

# OnThe Relationship Between Knowledge Management And Teachers' Self-Efficacy (Case study : Shiraz Pre-School Centers)

Sara Baezat<sup>1</sup>, Hossein Aflakifard<sup>2</sup>, Nima Shahidi<sup>3</sup>

1. Department Of Educational Sciences, Arsanjan Branch, Islamic Azad University, Arsanjan , Iran
2. Assistant professor , Department Of Educational Sciences, Arsanjan Branch, Islamic Azad University, Arsanjan , Iran
3. Assistant professor , Department Of Educational Sciences, Nourabad Mamasani Branch, Islamic Azad University, Nourabad Mamasani, Iran

*Corresponding author:* Sara Baezat

**ABSTRACT:** The main purpose of this study was to analyze the relationship between teachers' knowledge management and self-efficacy in pre-school centers of Shiraz Educational Organization region 2. Research population included 78 pre –school teachers in region 2 of shiraz educational organization. The sample were 66 teachers and was selected randomly based on KrejceyMorgan table. Jashpara knowledge management questionnaire (chronbach alpha= 0.89) and shwarzer et al (1991) self- efficacy questionnaire (chronbach alpha=0.82) with appropriate validity based on the specialists points of view were used to conduct this research. Pearson correlation coefficient and stepwise regression tests were used to analyze the relationship between teachers' knowledge management and their self-efficacy. the results showed that all dimensions of knowledge management including knowledge creating, organizing, implementing and sharing had a positive and significant relationship with teachers self-efficacy. Among the dimensions of knowledge management , knowledge implementing and knowledge organizing had a significant power for predicting teachers self-efficacy.

**Key Words:** Knowledge Management, Self-Efficacy, Teachers, Pre-School Center.

## INTRODUCTION

Nowadays Basic education and specially preschool education, has raised as the foundation for all other Educations in the world. Many advanced countries to build community, Pay special attention to preschool education sectors. One of the ways to increase the capabilities and competencies of staffs is applying knowledge management that create ,organize , share and apply knowledge in organizations in a systematic way , Thus, knowledge of the organizations and the staffs is trying to become more effective and updated (Ciganek et al, 2008, p3). Educational organizations as important organizations, requires the application of knowledge management. One of the aspects that are supposed that applying knowledge management can increase it is teachers' efficacy. Researches have shown that the improvement of teachers beliefs about their capabilities, which is named as teachers' self-efficacy, can have a great impact on improving the performance of teachers and students in learning (Cerit, 2010; Chacon, 2005; Delinger et al, 2008; Margolis & McCabe, 2010). chue et al (2011) believe that the application of knowledge management in schools can improve the teaching process of teachers. Other research has shown that attention on knowledge management in schools and education systems can improve the various processes of education, quality of work life, professional development and job satisfaction of teachers (Petrides & Nodin, 2003; Wang & Jia, 2005).

One of the most important educational centers that seem to be able to use knowledge management to help improve their training, are pre-school centers. Preschool centers since the first official training center of the lives of individuals and due to the nature of their work and basic skills to influence the behavior and personality of the child is very sensitive, need to update knowledge in the areas of training and the appropriate methods for teaching purpose. It is thought that increased knowledge and awareness for teachers should be able to increase their

efficacy in teaching. Accordingly, it is important that teachers believe about their abilities, which was created by knowledge management to do their responsibilities about children's education.

Therefore, this research with regard to the importance of the role of teachers of preschool centers in shaping behaviors and skills of teachers and learners of these centers need to have knowledge to know and to educate the next generation, is trying to engage this issue that is there any relationship between knowledge management of teachers with their self-efficacy in Shiraz preschool centers? And whether different aspects of knowledge management can increase their self-efficacy?

Knowledge management is the planning, organizing, motivating, and controlling of people, processes and systems in the organization to ensure that its knowledge-related assets are improved and effectively employed (King et al, 2008).

Davenport (1998) defines the knowledge management as an effort to explore the treasure lies in the minds of the people and turn this hidden treasure to finance in a way that a wide collection of people in organization involved in Organization's decisions. Balcomb (1999) defined Knowledge management as "the systematic acquisition of knowledge sharing, creation and application of knowledge to enhance the organization".

Shanhong (2000) defined Knowledge management as "effective detection, creation, development, solving, use, storing and sharing knowledge in order to create an approach to convert tacit knowledge into explicit knowledge."

Jashapara (2004) defines knowledge management in the form of a four-looped process as: effective learning process blended in creating, organizing, sharing (both tacit and explicit) and applying knowledge, which leads to upgrade of organizational intellectual capitals and performance improvement (see Figure 1).

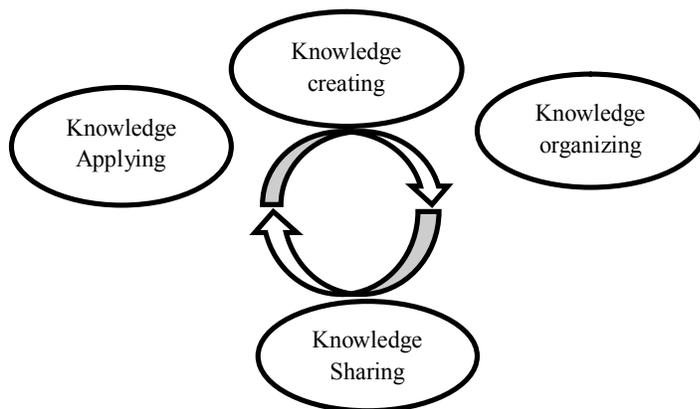


Figure 1. Four-looped Knowledge Management Cycle (Jashapara, 2004, p. 12)

### **Knowledge Creating**

Knowledge creating is an endless process which includes creating novel ideas, grasping new paradigms, and combining isolated principles for establishing new processes. Libraries and Departments for Documents are central resources for knowledge creating (Nazari, 2003, pp. 262-263).

### **Knowledge Organizing**

This loop of knowledge management cycle refers to storing, recording, and preserving knowledge in formats and frames which let other employees regain it. In fact, knowledge organizing is prerequisite to knowledge sharing. In other words recording knowledge within folders and intranets, provides capacity for knowledge sharing (Radring, 2003, pp 178-189).

### **Knowledge Sharing**

Knowledge sharing is the mutual knowledge flowing and scattering among people and mechanical and nonmechanical bases for knowledge. In fact, 90% of the knowledge management success depends on right knowledge sharing. In other words, the effectiveness of knowledge management cycle relies on the abilities of people for knowledge sharing. It should be noted here that culture has a significant role for a fruitful sharing of knowledge. The establishment of a culture where "sharing knowledge is power instead of knowledge is power", has a great influence on the success of knowledge sharing in knowledge management cycle (Rading, 2003, pp. 160).

### **Knowledge Applying**

It Consists of utilizing the obtained ideas and knowledge, without being concerned about their presenters (Benbya,2008).

Knowledge management is a collaborative and integrated approach to the creation, capture, organization, access, and use of an enterprise's intellectual assets. ( Grey,1996) Further definitions come from the intellectual or knowledge asset perspective:

Knowledge management consists of “ leveraging intellectual assets to enhance organizational performance ”(Stankosky,2008 ).

Knowledge management is a movement to upgrade a company's abilities, help it to preserve competitive potential, and reflect its knowledge in goods and services. On the other hand, through knowledge management, the knowledge fund is reserved and not lost by employee turnover (Nonaka, 1995, p.96).

### **Self-efficacy**

For the first time, Armor et al. (1976) defined teachers' self-efficacy as “the extent to which the university teacher believes he/ she has the capacity to influence university students' learning”. Bandura (2000) defined self-efficacy as individuals' beliefs in their abilities to fulfill duties successfully.” Self-efficacy beliefs are beliefs in an individual's own perceived competencies and that she/ he believes that she/ he can perform an action well or at least satisfactorily” (Gist & Mitchell, 1992).

Dellinger et al. (2008) defined teachers' self-efficacy as “teachers' beliefs in their own abilities to fulfill teaching and learning duties successfully within their own class context”. They insist on teachers' teaching context in their own classes and this is what does not exist in Bandura's definition of teachers' self-efficacy (Yough, 2011)

Tschannen-Moran et al. (1998)'s define teachers' self-efficacy as “teacher's belief in his/ her abilities to organize and perform activities required for fulfillment of teaching duties against a specific background”. Teacher self-efficacy beliefs may affect learners' success in many different ways. Teachers who have higher self-efficacy tend to use innovative teaching methods in the classroom and classroom management as well as the different perspectives and different teaching methods to encourage learners to self-reliance and reduce the severe supervision of teacher (Guskey& Passaro,1998,p 631) .Chacón(2005) stated that teachers having higher self-efficacy beliefs can manage class issues better.

Also Gist & Mitchell(1992) defined , self-efficacy beliefs as an outcome of the comparison process, composition and evaluation of information about a person's ability to select and define the duties of her efforts to effects.

Research carried out by different researchers on the impact of teachers' self-efficacy in cognitive development, showed that they self-efficacy can increase students' learning and academic achievement .

Awang et al (2012) in a study about the application of knowledge management in the learning system in Malaysia, concluded that knowledge management is an important factor in improving the professional status of teachers and the development of the educational system and increase the academic achievement of students .

Ghalai et al (2012) reported that teachers' self-efficacy had a significant and positive relationship with academic achievement .

Drang (2011) in a research stated that using knowledge management among teachers in preschool centers improve their classroom management status and enhance the capabilities of their training .

Margolis &McCabe(2010), in their research concluded that the teachers' self-efficiency would increase the motivation to learn in learners.

Cerit(2010)reported that the teachers' self-efficacy would improve the quality of teaching and their educational activities .

Ohlsen(2010) also showed that the quality of teachers will improve outcomes for learners. He knows that one of the characteristics of quality teachers to improve their efficacy and leadership abilities to teach.

Petrides and Nodin's(2003)research showed that applying knowledge management strategies in schools and educational institutions can improve educational outcomes for teachers, schools and learners .

## **RESEARCH METHODOLOGY**

The descriptive method, of surveying type, was used for conducting the study. Research population included 78 pre –school teachers in region 2 of shiraz educational organization. The sample were 66 teachers and was selected randomly based on krejceyMorgan table.Jashpara knowledge management questionnaire (chronbach alpha= 0.89) and shwarzer et al (1991) self- efficacy questionnaire (chronbach alpha=0.82)with appropriate validity based on the specialists points of view were used to conduct this research. Pearson correlation coefficient and stepwise regression tests were used to analyze the relationship between teachers' knowledge management and their self-efficacy.

## RESULTS

First hypothesis: There is a significant relationship between pre-schools teachers' knowledge creating and their self-efficacy.

To test this hypothesis, pearson correlation coefficient was used; results showed that there is a significant ,positive and direct relationship between pre-schools teachers' knowledge creating and their self-efficacy. The pearson correlation coefficient was 0.309 and it's significant level was 0.012.

Second hypothesis: There is a significant relationship between pre-schools teachers' knowledge organizing and their self-efficacy.

To test this hypothesis, pearson correlation coefficient was used; results showed that there is a significant ,positive and direct relationship between pre-schools teachers' knowledge organizing and their self-efficacy. The pearson correlation coefficient was 0.460 and it's significant level was 0.000.

Third hypothesis: There is a significant relationship between pre-schools teachers' knowledge applying and their self-efficacy.

To test this hypothesis, pearson correlation coefficient was used; results showed that there is a significant ,positive and direct relationship between pre-schools teachers' knowledge applying and their self-efficacy. The pearson correlation coefficient was 0.412 and it's significant level was 0.001.

Fourth hypothesis: There is a significant relationship between pre-schools teachers' knowledge sharing and their self-efficacy.

To test this hypothesis, pearson correlation coefficient was used; results showed that there is a significant ,positive and direct relationship between pre-schools teachers' knowledge sharing and their self-efficacy. The pearson correlation coefficient was 0.445 and it's significant level was 0.000.

In table 1, pearson coefficient between teachers' self-efficacy and dimensions of knowledge management are presented.

Table1. Pearson correlation coefficient between teachers' self-efficacy and dimensions of knowledge management

Variable	Mean	Self-efficacy	
		Correlation coefficient	P value
Knowledge Creating	4.3545	0.309	0.012
Knowledge Organizing	3.9432	0.460	0.000
Knowledge Applying	3.7896	0.412	0.001
Knowledge Sharing	3.7192	0.445	0.000
Knowledge Management	4.2424	0.524	0.000
Self-efficacy	3.3561	1	

In table 2 ,the stepwise regression between teachers' self-efficacy and dimensions of knowledge management are presented.

Table 2.The stepwise regression between teachers' self-efficacy and dimensions of knowledge management

Model		SS	df	MS	F	P value	R	R <sup>2</sup>	Revised R <sup>2</sup>
1	regression	1.836	1	1.836	17.213	0.000	0.460	0.212	0.200
	residual	6.827	64	0.107					
	total	8.663	65						
2	regression	2.404	2	1.202	12.096	0.000	0.527	0.277	0.255
	residual	6.259	63	0.099					
	total	8.663	65						

Table 3. Stepwise regression coefficients

Model		Unstandardized Coefficient		Standardized Coefficient Beta	t	Significant level
		B	Standard Error			
1	Constant	2.429	0.227		10.700	0.000
	Knowledge Organizing	0.235	0.057	0.460	4.149	0.000
	Constant	1.994	0.285		7.003	0.000
2	Knowledge Organizing	0.181	0.059	0.355	3.061	0.003
	Knowledge Applying	0.171	0.072	0.277	2.390	0.020
	Constant					

As it is observed, among all dimensions of knowledge management, knowledge organizing in first step ,and knowledge organizing and knowledge applying in second step ,had the most prediction power for predicting pre-school teachers' self-efficacy. According to findings knowledge creating and knowledge sharing had no power for predicting teachers' self-efficacy.

### DISCUSSION AND CONCLUSION

With regard to direct and significant positive relationship between knowledge management and teachers' self-efficacy can be concluded that , if Knowledge management is implemented correctly among teachers, they can empower their abilities by creating, applying, sharing and organizing their knowledge to improve the teaching quality in pre –school centers. Accordingly recommended that school administrators provide the basis for the implementation of knowledge management in schools and encourage the creation and application of knowledge management in their own schools and classrooms by adopting policies, for Using knowledge management capacities to increase their self-efficacy to improve learning processes. The results achieved are consistent with results of the researches done by Awang et al(2012),Drang(2011),Cerit(2010), Ohlsen(2009),Petrides&Nodin(2003) and Ghalai et al(2012)

With regard to direct and significant positive relationship between teachers' knowledge creating and self-efficacy it can be concluded that, Knowledge creating can improve the teachers' self-efficacy in the educational affairs. In other words, production and acquisition of the knowledge needed by teachers of preschool centers they Can increase their faith in their own abilities to do their tasks successfully and lead to improve the outcomes' quality. The results achieved are consistent with results of the researches done by Awang et al(2012),Drang(2011),Cerit(2010), Ohlsen(2009),Petrides&Nodin(2003) ,Ghalai et al(2012), and Wang &Jia (2005).

With regard to direct and significant positive relationship between teachers' knowledge organizing and self-efficacy it can be concluded that, Knowledge organizing can improve the teachers' self-efficacy in the educational affairs.thus it is recommended that school administrators and authorities necessary to provide necessary basis for motivating teachers to produce the desired knowledge in preschool centers. The results achieved are consistent with results of the researches done byAwang et al(2012),Ghalai et al(2012),Drang(2011),Cerit(2010), Ohlsen(2009),Chan(2008), Von Villas(2004), Wang &Jia (2005) ,and Petrides&Nodin(2003)

With regard to direct and significant positive relationship between teachers' knowledge applying and self-efficacy it can be concluded that, Knowledge applying can improve the teachers' self-efficacy in the educational affairs, because paying attention to Knowledge applying among teachers can improve their believes about their abilities to do their educational tasks .so it is recommended that school administrators to provide a good basis for applying the knowledge of pre-school education in pre-school centers. The results achieved are consistent with results of the researches done by Awang et al(2012),Ghalai et al(2012),Drang(2011),Cerit(2010), Margolis & McCabe(2010), Ohlsen(2009),Chan(2008), Wang &Jia (2005) , Von Villas(2004), and Petrides&Nodin(2003)

With regard to direct and significant positive relationship between teachers' knowledge sharing and self-efficacy it can be concluded that, Knowledge sharing can improve the teachers' self-efficacy in the educational affairs, because dissemination of ideas and knowledge among teachers can improve their abilities and their believes about their abilities to do their educational tasks. it is recommended that school administrators to Increase the possibility of publishing and distributing ideas and knowledge among pre-school teachers by holding Specialized scientific conferences and seminars on Preschool Education. The results achieved are consistent with results of the

researches done by Awang et al(2012),Ghalai et al(2012),Drang(2011),Cerit(2010), Ohlsen(2009) , Von Villas(2004), Wang &Jia (2005) ,and Petrides&Nodin(2003)

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