## Knowledge sharing strategies among teachers based on qualitative study

Kheiri F., <sup>1</sup> Karimi F., \*<sup>2</sup>, Nadi M.A.<sup>3</sup>

#### **Abstract**

**Introduction:** By organizing knowledge management and sharing, the lifespan of knowledge created in schools will increase, considering the importance of knowledge sharing and its significant impact on education, this research aims to identify obstacles to knowledge sharing among teachers of education across the country in order to provide the resulting solution. has been.

**Methods:** The method of this research is mixed (qualitative-quantitative method), so that in the qualitative part the phenomenological approach is used and in the quantitative part the survey method is used. Data collection was performed using semi-structured interview technique and theoretical saturation criteria between 11 teachers who had research work. All interviews were simultaneously recorded and handwritten and analyzed using the Colaizzi's seven step data analysis method. The robustness of the data was used by participants and university professors using the Lavasheh validation method (experts evaluate the questions). To determine the reliability of the extracted codes, they were returned to the interviewees to confirm its accuracy. Research Findings: Contained 49 conceptual codes, which were classified into three main concepts with sub-concepts. The main concepts include a: cultural barriers (with four concepts of disbelief of knowledge sharing with 5 conceptual codes, distrust with 4 conceptual codes, lack of dynamism in learning with 5 conceptual codes and the governance of closed culture with 5 conceptual codes). B: communication barriers (with sub-concepts of weakness in the underlying factors for knowledge sharing with 5 conceptual codes, problems of educational media with 9 conceptual codes, disregard for the intellectual capital of the organization with 6 conceptual codes) .c: Lack of supportive leadership (weakness in evaluation with 4 conceptual codes and mismanagement with 6 conceptual codes). In the quantitative part, data collection was done by distributing a questionnaire among teachers across the country and Smart PLS 6-2-3 and SPSS version 23 were used for analysis. Relevant professors were consulted to achieve the necessary validity in designing the questionnaire. Cronbach's alpha test was used for reliability.

<sup>&</sup>lt;sup>1</sup> - PhD student in educational Administration, Department of Educational Sciences and Psychology, Isfahan (Khorasgan)branch Islamic Azad University. ORCID: 0000000c6772186.

<sup>&</sup>lt;sup>2</sup> - Department of Educational Sciences and Psychology. Isfahan (Khorasgan)branch Islamic Azad University. ORCID: 0000000285943790, <a href="mailto:faribakarimi2005@yahoo.com">faribakarimi2005@yahoo.com</a>

<sup>&</sup>lt;sup>3</sup> - Department of Educational Sciences and Psychology. Isfahan (Khorasgan)branch Islamic Azad University. ORCID: 0000000215780893

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**Results:** The results showed that the communication barriers with a factor loading of 0.92 had the greatest impact on knowledge sharing.

**Conclusion:** By establishing the culture of knowledge sharing among teachers, they will promote the sharing behavior among teachers. Also, by getting the support of the education officials, the collection of knowledge by the teachers should be recognized as the organizational values of the schools and be integrated with the culture of the school organization.

**Keywords:** barriers to knowledge sharing, knowledge management, knowledge sharing

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### **Introduction:**

In the present age, which is called the age of knowledge, organizations have become more and more dynamic and challenging environment. Moreover, given that change is an integral part of today's world, it is necessary for organizations with large structures to change their inflexible workflow in today's competitive world or to equip themselves with adaptation tools and control them with these changes. Therefore, due to this, intangible and spiritual capitals of knowledge are considered as a vital and important factor today. In other words, those organizations will be successful and victorious in the face of changes and transformations that can improve and develop their intangible and spiritual capital (knowledge) (1). Given that in the age of knowledge, having a philosophical and new thought and how to use it in the right direction in the competitive world between organizations are the basic conditions for the success of an organization, including an educational organization. Therefore, this new approach in management science, knowledge management, is used in the field of creation, acquisition, storage, dissemination, sharing and application of knowledge and learning. Therefore, given that educational systems can play a key role in establishing knowledge management, using knowledge management processes will make them able to train people rich in knowledge. Since there is a close relationship between learning methods and knowledge creation, and human beings can identify, define and share their information needs by it (2) and because the institution of education as one of the most important subsystems of modern societies and as the most obvious manifestation of manpower investment plays a major role in the development of human capital and the development of human societies. For these reasons, education should be viewed as a national asset and it should be considered as one of the most valuable assets that are stored and invested in human beings (3). In fact, in the new age, knowledge is a tool to eliminate or reduce the gap between developed and developing countries. Schools have been able to take on the task of creating knowledge and legitimizing

sustainable development in the global, national and local community. In fact, knowledge management in this sector is a new approach that plays a role as the most important human and organizational capital in schools by using knowledge gathering and intellectual capabilities of people's experiences and creating recovery capabilities with the aim of growth and excellence of students. (4) Studies in the field of education and training issues indicate that when problems arise in schools and the school teacher finds a solution for them, It is necessary to share these experiences and record them and turn them into knowledge. So that in case of similar problems, even if the teacher is not present in that school, the rest of the teachers can use it and save time and costs (5).

Therefore, it can be argued that by organizing management and knowledge sharing, the lifespan of the knowledge created in schools will increase and at the same time the existing knowledge will be used to improve services to students. It will be a significant contribution to the excellence and growth of the teaching and research staff and their culturalization. Therefore, considering the importance of knowledge sharing and its significant impact on education, the researcher has decided to identify barriers to knowledge sharing in teachers and provide solutions and answer the question (what are the barriers to knowledge sharing in teachers?).

### **Research Methods:**

The method used in this research is mixed (quantitative and qualitative). In the qualitative part, the phenomenological approach is used and in the quantitative part, the survey method is used. The statistical population in the qualitative section included all teachers with more than 15 years of experience and research work in different cities of Iran. The tools used in this section were semi-structured interviews and based on theoretical saturation, a statistical sample of 11 teachers was allocated. It should be noted that all interviews were recorded and handwritten at the same time and analyzed using the Colaizzi's seven step data analysis method. The robustness of the data was analyzed by participants and university professors using the Lavasheh validation method (experts evaluate the questions). To determine the reliability of the extracted codes, they were returned to the interviewees to confirm its accuracy. In the quantitative part, the statistical population included all teachers of different levels working in public education in Iran amounted to 897 thousand people and the sample size in the present study was calculated based on the Cochran table equal to 270 people. The research tool in this part was a 49-item researcher-made questionnaire based on the Likert scale.

### **Research Findings**

Out of 11 participants in the interview, 9 are female and 2 are male. In the information obtained from the opinions of the participants in the research, 49 conceptual codes were obtained which

were classified into 3 main concepts with different sub-concepts. The main concept includes A: Cultural dimension (with four sub-concepts, disbelief of knowledge sharing in education with 5 conceptual codes, distrust with 4 conceptual codes, lack of dynamism in learning with 5 conceptual codes and governance of closed culture with 5 conceptual codes). B: Communication dimension (with sub-concepts of weakness in the underlying factors of knowledge sharing with 5 conceptual codes, problems of educational media with 8 conceptual codes and disregard for the intellectual capital of the organization with 6 conceptual codes). C: Lack of supportive leadership (with sub-concepts of weakness in evaluation with 4 conceptual codes and mismanagement with 6 conceptual codes)

Table 1 (Cultural Barriers to Knowledge Sharing)

The main	Sub-	Concept codes
concept	concept	
Cultural barriers	Distrust Disbelief of knowledge	Reluctance to knowledge dissemination Lack of awareness of the benefits of knowledge sharing Inability to understand the knowledge sharing system  Doubts about the validity of the knowledge provided Fear of not accepting and validating knowledge Possibility of abusing the shared knowledge Concern about unfair judgment of the knowledge provided
	Lack of dynamism in learning	Conservatism for creativity Weaknesses in verbal-written skills The difference between the level of knowledge of the recipient and the holder of knowledge Lack of motivation to acquire new knowledge Reluctance to continue education

of	Reluctance to Unknown questions
	Encourage preservation
inc tur	Lack of suitable context for knowledge
rna	sharing
governance osed culture	Uncommon freediscussion
e go	One-way communication flow from the
The cl	organization to the schools

Table 2 – communication barriers to knowledge sharing

The main	Sub-concept	Concept codes
arriers	weakness in the underlying factors of knowledge sharing	Lack of knowing the knowledge sharing goals Weakness in informing knowledge sharing sessions Lack of necessary connection between the holder and the receiver of knowledge Lack of a system for recording and maintaining knowledge Time constraints for knowledge sharing
Communication barriers	Problems of Educational media	Resistance to the use of technology Unreasonable expectations of technology Avoiding to use computers Insufficient technical support for systems Insufficient training to work with new systems Doubts about the benefits of new technology Lack of knowledge of human resources valuable knowledge Weakness of the system in identifying experienced people Insufficient media support

E E	Lack of training tailored to the needs
<b></b>	Failure to receive feedback after training
ion	Not using the knowledge of experienced teachers
intellectua zation	within the system
ani:	Heterogeneity of degree with teaching level
th	Insufficient attention of the organization to
for	activities
d .	Lack of attention of the organization to
egar tal o	elementary school teachers
lisregal	erenies y series a teneral
dis dis	

Table 3 – lack of supportive leadership to knowledge sharing

The main	Sub-	Concept codes
ive leadership	Weaknesses in evaluation	Ignoring the efficiency of people Not employing qualified people in the education system Failure to provide performance-based rewards Neglect of knowledge sharing in annual evaluation
Lack of supportive	Mismanagement	Lack of support for knowledge sharing programs Ignorance of knowledge sharing meetings Lack of attention to educational needs assessment in knowledge sharing Ignorance of scientific ideas Existence of cumbersome organizational rules

In the quantitative part, according to the values in Table (4): 1. Convergent and discriminant validity indicators indicate the desirability of convergent and discriminant validity of "cultural" components. 2. The values of Cronbach's alpha coefficient and the combined reliability indicate the accuracy of the measuring instrument of the components related to this dimension, in other words, the reliability of the instrument of these components.

Estimation of values related to Fornell and Larker criteria and HTMT index is reported in the following tables and it is expected that the second root of the mean variance extracted ( $\sqrt{AVE}$ ) for each structure to be greater than the correlation of that structure with other structures. Regarding the HTMT index, it is expected that the geometric mean of the correlation coefficients between the representations that are related to different structures to be lower than the geometric

mean of the correlation coefficients between the representations that are related to the same structure, and therefore the ratio between them (HTMT ratio) is less than 1.

Table (4) Criteria for evaluating the validity and reliability of cultural barriers assessment tools

Components	Combined reliability	Cronbach's alpha	discriminant validity			Convergent validity
			HTMT	Fornell	Cross-	AVE
				and	factor	
				Larker	loads	
Disbelief of	0.87	0.83		Approved		0.50
knowledge						
sharing						
Distrust	0.81	0.70		Approved		0.53
Lack of	0.84	0.77		Approved		0.51
dynamism in						
learning						
The	0.83	0.76	1	Approved		0.52
governance						
of closed						
culture						

According to the values estimated in Table (5) 1. Convergent and discriminant validity indicators indicate the desirability of the convergent and discriminant validity of the "communication" barriers components. 2. Cronbach's alpha coefficients and combined reliability values indicate the accuracy of the measuring instrument of the components related to this dimension, in other words, the reliability of the instrument of these components.

Table (5) Criteria for evaluating the validity and reliability of the communication barrier measurement tool

Component	Combined reliability	Cronbach's alpha	Discriminant validity			Convergent validity
			HTMT	Fornell	Cross-	AVE
				and	factor	
				Larker	loads	
Weaknesses in		0.70		Approved		0.52
the underlying						
factors of	0.76					
knowledge						
sharing						

Problems of		0.75	Approved	0.77
Educational	0.81			
media				
disregard for the		0.78	Approved	0.53
intellectual capital				
of the	0.84			
organization				

According to the values obtained in Table (6) 1. Convergent and discriminant validity indicators indicate the desirability of the convergent and discriminant validity of the "lack of supportive leadership" components. 2. Cronbach's alpha coefficients and combined reliability values indicate the accuracy of the measuring instrument of the components related to this dimension, in other words, the reliability of the instrument of these components.

Table (6) Criteria for evaluating the credibility and reliability of the tool for measuring the lack of supportive leadership

Components	Combined reliability	Cronbach's alpha	Discriminant validity			Convergent validity
			HTMT	Fornell and Larker	Cross- factor loads	AVE
Weakness in evaluation	0.82	0.71		Approved		0.54
Mismanagement	0.87	0.82		Approved		0.50

According to the values obtained in Table (7) 1. Convergent and discriminant validity indicators indicate the desirability of the convergent and discriminant validity of the "supportive leadership" components. 2. Cronbach's alpha coefficients and combined reliability values indicate the accuracy of the measuring instrument of the components related to this dimension, in other words, the reliability of the instrument of these components.

Table (7) Criteria for evaluating the validity and reliability of the variable measurement tool of knowledge sharing barriers

Dimensions	Combined Cronbach's reliability alpha	Discriminant validity			Convergent validity	
			HTMT	Fornell and	Cross- factor	AVE
				Larker	loads	
Cultural	0.88	0.82		Approved		0.65

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Communicational	0.86	0.79	Approved	0.61
Lack of	0.93	0.86	Approved	0.87
supportive				
leadership				

#### **Discussion conclusion:**

Descriptive findings of the study indicate that 44% of the statistical sample of the study were active in elementary school, 24% in junior high school and 33% in senior high school. In this study, 20% of them had 10 to 15 years of work experience, 38% had 15 to 20 years of work experience and 42% had 20 to 25 years of work experience. Also, 23% of the statistical sample had a bachelor's degree, 54% had a master's degree and 23% had a doctorate. Therefore, it can be said that people with postgraduate education have a higher percentage of the statistical sample of the research.

The description of the research variables showed that the average of the cultural barriers and its components in the statistical sample of the research is higher than the average (3). Furthermore, the average of the variables of communication barriers and lack of supportive leadership and their dimensions among the statistical sample of the study is estimated to be above average (3).

In the inferential findings section, the barriers to knowledge sharing were examined using a confirmatory factor approach related to teachers' experiences. The statistical model of cultural barriers was developed as a hierarchical factor model (second order). The inferential findings in this section indicate that:

- 1- Convergent and discriminant validity indicators indicate the desirability of convergent and discriminant validity of cultural components.
- 2. The values of Cronbach's alpha coefficient and the combined reliability the high measurement accuracy of the measuring tool related to this dimension, in other words, the reliability of the component tool.

Estimated values (factor loading, critical values and significance level) indicate that the factor loadings related to the components and reagents of the cultural variable are in good condition, in other words, the correlation of these variables, components and reagents related to this component is estimated at a high level, so it can be said that the convergence validity of the components of this dimension is established at the level of reagents.

The variables of communication barriers with dimensions of weakness in the underlying factors of knowledge sharing, problems of educational media and disregard for the intellectual capital of the organization were measured. The factor model of the communication dimension was developed hierarchically (second order). Estimates related to the validity and reliability indices and factor loads of components and reagents indicate that:

- 1. Convergent and discriminant validity indicators indicate the desirability of convergent and discriminant validity of communication components.
- 2. The values of Cronbach's alpha coefficient and the combined reliability the high measurement accuracy of the measuring tool related to this dimension, in other words, the reliability of the component tool.

The estimated values (factor loading, critical values and significance level) indicated that the factor loadings related to the components and reagents of the communication dimension are in a good condition.

The factor model of lack of supportive leadership was developed as a hierarchical factor model (second order). Estimates of validity and reliability indices and factor loadings of components and reagents indicated that:

- 1. Convergent and discriminant validity indicators indicate the desirability of convergent and discriminant validity of the lack of supportive leadership components.
- 2- Cronbach's alpha coefficient values and combined reliability indicate the high measurement accuracy of the measuring tool related to this dimension, in other words, the reliability of the component tool.

Estimated values (factor loading, critical values and significance level) indicate that the factor loadings related to the components and reagents of the lack of supportive leadership are in good condition. The results of the research in the quantitative part showed that communication barriers with a factor loading of 0.92 had the greatest impact on knowledge sharing. The results obtained in the qualitative part for barriers to knowledge sharing point to three main concepts including cultural dimension, communication dimension and lack of supportive leadership dimension. The first findings confirm the fact that barriers to knowledge sharing among teachers are affected by some cultural characteristics, such as disbelief in knowledge sharing, distrust, lack of dynamism in learning and the governance of closed culture. in research has evaluated the barriers to knowledge sharing in terms of change management in research and industrial organizations. The results showed that 5 factors of trust, commitment, job satisfaction, learning and organizational communication were identified as effective factors in knowledge sharing. (6) In other study, identified barriers to knowledge sharing in Shahed University. The results of this study showed that the individual barriers (insufficient trust between people), technology barriers (lack of identification system for knowledge sharing, insufficient technical support and incompatibility of information technology systems with existing processes in the organization) and organizational barriers (lack of appropriate infrastructure for knowledge sharing support, inadequate physical work environment, lack of proper reward system, lack of strategy in the knowledge management process, insufficient attention to experienced staff, insufficient resources to create opportunities for knowledge sharing, lack of leadership and managerial guidance in expression of the benefits of knowledge sharing) are the main barriers to knowledge sharing. (7) other studied for barriers of

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knowledge in Siemens Company. The statistical population of this study was the middle managers and senior managers of Siemens Company. The results show that tacit knowledge (implicit knowledge) is one of the main barriers to knowledge sharing. (8)

Organizational culture has received a lot of attention due to its effectiveness and significant effects on organizations. In recent years, this attention has also spread to educational systems. Among the various elements that make up the educational systems in schools, teachers are the central nucleus and the real implementers of the education system, and the impact of their behaviors on society is so great that it can be said that the prosperity of property is in their hands. Existing organizational culture as the personality and foundation of the organization has an effective role in establishing knowledge sharing. In order for the education organization to be able to effectively extract knowledge and disseminate it throughout the organization, it must first pay attention to the culture related to it and implement knowledge sharing programs according to the culture created. It can be said that the barriers to organizational culture are one of the main obstacles that must be seriously considered in order to successfully implement knowledge sharing programs. According to the information obtained in schools, more emphasis is placed on the sharing of documented and objective knowledge, and no attention is paid to the sharing of knowledge and implicit knowledge that exists in the minds of teachers, and principals should strive to reveal such knowledge. Education in today's world has a different meaning than in the past. The evolution of science and technology has made the necessity of change in educational processes and activities inevitable. We can never look at students and their upbringing with the old way of thinking and old biases. Today's educational systems must train and employ forces that are capable and innovative in understanding this complex world and fostering students' thinking and creativity. In such a situation and in such an era, many education systems continue to operate in ineffective ways. Still, books are the main focus of education. Only a few of teachers tend to innovate and create. Unhealthy competition prevails in some schools and the interest in learning and increasing knowledge has not been strengthened in teachers. There is reluctance to knowledge sharing and low motivation to work in groups among teachers. Organizations should not force employees to share their knowledge with colleagues, but should create an opportunity for them to voluntarily share their knowledge and experience with others. Based on these findings, it can be explained that knowledge sharing is a social phenomenon and refers to human interactions. Therefore, it can be said that the concept of trust is a key lever in the direction of real knowledge sharing. In fact, people will be more inclined to provide useful knowledge to each other if they are confident, otherwise knowledge sharing either does not occur or may occur formally. People will be more willing to share knowledge and experiences with each other if they are confident. In organizations where knowledge is not well transferred, the prevailing atmosphere is full of distrust. The consequence of a lack of trust among teachers is the suspicion, that it is an obstacle to promoting knowledge and a destructive factor in improving cognitive, emotional and social development, which also reduces the effectiveness of the school. In schools where there is trust between teachers and colleagues, the performance of teachers also increases. The most basic job in any society is education, and the person who carries out this mission is the teachers who know that risk-taking is part of the formula for success. Students need to look closely at how a teacher manages failure by accepting risk when a new activity is tested in the classroom. At a time when global change is happening at an incredible pace, it is no longer possible to expect that capable and skilled students to take the helm of the country's management and development by running classrooms in the old and traditional way. In the educational environment, conditions should be provided to show people that through education, they can communicate with each other and pay attention to the specific problems and needs of that community.

Training helps individuals to develop their abilities and talents, enrich their knowledge and improve their professional and technical competencies. It also helps them to change their behavior and attitudes, both in terms of all-round personal development and in terms of social, economic and cultural balance. Teachers 'indifference to management and knowledge sharing and the desire to preserve experiences and the organization's lack of support for this issue and lack of sufficient attention to teachers' opinions in setting educational programs and plans are the problems that have plagued the education organization. In dealing with this issue, different reactions have been shown in schools by principals, some are indifferent because they have no choice. Some (inexperienced) principals do not realize at all that they have a problem in their schools. Failure to pay attention to the appropriate environment for teachers to acquire new knowledge reduces the motivation to share knowledge and information, and this can lead to the loss of talents and weakness in abilities. The second main concept is the communication dimension, which is classified into sub-concepts of weakness in the underlying factors of knowledge sharing, problems of the educational media, and disregard for the intellectual capital of the organization. in research has evaluated the barriers to knowledge sharing in terms of change management in research and industrial organizations. The results showed that 5 factors of trust, commitment, job satisfaction, learning and organizational communication were identified as effective factors in knowledge sharing. (6) in other study examined the barriers to knowledge sharing to find ways to overcome these barriers. The most important barriers in this study were ownership, lack of motivation, lack of trust, lack of incentive and reward systems, lack of proper leadership, insufficient technology infrastructure and lack of technical support. Employees' communication skills, both verbal and written, to share tacit knowledge are the basis of knowledge sharing in organizations. (9) Therefore, if people in the organization are weak in communication and verbal and written skills, knowledge sharing will definitely not be done effectively and efficiently in those organizations. In this regard, it is necessary for organizations to strengthen the communication skills of employees (verbal and written) by holding training classes, one of the main characteristics of good teachers is the ability to communicate during teaching, and most of the stresses observed in teaching result from inappropriate communication. Communication skills ensure effective communication at all levels. These skills are considered as the basis of teachers' professional activity. (10) Communication skills help a teacher to accomplish educational tasks. The teacher must purposefully develop the ability to think publicly, that is, to speak publicly and to be able to organize communication. On the other hand, teachers' interaction with each other makes educational success more sustainable.

## Family and health Quarterly, vol11, Issue A, Summer 2021, ISSN: 2322-3065 http://journals.iau-astara.ac.ir

The development of information technology and the use of new tools and concepts, provides information expansion and easy and low-cost access for learners, including teachers and students in a continuous way and facilitates the rapid exchange of information and cultural interactions. In the new millennium, communication technology has rapidly taken over the world and has affected many aspects of human life. Education is no exception and in many countries around the world, the development of information technology in education has received much attention.

Due to the increasing development of information technology and its increasing impact on human life, familiarity of educational staff with this technology and mastery in using its tools is essential. Knowledge management tools allow people to make their knowledge available and searchable. The ability to share knowledge and participate is all that is often lacking in schools. Efforts to establish knowledge management have always been met with reluctance on the part of employees to share their experiences. Knowledge management is about managing people, culture, structures and organizational practices. For this reason, effective knowledge management practices are not only technology-based, but also individuals are valuable resources for knowledge sharing. Many possibilities for efficient management and control of knowledge are available to individuals. Today, the importance of human resources as talented employees is not hidden from anyone. This issue has become even more important, especially in educational organizations such as education and schools. Attracting and retaining qualified human resources in education is one of the most important issues. Human resources are considered as the most valuable resource at any organization. Retirement of key employees can be considered detrimental to organizations in terms of replacement costs and disruptions. Retired teachers with several years of experience in teaching and familiarity with the details and how to teach are a great source of learning and can be a guide in the process of education. Most retirees want to connect with the organization, and this communication is effective when there is an effective flow of knowledge with these people and experience has shown that this increases the satisfaction and loyalty of employees. The third main concept is the lack of supportive leadership. This concept can be classified into two concepts of weakness in annual teacher evaluation and mismanagement.

In other study, identified barriers to knowledge sharing in Shahed University. The results of this study showed that the individual barriers (insufficient trust between people), technology barriers (lack of identification system for knowledge sharing, insufficient technical support and incompatibility of information technology systems with existing processes in the organization) and organizational barriers (lack of appropriate infrastructure for knowledge sharing support, inadequate physical work environment, lack of proper reward system, lack of strategy in the knowledge management process, insufficient attention to experienced staff, insufficient resources to create opportunities for knowledge sharing, lack of leadership and managerial guidance in expression of the benefits of knowledge sharing) are the main barriers to knowledge sharing.(7) in other study examined the barriers to knowledge sharing to find ways to overcome these barriers. The most important barriers in this study were ownership, lack of motivation, lack of trust, lack of incentive and reward systems, lack of proper leadership, insufficient technology infrastructure and

lack of technical support.(9) Leadership is a basic process in any organization and is considered for the success or failure of the organization. Therefore, it can be said that the views and attitudes of people working in an organization depend on the leadership style in that organization. Today, organizations are entering the knowledge-based economy, an economy in which knowledge and intangible assets are recognized as the most important factor of production and also as the most important competitive advantage of organizations for better performance of the organization and its employees. Undoubtedly, one of the factors influencing the progress of human societies is the leadership styles of managers on subordinates. Every year, with the beginning of the new school year, school principals complete a form as an evaluation form and submit it to their office. In the form, there are scores for its various sections that a principal should record a grade based on the useful documents of the teacher or based on his personal opinion and then get the sum of the grades and apply it in the form as a teacher evaluation score. Based on the evaluation score, the best people are rewarded to motivate others to progress. Teacher work is a quality work and evaluation by numbers is not impossible, but it is very difficult. In this form, only written items are weighed. For example, a teacher who has had a tremendous impact on one or more of his students with his morals and behavior and has changed their personalities, or has given them tacit knowledge by interacting with his colleagues, how is this effect measured? Education should consider the efficiency and effectiveness of teachers in both areas of education that are not separate in the evaluation form. Of course, the existence of an accurate and comprehensive evaluation form is important in this field. In the section on communication barriers, concepts such as weakness in the underlying factors of knowledge sharing, problems of educational media, disregard for the intellectual capital of the organization were mentioned. The factor loading of this concept was 0.92. This result showed that communication barriers can have the greatest impact on the transfer and dissemination of knowledge in the education organization.

Knowledge management is the process of creating value from the organization's knowledge and tangible assets, knowledge that can be searched not in words but in human beings. Communication is the root of many interpersonal and organizational problems, and familiarity with the major communication barriers and how to deal with them will help to improve the knowledge sharing process in schools. In order to reduce communication barriers, the following items are mentioned:

- 1- Creating a qualitative relationship by considering sufficient time and appropriate tools for discussion to achieve semantic commonalities
- 2- Establishing a healthy relationship between experienced teachers and new teachers
- 3- In-service trainings to acquaint teachers with modern technologies
- 4- Accuracy in cultural and linguistic differences of individuals
- 5- Creating a thinking room to create a suitable space for the exchange of knowledge
- 6- Creating a free flow of healthy communication in schools

7- Implementing an appropriate reward and punishment system to encourage employees to strive for knowledge acquisition and cooperation in the implementation of knowledge sharing system.

People need to be informed about the information and beliefs by communicating with others and remove their mental ambiguities. Among these, the role of managers is to motivate employees to share knowledge in the organization. If employees do not believe in the benefits of knowledge management, knowledge sharing in the organization will be difficult, managers therefore play a key role in convincing employees of the benefits of knowledge sharing, including the development of job skills and professional growth. Motivation for work is important and necessary in any organization, and this issue is given more attention for education, especially the teacher. The best programs and the richest educational content will not be achieved without experienced and motivated teachers. Therefore, by increasing motivation in the individuals, their efficiency can be increased to avoid wasting time and potential forces. Education is one of the main centers of production and sharing of knowledge, and on the other hand, it provides elite manpower for other knowledge-based organizations. Considering that the issue of knowledge sharing is of special importance in the field of education and little research has been done in this field, it is necessary to promote knowledge sharing among teachers by establishing a culture of knowledge sharing among teachers. Also, with the support of education officials, the collection of knowledge by teachers should be recognized as the organizational values of schools and should be integrated with the culture of the school organization.

#### **Research limitations**

- 1. This research was conducted in 2018, so the generalization of the research results to future years should be done with caution.
- 2. The participants in the present research were working in public schools of education, due to the difference in the structure of public and non-governmental and exceptional schools, the results of the present research cannot be simply generalized to the system of non-governmental and exceptional schools.

## **Application of Research**

Knowledge management and its decision is a conscious process of creating knowledge, presenting it and distributing it, which is directly related to education. Undoubtedly, what increases the quality of learning in schools is the presence of a knowledgeable and influential teacher who, in addition to adapting and coordinating with changes. with its own changes, it can cause changes in the educational environment, so this article can be of great help to teachers who are constantly seeking to improve their scientific and educational level.

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