

Research Article**Proposing a Model for investigating the factors individual, technological, and organizational affecting on organizational knowledge sharing emphasizing the mediating role of motivational factors in Fars Industrial Estates Company****Fatemeh Rezazadeh and Majid Amouzad Khalili**Master of Public Administration,
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ABSTRACT:

One of the most important and most common processes in different structures introduced in knowledge management is knowledge sharing, making people motivated to share their knowledge in organizations and improve knowledge sharing among individuals in order to create competitive advantage; are of the most important priorities of knowledge management in the world. Sharing the knowledge effectively between members of an organization leads to cost reduction in producing the knowledge, and to ensure dissemination of best working practices in the organization, thus; it enables organizations to solve their issues and problems themselves. The increasing importance of knowledge sharing for the competitiveness of organizations introduces the identification of factors influencing on it as one of the most important aspects of knowledge management in organizations, and with a management perspective also introduces the factors influencing knowledge sharing in organizations; the effect of these factors on organizational knowledge sharing in Fars Industrial Estates company are then studied through components including satisfaction attained by helping others, self-efficacy of the knowledge, the application of information and communication technologies, organizational bonuses, internal support, and organizational mechanisms among the employees of the company (total of 160 employees). The data collection tool is a combination of four questionnaires. In addition to the inferential statistics the Path analysis method was used to investigate the hypothesis of the research, for the demographic features investigation and the response to demographic hypotheses of the study; the independent group t-test and the one way variance analysis were used. The results of this study indicate that factors influencing organizational knowledge sharing have a direct and significant impact on organizational knowledge sharing, furthermore; affect organizational knowledge sharing significantly and indirectly through motivational factors. This means that individual, technological, and organizational factors by an increased willingness to share knowledge will have a very important role in promoting the level of organizational knowledge sharing despite the atmosphere of confidence and the attitude toward learning.

Keywords: organizational knowledge sharing, individual factors, motivational factors, organizational factors, self-efficacy of the Knowledge.

INTRODUCTION:

In the current Knowledge-based economy with respect to the low lifetime of the knowledge

and high rates of innovations; maintaining on a competitive position for a long time is no

longer possible. Furthermore, most organizations which are highly depended to their own knowledge; every now and then face the problem of size reduction and regenerating the structures, and subsequently they loss the old staff and hire new employees; this may lead them to the loss part of the organizational knowledge.

In such circumstances, the importance of knowledge management is determined as a crucial and fundamental factor to make the most advantages of past experiences. In this context, knowledge sharing is of utmost importance in order to avoid wasting knowledge and increasing the understanding among human beings and organizations and, ultimately, human development.

It is obvious that; managers, executives and technical engineers will cope with these complex issues that in addition to having the necessary information and knowledge, obligate themselves to have a system for sharing and maintaining their past experiences or knowledge within the organization. It is noteworthy that the purpose of the present study is to develop increasing knowledge of applied knowledge in the field of knowledge sharing and factors which may affect it, and to direct the minds of planners and decision makers to the scientific application of knowledge and business systems, maintenance and sharing the retrieval.

Literature review:

Davenport & Prusak (1998) believe that the role of knowledge sharing in knowledge management is so important that some authors argue: "the existence of knowledge management is to support knowledge sharing." According to Mc Dermot and O'dell (2001), although some people believe that knowledge is power, but it seems that the knowledge is not power by itself, rather; what empowers people is part of their knowledge which they share with others.

The most important challenges managers have to succeed in doing it; is to convert the thought

of "the power of knowledge " to "the sharing of knowledge" in the organization because the most fundamental application and the challenge of knowledge management is to share the knowledge, not the production of knowledge, because the knowledge which is not broadcasted will have a very limited value for the organization (FaqihMirzaei and Gholamian, 1388).

According to Rige (2005), knowledge sharing, as a complex activity but a value making one; is a fundamental to multitude of knowledge management strategies in organizations. Therefore, as much as this issue is effective in the success of any organization to create a competitive advantage, for the identification of factors influencing on it, it is necessary to create a more suitable condition for sharing the knowledge.

Because, overcoming the willingness of employees to accumulate knowledge, requires an understanding of the factors influencing the knowledge sharing and the considering how an organization can be managed using these factors. And sharing of knowledge at work could be effected by motivational and individual or organization factors (Banke, 2010).

Knowledge Management

Here we provide a general definition of knowledge management:

"Knowledge management is a set of processes in order to prevent wasting knowledge through dissemination of existing knowledge and creating new knowledge for achieving certain goals" (Knott, 2004).

Organizational Knowledge Sharing

Knowledge sharing is one of the virtual (intangible) activities that people cannot be forced to do it.

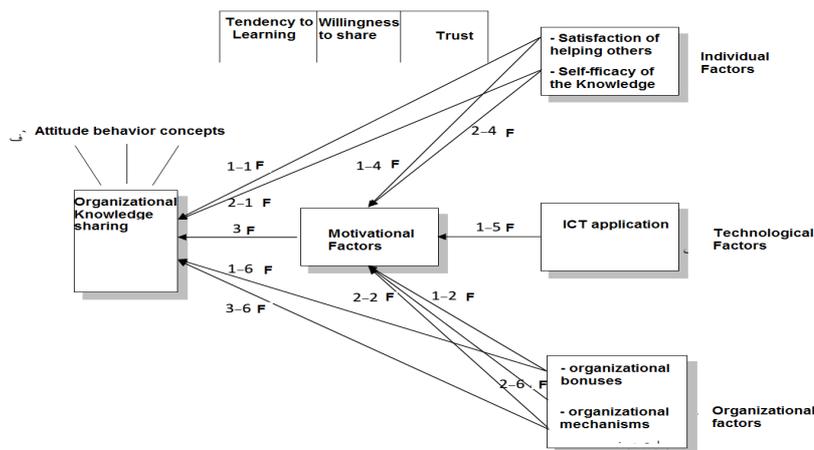
Therefore, it is the duty of senior managers to create such attitude among employees that: knowledge is not the power, but to share is a power (Habibi, 1387).

Table

1. Some definitions of knowledge sharing (Tan & et al, 2010)

Definitions	Authors
Knowledge sharing can be defined as a culture of social interaction which covers the exchange of knowledge, experiences and skills of employees across departments or organizations.	Lin, Lee, Wang (2009)
Knowledge sharing can be defined as a social and voluntary process for transmission, absorption and reusing the existing knowledge in planning and carrying out the organization's services.	Harder (2008)
A systematic process for creating, acquiring, combining, learning, sharing and applying the knowledge and experiences to achieve organizational goals. This knowledge can come from the staffs' minds, notes stored in files or stored in electronic formats.	Sethumadhavan (2007)
The process of taking or transferring knowledge from the source unit to the receiver unit.	Bircham - Connolly, Corner and Bowren (2005)
The two-way exchange of knowledge between individuals (receiver and the sender of knowledge).	Hooff and Weenen (2004)
The exchange of knowledge in a mutual process following the creation and re-using knowledge in a new concept.	Willem (2003)
The way of identifying knowledge in the thought processes through understanding and learning something that is only in the mind and interacting with other people in the world outside the mind of the staffs.	Wilson (2002)
The interpretation of knowledge during the periods of performance and distinguishing it from information issues which have a mediate relationship with performance.	Malhorta (2001)
Knowledge sharing is a process that each of the units is affected by means of sharing the experience of others. In this regard, a unit can be an individual, a group, or an organization.	Linda Argote and Ingram (2000)

Figure 1. The conceptual model of the research



METHODOLOGY

The aim of this study was to examine the organizational knowledge sharing variable with three dimensions of attitude, concept and knowledge sharing among the organizational employees, in situations and problems of real organizational life, with the effect of factors such as individual factors (satisfaction of helping others, self-efficacy Knowledge), and organizational factors (organizational bonuses, internal support). Based on the nature and method of the research, this study is a descriptive correlational research.

The statistical population of the research

In this study, because of the limitation of the statistical population and the total population equality to whole sample, the sampling method was done as census sampling of staffs in Fars Industrial Estates Company.

A) Methods and tools for data collection and its relationship with the research model
 Data collection for the study was performed by a combination of four questionnaires and as a closed type; the measuring scale for all parts of the model was based on Likert scale. After obtaining the required licenses and introducing

correspondences the permission was issued to distribute 160 questionnaires in Fars Industrial Estates Company.

155 questionnaires were gathered of 160 questionnaires which were distributed among the employees, including 4 questionnaires that were incomplete, thus; the number of questionnaires which were used reached to 151 questionnaires.

B) Validity and Reliability of the questionnaire
 With respect to the standardized questionnaires, to ensure the construct validity it can be said that; since there is a relatively good correlation between the variables used in this study, the measuring tools have good construct validity.

Table 4. Cronbach's alpha values to determine the reliability of the measuring tools

Cronbach's alpha	Factors
0/82	Organizational knowledge sharing
0/79	Self-efficacy of knowledge
0/80	Satisfaction of helping others
0/88	The application of information and communication technologies
0/86	Organizational bonuses
0/77	Inner supports
0/72	Organizational mechanisms
0/85	Motivational Factors

As can be understood from the above table and comparing the reliability provided by other researchers which also have been mentioned in

Table 5. direct effects, indirect effects, total and t value for variables affecting organizational knowledge sharing

T value	total effects	indirect effects	direct effects	effects
-----	-----	-----	-----	Satisfaction of helping others
2/09	0/15	0/01	0/14	Organizational knowledge sharing
-----	-----	-----	-----	Self-efficiency of the knowledge
3/58	0/35	0/03	0/33	Organizational knowledge sharing
-----	-----	-----	-----	Organizational bonuses
3/67	0/10	0/01	0/09	Organizational knowledge sharing
-----	-----	-----	-----	Inner support
2/68	0/32	0/06	0/26	Organizational knowledge sharing
-----	-----	-----	-----	Motivational factors
1/96	0/17	-----	0/17	Organizational knowledge sharing
-----	-----	-----	-----	Satisfaction of helping others
2/09	0/10	-----	0/10	Motivational factors
-----	-----	-----	-----	Self-efficiency of the knowledge
2/78	0/15	-----	0/15	Motivational factors
-----	-----	-----	-----	Application of ITC

this research; it can be said that the reliability of the measuring tools is relatively good.

C) Data analysis techniques

First, demographic characteristics of subjects will be discussed using descriptive statistics analysis and the sample will be investigated separately based on gender, level of education and service record and age. Then, the Path analysis method is used to investigate the hypothesis of the research and the model is crushed then the single track individuals are examined. The whole model presented in the research will be evaluated in terms of Goodness of Fitness Index. Finally, t-test and one way variance analysis will be used to study the demographic hypothesis of the research.

Investigating the hypotheses of the research

Since the aim of this study was to assess the role of mediating and predicting variables and also determining the direct effects of these variables; the Path analysis method is used in order to estimate the direct effects of paths' coefficients between the variables in the model which is in fact the standardized coefficients (direct effects), the results of which are presented in separate tables.

2/67	0/15	-----	0/15	Motivational factors
-----	-----	-----	-----	Organizational bonuses
2/65	0/10	-----	0/10	Motivational factors
-----	-----	-----	-----	Organizational mechanisms
5/18	0/30	-----	0/30	Motivational factors
-----	-----	-----	-----	Inner support
5/93	0/38	-----	0/38	Motivational factors

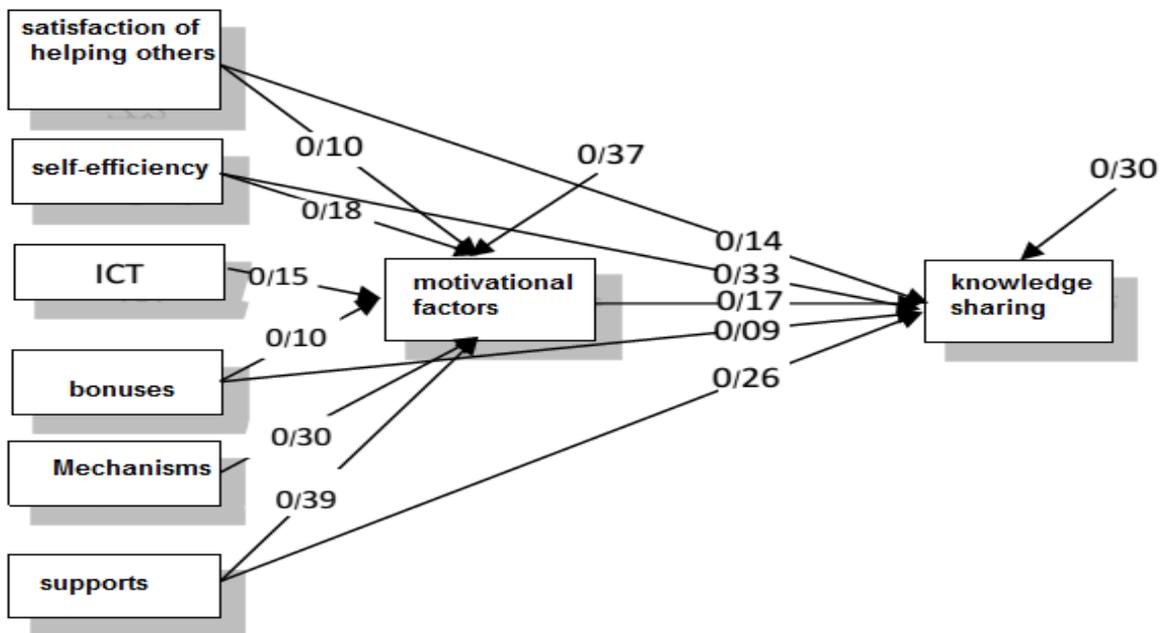
Fitness Goodness Test of the model

Table (6). Statistics of Fitness Goodness in the model

value	Fitness Goodness
1	GFI
0/99	AGFI
1	CFI
1	NFI
0/0009	RMSEA
1/52	X ²
7	DF
0/981	P

The statistic value of $(\chi^2 / 432 = 1.52, DF = 7) \chi^2 / df$ equals to 0/255, P value equals to 0/111 and Fitness indexes values of (GFI), (AGFI), (NFI) are equal to (1), (0/99) and (1), suggesting very good fitness of the model.

Figure 2. The fitted model for the total sample by standard coefficients



Investigating findings of the research

To examine the relationship between employees’ gender and knowledge sharing; independent t test was used, the results of which are presented in the following table:

Table (7). Independent t test between employees’ gender and sharing organizational knowledge

Level of significance	Degrees of freedom	Statistical value off	mean	number	gender
0/728	149	0/384	91/619	130	men
			90/346	21	women

The results of the independent t test (384/0) with 149 degrees of freedom is smaller than the table value in a meaningful level (05/0 P), so; it could be said in 95% certainty that there is no significant difference between employees’ gender and organizational knowledge sharing.

Table (8). One-way analysis variance test between the employees’ age and organizational knowledge sharing

Significance level	Statistical value of F	Sum of squares	Freedom degree	Sum of squares	Sources of variation	
0/445	0/877	210/877	3	632/630	Intergroup	Employees age and organizational knowledge sharing
		240/497	147	35353/039	Within the group	
			150	35985/669	total	
Significance level	Statistical value of F	142/159	3	426/478	Intergroup	
0/624	0/588	241/899	147	35559/191	Within the group	employees level of education and knowledge sharing organizational
			150	35985/669	total	
Significance level	Statistical value of F	273/927	3	821/780	Intergroup	
0/333	1/145	239/210	147	35163/889	Within the group	employees service record and organizational knowledge sharing
			150	35985/669	total	

RESULTS AND CONCLUSION:

The results of the analysis provided in chapter four, showed that the proposed model fits the data properly and could explain 70/0 of the variance in organizational knowledge sharing. Considering the hypothesis was confirmed in the model, we can positively answer the main question of the research, and conclude the following results from the present study.

Hypothesis 1) there is a direct and significant relationship between individual factors and Organizational knowledge sharing.

Hypothesis 1-1) there is a direct relationship between the satisfaction of helping others and sharing the knowledge.

Based on the results, there is a meaningful and relatively good relationship between satisfaction of helping others - as one of individual factors - and Organizational knowledge sharing and that is consistent with

research of Yu et al. (2010), Huang and Chang (2010), and Cancan Holly (2005).

Hypothesis 1- 2) there is a direct relationship between self-efficacy of knowledge and sharing organizational knowledge.

Based on the results, there is a meaningful and relatively powerful relationship between self-efficacy of knowledge - as an effective factor - and Organizational knowledge sharing which was examined through all factors considering the LISERL software analysis.

Hypothesis 2) there is a direct relationship between organizational factors and Organizational knowledge sharing.

Hypothesis 2-1) there is a direct relationship between organizational bonuses and Organizational knowledge sharing.

The results showed a significant but weak relationship between organizational bonuses factor and organizational knowledge sharing and the results of the research were consistent

with Banke (2010), Lin Bawa (2010), Lumitjanin (2007), Buck and et al (2005), and Cancun Holly (2005).

In this research, organizational bonuses are studied with two bonuses indexes of external source (monetary, advantages and fiscal incentives) and of inner source (business reputation, security and job promotion); thus, in explaining the obtained results it could be said that such slight effect could be suggesting the possibility that in the studied population the bonus value may not be sufficient to share the knowledge and the staff may not be satisfied and motivated to share the knowledge.

Inner bonuses have potentially great benefits that motivate employees to share knowledge.

Hypothesis 2-2) there is a direct relationship between internal support and sharing organizational knowledge.

The results showed a significant and powerful relationship between Organizational knowledge sharing and inner support factor; the effects of this factor ranked second in importance compared to other influencing factors. The obtained results were consistent with the research of Banke (2010), Bowlin (2008), Bogodan (2008), Lumitjanin (2007), Kabraira (2006), and Buck et al (2005).

Hypothesis 3) there is a direct relationship between motivational factors and Organizational knowledge sharing.

According to the results, there is a direct and significant relation between motivational factors and Organizational knowledge sharing and it means that motivational factors, as an effective functional group, can significantly change the organizational knowledge sharing in the study population. These results are consistent with Yun (2011), Tan, and et al (2010), Wang, and Nouii (2010), Hermanrud, and Scorns (2009), Saymsun, and et al (2008), Liu and Tsai (2008).

Hypothesis 4) there is a direct relationship between individual factors and organizational knowledge sharing with an emphasis on the mediating role of motivational factors.

Hypothesis 4-1) a direct relationship was observed between satisfaction of helping others and motivational factors.

The results show a significant correlation between the satisfaction of helping others - as one of the individual factors - and organizational knowledge sharing, and this means that the variable of satisfaction of helping others; in addition to have a direct relationship through sharing organizational knowledge (hypotheses 1-1), establish an indirect relation with Organizational knowledge sharing. The results are consistent with Wang cholera, and Nuii (2010), Chung et al. (2008), Lin Fan (2007), Le, et al. (2006), and Holly Cancan (2005).

Research results of Cancan Holly (2005), and Chung, et al. (2008) indicate that the concept of knowledge sharing in employees is affected by domestic interests (satisfaction of helping others and self-efficiency of knowledge) by the mediating role of combined factors such as Trust.

According to the results, managers and decision-makers in the studied population should be trying to create a culture of sharing the knowledge through the promotion of trust between individual employees and the desire to learn and consequently a tendency to share the knowledge. Since, through the mediating role of motivational factors and the observed importance of them, staff will follow a shorter path to knowledge sharing activities and they will enjoy the benefits.

Hypothesis 4-2) there is a direct relationship between self-efficacy of knowledge and motivational factors.

According to the results of the fourth chapter; there is a direct and significant relationship between the variable of self-efficacy of knowledge and motivational factors and the results are consistent with Chen and Hung (2010), Lin Fan (2007), Holly Cancan (2005), Le, et al. (2006).

In explaining this result, it could be said that self-efficacy of knowledge as a belief of

employees in their abilities and capabilities for sharing. Effectively the organizational knowledge will be effective following a more effective motivational factors in line with the most effective performance.

So, the employees' belief that they can contribute in improving organizational performance by sharing their knowledge, have a positive relationship with a desire to share organizational knowledge, particularly if the level of confidence is high. Here, again it should be noted that self-efficacy of knowledge through the establishment of trust factor, increasingly encouraged employees to share knowledge through reducing the parasitic knowledge.

Because; whenever the atmosphere of trust is prevailed between employees, they do not hoard their own personal knowledge anymore and they will make it easily available to each other; promoting positive bilateral interactions to share the knowledge, willingness to share knowledge and then the knowledge sharing will occur, followed by a positive attitude and behavior.

Hypothesis 6) there is a direct relationship between organizational factors and sharing organizational knowledge with an emphasis on the mediating role of motivational factors.

Hypothesis 6-1) there is a direct relationship between organizational bonus and motivational factors.

According to the results of organizational bonuses as one of the effective organizational factors, In addition to the direct relationship with organizational knowledge sharing (hypotheses 2-1) they will also indirectly have a significant and positive relationship with organizational knowledge sharing and thus; organizational bonuses as an effective factor explain and predict the changes of organizational knowledge sharing in the population being studies through motivational factors and the results are consistent with Wang and Nuii (2010), Min Bava (2010), Lumitnianin (2007), and Fan Lin (2007).

It should be noted that; organizational bonuses in the studied population either through direct relationship with sharing organizational knowledge (hypotheses 2-1), or through indirect connection through motivational factors on organizational knowledge sharing (this hypothesis) have shown little effect and a practical solution is that people develop their ideas in collaboration by other people through building trust and encouraging group works particularly in informal occasions.

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