

## A Review on the Role of Knowledge Management in Improvement of Performance of Police Commanders

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**ABSTRACT:** The present study has dealt with the role of knowledge management in improving the performance of police commanders. The statistical population of the current research includes all Iranian Police commanders where according to simple randomized sampling method and formula for determination of sample size, it comprises of 97 commanders as participants in this study. The measurement tools in this study are 32 question knowledge management questionnaire and 20 question commanders' performance inventory, respectively. Validation of both tools was confirmed by face validity and their reliability was computed by means of Cronbach's Alpha coefficient where this value for knowledge management questionnaire and commanders' performance inventory was calculated as 0.83 and 0.81 respectively. These tools was administered on sample group and analyzed statistically based on Pearson Correlation Test and Single Sample t-test so that the results suggested as follows: There is significant relationship among knowledge management and improvement in planning ability of police commanders; There is significant relationship among knowledge management and improvement in organizing ability of police commanders; There is significant relationship among knowledge management and improvement in decision- making ability of police commanders; There is significant relationship among knowledge management and improvement in leadership ability of police commanders.

**Keywords:** Knowledge Management, Planning, Organization, Decision-Making, Leadership, Performance

ORIGINAL ARTICLE

### INTRODUCTION

On the brink of Third Millennium, with respect to the changes and developments which have occurred due to growing science and knowledge, the leading organizations are increasingly trying to take a certain strategy for knowledge management and attraction of human capitals in the world of competition and business; thus, today in these communities and organizations, knowledge management is purposed as a strategic requirement for servicing institutions, organizations and departments since knowledge management may guarantee the long run superiorities for organizations and communities and improvement in their performance.

In these communities, organizations deem knowledge as a strategic source and they have tended to creation and developing knowledge management in a dense and tight competition in order to be able to take an effective stride toward performance improvement and realization of their goals and as a result those organization will remain in the field of this competition, which manage to be equipped with the today world knowledge and to move along with it. Knowledge management is a process that contributes to organizations in recognition, selection, organizing, sharing (publishing) information and important specialties, which are some parts of organizational memory and often exist in unstructured form inside

organization. Turban and McLain (2002) define knowledge management as using the existing knowledge, acquisition, storage and saving of new knowledge where these measures are made within organizational learning process and with respect to culture and strategy of organizations. Sallis and Jones (2002) argue that structuralizing knowledge may effectively and efficiently improve solving the problem, dynamic learning, strategic planning and effective decision making and enhance organizational performance. Knowledge management focuses on identifying, description and organizing knowledge and increasing its value through using it again.

It is a matter of fact that world police organizations along with other organizations have taken step in the path of knowledge creation and development since cultural and social developments have caused purposing different theories about the appropriate security and protection from the society and police was not exception to this rule and it deems knowledge management necessary in its police organization. Since police's approach is community- and software- oriented so in order to increase people's satisfaction by improvement in directors' performance, it should take step along with community and other organizations and in the path of knowledge- based organization. Therefore, it has been tried in this essay to give answer to this question that

if there is a relationship among knowledge management and improvement of police commanders' performance or not. It is hoped that the present investigation can take at least a few steps in realization of police's objectives in the course of knowledge management fulfillment.

#### **Major Hypothesis of Research**

There is a relationship among knowledge management and improvement in performance of police commanders.

#### **Minor Hypotheses of Study**

1- There is relationship among knowledge management and improvement in planning ability of police commanders.

2- There is relationship among knowledge management and improvement in organizing ability of police commanders.

3- There is relationship among knowledge management and improvement in decision making ability of police commanders.

4- There is relationship among knowledge management and improvement in leadership ability of police commanders.

#### **Research History**

Despite of multiple studies which have been conducted in researching field of knowledge management inside organizations, few specialized investigations were carried out in this area. Nevertheless, in some studies done by experts, religion and knowledge factors have been typically mentioned in some of them. In a study under title of "Review the impact of spirituality on empowerment of NAJA (Police ir) commanders and mid- rank directors", Bakhtiari (2008) concluded that factor of (religious) belief has the maximum impact on empowerment of NAJA commanders and mid- rank directors. In an essay called "Religion and management", Sharifinia (2003) has examined knowledge management regardless of spirituality and ethics and come to this result that no one could consider knowledge management only as empirical knowledge and away from intervening morality, spirituality and values. Therefore, no study has been carried out regarding role of knowledge management in improvement the performance of police commanders. It is hoped this article to open the new horizon toward this purpose and to be employed as a researching background in other studies done by researchers.

Akhavan and Bagheri (2010) deem knowledge as information combined with individuals' expertise and experiences and or an organized subset from facts or ideas that are presented by a logical judgment (comment) or an empirical result. Fathian et al (2005) argue that there are two types of knowledge in organizations; namely, explicit (clear) knowledge,

where this knowledge can be encoded and codified and as a result it is easily transmitted, processed, transferred and saved in databases. This kind of knowledge may be shaped and published as a scientific formula and or a manual among organizational personnel. Instructions, regulations, rules, work procedures, bylaws, detailed descriptions etc, which could be transferred formally and easily among personnel of an organization, are considered as explicit knowledge.

The latter type is implicit (tacit) knowledge so that this type is private knowledge and formulation of this knowledge is a difficult task. This kind of knowledge, which is acquired through sharing of experiences by observation and imitation, stems from personnel's actions, conducts, obligations, values and emotions; it could not be codified or transmitted through a language.

Understanding the concept of three elements i.e. data, information knowledge and interaction among them is one of the major bases in topics relating to knowledge. Occasionally, fourth side is also added to this triangle, which called insight or virtue. It should be said in general that group of data is not information; sum of information is not knowledge; group of knowledge is not wisdom and sum of wisdom is not reality. Knowledge flow is a group of processes, events and functions thereby information, knowledge and meta- knowledge or wisdom is converted from one status into another. As a result, any discussion about knowledge should be started from data. Those advancements, which have been occurred in data processing and network technologies, increased access to data and information via internet at any time and place in the world.

Data is a group of facts and definite issues about a phenomenon. Information comprises of organizing, grouping and categorization of data within meaningful models; and knowledge is the information that is composed with experience, background, interpretation and contemplation and it enables taking proper measure.

Davenport and Prusak (1998) consider knowledge management as a process by which organizations acquire some skills about learning (internalization of knowledge), codification of knowledge (knowledge externalization) and knowledge distribution and transfer. In a study, Malhotra (2000) has stated recognition of knowledge management, which considered as an interdisciplinary course, is a difficult task and this makes it a little complex and complicated. In any case, it is assumed that this field should not be left out because of its difficulty. Ideas of knowledge management should be taken into consideration upon codification of strategy

for an organization and contribute to it. Interaction between technology and techniques with human may deepen knowledge management since the model of interaction among technology and techniques and human is unique for any organization so that this model could not be easily transacted or imitated by other organizations. Generally, any change in an organization purports three interrelated fields. As it mentioned, these three fields include structure, technology and human. Knowledge management concentrates on identifying knowledge, description and organizing and increasing in its value by reuse it. Knowledge management concept has been adopted in different fields out of which one can refer to knowledge engineering and artificial intelligence. Accordingly, present and future success in competition among organizations will be slightly based on allocation of physical and financial sources and to the great extent on knowledge management. Thus, leadership of an organization is tasked to create an environment for knowledge management. Therefore, "Knowledge Management" is the most essential skill for managers in knowledge-oriented organizations. Quinn (1992) argues that paying attention to field of knowledge management is growingly increased in two academic and business areas. With respect to ever-increasing growth in number of published books and essays about knowledge management, this point is comprehensible. Zack (1999) states that during recent years, role knowledge has been also converted into a very important subject as the most crucial source for organizations in realization of organizational goals, and notion of "knowledge manageability" has achieved its due status in many knowledge-based businesses, learning and servicing organizations. Based on North's opinion (1991) following to conversion of knowledge into strategic source for competition and survival of organizations and communities, need to development and control over techniques of knowledge creation, sharing and application become vital and in turn demand for knowledge leads to request for increasing knowledge storage and its distribution. According to Newman and Conrad (1999), knowledge creation refers to all activities that cause new knowledge to enter into organization. Knowledge transfer includes flowing of knowledge from one group or person in organization to other group or person. Knowledge saving and storage guarantee maintenance and presence of knowledge in organization. Nonaka and Takeuchi (1995) consider knowledge acquisition as interactions spiral process between implicit (tacit) and explicit knowledge that are done in four phase conversion: 1- Socialization, 2- Externalization, 3- Composition, and 4- Internalization. According to Canglosi and Dill's view (1965), organizational learning

consists of a group of interaction between individual and collective adjustments and adaptation at organizational level. Li and Yang (2000) consider knowledge application as those activities, which have been done regarding creation of new knowledge from the existing knowledge; for example, to discover customers' internal interests from their behavior and employing the current knowledge in some field such as acquiring new customers and maintenance of current customers.

Amid (2004) has defined term "application" as a composite word (Apply+ (suffix) -tion) that stands for performance, work rate, and result and outcome of work. Similarly, this word is equivalent for Latin term (performance) namely action, yield, function and business. According to Bateni (2003), performance is a general concept that shows result of individual activities and effectiveness and efficiency are noticed as its constituent elements. Alaghehband (2001), who quoted from Peter Draker as initiator and founder of Theory of Management, wrote that effectiveness is foundation for success and efficiency is the minimal condition for survival after achieving success. Efficiency is the factor based on which works are done properly and according to effectiveness these works are executed correctly. Thus it can be concluded that effectiveness denotes rate of achieving success in organization. From viewpoint of Kooklan (1994), efficiency includes realization of the given goals by using the least sources or access to objectives with minimal cost and ability to exposure to the unwanted consequences. In other words, Skandari (2004) defines performance briefly as a group of behaviors, which persons show in relation with their job.

Aarabi and Hamid Rafiei (2005) have written that term "management" means process of doing tasks effectively and efficiently by others. All managers have five managerial tasks including: Planning, organization, leadership, coordination and control. In addition to these tasks, according to Koonts and Weihrich (1990), manager plays interactive, informative and decision making role. In this study, performance is considered as result and outcome from doing the given tasks by police commanders including improvement in abilities of planning, organization, decision making and leadership. Knowledge management may affect on improvement of performance of police commanders in competition with other servicing organizations since in most of recent studies, including Argote and Ingram (2000) about strategic management, role of knowledge management has been emphasized as a base and pillar for competitive advantage of organizations. Many factors may affect on competitiveness among organizations out of which one could refer to development of potential abilities of organizations and

manufacturing of products or giving services distinguished from their rivals. On the other hand, despite of this point that many studies show knowledge has been characterized as a source for

**MATERIALS AND METHODS**

The present methodology is quantitative in terms of data and of applied type based on its objectives and it is correlated in terms of nature of study. Statistical population in the present study comprises of all police commanders where method of sampling is based on simple randomized sampling technique and according to formula of determining sample size (H.S. Bola, transl. Abily, 1970), 99 participants are included in this sample.

In the current investigation, the measurement tools are two questionnaires; namely, 32- question knowledge management questionnaire and 20-question police commanders’ performance inventory, respectively. These questionnaires have been

competitiveness, but this valuable source is not yet managed appropriately and only few percent of organizational directors believe in that knowledge is administered well inside their organizations.

prepared by the researchers by means of national and international theories in this field. Reliability of both tools was calculated by Cronbach's Alpha Coefficient and this value was obtained as 83 and 81 for them respectively. Also validation of both tools has been confirmed by Face Validity. The current data have been analyzed by statistical tests called as Pearson Correlation Test and Single- Sample t- test via SPSS software package.

**RESULTS**

Results of data analysis from this study are given in two parts. In description part, data were interpreted by means of descriptive statistics, which have been shown and reviewed in Table 1.

**Table 1.** Descriptive indices of sample group

Variables	Mean	Mean Deviation	Median	Mode	Standard Deviation	Variance	Skewness	Minimum	Maximum
Knowledge Management	4.20	0.68	4.00	4	0.682	0.465	-0.830	2.40	5
Planning	4.35	0.66	4.00	4	0.657	0.432	-0.680	3	5
Organization	4.43	0.76	5.00	5	0.756	0.571	-0.655	3	5
Leadership	3.94	0.85	4.00	4	0.852	0.625	-0.516	2	5
Decision making	4.35	0.66	4.00	4	0.657	0.432	-0.681	3	5

In second part, Inferential Statistics is presented. Research hypotheses were analyzed by Pearson Correlation Test and single- sample t- test and the results came from testing these hypotheses verified the existing relationship among knowledge management with improvement in police

commanders’ performance at 95% level. Following to this trend, we deal with analysis on data for each of research hypotheses.

Minor Hypothesis 1: There is relationship among knowledge management with improvement in planning ability of police commanders.

**Table 2.** Correlation coefficient between knowledge management with improvement in planning ability of police commanders (results of Pearson’s Test)

Quantity	Correlation Coefficient	Significance Level (Sig.)
97	0.81	0.000

With respect to the results of above table, it can be concluded that there is significant relationship among knowledge management with improvement in planning ability of police commanders and correlation is at high rate.

Refuted Assumption: Knowledge management does not improve planning ability of police commander. Assumption: Knowledge management improves planning ability of police commander.

**Table 3.** Results of single sample t- test to review research first hypothesis

Number of Respondents	t- value	Degree of Freedom	Significance Level
97	6.79	145	0.000

Given that t-value in this table (6.79) is greater than 3 thus it is located in H1 and at the same time

since the given significance level also lesser than 0.05 so Hypothesis 1 is confirmed and it can be implied at

95% level of confidence that knowledge management improves planning ability of police commanders.

Minor Hypothesis 2: There is relationship among knowledge management with improvement in organizing ability of police commanders.

**Table 4.** Correlation coefficient between knowledge management with improvement in organizing ability of police commanders (results of Pearson's Test)

Quantity	Correlation Coefficient	Significance Level (Sig.)
97	0.735	0.001

With respect to results shown in the above table, one may come to this result that there is significant relationship among knowledge

management with organizing ability of police commanders and rate of correlation is at high level.

**Table 5.** Results of single sample t- test to review research second hypothesis

Number of Respondents	t- value	Degree of Freedom	Significance Level
97	5.28	145	0.001

Refuted Assumption: Knowledge management does not improve organizing ability of police commander.

Assumption: Knowledge management improves organizing ability of police commander.

Given that t-value in this table (5.28) is greater than 3 thus it is located in H1 and at the same time

since the given significance level also lesser than 0.05 so Hypothesis 2 is verified and it can be mentioned at 95% level of confidence that knowledge management improves organizing ability of police commanders.

Minor Hypothesis 3: There is relationship among knowledge management with improvement in decision making ability of police commanders.

**Table 6.** Correlation coefficient between knowledge management with improvement in decision making ability of police commanders (results of Pearson's Test)

Quantity	Correlation Coefficient	Significance Level (Sig.)
97	0.71	0.000

With respect to the results of above table, it can be concluded that there is significant relationship among knowledge management with improvement in decision making ability of police commanders and correlation is at high rate.

Refuted Assumption: Knowledge management does not improve decision making ability of police commander. Assumption: Knowledge management improves decision making ability of police commander.

Given that t-value in this table (5.82) is greater than 3 thus it is located in H1 and at the same time since the given significance level also lesser than 0.05 so Hypothesis 3 is confirmed and it can be said at 95% level of confidence that knowledge management improves decision making ability of police commanders.

Minor Hypothesis 4: There is relationship among knowledge management with leadership ability of police commanders.

**Table 7.** Results of single sample t- test to review research third hypothesis

Number of Respondents	t- value	Degree of Freedom	Significance Level
97	6.11	145	0.000

**Table 8.** Correlation coefficient between knowledge management with improvement in leadership ability of police commanders (results of Pearson's Test)

Quantity	Correlation Coefficient	Significance Level (Sig.)
97	0.69	0.003

With respect to the results of above table, it can be concluded that there is significant relationship among knowledge management with improvement in

leadership ability of police commanders and correlation is at high rate.

**Table 9.** Results of single sample t- test to review research fourth hypothesis

Number of Respondents	t- value	Degree of Freedom	Significance Level
97	5.82	145	0.003

Refuted Assumption: Knowledge management does not improve leadership ability of police commander.

Assumption: Knowledge management improves leadership ability of police commander.

Given that t-value in this table (6.11) is greater than 3 thus it is located in H1 and at the same time since the given significance level also lesser than 0.05 so Hypothesis 4 is verified and it can be implied at 95%

level of confidence that knowledge management improves leadership ability of police commanders.

Major Hypothesis of Research: There is relationship among knowledge management with improvement in performance of police commanders.

By considering the results from Table 10, it can be concluded that there is significant relationship among knowledge management with improvement in performance of police commanders and rate of correlation is at high level.

**Table 10.** Correlation coefficient between knowledge management with improvement in performance of police commanders (results of Pearson's Test)

Quantity	Correlation Coefficient	Significance Level (Sig.)
97	0.76	0.001

**Table 11.** Results of single sample t- test to review research major hypothesis

Number of Respondents	t- value	Degree of Freedom	Significance Level
97	6.22	145	0.001

Refuted Assumption: Knowledge management does not improve performance of police commanders.

Assumption: Knowledge management improves performance of police commanders.

Given that t-value in above table (6.22) is greater than 3 therefore it is located in H1 and at the same time since significance level is also lesser than 0.05 so major hypothesis of this study is confirmed and it can be said at 95% level of confidence that knowledge management improves performance of police commanders.

## DISCUSSION

I) With respect to descriptive statistics and Table -1, all respondents have education at BA degree and higher and most of participants are at calendar age 31-50 and yearly service (11-30) and for this reason they had the sufficient and needed information and experiences in their activity field at appropriate level.

II) By considering descriptive indices in sample group where data mean values are at level higher than average rate (3), therefore all variables are placed in more appropriate status.

III) In this study, the relationship among knowledge management with performance of police commander was examined and after testing hypotheses the following results were obtained:

1- There is significant relationship among knowledge management with improvement in planning ability of police commanders at level 0.81.

2- There is significant relationship among knowledge management with improvement in organizing ability of police commanders at level 0.73.

3- There is significant relationship among knowledge management with improvement in decision making ability of police commanders at level 0.71.

4- There is significant relationship among knowledge management with improvement in leadership ability of police commanders at level 0.69.

5- There is significant relationship among knowledge management with improvement in performance of police commanders at level 0.76.

IV) As research findings indicate, results of study are generally coordinated with literature of research and confirmed by it. But at the same time this study has had some limitations as follows:

1- In this study, impact of variable of knowledge management has been totally measured on other dependent variables while the effect of each of knowledge management dimensions was not evaluated on dependent variable.

2- There are also some other variables, which are effective on commanders' performance but they were not measured. Thus, it is suggested to other researchers to evaluate the relationship among dimensions of knowledge management with other dimensions of performance of police commanders.

V) With respect to admitting the presence of causal relationship among knowledge management

with improvement in performance of police commanders, some suggestions are purposed, which have been derived from study results in order to improve and upgrade performance of police commanders and moving from status quo to optimal position and for realization of police's strategic goals, as follows:

1- As study findings show, knowledge management plays an effective role in improvement of performance of police commanders. Thus with respect to verification of major hypothesis of this study with a relatively high correlation rate, it should be tried to pay attention to knowledge management seriously and deeply and more than ever as the main and essential basis and most secure pivot in all organizational planning for knowledge creation, knowledge acquisition, organizational learning, sharing of knowledge and storing police- related knowledge.

2- Revision in police strategic plans in the course of removal the existing barriers and codification of an appropriate structure by means of the suitable models for exploitation from dimensions of knowledge management strongly in police knowledge development process.

3- Holding of attendance, non- attendance, virtual and qualitative courses under title of knowledge management and its role in growth and enhancement of police organization and making effort toward culture making and establishment of knowledge management dimensions in police organization.

4- Trying for maintenance and saving knowledge and implicit and latent experiences of commander by transfer it to explicit knowledge in order to strengthen organizational memory.

5- Establishing knowledge base in parallel with creation of a climate that signifies confidence to implementation of knowledge management in police organization.

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