effective on the values of the staff results in their tendency towards knowledge management

Secondary hypotheses

1. Teamwork performance is effective on increasing the staff's tendency towards knowledge management in the organization.
2. The intensives of knowledge management are effective on increasing the staff's tendency

towards knowledge management in the organization.

3. Continuous learning is effective on increasing the staff's tendency towards knowledge management in the organization.
4. The staff's development and promotion are effective on the relationship between teamwork performance and increasing the staff's tendency towards knowledge management in the organization.
5. The staff's flexibility is effective on the relationship between the intensives of knowledge management and the staff's tendency towards knowledge management in the organization.
6. The staff's flexibility is effective on the relationship between continuous learning and the staff's tendency towards knowledge management in the organization.

5. The scope of the research

Temporal scope of the research is June to September 2014, and the spatial scope is Payam Noor University, Semiroom Branch.

Population

The population of the research includes all the staff of different departments of Payam Noor University, Semiroom Branch. 100 participants were selected using purposive sampling.

6. Statistical method and data analysis

To enter all the data obtained from the distribution of copies of the questionnaire and coding them, Excel Software Program was used and to process the data, SPSS was employed. Data analysis was conducted at two descriptive and inferential statistics. In the present study, due to evaluating the effects or the lack of effects of the variables on each other, and continuing the use of moderator variables, the most appropriate test was regression. Therefore, before starting the issue of regression, the parametric and non-parametric nature of the test should be identified. Accordingly, using Kolmogorov-Simonov non-parametric test, the parametric tests were allowed to be used. To investigate the hypotheses, linear regression was used.

6.1. Descriptive analysis

Table 1: descriptive statistics of the components of the research model

Components	Number	Min.	Max.	Mean	SD
Teamwork performance	100	2.80	5	3.744	0.4884
Incentives	100	2	3.80	2.793	0.4219
Continuous learning	100	1.60	3.50	3.041	0.6510
The staff's development and promotion	100	1	2.20	1.598	0.4738
The staff's flexibility	100	1	3	2.326	0.5616
Organizational knowledge management	100	1.23	2.73	2.084	0.3311

Table 2: statistics of Kolmogorov-Simonov test

The number of data	The state of components	The highest difference			z-statistic	p-value (two-sided)
		Absolute	Positive	Negative		
100	Teamwork performance	0.144	0.144	-0.96	1.445	0.031
100	Incentives	0.157	0.157	-0.076	1.568	0.015
100	Continuous learning	0.165	0.165	-0.122	1.654	0.021
100	The staff's development and promotion	0.312	0.267	-0.312	3.119	0.04
100	The staff's flexibility	0.269	0.269	-0.225	2.692	0.03
100	Organizational knowledge management	0.107	0.107	-0.088	1.068	0.204

Regarding the statistical outputs identified in Table 2 and the value of significant level, parametric tests can be used. In this section, for all hypotheses, due to calculating the coefficient of effect, linear regression was used.

1. Teamwork performance is effective on increasing the staff's tendency towards knowledge management in the organization.

Table 3: the assumption of errors independency by regression equation and Durbin-Watson test in linear regression

Correlation coefficient	Coefficient of determination of the table	Adjusted coefficient of determination	Standard error of estimation	Durbin-Watson
0.025	0.001	-0.010	0.33270/	2.179

According to Table 3, the value of Durbin-Watson statistic is equal 2.179 which indicate that errors are independent of each other; therefore, there is no correlation between errors and the hypothesis claiming the existence of correlation between errors is not rejected. As a result, regression can be used. Other assumptions considered in regression are that errors (and not data) should have a normal distribution with mean value zero. For obtaining this aim, the values of standard errors should be calculated, then, the graph of their distributions and normality should be investigated. Afterwards, a comparison should be conducted between the graphs. Then, doing linear regression is allowed in this stage. Fig. 1 and Fig. 2 indicate the frequency distribution of errors and normal distribution which intuitively can identify the normal and non-normal distribution of errors.

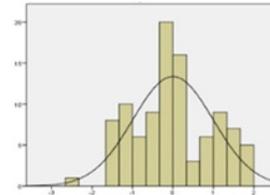


Fig. 2: histograms obtained from regression test of the first hypothesis

As observed, most of the accumulation of errors in these two graphs are the same, and selecting regression test for confirming the effectiveness of independent variable on dependent on is correct and the use of regression test is appropriate. Because the null hypothesis is rejected, then, this hypothesis is confirmed.

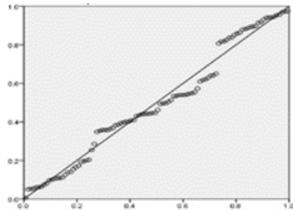


Fig. 1: distributions obtained from regression test of the first hypothesis

2. The intensives of knowledge management are effective on increasing the staff's tendency towards knowledge management in the organization.

Table 4: the assumption of errors independency by regression equation and Durbin-Watson test in linear regression

Correlation coefficient	Coefficient of determination of the table	Adjusted coefficient of determination	Standard error of estimation	Durbin-Watson
0.143	0.021	0.011	0.3294	2.182

According to Table 4, the value of Durbin-Watson statistic is equal 2.182 which indicate that errors are independent of each other; therefore, there is no correlation between errors and the hypothesis

claiming the existence of correlation between errors is not rejected. Fig. 3 and Fig. 4 indicate the frequency distribution of errors and normal

distribution which intuitively can identify the normal and non-normal distribution of errors.

3. Continuous learning is effective on increasing the staff's tendency towards knowledge management in the organization.

According to Table 5, the value of Durbin-Watson statistic is equal 2.180 which indicates that errors are independent of each other; therefore, there is no correlation between errors and the hypothesis claiming the existence of correlation between errors is not rejected. Graphs 5 and 6 indicate the frequency distribution of errors and normal distribution.

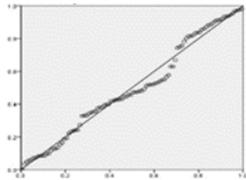


Table 5: the assumption of errors independency by regression equation and Durbin-Watson test in linear regression

Correlation coefficient	Coefficient of determination of the table	Adjusted coefficient of determination	Standard error of estimation	Durbin-Watson
0.365	0.133	0.124	0.3099	2.180

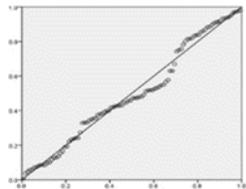


Fig. 5: distributions obtained from regression test of the third hypothesis

4. The staff's development and promotion are effective on the relationship between teamwork performance and increasing the staff's tendency towards knowledge management in the organization.

Table 6: the assumption of errors independency by regression equation and Durbin-Watson test in linear regression

Correlation coefficient	Coefficient of determination of the table	Adjusted coefficient of determination	Standard error of estimation	Durbin-Watson
0.609	0.371	0.385	0.2635	1.934

According to Table 6, the value of Durbin-Watson statistic is equal 1.934 which indicates that errors are independent of each other; therefore, there is no correlation between errors and the hypothesis claiming the existence of correlation between errors is not rejected. Graphs 7 and 8 indicate the frequency distribution of errors and normal distribution which intuitively can identify the normal and non-normal distribution of errors.

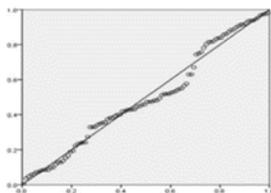


Fig. 7: histograms and distributions obtained from regression test of the fourth hypothesis

Fig. 3: distributions obtained from regression test of the second hypothesis

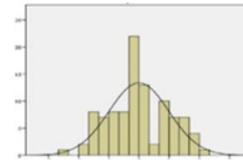


Fig. 4: histograms obtained from regression test of the second hypothesis

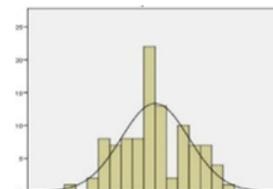


Fig. 6: histograms obtained from regression test of the third hypothesis

As observed, most of the accumulation of errors in these two graphs is the same, and selecting regression test for confirming the effectiveness of independent variable on dependent on is correct and the use of regression test is appropriate. But, in this hypothesis, regarding the fact that the second independent variable or moderator variable is present, it is necessary that another assumption be considered, which is the identification of the effectiveness or the lack of effect of the moderator variable on the relationship between the predictor variable and criterion variable.

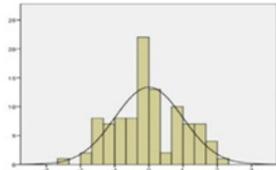


Fig 8: histograms and distributions obtained from regression test of the fourth hypothesis

variables of the staff's development and promotion in the relationship between teamwork performance and the staff's tendency towards knowledge management. In this case, accepting an independent variable and its standard coefficient indicate the degree of the effect of the independent variable on the dependent one.

Table 7 indicates the results of investigating the coefficients of the regression model between

Table 7: investigating the coefficients of the regression model

The regression model	Non-standard coefficients		Standardized coefficient Value	T statistic	p-value (Sig)
	Value	Standard error			
Criterion variable	1.514	0.222		6.803	0.000
Moderator variable	0.436	-.056	0.609	7.561	0.000
Predictor variable	-0.029	0.055	-0.043	-0.537	0.593

Regarding Table 7, because p-value of all coefficients of the predictor variable and criterion variable are less than 0.05, and the coefficient of the moderator variable is more than 0.05, therefore, the hypothesis of the equality of regression coefficients and the fixed value zero are rejected and there is no need to exclude them from the regression equation. But, p-value for the predictor variable is bigger than acceptable error; therefore, the null hypothesis is confirmed and this hypothesis is not confirmed. In other words, the Certified Management Information

System are associated with strategic and flexible performances, but, skills of the senior management team have no effect on the relationship between the Certified Management Information System and strategic and flexible performances.

5. The staff's flexibility is effective on the relationship between the intensives of knowledge management and the staff's tendency towards knowledge management in the organization.

Table 8: the assumption of errors independency by regression equation and Durbin-Watson test in linear regression

Correlation coefficient	Coefficient of determination of the table	Adjusted coefficient of determination	Standard error of estimation	Durbin-Watson
0.707	0.500	0.490	0.2365	2.634

According to Table 8, the value of Durbin-Watson statistic is equal 2.634 which indicates that errors are independent of each other; therefore, there is no correlation between errors and the hypothesis claiming the existence of correlation between errors is not rejected. Graphs 9 and 10 indicate the frequency distribution of errors and normal distribution which intuitively can identify the normal and non-normal distribution of errors.

need to exclude them from the regression equation. But, p-value for the predictor variable is bigger than acceptable error; therefore, the null hypothesis is confirmed and this hypothesis is not confirmed.

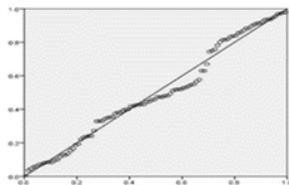


Fig. 9: distributions obtained from regression test of the fifth hypothesis

Regarding Table 9, because p-value of all coefficients of the predictor variable and criterion variable are less than 0.05, and the coefficient of the moderator variable is more than 0.05, therefore, the hypothesis of the equality of regression coefficients and the fixed value zero are rejected and there is no

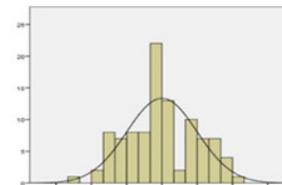


Fig. 10: histograms obtained from regression test of the fifth hypothesis

Table 9 indicates the results of investigating the coefficients of the regression model between variables.

Table 9: investigating the coefficients of the regression model

The regression model	Non-standard coefficients		Standardized coefficient Value	T statistic	p-value (Sig)
	Value	Standard error			
Criterion variable	1.249	0.199		6.285	0.000
Moderator variable	0.412	0.043	0.698	9.647	0.000
Predictor variable	-0.044	0.057	-0.056	-0.773	0.090

6. The staff's flexibility is effective on the relationship between continuous learning and the staff's tendency towards knowledge management in the organization.

Table 10: the assumption of errors independency by regression equation and Durbin-Watson test in linear regression

Correlation coefficient	Coefficient of determination of the table	Adjusted coefficient of determination	Standard error of estimation	Durbin-Watson
0.747	0.558	0.549	0.2223	2.601

According to Table 10, the value of Durbin-Watson statistic is equal 2.601 which indicates that errors are independent of each other; therefore, there is no correlation between errors and the hypothesis claiming the existence of correlation between errors is not rejected. As a result, regression can be used. Other assumptions considered in regression are that errors (and not data) should have a normal distribution with mean value zero. For obtaining this aim, the values of standard errors should be calculated, then, the graph of their distributions and normality should be investigated. Afterwards, a comparison should be conducted between the graphs. Then, doing linear regression is allowed in this stage. Graphs 11 and 12 indicate the frequency distribution of errors and normal distribution which institutively can identify the normal and non-normal distribution of errors.

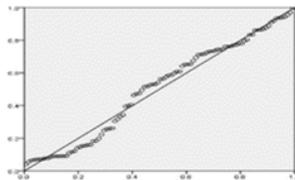


Fig. 11: distributions obtained from regression test of the fifth hypothesis

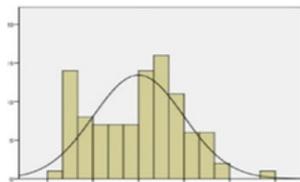


Fig. 12: histograms obtained from regression test of the fifth hypothesis

7. Results

The results obtained from inferential statistics indicated that the first hypothesis stating that teamwork performance is effective on increasing the staff's tendency towards knowledge management in the organization, was confirmed. In this line, the second hypothesis stating that the intensives of knowledge management are effective on increasing the staff's tendency towards knowledge management in the organization, was also confirmed. The third hypothesis stating that

continuous learning is effective on increasing the staff's tendency towards knowledge management in the organization, was confirmed as well, but the fourth and fifth ones in which moderator variables had a determining role, were rejected. In these two hypotheses, the staff's development and promotion and their flexibility as moderator variables caused the rejection of the hypotheses. Finally, the sixth hypothesis claiming that the staff's flexibility is effective on the relationship between continuous learning and the staff's tendency towards knowledge management in the organization was confirmed as well.

8. Applied suggestions

- ✓ More participation of the staff in organizational decisions.
- ✓ Forming specialized teams for eliminating basic problems of the organizations.
- ✓ Explicating incentives of knowledge management in organizations.
- ✓ The knowledge of organizational managers of different incentives which can be effective in knowledge management.
- ✓ Explaining learning and its different kinds by related educational unites to other unites.
- ✓ Increasing the flexible power of organizational staff in relation with job rotation in the organization.

9. Suggestions for further research

- Conducting the results of the present study in a broader population and comparing its results with those of the present study.
- More knowledge of managers regarding the advantages and disadvantages available in information systems.
- Investigating the present study using other models by using other variables.
- Conducting the present study in other academic centers and comparing their results with each other.

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