


## Systematic Review

# An organizational entrepreneurship model based on organizational learning: a systematic review study from Iran Health Insurance Organization

Shahrzad Inanloo <sup>1</sup> , Ali Mehdizadeh Ashrafi <sup>1\*</sup> , Majid Jahangirfard <sup>1</sup> 

<sup>1</sup> Department of Management, Firoozkooch Branch, Islamic Azad University, Firoozkooch, Iran.

**Corresponding author and reprints:** Ali Mehdizadeh Ashrafi, Assistant Professor, Department of Management, Firoozkooch Branch, Islamic Azad University, Firoozkooch, Iran.

**Email:** [Mehdizadeh297@yahoo.com](mailto:Mehdizadeh297@yahoo.com)

**Received:** 01 Sep 2022

**Accepted:** 26 Sep 2023

**Published:** 01 Oct 2023

## Abstract

**Background:** One of the most basic tools and strategies for developing new ideas and entrepreneurship is establishing the entrepreneurial culture in the organization. The present study explained and analyzed the dimensions and components of organizational entrepreneurship based on organizational learning.

**Methods:** The approach of this study was qualitative and was carried out with the seven-step hybrid method. Systematically analyzed the results of previous studies. According to the depth of the study in this approach, the range of scientific articles and documents is less than 70 cases. To achieve the basic framework of the research based on the seven-step method of Sandelowski.

**Results:** The concept of organizational entrepreneurship based on organizational learning was identified and classified into 6 components, 16 dimensions, and 159 indicators. The components included causal, contextual, intervening factors, axial phenomenon, strategies, and implications of organizational entrepreneurship based on organizational learning. The causal conditions included indicators of organizational performance, competitive advantage, organizational change, strategic leadership, and individual factors of organizational learning. Contextual factors included organizational environment and organizational infrastructure.

**Conclusion:** Entrepreneurship is a tool to create jobs and generate wealth. Entrepreneurial activities in the organization can be considered innovative actions guided through an organized system of human relations and a combination of resources to achieve a specific goal. If organizational entrepreneurship is implemented with an organizational learning approach, it can play a very effective role in improving the organization's performance and achieving goals.

**Keywords:** Entrepreneurship; Learning; Organizations.

**Cite this article as:** Inanloo S, Mehdizadeh Ashrafi A, Jahangirfard M. An organizational entrepreneurship model based on organizational learning: a systematic review study from Iran Health Insurance Organization. *Soc Determinants Health*. 2023;9(1):1-13. DOI: <http://dx.doi.org/10.22037/sdh.v9i1.43134>

## Introduction

The move towards entrepreneurship is so important for success in today's changing world. Nowadays, entrepreneurship is considered as one of the tools of development since entrepreneurial people provide the context for success. Moreover, considering the rapid growth of

new competitors and the emerging distrust in traditional methods, the need is felt for entrepreneurship in the organization. Regarding this, the dynamic organizations' duty is to discover and nurture creative and entrepreneurial individuals. Each organization requires the right structure and

entrepreneurial people to nurture creative and innovative people (1). Organizations should respond to the changes with an appropriate speed and with flexibility for their survival in today's complex and rapidly changing environment (2). Entrepreneurship is one of the essential tools for dynamism, transforming organizations into learning and entrepreneurial organizations (3). Readiness to enter a new management paradigm (competitive environment) and exit from the old management paradigm (stability and balance) is considered the primary factor of survival and internal empowerment (4). Paying attention to the capabilities of a learning organization such as predicting and adapting faster to environmental impacts, speed in product development, becoming professional through competitors, speed in knowledge transfer, effective learning from mistakes, encouraging continuous improvement, and attracting the best employees, the role of organizational learning as a factor of organizational flexibility to the external and environmental changes suitable for creativity and innovation lead to entrepreneurship and the creation of new and stimulating strategies for economic development and creating a competitive advantage in organizations (5). Researchers have reported that organizational entrepreneurship is the most effective way to solve the problems of organizations (6). Learning in the organization teaches people to change the organization and improve its functions, resulting in growth and development in the organization (7).

Different experts have presented several scientific and practical frameworks for creating an entrepreneurial organization. For example, the Cornwall & Perlman, organizational entrepreneurship model is the basis of the strategic management approach (8). The Echols & Neck, organizational entrepreneurship model investigates the effect of individual entrepreneurial behaviors and the

entrepreneurial organizational structure of organizations (9). Kuratko et al., presented an interactive model of entrepreneurship based on the three factors of organizational characteristics, individual characteristics, and sudden accidents (10). Thompson et al., considered five dimensions to develop entrepreneurship in an organization. These dimensions include hard entrepreneurship, soft entrepreneurship, risk-taking, creativity, and idea presentation (11). Since Iran is a developing country and most public organizations work primarily by traditional and non-entrepreneurial methods, one of the most significant reasons for the weak performance of Iran's public organizations, such as Iran Health Insurance Organization, is the lack of innovation and organizational entrepreneurship. Thus, the present study seeks to answer the question of what model can be developed to promote organizational entrepreneurship based on organizational learning in Iran's health insurance organization. Therefore, in this study, an entrepreneurial model based on organizational learning was presented by integrating various previous models and the application of a qualitative approach, meta-synthesis, and interviews.

## **Methods**

The approach of the present study was qualitative and the meta-synthesis method was used to evaluate scientific resources. Meta-synthesis, as one of the fields of meta-study, is a systematic approach to combining different qualitative studies to discover secondary and primary fields. It promotes new knowledge and creates a comprehensive view of the study area. This method requires the researcher to conduct a detailed and in-depth review of the research subject and integrate the results of related qualitative studies and accordingly show a comprehensive representation of the study phenomenon. In other words, the use of meta-synthesis is synergistic and gives a result that is greater than the sum of its parts.

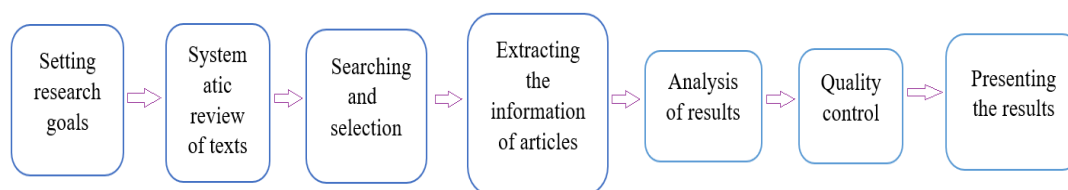


Figure 1. The seven stages of the meta-synthesis qualitative method (Sandelowski et al., (1))

The scope of reviewing scientific articles and documents according to the depth of study in this approach is less than 70 cases. This method is especially used in sciences whose studies are primarily based on qualitative analyses and do not include extensive theoretical foundations. Since the studies related to the concept of organizational entrepreneurship based on organizational learning are more qualitative and no comprehensive model that includes its various dimensions was found until the present study, the meta-synthesis method was used as a suitable method to identify and obtain a comprehensive combination of the primary components and dimensions of organizational entrepreneurship based on organizational learning. Therefore, to use the meta-synthesis method in this study, the

seven-step method of Sandelowski et al., (1) was used. Its steps are presented in Figure 1.

To achieve the basic framework of the research based on the seven-step method of Sandelowski et al., (1), each of its implementation steps is presented based on previous studies.

**Study implementation steps:**

*Setting research questions*

The first step of meta-synthesis is related to the setting of research questions, which should be in the field of interest and continuation of the researcher's previous studies. The research questions should have the characteristics that are presented in Table 1.

Table 1. Research questions and their parameters

Parameter	Research questions and how to answer them
Nature of work (What)	<p>The primary question</p> <ul style="list-style-type: none"> <li>•What is the model of organizational entrepreneurship based on organizational learning in Iran's health insurance organization? How is that?</li> </ul> <p>Sub questions</p> <ul style="list-style-type: none"> <li>•What are the causal factors of the organizational entrepreneurship model based on organizational learning?</li> <li>•The primary category of the organizational entrepreneurship model based on organizational learning</li> <li>•What are the contextual factors of the organizational entrepreneurship model based on organizational learning?</li> <li>•What are the intervening factors of the organizational entrepreneurship model based on organizational learning?</li> <li>•What are the strategies of the organizational entrepreneurship model based on organizational learning?</li> <li>• What are the implications of the organizational entrepreneurship model based on organizational learning?</li> </ul>
Studied population (who)	Databases such as Science Direct, Springer, Emerald, Sage, and Isco for Latin articles and internal databases such as Iran Scientific Information and Documents Center, the National Library and Documents Center of Iran, the Iran's publications database, the Academic Jihad Database, Regional Science and Technology Center of Shiraz and Noormags
Study time (when)	<ul style="list-style-type: none"> <li>• 2010-2019 for domestic studies</li> <li>• 2010-2020 for foreign studies</li> </ul>
Study method (how)	Thematic analysis of works, identification, and note-taking of key points, analysis of concepts, classification of concepts, and identified categories

In the initial part of the meta-synthesis step, the general questions in this field were answered to avoid further ambiguities in this field. Accordingly, only those works should be included in the study in which the most significant components and dimensions of organizational entrepreneurship based on organizational learning have been addressed. The selected period (2010 to 2019 for domestic studies and 2010 to 2020 for foreign studies) until the time of conducting the study, is a good representative of the studies conducted in this field since studies in the field of organizational entrepreneurship based on organizational learning have expanded in recent years.

### Systematic review of literature or texts

For the accurate and systematic start of the studies, the sources including articles, theses, and studies were selected and reviewed based on criteria such as appropriateness with the purpose of the study, the specified period, and place, as described in Table 2.

In this step, the eligible studies were selected to enter the meta-synthesis, and the inclusion and exclusion criteria were determined. Therefore, the researcher focused his systematic search on the studies published in different sources and found relevant keywords. In this study, different databases were examined between 2010 and 2020 for foreign studies and between 2010 and 2019 for domestic studies. Various keywords were used to search for articles and an attempt was made to select a variety of keywords for the search to achieve maximum retrieval Table 2.

Since the keywords "organizational entrepreneurship and organizational learning" are used in the Persian language, attention was also paid to these words in the searches. Searching in various databases, including Science Direct, Springer, Emerald, Sage, and Isco for Latin articles

and Iran Scientific Information and Documents Center, the National Library and Documents Center of Iran, Iran's Publications Database, the Jihad Scientific Database, Shiraz Regional Science and Technology Center database, and Noormags for domestic articles and home page of some journals were considered for the search. An attempt was made to select high-quality documents. For example, conference papers and articles on personal websites were not considered. As a result of searching in different databases, 846 works were found.

Table 2. The keywords searched in the study

Keywords
Entrepreneurship
Organizational entrepreneurship
Entrepreneurial orientation
Characteristics of entrepreneurs
Learn
Team learning
Organizational Learning
Orientation of learning
Organizational learning capabilities

### Searching and choosing suitable articles and texts

After searching the texts and articles based on keywords, many cases were identified, many of which were not suitable for the final analysis of the study. Thus, in this step, the researcher refined the found items in several steps to obtain reliable and relevant sources for use in the research and its final analysis. According to Figure 2, the sources were compared with each other, and some of them were removed. Then, the abstracts of the remaining cases were reviewed, and by reviewing their abstracts, some irrelevant sources were removed. In the next step, the refined sources were reviewed based on the abstract in the form of full text, and in this review, some sources were removed in terms of content. The remaining sources after the content review were the sources used in the final research and analysis.

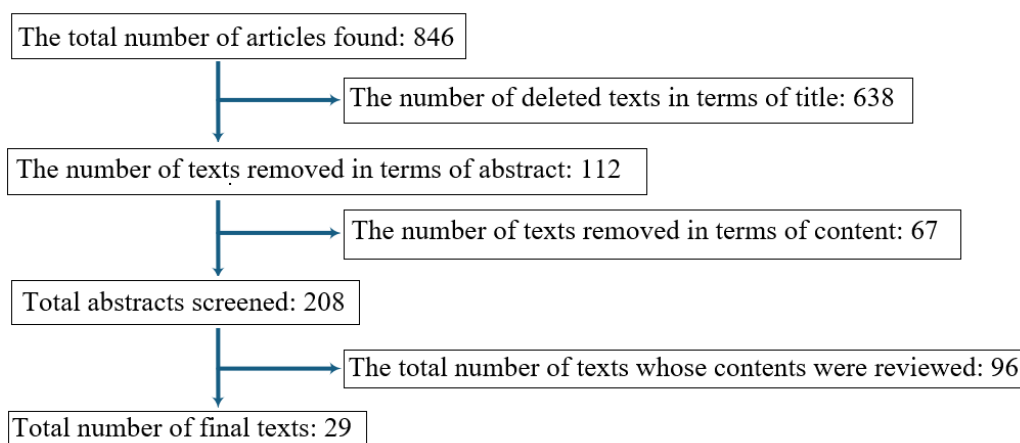


Figure 2. Flowchart for selecting suitable works for analysis

The flowchart shows that out of 846 works, 638 works were not in line with the purpose and questions of this study in terms of title, 112 works in terms of abstract, and 67 works in terms of text. Therefore, these works were excluded and only 29 works that were based on organizational learning in the field of organizational entrepreneurship and were in line with the purpose and questions of the present study both in terms of title and content, were analyzed in a meta-synthesis method and a model of organizational entrepreneurship based on organizational learning was selected.

### Extracting information from texts and articles

In this step, by carefully studying and reviewing the sources, the relevant findings were extracted from each of the sources, including the components and indicators of organizational entrepreneurship based on organizational learning.

### Quality control and evaluation

To measure internal validity to know whether the results are in line with the goals of the research or not, the opinions of one or two experts are considered, especially in the field of axial coding and categories, and components. In this case, it is enough for the experts to express their opinions verbally and approve the work. In this study, the opinions of two professors were considered and they confirmed the

consistency of the results with the research goals. Also, the Kappa coefficient can be used to measure the reliability of the final designed framework. It shows the degree of agreement. In this case, the entire work or all the required items are given to two experts in the form of a checklist with two values (yes/no) for ease of answering and saving time.

After obtaining their opinions, the Kappa coefficient of agreement is calculated using the following formula, which is a number between -1 and +1. If the calculated number is close to +1, it indicates high reliability, if it is close to -1, it indicates a lack of agreement, and if it is close to zero, it indicates a lack of reliability. The Kappa coefficient between +0.6 and +0.8 shows good reliability. In this study, the most important items of the entire work were given to two professors, and based on their opinions; the Kappa coefficient was calculated at 0.84 using the following formula.

$$\kappa = \frac{P_0 - P_E}{1 - P_0}$$

### Results

The relevant findings were extracted from each of the sources, including the components and indicators of organizational entrepreneurship based on organizational learning. Table 5 presents them.

Components and indicators affecting organizational entrepreneurship based on organizational learning categorized on selective code, axial and open codes. One selective code was Causal factors and their axial code was Organizational performance that their open codes were Performance of employees, Job Opportunities, Corporate social responsibility performance, Effectiveness, Aggressive spirit towards competitor, Institutional investment, Strategic intelligence, High performance work systems, The organization effort, Responsibilities, Values, New requirements, Performing missions, The organization goals, Organizational bureaucracy, Conservative organization, Dominant culture (6,12-16). Competitive Advantage on axial code were Aggressive competition, Competitive trends, Increase of new competitors, Attention to the needs and demands of customer's Sustainable reconstruction, Organizational renewal, Organizational restructuring, Discovery of organizational changes, Taking advantage of organizational changes, Organizational changes, Plan and program of the organization (6, 12-14). In Strategic leadership from axial code Transformational leadership, Creative managers, Innovative managers, Entrepreneurial managers, Management commitment, Systemic vision, Collaborative leadership, Strategic leadership, Characteristics of a leader, Leader's beliefs and values, Leader behavior, Leader abilities, Management support were open codes (17-22). In Individual factors of organizational learning axial code Continuous learning, Promotion of inquiry and exchange of opinions, Research and search, Continuous learning, Job Satisfaction, Creativity, risk taking, Innovative and proactive activities, Lack of trust in traditional management methods in organization, Attitude of employees and Continuous learning were open codes (14,15, 18-24). Other selective code was Primary category (organizational entrepreneurship based on organizational

learning). This code has Entrepreneurial culture as axial code with Entrepreneurial spirit, Risk taking, Entrepreneurial culture, Entrepreneurial orientation, Entrepreneurship Development, Entrepreneurial activities, The spirit of entrepreneurial development, Entrepreneurial performance of employees, The performance of entrepreneurial orientation, Strategic entrepreneurship (6,7,12,18,20,22, 24-25). In Organizational wisdom, Ability to learn the organization, learning organization, Creative culture, Organizational learning capability, Organizational wisdom and Creation of innovation were as axial code (6,7,12,18,20,22, 24-25).

In Contextual factors selective code, Organization environment was axial and Environmental factors, Government strategies, Competition, shared vision, Organizational Culture, Teamwork, Knowledge sharing, Systematic thinking, Supportive environment, competitive environment, Technological environment, Social environment, Political environment, Energetic environment, Authority, Encouragement and reinforcement, Availability of time, Environmental awareness were open codes (7,14,19,20-22). In Organizational infrastructure axial code, exploratory learning, Extractive learning, Management structure, Member interaction, organizational intelligence, knowledge management, Information processing and sharing, applying effective systems of encouragement and punishment, employing competent and capable managers and leaders were open codes (12,14,22,26). Organizational factors of learning were axial and Managers' support for learning, Development of employee competence, Open space and experimentation, Knowledge transfer and integration, Knowledge sharing culture and Organization initiatives were open codes (16,19,21,22,24,27). In learning system axial code, The relationship between the organization and the environment, Paying attention to organizational communication,

Establishment of a suitable learning system, Organizational learning speed, Depth of organizational learning, The scope of organizational learning, Focusing on the use of new technologies and Establishment of a suitable learning system were open codes. (19,21,24).

In Strategies selective code, Supportive role of organization was axial and Strategic flexibility, Creating strategic insights, Participation of managers, Interaction between managers and employees, Negotiation, Knowledge transfer and integration, Experimentation, Philosophy of reward and encouragement, Leading strategy, Link with the system, Empowerment, Integrated systems, Organizational dynamics, Official organizational instructions, Managers' support for learning, Application and creation of design units in the organization were open codes (18,19,20,22,24,26,28,29). Organizational innovation was axial and Innovation strategies, creating project ideas, Strategic renewal, creating opportunities for prosperity, creating opportunities for promotion, Structure reforming, Organizational Innovation, Innovation in technology, Process innovation, Product innovation and Pioneering in the organization were open codes (18,19,20,24,30).

In Implications selective code, Organization improvement was axial and Employee satisfaction, Atmosphere of trust toward managers, Organizational goals, Attracting the public commitment, Growth and modernization of the organization, Behavior change, improving productivity and improving the quality of working life were open codes (14,19,20,28,30,31). Organization development was axial and Development of products and services, Strength and survival of the organization, earning profit, reducing paperwork, New and risky processes and Development of employee competence were open codes (14,19,20,28,30,31).

## Synthesis of qualitative results

In this step, the primary category is placed at the center and other categories are related to it. These categories include causal factors, contextual factors, intervening factors, axial phenomenon, strategies, and implications of organizational entrepreneurship based on organizational learning. These categories are presented separately in the following tables.

**Causal conditions:** These conditions cause the creation or development of the axial category. They are described below. In this study, causal conditions include the indicators of organizational performance, competitive advantage, organizational change, strategic leadership, and individual factors of organizational learning.

**Contextual factors:** These factors affect the strategies and are often related to the internal and specific factors of the axial phenomenon and are explained below. In this study, contextual factors include organizational environment and organizational infrastructure.

**Intervening factors:** These factors affect the strategies, their implementation, and operationalization. The types of intervening factors are also described below. In this study, the intervening factors include the indicators of group factors of organizational learning, organizational factors of learning, and learning systems.

**Axial phenomenon:** An axial phenomenon is a mental form of a phenomenon that is the basis of the process. In this study, the axial phenomenon includes indicators of entrepreneurial culture and organizational wisdom.

**Strategies:** they are behaviors or activities that are created in response to the axial category and affected by intervening conditions. It can be stated that they are strategies that are effective in organizational entrepreneurship based on organizational learning. The presented items are explained below. In this study, the

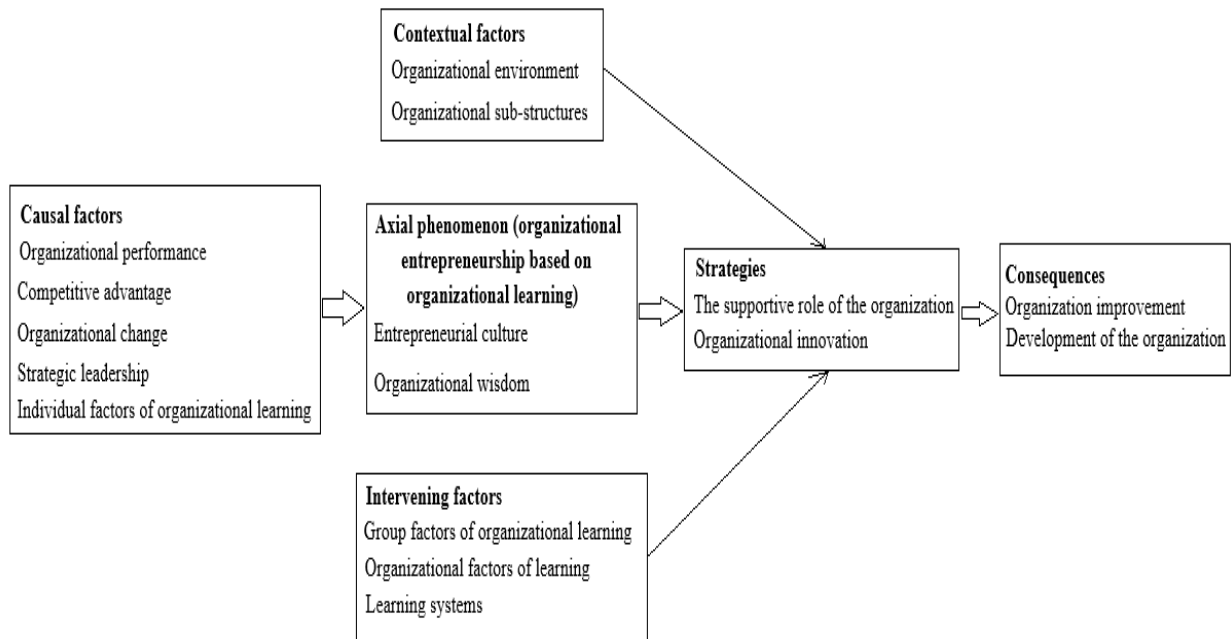


Figure 3. Organizational entrepreneurship model based on organizational learning with a meta-synthesis qualitative approach

strategies include indicators of the supportive role of the organization and organizational innovation.

Implications: They are the results of using strategies and can be considered the outcomes of using strategies. In this study, the implications include the indicators of organization improvement and organization development.

#### Results and the final framework

Based on the obtained results, a model can be designed, a framework can be presented, or the results can be presented in the form of tables, or they can be presented in other creative forms according to the researcher's creativity. However, all these cases can be cited if the validity and reliability are measured and confirmed. After confirming the validity and reliability of the study, the results were presented in the form of a grounded theory model as follows. According to the results in Figure 3, the model of organizational entrepreneurship based on organizational learning has been presented in the form of 6 dimensions causal factors, contextual factors, intervening factors, axial phenomenon, strategies, and implications.

#### Discussion

Globalization and the increasingly rapid spread of new technologies in the current competitive environment are changing industries significantly. Innovation and differentiation are now essential for every company, so the traditional methods used in the public and private sectors cannot meet the complex and evolving requirements of the present century. The continuation of this process causes the inefficiency of the government and the economic structure of the country. Nowadays, the world is based on innovation and the people who are responsible for it. In other words, the survival of societies and organizations relies on creativity and entrepreneurship. Entrepreneurship is the engine of economic development, progress, creativity, and improvement of society.

Entrepreneurship is a basic tool for creating jobs and generating wealth, and economic growth and development are related to entrepreneurship. For this purpose, the present study sought to develop an organizational entrepreneurship model based on organizational learning using a meta-synthesis approach. To present the model of organizational entrepreneurship

based on organizational learning with a meta-synthesis qualitative approach, 29 studies related to the subject were selected. By using the meta-synthesis method, the results of the previous studies were systematically evaluated and analyzed. The model of organizational entrepreneurship based on organizational learning was identified in 6 components, 16 dimensions, and 159 indicators.

The results show that the components included causal factors, contextual factors, intervening factors, axial phenomenon, strategies, and implications of organizational entrepreneurship based on organizational learning. Also, in this study, causal conditions include the indicators of organizational performance, competitive advantage, organizational change, strategic leadership, and individual factors of organizational learning. Contextual factors include organizational environment and organizational infrastructure. Intervening factors include the indicators of group factors of organizational learning, organizational factors of learning, and learning systems. The axial phenomenon includes the indicators of entrepreneurial culture and organizational wisdom. Strategies include the indicators of the organization's supportive role and organizational innovation. Implications include the indicators of organization improvement and organization development. In explaining the results, it can be stated that organizational entrepreneurs are the only sustainable source of developing competitive advantage in the long term. According to them, there is an interaction between organizational entrepreneurship and learning at individual and organizational levels. In other words, organizational entrepreneurs learn as individuals in the first stage and then share this knowledge with their teams. Teams can use organizational entrepreneurship strategically to support the company's goals (32).

Another issue that makes organizational entrepreneurs unique is their positive attitude toward new learning processes. An organization that promotes entrepreneurship is capable in the areas of learning, creativity, and impact on the environment. It can also be stated that entrepreneurial behavior occurs in a learning framework and includes a tangible activity such as learning that is tied to the organization (22). Organizational learning fosters new and expanded mental patterns, and people constantly learn how to learn with each other. Entrepreneurs can also continuously create new value added by integrating new tools, technologies, resources, and opportunities obtained through learning (18). To use these opportunities, entrepreneurs should use new organizational learning processes. Such knowledge and learning form factors that entrepreneurs can distinguish themselves from their competitors. Shariat Nejad et al., have also considered organizational learning as a mechanism in the entrepreneurial process (24).

Zahra, concluded that deep thinking and foresight in organizational learning positively affect entrepreneurship in family companies (33). The study by Vasconcelo et al. (26) also showed a significant relationship between entrepreneurship and organizational learning. This result was confirmed in the studies by Zamani & Garousi Mokhtarzadeh (14), Eskandari & Elahi (17), Sajjadi et al. (18), Akbarpour et al. (21), and Khonk Khan et al. (30), also found that organizational learning can be a good predictor for organizational entrepreneurship. Based on a study by Safamanesh et al. (20), continuous learning and team learning are the most significant components of the learning organization in explaining the entrepreneurial performance of employees (14). Many insurance companies have put organizational entrepreneurship on their agenda to maintain and improve the share of their resources and customers. Some of these services stem from innovation and

pioneering, and others stem from risk-taking capabilities, independence, and dominance. To solve the problems and challenges of the insurance company, creating suitable conditions for increasing the trend towards entrepreneurship can be considered an effective model for achieving goals, taking initiative and providing new products, and work processes, improving the quality of service, and thus improving the performance of insurance companies in all dimensions.

Thus, in the unstable conditions in the current competition, entrepreneurial orientation and market orientation are considered necessary for the success of organizations. Thus, in the present study, the model of organizational entrepreneurship based on organizational learning was investigated. The results provide useful suggestions to organization managers to improve entrepreneurship. As organizations in developed countries have improved their performance by identifying effective factors in entrepreneurship and increased customer satisfaction, non-entrepreneurial organizations can also improve their performance by improving organizational learning. In this regard, studies conducted on organizational entrepreneurship and factors related to it are of special importance.

Moreover, the results provide a comprehensive package of information for executive managers about how to improve entrepreneurship in the field of health insurance. Some of the important issues for the health insurance organization are knowing which variables to improve the dimensions of entrepreneurship such as innovation, risk-taking, and pioneering, and what strategies should be formed inside so the organizations can improve the entrepreneurial performance. In this regard, managers should provide the conditions for organizational entrepreneurship by removing the barriers. Enhancing knowledge in this area will help the health insurance organization to provide better and

more desirable services and increase the satisfaction of customers, and take an important step in improving and improving the quality of health of society (6).

### ***Recommendations***

Based on the present study results, the following recommendations are presented:

Despite all its advantages, qualitative research has some limitations such as generalizability and validity. Thus, to increase the generalizability of this study, it is recommended studies evaluate the above model in other high-risk industries. Also, the quantitative approach of structured equations can be used to evaluate the validity of the model and increase the generalizability of the model results. It is also recommended for researchers investigate the challenges of implementing the proposed framework. Managers should first create an entrepreneurial atmosphere in the organization to provide a suitable space for ideation and transfer of knowledge and information about opportunities among the members of the organization to implement organizational entrepreneurship based on organizational learning.

It is recommended for them to facilitate the absorption and creation of new entrepreneurial knowledge by creating a learning organizational structure and using the inter-organizational cooperation network.

Applying what has been learned is one of the effective factors regarding the organizational learning environment to create organizational entrepreneurship. Some employees have skills, but they cannot apply these skills in practice for various reasons. In other words, when employees do not have the necessary opportunity to implement the learned skills, the learning of the organization will decline, and organizational entrepreneurship will not occur. Hence, special attention should be paid to this dimension in an effective organizational learning environment.

## Conclusion

Rapid changes in today's business environment have created various threats to the survival of organizations. Thus, the long-term growth of organizations is not possible without having key competitive advantages. Entrepreneurship is one of the most significant competitive advantages that has always been a significant factor in the progress and development of countries. The primary concern of governments is to improve entrepreneurship so some countries allocate special facilities to the private sector rather than entrepreneurship programs. In today's economic environment of the world, rapid changes and developments in all areas have caused organizations cannot achieve their strategic goals with old methods. They have no way but to improve organizational entrepreneurship. Learning is significant in organizational entrepreneurship. In the present study, the components included causal factors, contextual factors, intervening factors, axial phenomenon, strategies, and implications of organizational entrepreneurship based on organizational learning. Causal conditions include the indicators of organizational performance, competitive advantage, organizational change, strategic leadership, and individual factors of organizational learning. Contextual factors include organizational environment and organizational infrastructure. Intervening factors include the indicators of group factors of organizational learning, organizational factors of learning, and learning systems. The axial phenomenon includes the indicators of entrepreneurial culture and organizational wisdom. The strategies include the indicators of strengthening the supportive role of the organization and the strengthening of organizational innovation. The implications include the indicators of organizational improvement and development of the organization. Managers and policymakers in organizational entrepreneurship

programs should pay attention to these factors.

## Authors' contribution

Shahrzad Inanloo and Ali Mehdizadeh Ashrafi developed the study concept and design. Majid Jahangirfard and Shahrzad Inanloo acquired the data. Shahrzad Inanloo and Ali Mehdizadeh Ashrafi analyzed and interpreted the data, and wrote the first draft of the manuscript. All authors contributed to the intellectual content, manuscript editing and read and approved the final manuscript.

## Informed consent

Questionnaires were filled with the participants' satisfaction and written consent was obtained from the participants in this study.

## Funding/financial support

There is no funding.

## Conflict of interest

The authors declare that they have no conflict of interests.

## References

1. Sandelowski M, Barroso J, Voils CI. Using qualitative metasummary to synthesize qualitative and quantitative descriptive findings. *Res Nurs Health*. 2007;30(1):99-111. <https://doi.org/10.1002/nur.20176>
2. Van de Wetering R, Mikalef P, Helms R. Driving organizational sustainability-oriented innovation capabilities: a complex adaptive systems perspective. *Current Opinion in Environmental Sustainability*. 2017;28(1):71-79. <https://doi.org/10.1016/j.cosust.2017.08.006>
3. Abbasi E, Akbari M, Tajeddini K. Organizational Learning Capabilities: Evidence from the Iranian Agricultural Higher Education System. *Interdisciplinary Journal of Management Studies (Formerly known as Iranian Journal of Management Studies)*. 2015;8(1):117-138. <https://doi.org/10.22059/ijms.2015.52319>
4. Dinpanah M, Sadeghi T. Investigating the Role of Strategic Management in Grow and learn the organization. *Journal of Human Capital Empowerment*. 2018;1(1):1-12. [https://jhce.rasht.iau.ir/article\\_543209.html?lang=en](https://jhce.rasht.iau.ir/article_543209.html?lang=en)
5. Ignacio TT, Leopoldo J, Gutiérrez-Gutiérrez FJ, Llorens-Montes F, Martínez-López J.

- Organizational Learning and Innovation as Sources of Strategic Fit. *Industrial Management & Data Systems*. 2016;116(8):1445-1467. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3876123](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3876123)
6. Zhuang Y, Lee Y, Chang X, Kim RB. Entrepreneurial orientation and corporate social responsibility performance: An empirical study of state-controlled and privately controlled firms in China. *Corporate Social Responsibility and Environmental Management*. 2020;27(1):383-392. <https://doi.org/10.1002/csr.1872>
  7. Duncan R, Pelly M. How Can Lean Six Sigma Foster Organizational Entrepreneurship in a Military Bureaucracy?. *Academy of Management*;2019. <https://doi.org/10.5465/AMBPP.2019.14114abstract>
  8. Cornwall JR, Perlman B. *Organizational Entrepreneurship*. Richard d Irwin;2019. <https://www.amazon.com/Organizational-Entrepreneurship-Jeffrey-R-Cornwall/dp/0256069808>
  9. Echols AE, Neck C. The impact of behaviors and structure on corporate entrepreneurial success. *Journal of Managerial Psychology*. 1998;13(1):38-46. <https://doi.org/10.1108/02683949810369110>
  10. Kuratko DF, Hornsby JS, Covin JG. Diagnosing a Firm's Internal Environment for Corporate Entrepreneurship. *Business Horizons journal*. 2017;57(1):37-47. <https://doi.org/10.1016/j.bushor.2013.08.009>
  11. Thompson J, Alvy G, Lees A. Social entrepreneurship—a new look at the people and the potential. *Management decision*. 2000;38(5):328-338. <https://doi.org/10.1108/00251740010340517>
  12. Almasi S, Eydi H, Abbasi H, Zardoshtian S. The effect of strategic flexibility on entrepreneurship through the mediating role of organizational learning (Case Study: Office of Youth and Sports West Country). *Organizational Behavior Management in Sport Studies*. 2019;6(2):101-116. <https://doi.org/10.30473/fmss.2019.44406.1898>
  13. Aghajani H, Samadi Miarkolaei H, Samadi Miarkolaei H. An Investigation of the Relationship between Organizational Entrepreneurship and Learning Organization's Features. *The Journal of Productivity Management*. 2015;9(4):64-39. <https://doi.org/20.1001.1.27169979.1394.9.4.2.1>
  14. Zamani M, Garousi Mokhtarzadeh N. Technological Corporate Entrepreneurship, Organizational Learning, Innovation and Firm Performance: Test of a Model in Pharmaceutical Firms. *Management and Development Process*. 2016;28(4):91-108. <https://doi.org/20.1001.1.17350719.1394.28.4.2.8>
  15. Zhu C, Liu A, Chen G. High performance work systems and corporate performance: the influence of entrepreneurial orientation and organizational learning. *Frontiers of Business Research in China*. 2018;12(1):1-22. <https://doi.org/10.1186/s11782-018-0025-y>
  16. Fortis Z, Maon F, Frooman J, Reiner G. Unknown Knowns and Known Unknowns: Framing the Role of Organizational Learning in Corporate Social Responsibility Development. *International Journal of Management Reviews*. 2018;20(2):277-300. <https://doi.org/10.1111/ijmr.12130>
  17. Eskandari I, Elahi A. learning as a prediction for entrepreneurship. *Journal of Development & Evolution Mangement*. 2019;11(38):23-29. [https://jdem.qazvin.iau.ir/article\\_669572.html?lang=en](https://jdem.qazvin.iau.ir/article_669572.html?lang=en)
  18. Sajjadi SA, Razavi MH, Kordalo H. The effect of organizational learning capabilities on organizational entrepreneurship in the Ministry of Sports and Youth of Iran. *Journal of sports management and movement behavior*. 2018;15(30):241-255. <https://doi.org/10.22080/JSMB.2017.1868>
  19. Rezaei R, Amin Fanak D, Badsar M. Relationship of Organizational Learning and Entrepreneurial Orientation in the Governmental Organizations: The Case of West Azerbaijan Province Organization of Agriculture Jihad. *Iranian Agricultural Extension and Education Journal*. 2017;12(2):107-121. <https://doi.org/20.1001.1.20081758.1395.12.2.7.0>
  20. Safamanesh P, Hosseini SR, Oladian M. The effect of the components of the learning organization on the entrepreneurial performance of the employees of an insurance company. *Insurance Research Journal*. 2014;30(1):95-124. [https://ijir.irc.ac.ir/article\\_10118.html](https://ijir.irc.ac.ir/article_10118.html)
  21. Akbarpour Z, Mohammadzadeh Rostami J, Motamel al-Shariati SAR. Investigating the relationship between organizational learning and organizational entrepreneurship (case study: Khorasan province organizations), National Business Management Conference focusing on: entrepreneurial businesses and knowledge-based economy, Ramsar;2021.
  22. Banumathi M, RajaKumar CS. A Study on Corporate Entrepreneurship development by organizational learning capability and outcome of job satisfaction. *Journal of the Gujarat Research Society*. 2019;21(12):121-129. [http://www.gujaratresearchsociety.in/index.php/JG\\_RS/article/view/1000](http://www.gujaratresearchsociety.in/index.php/JG_RS/article/view/1000)
  23. Yazdi-Moghadam J, Khorakian AR, Mahrati Y. Investigating the impact of organizational entrepreneurship on performance in public organizations of Mashhad city, Master's thesis, Ferdowsi University of Mashhad, International Campus;2022.
  24. Shariat Nejad A, Amrae F, Saedi A. The effect of Innovation Strategies in Organizational Entrepreneurship Development: Moderating effect of Organizational Learning Capacity. *Journal of Entrepreneurship Development*. 2015;8(2):313-332. <https://doi.org/10.22059/jed.2015.55982>
  25. Ortakarpoz Romero JGI, Alagoz Solís M. Las incapacidades de aprendizaje organizacional y su

- relación con los estilos de aprendizaje organizacional en la Mipyme. *Accounting & Management*. 2017;60(3):686-702. <http://www.cya.unam.mx/index.php/cya/article/view/745>
26. Vasconcelos V, Nunes de Souza AV, Silveira A, Bizarrias FS. The Relations Between Entrepreneurial Orientation, Organizational Learning and Organizational Performance of Small Enterprises. *International Journal of Professional Business Review*. 2016;1(2):1-14. <https://doi.org/10.26668/businessreview/2016.v1i2.23>
  27. Tabarsa GHA, Ahmadizad A, Nazarpuri AH. Explaining the role of organizational learning in organizational entrepreneurship (case study). The first international conference on management and innovation, Shiraz;2022.
  28. Dargahi H, Rajabnezhad Z, Reshadatjo H. The relationship between transformational leadership managers and organizational commitment of staff In Tehran University of Medical Sciences. *Health\_Based Research*. 2016;2(2):133-146. <http://hbrj.kmu.ac.ir/article-1-115-en.html>
  29. Soysekerici S, Erturgut R. Improvement of non-governmental organization entrepreneurship in vocational schools: Turkey case. *Procedia - Social and Behavioral Sciences*. 2010;2(2):1849-1854. <https://doi.org/10.1016/j.sbspro.2010.03.997>
  30. Khonk Khan B, Najari R, Shafizadeh R. The relationship between organizational learning and organizational entrepreneurship (case study: Safa rolling and pipe company in Saveh city). The second national conference of modern management sciences, Gorgan;2021.
  31. Rahimi I, Abbasi Rostami N, Shad Safari F, Nowrozi M. The relationship between market learning ability and organizational entrepreneurship and organizational innovation. *Human Resources Studies Quarterly*. 2017;8(4):87-106. [https://www.jhrs.ir/article\\_84947.html?lang=en](https://www.jhrs.ir/article_84947.html?lang=en)
  32. Teimouri H, Shaemi A, Zarei M. Study of The Relationship Between Dimensions of Organizational Intelligence and Organizational Entrepreneurship. *Management Studies in Development and Evolution*. 2017;25(83):115-134. <https://doi.org/10.22054/jmsd.2017.7481>
  33. Zahra SA. Organizational learning and entrepreneurship in family firms: Exploring the moderating effect of ownership and cohesion. *Small Business Economics*. 2012;38(1):51-65. <https://doi.org/10.1007/s11187-010-9266-7>