

The Effect of Factors Affecting the Effective Implementation of Knowledge Management in the Employees of the Department of Education Sistan and Baluchestan Province

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Abstract: This study attempts to survey the Factors affecting the effective implementation of knowledge management among employees of the Department of Education Sistan and Baluchestan Province. The study sample included all employees of the Department of Education for the academic year 2015-2016 Sistan-Baluchistan province, which numbers 309 people. The sample of 172 persons Morgan table were selected as sample. The method is simple random sampling. The tool measuring questionnaire developed by the researchers that the composite combination of standard questionnaires collected. The scale contained 101 questions that its validity by experts and managers and then approved supervisor. To obtain Item reliability through Cronbach's alpha was used to 0.927 times the amount obtained show good reliability. In order to use data analysis software package has been SPSS19. For data analysis, descriptive statistics were used also to express correlation coefficient method is used. Statistical analysis suggests that: organizational culture, management style of the organization, organizational participation, valuing entrepreneurship within the organization and organizational learning on effective implementation of knowledge management in the Department of Education staff is effectively in Sistan and Baluchestan Province? The effectiveness of the implementation of knowledge management among employees of the Department of Education Sistan-Baluchistan province in terms of demographic characteristics (age, sex, education, organizational base, social-economic status) is different.

Keywords: Knowledge Management, Organizational Culture.

Introduction

Given the importance of training courses in the field of staff enable, unfortunately, in some organizations for several reasons, including the uncertainty of organizational goals, lack of the proper definition of the work and personal relationships, lack of the appropriate system of operation valuation, lack of the definition of appropriate indicators to assay the productivity of human resources and some factors in market, which is due to non-competing

business environment cause to not define the special solution to qualify human resources, and even this does not consider so much serious. Therefore, the effectiveness of these training courses is still questionable.

With the advancement of technology and complexity of the activities of the organization, we can certainly say that individual working era has been expired, and today as before the management does not mean to manage the people, but it is the management on the working groups. Making the Change willingly, without coercion is in order to improve and restructure the organization.

The future looking is extensively determined by cultural normalizations, values, and beliefs. Any change in the organization without the knowledge management is not successful. In today organizations, any reduction in quality, service and manufacturing goods can be evaluated according to intra-organization factors. Norms and conflicts in organizations cause to renew or decrease the output level (Oreyi, 2012).

Also, since the performance of employees is the effective factor to increase the effectiveness and performance of organizations, it needs to overall attend them. Today, organizations will lose their effectiveness when do not consider to management of knowledge, and they will be postponed from the goals that have been determined strategically.

Staff operation is one of the most important variables in the field of organizational behavior. Because, each organization has a purpose, that makes up the philosophy of its nature. Achieving organizational goals depends on the mobilization of resources (capital, equipment and manpower). Among the facilities of an organization, human resource has an important and central role. Because, they can combine the capital and equipment, and thus with creative force and their own initiative are in seeking to achieve the goals of the organization. If you do not pay special attention to knowledge management of organization, therefore their performance and effectiveness will decline. Today, organizations are confronting with the increasing speed and intensity and depth in internal and external conditions. One of the most important tasks of the senior managers is to fit the goals of the organization, staff viewpoints, the attitude of managers, strategies and activities (Rahimi, 2010).

Given that education forms the important and necessary part of education and training, and generally the improvement of human resources in each country, it will make the necessary infrastructures in order to the better doing works by the effectiveness of knowledge management among their employees, and to increase more productivity and efficiency. Therefore, role of knowledge management is very important.

Without a doubt, follow the stages and change steps as well as preparation of internal space of organization and staff thought in order to this subject cause to reduce the intra-organizations conflicts, use of creative forces, reduce costs, and proper speed in the face of changes. In the meantime, the awareness of proper and necessary trainings and implement of them play an important role in achieving these goals. The study was conducted by a team of scholars in the field of management, knowledge management has been known as one of the most effective factors in progressing of organizations.

Lack of organizational learning, due to poor communication among employees, failure to optimal use of knowledge management in all daily activities, failure to allocate adequate time for learning, how to better use of the knowledge management, and understanding its intricacies, the lack of staff training, false conception of staffs, all of them have been caused by low benefit providing with knowledge management to its users. These cases show that the most important sensations of implementation for effectiveness of knowledge management include human aspects. Many institutions have failed to implement the effective knowledge management in organizations, which have not introduced the concepts of knowledge management in a way favorable to employees.

Currently, the effectiveness of the teaching staffs in Sistan and Baluchistan province has been affected by the heavy administrative bureaucracy in this province, so that creativity and impact on the educational process heavily influenced by the overhead formulary and the regulations. The main problem for assessing the effectiveness of employees in education and training of the province is in this matter that the ability to create the effectiveness between the education and training staffs will lead to improve the academic performance of students and organizational productivity in this sector. Accordingly, in this research is tried to answer to the main question of this study that is "what are the factors influencing the effectiveness of the implementation of knowledge management among staffs of department of education and training employees of Sistan and Baluchistan province?", which can identify the effective factors and offer the suggestions and proper ways derived from research results in order to enhance the effective management of the community.

Changes in the competitive environment of organizations cause to generate a new space in the organizational process. This progress has provided the changes of the dynamics of knowledge in organization, so that the progress of market knowledge will be dynamically changing, and organizations are bound to change under the framework of these changes. Therefore, knowledge management appeared as a shield against these progresses and changes. Knowledge management is the attractive subject for many industrial, business and academia areas with that slogan "knowledge management" was manifested in the minds and in less than several decades was changed to one of the

interesting and manageable issues. Also with the advent of the 21st century, knowledge was considered as an eternal source in many communities, and the necessity of making and control is necessary. As a result, the boundary between the developed countries is the use and better utilization of knowledge. In recent years, knowledge is considered as a commodity, so that could be a competitive advantage.

Organizations to perform their duties with heaps of data (information) are faced that due to the ever-increasing tasks. It is clear that this volume of data will affect how to information and the manner of internal controls, which is as the duties of managers. So today, the managing of organization has been led to the application of scientific methods and the use of specialist human resource as well as the advanced technology. Nowadays, computers and electronic machines able to store and process the information, that can be both time saving and prepare numerous copies of a letter or a report.

Knowledge management in most organizations is still in their infancy. And while the most focuses are on the data management and information management in the field of information systems. A knowledge management is increasingly an indivisible business activity for most organizations. Managers' awareness of the value of intellectual capitals causes to proceed their minds to ways of realizing this potential and powerful capabilities; in a way that Nonaca et al (2001) have acknowledged that organizational knowledge is the main source of sustainable competitive advantage (Zahday, 2011).

Human resources constitute the real wealth of an organization. The important concerns of successful businesses are the collecting of the wisdom and educated human resource capital, which is able to make a difference in their organization they belong it. Therefore, it can be accepted that educating and empowering the employees is one of the goals of the organization, because they have accepted that the efficiency depends on the educated and empowered employees, and for this important issue are cost, and training courses are carried out for the purpose of enhancing the individual and group ability of their employees, and empowerment is considered as a strategy for the development and prosperity of organization (Miller, 2011).

In organizations that believed more important to the training of human resources, human source seek new information and practical solutions to achieve the best efficiency, effectiveness. These organizations have features such as: dynamic, creative, and lasting and development in order to make effective changes in inter-organizational factors, and their interaction with the social environment. The main objective of the effectiveness of human resource in any organization is to help better performance; an improvement in efficiency in any organization is to achieve its goals. One of the suitable methods for keeping the employees in organization is the offering of appropriate and good training for them. Implementation of such programs has so important effect to increase staffs' commitment to the organization, and avoids undermining the stored knowledge and skills within the organization. Organizations that spend a lot of resources and effort for development programs of their staffs, they provide a position for the permanent promoting of skills, motivation, increasing of knowledge and positive psychological dynamics of your organization and increase their competitive opportunities (Fazli et al., 2012).

Knowledge management in education and training is as one of the pillars of reliability organizations that because of making the organizational motivation and commitment. The staffs of education and training organization, which have high-job motivation, have a tendency to share their knowledge and enhance organizational excellence. On other hands, the necessity for creating the organizational effectiveness by staff causes to make the intra-part competitive advantages and will be effective on improving human resource management (Miller and Deuce, 2011).

According to studies, the impact of factors affecting the effectiveness implementation of knowledge management among employees of the department of education and training in Sistan and Baluchistan is investigated, so that we can offer theoretical and practical suggestions to those involved in the educational system.

Methodology

The research population consisted of all the employees of the department of education and training with 309 people in Sistan and Baluchistan in 2015-2016.

According to Morgan's sampling table includes 172 people of employees of this department who were selected randomly and simply.

In order to be aware of the findings of studies made in other parts of the world, and the results of research findings, scientific articles and the exchange of information and resources, online search is used.

The instrument used in this research has been using a questionnaire.

The used items are presented in Table 1.

Table 1. The items used in this study.

Name of questionnaires	Variable	Components	No. items
Conrad and Newman's knowledge management questionnaire (1999)	Knowledge management	Production and knowledge learning	
		Storing the knowledge	
		Distributing and sharing the knowledge	
		Using the knowledge	
Researcher-made	Intra-organizational entrepreneurship	Producing the idea	
		Implementing the Idea	
Nameth's Organizational learning questionnaire		Organizational learning	
Houghton's leadership style questionnaire	Leadership style	Directive leadership	
		Empowerment leadership	
		Self-leadership	
		Job challenging	
Carmeli's organizational culture questionnaire (2005)	Organizational culture	Communications	
		Innovation	
		Confidence	
		Social integration	
Research-made		Organizational participation	

In any scientific research with experimental method, the measuring instruments must be the valid and the reliable.

To calculate the validity of the questionnaire, 30 copies of questionnaire was distributed between the statistical sample and after analyzing with statistical software, its reliability was accepted. The Cronbach's alpha coefficients obtained for the components of the questionnaires are offered in Table 2:

Table 2. Cronbach's alpha coefficients based on the components.

Variable	Components	Cronbach's alpha coefficients
Knowledge management	Production and knowledge learning	
	Storing the knowledge	
	Distributing and sharing the knowledge	
	Using the knowledge	
Intra-organizational entrepreneurship	Producing the idea	
	Implementing the Idea	
	Organizational learning	
Leadership style	Directive leadership	
	Empowerment leadership	
	Self-leadership	
Organizational culture	Job challenging	
	Communications	
	Innovation	
	Confidence	
Organizational participation	Social integration	

To analyze the data, the descriptive and inferential statistics will be used. For descriptive statistics, indicators such as frequency tables, percentages, graphs, mean, mode, standard deviation, variance and skewness, and inferential statistics, one-sample t test was used.

Results

In this section, we discuss the research questions and test the hypotheses. In the first step must be tested normality of variables. Kolmogorov-Smirnov test was used to test the normality, which its results were shown in Table 3.

Table 3. The results of Kolmogorov-Smirnov test.

Variable	Test statistic	P-value	Results
Knowledge management			Normal
Intra-organizational entrepreneurship			Normal
Organizational learning			Normal
Leadership style			Normal
Organizational culture			Normal
Organizational participation			Normal

According to Kolmogorov-Smirnov test for all main variables, because the level of significance is greater than the level of error 0.05 ($p > 0.05$), therefore, in a 0.95 confidence level, this claim that the mentioned distribution is normal to be accepted and to test hypotheses associated with this variables must make use of parametric tests.

To investigate the factors affecting the implementation of the effective knowledge management between staffs of the department of education and training in Sistan and Baluchistan province, the regression is used. Results were shown in Tables 4, 5 and 6:

Table 4. The summarizes of the regression model.

Model	Correlation coefficient	Determination coefficient
Regression		

Table 5. Variance analysis.

Source of variations	SS	df	MS	F-value	P-value
Regression					
Residue					
Total					

Table 6. Coefficients of the variables in regression model.

Variables	Non-standard coefficients		Standard coefficients	t-value	P-value
	Standard error	B	beta		
Constant					
Intra-organizational entrepreneurship					
Organizational learning					
Leadership style					
Organizational culture					
Organizational participation					

As shown in the table of the summary of model, coefficient of determination is equal to 0.757; therefore we can say that approximately 76 % of the changes of the dependent variable (knowledge management) were determined by independent variables (intra-organization entrepreneurship, learning organization, leadership style, organizational culture and institutional participation). In the table of variance analysis, significant amount is equal to 0.000 and less than 0.05, so regression is significant. In the table of the coefficients of the variables in the regression model can be seen that the significant values for the variables of organizational learning, leadership style and organizational participation are more than 0.05; therefore, with 95% confidence coefficient the impact factor of these variables in the regression model is not significant. In conclusion, it can be said that learning organization, leadership style and organizational contributions in order to implement the effective knowledge management among all staffs of the department of education and training in Sistan and Baluchistan province are not effective. Also according to the table of coefficients of the variables in the regression model can be seen that significant values for variable of intra-organization entrepreneurship and the organizational culture are less than 0.05.

Friedman test was used to rank the components. The results of these tests are summarized in Tables 7 and 8.

Table 7. The results of Friedman test.

Number
X^2
df
P-value

According to Friedman test, because a significant level obtained for the test (0.000) is less than the accepted level of error (0.05), we conclude that the priority of the variables affecting the effective implementation of knowledge management in the staffs of department of education and training in Sistan and Baluchistan province have significant differences in the confidence level of 95%. Prioritizing results of the variables affecting the effective implementation of knowledge management were shown in Table 8.

Table 8. The results of prioritizing

Priority	Variables	Average of ranking
Fifth	Intra-organizational entrepreneurship	
Fourth	Organizational learning	
Second	Leadership style	
Third	Organizational culture	
First	Organizational participation	

According to Table 8, the first rank is related to the organizational participation and the last is for the intra-organizational entrepreneurship.

To examine the differences in knowledge management effectiveness based on marital status, independent t test was used. In this test, the average obtained for the component “knowledge management effectiveness” with marital status is summarized in Table 9.

Table 9. The results of the independent t test for the marital status and knowledge management.

Demographic features	Group	Mean	t-value	df	P-value
Marital status	Single				
	Married				

Because, significant level of test is more than error level of 5%, it can be inferred that the education-based effectiveness of knowledge management has not a significant difference.

ANOVA test was used to examine the differences education-based effectiveness knowledge management. In this test, the average obtained for the component “knowledge management effectiveness” with education are shown in Table 10.

Table 10. ANOVA test results.

Demographic features		Mean	F-value	df	P-value
Education	Diploma and Associate's degree				
	Bachelor of science (or Art)				
	Master of Science (or Art) and PhD				

The results of f test show the effectiveness of knowledge management based on education, according to the f-value of 2.804 with a degree of freedom of 2, and a significance level of 0.064, is smaller than the critical value of table in 0.95 level, thus the differences observed is not statistically significant; therefore it can be concluded that the effectiveness of knowledge management is same based on education.

To examine the differences in knowledge management effectiveness based on work experience, ANOVA test was used. In this test, the average obtained for the component “knowledge management effectiveness” with education are shown in Table 11.

Table 11. ANOVA test results.

Demographic features		Mean	F-value	df	P-value
The working experience	< 5 years				
	Between 5 to 10 years				
	> 10 years				

F test results of the study show differences in the effectiveness of knowledge management based on work experience according to the f-value 0.896, df = 2 and a significance level of 0.410 is smaller than the critical value of table in 0.95 level, so differences are not statistically significant. Therefore, it can be concluded that the effectiveness of knowledge management is the same based on work experience.

To examine the differences in knowledge management effectiveness based on monthly income, ANOVA was used. In this test, the average obtained for the component “knowledge management effectiveness” with education are summarized in Table 12.

Table 12. ANOVA test results.

Demographic features		Mean	F-value	df	P-value
Monthly income	< 1500000 t				
	Between 1500000 to 2500000 t				
	> 2500000 t				

The results of f test show that differences of knowledge management effectiveness based on monthly income, with f-value 0.496, df = 2, and a significance level of 0.822 is smaller than the critical value in 0.95 level, so differences is not statistically significant. It can be concluded that the effectiveness of knowledge management is the same based on monthly income.

Discussion and Conclusion

Results show that intra-organizational entrepreneurship affects the effectiveness of the knowledge management among employees of the general department of education and training in Sistan and Baluchistan province. The results of this study are agreement with the results of Tahavandi et al (2011) entitled, Identifying and prioritizing criteria of effectiveness of knowledge management in research organizations with a comparative approach Fuzzy - decisive phase. It showed that the self-awareness skill, creative thinking, interpersonal communication play a role and significant important to predict and rank the effectiveness of knowledge management in the life skills of students. Furthermore, our results are agreement with study made by Miller (2011) entitled, factors affecting the

effectiveness of knowledge management in the UK. It showed that the increase in the effectiveness has the direct relationship with knowledge management.

The results show that the social innovation and integrations affect the effectiveness implementation of knowledge management among the staff of the general department of education and training in Sistan and Baluchistan province. The results of this study are agreement with the results obtained by McDermott (1999) entitled, *Why Information Technology Inspired, But Cannot Deliver Knowledge Management*, which showed that the knowledge management is one of the effective factors caused the increasing of the organization's efficiency and productivity. On the other hand, the results of this study with the results Weinreich and Groher (2016) with titled "Software architecture knowledge management approaches and their support for knowledge management activities: A systematic literature review", which showed that the efficiency of employees in private companies under what subject could be, is aligned.

The results show that the organizational culture has an influence on the effectiveness implementation of knowledge management among employees of the general department of education and training in Sistan and Baluchistan province. The results of this study with the results obtained by Gholizadeh (2004) entitled, *Investigation of the factors influencing the knowledge management from the perspective of the educational and organizational knowledge-workers in the city of Karaj*, which showed the knowledge management is effective by cultural factors, are agreement. On the other hand, the results of this study with the results obtained by Arthur White Hill and his Japanese counterpart; Takeshi Wang and Wang (2016) entitled, "Determinants of firms' knowledge management system implementation: An empirical study" are agreement, which showed how attitudes of staffs and cultural values and their motivation and sense of belonging to the organization have the significant relations.

The results show that the management style of the organization to implement the effective knowledge management between employees of the general department of education and training in Sistan and Baluchistan province is effective. This study is agreement with the results reported by Mao et al (2016) entitled, "Information technology resource, knowledge management capability, and competitive advantage: The moderating role of resource commitment", which showed a significant relationship between job satisfaction and management information system. Also, John Likert (2011) in a research with titled "offering a model of the general behavior of managers productive toward other managers in the UK" showed that supervisors which have the best performance those that have the most attention on the human dimension, this research also are agreement with our results.

According to the results, the staffs' organizational participation in the process of work is the influence on the effective implementing of knowledge management among employees of the general department of education and training in Sistan and Baluchistan province. This is agreement with the results reported by Li et al (2016) entitled, "Why do employees resist knowledge management systems? An empirical study from the status quo bias and inertia perspectives", which showed that in the current situation there is a direct relationship between the staffs' organizational behavior and comprehensive management information system, and with a confidence of 95% is confirmed. Among the personal factors, the factor of years of service has the most relevant to organizational behavior, which our results are agreement with it. The results of this study is agreement by Zack (2009) entitled, "the relationship between the performance of the organization with knowledge management in the UK", which showed knowledge management with intermediate of organizational performance associates with financial performance of organization as well.

Therefore, according to the results, costing the intra-organizational entrepreneurship to implement the effective knowledge management among employees of the general department of education and training in Sistan and Baluchistan province is effective. Our results align with the results reported by Arthur White Hill and Shin Ishii Cerchione and Esposito (2016) entitled, "A systematic review of supply chain knowledge management research: State of the art and research opportunities", which showed the attitude and perception procedure of staffs and their motivation for work and cultural values and their sense of belonging to the organization have the significant relationship each other.

Results show that the organizational learning affects the effective implementation of knowledge management in the general department of education and training staff in Sistan and Baluchistan. These results are agreement with studied made by Sadeghi et al (2011) entitled, "The relationship between organizational culture and knowledge management in Tehran", which showed indicators of knowledge management directly affect the productivity of the organization. Furthermore, Hissein Gholizadeh (2010) in a research with titled, "Studying the factors influencing educational and organizational knowledge management from the perspective of knowledge workers in the city of Karaj" showed that knowledge management causes to affect and increase organizational learning directly.

Among the available variables, only the variable of intra-organizational entrepreneurship affected the effectiveness implementation of knowledge management among employees of the general department of education and training in Sistan and Baluchistan province. Therefore, the highest priority is related to the variable of intra-

organizational entrepreneurship. Miller (2011) in a research entitled, “factors affecting the effectiveness of knowledge management in the UK” showed that increasing the effectiveness has a direct relationship with knowledge management, which our results are consistent with it.

The results show that there is a difference between the implementation of the effectiveness knowledge management among employees of the general department of education and training in Sistan and Baluchistan province in terms of demographic characteristics (age, sex, education, organizational base, socio-economic base). The results of this study with the results obtained by Mirfakh-roddin et al (2010) entitled, “Effectiveness of knowledge management innovation, knowledge and practice of innovation in small and medium size”, which showed self-awareness skills, creative thinking, interpersonal communication plays an important and significant role to predict and rank the effective knowledge management in the life skills of students, are aligned.

Conflict of interest

The authors declare no conflict of interest.

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