

Presenting a Learning Organization Model Based on Knowledge Management, Innovative Organizational Culture, and Quality of Work Life in the RCS of Tehran Province

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Abstract

INTRODUCTION: This study aims to present a learning organization model in the Red Crescent Society based on the variables of knowledge management, innovative organizational culture, and quality of work life.

METHODS: This research had a mixed approach and was conducted in two phases. The first phase was conducted using a grounded theory method and the second phase was conducted based on the standard questionnaires of Joseph Haddad (2006), Dabney model (2008), Richard Walton (1973) and also a researcher-made questionnaire. The statistical population of the qualitative section includes academic experts and specialists of the Tehran RCS and the quantitative section also includes 232 employees and volunteers of the Tehran RCS.

FINDINGS: The results showed that the variables "knowledge management", "innovative organizational culture" and "quality of work life" have a significant effect on the learning organization in the RCS of Tehran province, respectively. The dimensions of the learning organization in the RCS included five dimensions such as experience-building, feedback and evaluation system, systems thinking, collaborative learning and creative thinking

CONCLUSION: According to the results, the variables "knowledge management", "innovative organizational culture", and "quality of work life" have a significant effect on the learning organization in the RCS of Tehran province, respectively, and as the learning organization indicators increase, knowledge management, innovative culture, and quality of work life improve.

Keywords: Learning organization; Knowledge management; Innovative organizational culture, Quality of work life, Tehran province Red Crescent Society.

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Introduction

By examining the process of creating large organizations in the past decades, it is understood that these organizations no longer have the necessary efficiency in the field of global competition due to their lack of adaptation to global developments. Therefore, for their survival, they are forced to change their structure and equip themselves with tools to gain the ability to cope with global changes. A learning organization is an organization in which individuals continuously improve their abilities to achieve expected results, thereby developing new

patterns of thinking and expanding collective and group ideas. (1)

Also, a learning organization is one that manages and harnesses all the intellectual power, knowledge, and experience of the organization to create changes and continuous improvement for development. This type of organization has the ability to create, acquire, and transfer knowledge. In a systematic definition, it is called an organization that learns powerfully and collectively and constantly changes itself so that it can better collect and use information. (2) In fact, it utilizes the organization's skill and ability to create and transfer knowledge and modify the behavior of individuals to apply new knowledge

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and insight. Alvani also described a learning organization as an organization that learns, changes, and transforms its performance over time. (3)

In addition, it is an organization that is capable of changing behaviors, and if an organization seeks to progress, it must adapt to new needs and environmental changes and change its structure in line with environmental changes so that (at least) it can meet its new needs (in line with the aforementioned changes). (4) One of the most important of these tools is the creation of a learning organization and the institutionalization of the learning process in organizations. The learning organization represents the concept of an organizational change approach and continuous improvement and determines the capacity for change. In the current era, the ability and extent to which organizations can learn and react faster than their competitors emerges as a competitive advantage. (5)

Organizational change and continuous improvement are also evident in total quality management. In fact, it is a management philosophy that proposes a comprehensive and distinctive perspective for the management of organizations and has fundamental differences from traditional management approaches. By adopting total quality management, the structure of organizations also changes. Considering the philosophy and approach of total quality management and the creation of learning organizations in the present era, it is believed that the principles and activities of total quality management approve the transformation of the learning organization and are considered the first step towards moving towards a learning organization. If an organization is to progress, it must adapt to new needs and environmental changes and change its structure in line with environmental changes in order to be able to adapt to these changes. Innovative culture is one of the ways to increase competitive advantage, which is often seen as one of the most important strategic organizational attitudes for achieving long-term success and has a significant impact on risky matters (4)

It seems that creating an innovative culture can affect the performance of employees and the quality of their working life. (6) Knowledge management introduces a completely new concept and method of management and works on transforming the intellectual gifts of employees

and organizing the internal beneficial forces of staff - the power of competition and new value - and focuses on linking information with information, information with activities and information with the individual to realize knowledge sharing such as tacit knowledge and explicit knowledge and is completely different from information management. (7) Knowledge management is a broad range of activities used to manage, exchange, create or enhance intellectual capital at a macro level; in fact, it is the intelligent design of processes, tools, structures, etc., with the aim of increasing, renewing, sharing or improving the use of knowledge which represented in each of the three elements of intellectual capital: structural, human and social. (8)

Knowledge management helps organizations identify, select, organize, and disseminate important information and skills that are considered organizational memory and are typically unorganized, reducing errors and rework. This enables organizational management to learn, plan strategically, and make dynamic decisions efficiently and effectively, and increases the speed of problem solving and decision making (9).

At the beginning, knowledge management was viewed only from a technological perspective and was considered a technology, but gradually organizations realized that something beyond information management was needed to truly utilize employee skills. In contrast to the technological and electronic dimension, humans are at the center of the development, implementation, and success of knowledge management, and it is this human factor that distinguishes knowledge management from similar concepts such as information management. If an organization member truly feels that his or her quality of work life has improved, he or she will find more strength to do the work, and this will motivate him or her to do better work and, as a result, a better quality of work life (1). A number of experts believe that part of the decline in job performance and in product quality in some industrialized countries is due to deficiencies in the quality of work life and changes that have occurred in the interests and preferences of employees.

The infrastructure of development of countries and organizations is related to the creativity and innovation of human resources, and

this need is felt more in relief organizations that are responsible for the mission of preserving, providing and maintaining, promoting health, controlling and preventing diseases, and providing assistance in times of disasters. Undoubtedly, today, human resources are the greatest capital that organizations have, and one of the solutions to their success is for managers to be able to use these capitals efficiently. On the one hand, it depends on the effective training of human resources in the survival and continuity of organizations, and on the other hand, depends on the importance of quality of work life and its direct and important role on human resource productivity. Quality of work life, as one of the organizational improvement techniques, has attracted the attention of senior managers in recent years and means the mental image and perception of an organization's employees of the physical and psychological desirability of their work environment. It is not only the existence of some quality-creating factors in work life that makes it desirable, but also the perception and perception that human resources have of establishing justice in the field of providing them will be effective in the desirability of the factors and employee satisfaction (10).

In the present study, among the parameters that can affect the learning organization, the role of three variables, knowledge management, innovative organizational culture, and quality of work life, has been examined and explained. Considering the important role and position of the RCS in the country and since no study had been conducted in this regard, the researchers decided to model the learning organization in the Society, considering the conditions and the existence of unexpected man-made and natural hazards, and to examine the effectiveness of the learning organization with respect to the variables of knowledge management, innovative organizational culture, and quality of work life. And based on the results, explain the promotion of the learning organization in the RCS so that it can increase knowledge management, innovative organizational culture, and quality of work life among its personnel. Although the researchers was faced with numerous studies on the relationship between variables; however, no research was found on presenting a learning organization model based on these three components in the RCS of Tehran province. Therefore, the present study seeks to present a

model for a learning organization based on the variables of knowledge management, innovative organizational culture, and quality of work life in the RCS of Tehran province.

Methods

The study population in this study includes all employees and volunteers of the RCS of Tehran province. In the present study, 15 variables or latent parameters are measured using structural equation modeling. Therefore, 90 people were sufficient considering the ratio of 5 to 1, but to obtain better results, a ratio of 10 to 1 was used, in which case 180 people were sufficient. Since there is a possibility of incompleteness of the questionnaire, it was decided that at least 230 participants (50 more than estimated) would be considered for this study. Sampling at this stage was carried out in a multi-stage cluster and data related to the research variables were collected using a questionnaire. In describing demographic characteristics, percentages, frequencies, tables and graphs were used, and in describing the research variables, mean, standard deviation, skewness and kurtosis were used. In the inferential section, the research questions were answered by structural equation modeling and confirmatory factor analysis using LISREL and SPSS-23 software.

Findings

The main question of this research was to present a model for the learning organization in the RCS of Tehran province based on knowledge management, innovative organizational culture and quality of work life, and the GOF index of this model was 0.770, which indicates a strong fit of the model. According to the first question of this research, this model had the dimensions of the learning organization in the Society as feedback and evaluation system, systemic thinking, collaborative learning and creative thinking.

According to the second question of the research, examining the relationships within the structural model shows that the relationship between the learning organization and quality of work life, knowledge management and innovative culture is at a significance level of less than 0.05, and the t-value for these relationships is greater than 1.96, which means that these relationships are significant. Based on the results obtained, the relationships between knowledge management and the learning organization ($\beta=0.786$, $t=11.124$,

$p=0.000$), innovation culture and the learning organization ($\beta=0.717$, $t=29.759$, $p=0.000$), and quality of work life and the learning organization ($\beta=0.702$, $t=25.211$, $p=0.000$) are confirmed.

Based on the third research question, the value of the t-value for the relationship between quality of work life and the learning organization was 25.211 and greater than 1.96. In addition, the significance coefficient is 0.000, so this relationship is significant. The path coefficient was 0.702 and the dependence of quality of work life and learning organization was 70.2%, which is strong. The factor loadings of the components of fair and adequate compensation, healthy and safe working conditions, providing opportunities for continuous growth and security, legality in the organization, social dependence of work life, general living space, social integration and cohesion in the organization, and development of human capabilities, which are very strongly dependent on the quality-of-life dimension, are as follows: 0.783, 0.818, 0.846, 0.884, 0.792, 0.738, 0.821 and 0.866. It should be noted that the highest dependence is with the legality component in the organization, 88.4%.

According to the fourth research question, the t-value for the relationship between knowledge management and the learning organization was 29.759, which was greater than 1.96. Also, the significance coefficient was 0.000, which means this relationship is significant. The path coefficient was 0.786, and the level of dependence between knowledge management and the learning organization was 78.6%, which means that it is strong. The factor loadings of the components of knowledge creation, knowledge sharing, knowledge application, and knowledge storage were 0.941, 0.936, 0.933, and 0.929, respectively, which means that the level of dependence of the components on the knowledge management dimension was very strong. The highest dependence with the knowledge creation component was 94.1%.

Based on the fifth question, the t-value for the relationship between innovation culture and the learning organization was 11.124, which was greater than 1.96. Also, the significance coefficient was 0.000, and therefore this relationship is significant. The path coefficient was 0.717, and the factor loadings of the components of implementation context, organizational compatibility, organizational learning, market orientation, innovation

orientation, employee creativity and empowerment and value orientation were 0.872, 0.911, 0.903, 0.895, 0.900, 0.831, 0.909 respectively. Degree of dependence of the components on the innovation culture dimension is very strong, and the highest dependence is with the organizational compatibility component of 91.1%.

A) Learning Organization Questionnaire (Researcher-Designed)

This questionnaire was designed to validate the dimensions, components, and indicators of the learning organization in the RCS of Tehran province and based on the results of interviews with experts and the research text (theoretical foundations), and has dimensions such as experience-building, feedback and evaluation system, systemic thinking, collaborative learning, and creative thinking. A list of 70 items was initially prepared based on the results and interviews, which was reduced to 25 items after removing similar or inappropriate sentences. The questionnaire consists of two parts: a) the personal information including gender, level of education, and work experience, b) the dimensions and components of organizational learning, including experience-building (3 items), feedback and evaluation system (3 items), systemic thinking (3 items), collaborative learning (3 items), and creative thinking (3 items). In order to determine the content validity qualitatively, a number of assessors were asked to provide their corrective views after carefully studying the instrument regarding grammar, use of appropriate words, placement of items in their proper places, and appropriate scoring and to determine the content validity quantitatively, two content validity indices CVI and CVR were used.

Lawshe's Content Validity Index

To calculate this ratio, 10 experts views in the field of learning organizations were used and they were asked to assess each item based on a three-point Likert scale such as essential, useful but not essential, not essential. Then, Lawshe's CVI was calculated based on the following formula: $CVR = (n_e - n/2) / (n/2)$ n : number of experts n_e : experts who selected the essential option.

Minimum acceptable CVR based on the number of raters

Based on the values in the table, items with a calculated CVR lower than the desired value are

discarded because they will not have acceptable content validity (11). At this stage, out of the initial 25 items, 10 items did not meet the minimum CVR threshold, so they were removed from the initial set of items. The remaining items had a CVR greater than 0.62. (Table 1)

Table 1. Minimum acceptable CVR based on number of experts

CVR	Experts	CVR	Experts	CVR	Experts
0/39	25	0/76	9	0/99	5
0/31	30	0/61	10	0/99	6
0/28	40	0/51	15	0/99	7
		0/43	20	0/85	8

Content Validity Index (CVI)

To calculate this index, 10 experts were asked to determine the degree of relevance of each item to the spectrum. Items with a CVI between 0.79 and 1 were considered acceptable. 10 items that

did not meet the standard conditions were eliminated, and the remaining items, including 15, had a CVR greater than 0.79 (and less than 1). In this study, the face validity of the questionnaire was examined and confirmed by assessors.

Measurement Model Fit Indices for Learning Organization Questionnaire

In this section, the aim is to answer the question of whether the learning organization model obtained is supported by the collected data or not?

This questionnaire consisted of 15 items on a five-point scale and was composed of five dimensions: experience-building (3 items), feedback and evaluation system (3 items), systems thinking (3 items), collaborative learning (3 items), and creative thinking (3 items).

Table 2. Skewness and kurtosis of each dimension of the learning organization questionnaire (test of data normality)

No.	Dimension	Skewness	Kurtosis	St.d	Mean
Item 1	Gaining experience	-0/151	0/174	0/942	3/036
Item 2		-0/662	0/115	1/125	2/95
Item 3		-0/618	0/083	1/11	2/882
Item 4	Feedback & evaluation system	-0/397	-0/028	1/026	3/023
Item 5		-0/368	0/306	1/042	2/904
Item 6		-0/652	-0/019	1/115	3/042
Item 7	System thinking	-0/707	0/006	1/108	3/063
Item 8		-0/722	0/06	1/132	3/05
Item 9		-0/592	0/172	1/112	2/915
Item 10	Collaborative learning	-0/547	-0/045	1/082	3/044
Item 11		-0/693	-0/075	1/114	3/096
Item 12		-0/618	0/155	1/078	3/037
Item 13	Creative thinking	-0/615	0/053	1/073	2/972
Item 14		-0/703	0/039	1/097	3/021
Item 15		-0/838	0/048	1/17	3/076

Table 3. Fit indices of the learning organization questionnaire measurement model

Test name	Description	Obtained values	Acceptable values
χ^2/df	Relative Chi-Square	0/066	Acceptable <5 good<3
RMR	Root Mean Square of The Residuals	0/022	< 0/1
GFI	Goodness of Fit Index	0/954	> 0/9
AGFI	Adjusted Goodness of Fit Index	0/932	> 0/9
NFI	Soft-Fit Index	0/970	> 0/9
RFI	Relative Fit Index	0/960	> 0/9
IFI	Incremental Fit Index	0/998	> 0/9
CFI	Comparative Fit Index	0/998	> 0/9
RMSEA	Root Mean Square of Approximation Error	0/017	Poor>0/1 good<0/08

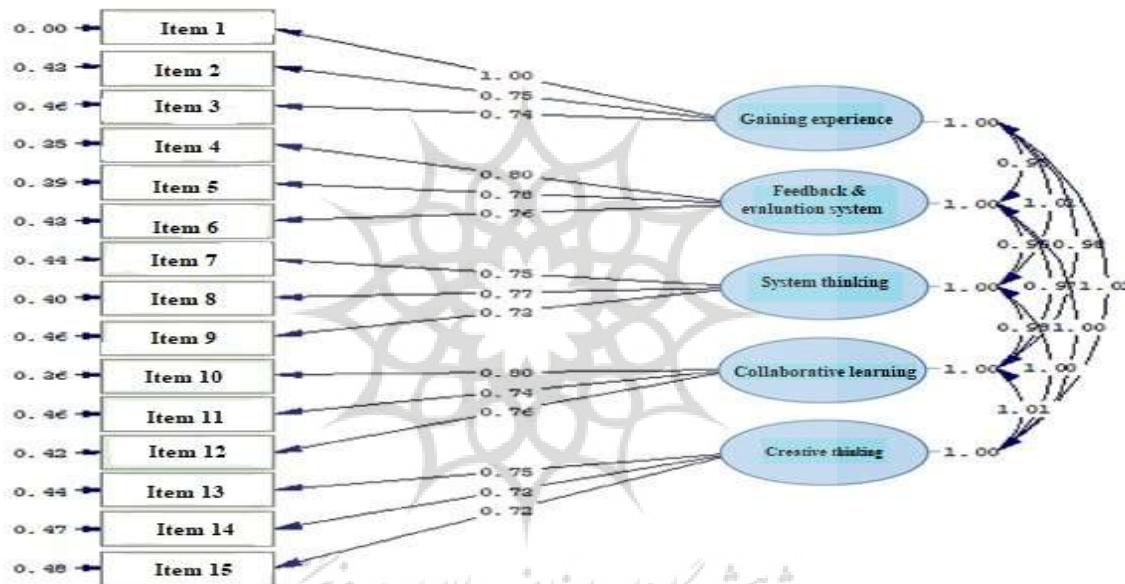
According to Table 2, the skewness and kurtosis indices of the dimensions of the questionnaire are within the range of ± 2 , which indicates a normal distribution of the data. In order to evaluate the fit of the 5-component structure of the questionnaire, factor analysis and

maximum likelihood estimation were performed.

This analysis included all items and each item was limited to only the desired latent factor and the latent factors were allowed to be correlated with each other. (Table 3)

Table 4. Questionnaire measurement model parameters in confirmatory factor analysis

No.	Dimension	Standard coefficient	T-Value
Item 1	Gaining experience	1/00	21/28
Item 2		0/75	13/53
Item 3		0/74	13/12
Item 4		0/80	14/54
Item 5	Feedback and evaluation system	0/78	14/04
Item 6		0/76	13/37
Item 7	System thinking	0/75	13/17
Item 8		0/77	13/83
Item 9		0/73	12/84
Item 10	Collaborative learning	0/80	14/49
Item 11		0/74	12/82
Item 12		0/76	13/47
Item 13	Creative thinking	0/75	13/13
Item 14		0/73	12/76
Item 15		0/72	12/60

**Figure 1.** Measurement model of the learning organization questionnaire in the Tehran province RCS

The results show that the indicators support the acceptable fit of the questionnaire measurement model with the collected data. Now, using confirmatory factor analysis, the reliability of each of the latent variable indicators is determined by the amount of factor loadings of each indicator and the LISREL software. The critical ratio value of each of the factor loadings of the relevant latent variable indicators should be ≤ 1.96 .

As can be seen in the table, all critical ratio values are outside the range (1.96 & -1.96) and are significant, as a result, the research instrument has appropriate validity and it can be said that this measurement model has sufficient reliability in the context of the latent variable items of the

learning organization.

In this study, a visual coding model was used to present the theory, which is a pattern similar to the axial coding pattern. In order to assess reliability, the learning organization questionnaire was administered in two stages with a two-week interval on 30 employees and volunteers of the Society. The correlation coefficients between the two stages of administration for the components of gaining experience, feedback and evaluation system, system thinking, collaborative learning, creative thinking were 0.66, 0.58, 0.70, 0.65 and 0.73 respectively which indicates that the scores of the questionnaire components have acceptable stability over a two-week period. It is important to

note that the Cronbach's alpha coefficients of each of the questionnaire components and the correlation coefficients between the components of the learning organization questionnaire and other research variables (knowledge management, innovative organizational culture, and quality of work life) indicate acceptable internal consistency and desirable convergent validity of the questionnaire.

B) Quality of Work Life Questionnaire

This questionnaire has 8 components and 24 questions including: adequate and fair pay (questions 1-3), safe and healthy working conditions (questions 4-6), opportunity for continuous growth and security (questions 7-9), legality in the organization (questions 10-12), social dependence of work life (questions 13-15), overall life atmosphere (questions 16-18), integrity and cohesion in the work organization (questions 19-21), and the manifestation of human abilities (questions 22-24).

C) Joseph Haddad's Standard Knowledge Management Questionnaire (2006)

This questionnaire has 21 items based on the 5-point Likert scale and its components, including: knowledge creation (questions 9, 10, 11, 12, 18, and 19), knowledge establishment (questions 4, 5, 8, 13, and 20), knowledge consolidation (questions 1, 2, 3, 6, 14, 15) and knowledge sharing (questions 7, 16, 17, 21)

D) Organizational Innovative Culture Questionnaire

The Dabney's questionnaire (2018) is used to measure innovative culture. This questionnaire has 86 items and 6 dimensions and also has the necessary content validity due to its appropriate theoretical foundation and approval by experts with subject matter expertise.

Discussion and Conclusion

Based on the calculated indices, the model was fit in the quantitative part and the results of the research also showed that the variables "knowledge management", "innovative organizational culture" and "quality of work life" have a significant effect on the learning organization in the Red Crescent Society of Tehran Province, respectively. In general, the results of this study show that with the increase in the indicators of the learning organization in the RCS, knowledge management, innovative culture

and quality of work life improve. The results of this study are consistent with the study of Shahrakipour et al. (2021), Veshkacai Nejad et al. (2024), and Namdar et al. (2018). (12-14)

Soon and in the not-so-distant future, we will not find any organization that can survive for a moment without learning. The future will belong to organizations that can learn and make the best use of all learning methods. Because the world is changing and transforming rapidly and no force can stop this change and transformation, and an organization has a lasting chance that can continuously adapt to the environmental changes around it. Environmental changes have forced organizations to constantly seek the best solutions and procedures in order to adapt to their environment and thus achieve competitive advantage, and the only solution for future organizations against its changes and transformations is to transform themselves into learning organizations. One of the basic ways to become a learning organization is to apply knowledge management in the organization. Knowledge management, by facilitating the process of creating and sharing knowledge, along with providing positive work environments and an effective reward system, accelerates organizational learning and helps the organization adapt to today's rapid changes and continue its life successfully in line with the changes.

This study will help the RCS develop strategies that promote learning throughout the organization and foster a spirit of becoming a learning organization among its employees.

The results of this study indicate that managers should create infrastructures so that employees can share their knowledge and feel empowered in organizational decision-making processes.

Strategies should be developed to recognize good ideas and consider formal and informal rewards for ideas that lead to big leaps or innovations.

The organization's management should encourage all employees to learn through an organizational vision. Once this vision is formed in the minds of managers, it will certainly be implemented with appropriate methods and processes. Given the set of conditions and volunteer culture in the RCS, employee empowerment is the main factor in encouraging them to take initiative and take full responsibility for the results achieved. Giving RCS employees and volunteers a sense of empowerment will lead

to better performance. In fact, learning should be considered a part of everyday activities at different levels of the organization. The findings of this study show that there are processes and methods to transform the IRCS into a learning organization, but to generalize these results, care must be taken and it must certainly be done with respect to the specific culture of volunteering.

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None

Conflict of Interests

The authors declare no conflict of interest.

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