

RESEARCH ARTICLE

Open Access

A Conceptual Model of Leadership for Learning Organizations in Higher Education Institutions

Hamideh Mohammadi ¹, Nader Shahamat ^{2*}, Ebadollah Ahmadi ³, Reza Zarei ⁴

Abstract

A growing body of research has highlighted that the capability for organizational learning is the singular competitive advantage that enables organizations to thrive in today's turbulent environment. The primary objective of this study is to design a conceptual model for leading learning organizations within higher education institutions in Fars Province. This research is developmental in nature, employing a qualitative design through thematic analysis and semi-structured interviews. Participants were selected using purposeful sampling and the concept of theoretical saturation, resulting in a sample of 25 faculty members and specialists in higher education. To obtain the credibility and validity of the data, two methods were used: participant review and expert review by non-participants in the research. Reliability was determined using the Holistic coefficient, which was found to be 0.87. To achieve transferability, interviews and consultations were conducted with 25 specialists, and to ensure dependability, all details of the research were meticulously recorded at every stage. The research findings indicate that the conceptual framework for learning organization leadership in higher education institutions in Fars Province encompasses four main dimensions: structural perspective, which includes flexibility, simplification, decentralization, and technology focus; contextual perspective, featuring policy-making, network expansion, strategic thinking, and culture focus; transformational perspective, characterized by leader mentorship, customer orientation, team trust, Magnificent Leader, and leader pragmatism; and knowledge-centered perspective, which supports knowledge production, knowledge sharing, and a belief in science. Identifying the key components influencing leadership in learning organizations within higher education institutions is essential. By prioritizing these elements in the strategic planning of higher education management, it can pave the way for a broader adoption of this leadership style nationwide.

Keywords: *Conceptual Framework, Leadership, Learning Organization, Higher Education*

Introduction

Today, a fundamental characteristic of contemporary organizations is their formation based on learning. In a learning organization, continuous learning is regarded as an essential requirement for all employees. This environment emphasizes not only the acquisition of knowledge but also the methods of learning, assimilating, and distributing new information. It fosters the creation and production of necessary

knowledge and information, which is ultimately reflected in the behavior and performance of the organization's employees. Therefore, managers and employees are constantly learning and acquiring new skills, as the strength of any organization is directly related to the ongoing education of its leaders and staff. A learning organization is one that effectively identifies environmental needs and equips itself with the necessary tools to adapt, ensuring its longevity. By rapidly

1. PhD Student in Educational Management, Department of Educational Sciences, Faculty of Educational Sciences, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran.

2*. Assistant Professor, Department of Educational Management, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran. (Corresponding author: Nader_shahamat@yahoo.com)

3,4. Assistant Professor, Department of Educational Management, Marvdasht Branch, Islamic Azad University, Marvdasht, Iran.

creating and nurturing the capabilities required for future success, it continually evolves. Many experts view a learning organization as one that is perpetually in a state of evolution, functioning as a living system focused on knowledge acquisition and skill development, which in turn enhances its overall performance (Amwoobai-Moghadam & Allahyari, 2023).

In today's dynamic landscape, the key to success for organizational leaders lies in their ability to adapt and lead effectively. Managers of organizations, institutions, and agencies must be equipped not only with management knowledge but also with leadership qualities and skills. Many leaders have realized that stability is an outdated concept, and that control and predictability are increasingly futile. As the world undergoes rapid changes fueled by technological advancements, complexities in organizational performance have escalated. Organizations that endure and thrive are those capable of responding adeptly to these shifts and meeting customer demands (Zali, 2006).

Leadership style and approach within an organization are considered among the most strategic tools for achieving excellence or facing failure. The series of decision-making and organizational structures can only be realized under the guidance of effective leadership. Managers, as the central axis of organizing and directing their organizations, play a vital and complex role. Their inherent and acquired capabilities significantly contribute to the effective operation and productivity of the organization, facilitating successful organizational movement and overall efficiency (Ebrahimpour et al, 2014). It is evident that focusing on the growth and advancement of educational institutions is an unavoidable necessity. In the rapidly changing landscape of the 21st century, only those organizations that possess a comprehensive and responsible understanding of this complex world can ensure their survival and dynamism. Thus, university leaders and educators who guide themselves toward better visions are true

artists in their field. These leaders not only have a clear and accurate understanding of what their institutions can achieve but also possess the potential to envision what they can ultimately become (Barkhoda & Amini, 2022).

Ghanbari & Mohammadi (2023) A study titled "The Role of Empowering Leadership of School Principals in the Professional Development of Teachers Mediated by Organizational Learning" focused on all primary school teachers (both male and female) in Kurdistan Province. The results indicated that empowering leadership and organizational learning have a significant positive direct effect on the professional development of teachers at the 0.05 level. Additionally, empowering leadership indirectly influences professional development through organizational learning at the same significance level. Furthermore, both empowering leadership and organizational learning account for 51% of the variance in teachers' professional development. Ultimately, the findings highlight a meaningful mediating role of organizational learning in the relationship between empowering leadership and the professional development of teachers.

In a study titled: Structural Analysis of the Dimensions of Knowledge Leadership and Its Relationship with Organizational Learning Capacity: A Case Study of the General Directorate of Education in Hamadan Province, it was found that

In a study titled "Structural Analysis of the Dimensions of Knowledge Leadership and Its Relationship with Organizational Learning Capacity: A Case Study of the General Directorate of Education in Hamadan Province," Samimi (2022) found that knowledge leadership consists of dimensions such as learning orientation, supportiveness, knowledge vision, strategic emphasis, and inquiry. The impact coefficients of the research variables indicated that among the components related to knowledge leadership, three components—learning orientation, knowledge vision, and inquiry—predict

changes related to the variable of organizational learning capacity.

Bazohori et al (2021) A study titled "Clarifying Self-Leadership and Self-Efficacy of Teachers Based on Transformational Leadership with the Mediating Role of the Learning Organization in Schools of Mashhad" demonstrated that the learning organization acts as a mediating variable between transformational leadership and both self-leadership and self-efficacy. Transformational leadership positively and directly influences the learning organization, self-leadership, and self-efficacy. However, it was found that transformational leadership did not have a significant impact on self-efficacy. The validity of the measurement model was confirmed by the cv.com test, and the structural model validation was supported by the cv.red test, indicating a strong model fit.

Peyvasteh et al (2020) A study titled "The Impact of Learning Leadership on the Willingness to Change in Police Force Employees with the Mediating Role of Organizational Trust in Tabriz County" indicates that this research is both applied in its objective and descriptive-survey in its nature and method. The statistical population consists of 725 police employees in Tabriz, with a random sample of 251 selected based on Cochran's formula. To ensure the validity of the data collection tools, content and face validity were employed, while internal consistency (Cronbach's alpha) was used to measure reliability. Structural equation modeling was utilized for data analysis. The findings of the research indicate that the analysis of structural equations revealed z coefficients of (0.853) and (0.769) in the primary hypothesis, showing that learner-centered leadership indirectly influences employees' willingness to change by approximately 8.4% through organizational trust. Additionally, the z coefficient of (3.281) demonstrates a positive impact of learner-centered leadership on employees' willingness to change, while the z coefficient of (16.59) and the standardized path coefficient (0.669) highlight the influence of

learner-centered leadership on organizational trust. Lastly, the significance level of z (0.460) and the standardized coefficient (0.057) indicate a positive effect of organizational trust on employees' willingness to change. The results suggest that the police force, as an important social institution, can benefit from learner-centered leadership to enhance employees' attitudes in alignment with the organization's mission and strengthen organizational trust.

Assefa et al (2024) The objective of the research titled "Transforming Higher Education Institutions from Spaces for Formal Learning to Environments for Lifelong Learning: A Convergent Study" is articulated as follows: This mixed-methods study aims to determine comprehensive perspectives on the transformation of higher education institutions from mere providers of formal education to environments where lifelong learning can be integrated. This necessitates an investigation not only through a sample review but also through the accumulation of richer evidence, which plays a crucial role in deriving lessons and conclusions from existing realities. The goal is to illustrate how higher education institutions can serve as spaces that promote lifelong learning for individual benefit and social advancement. In this study, researchers identified the broad concepts of lifelong learning, potential stakeholders, learning content, and delivery methods applicable within higher education institutions. The investigation also addressed practical challenges, concerns regarding engagement and coordination, as well as policy and reform issues related to promoting lifelong learning. The findings provide significant evidence for education policymakers and practitioners striving to transform their institutions into environments where lifelong learning is integrated with other educational programs, ultimately optimizing professional development and social advancement for individuals.

Castro (2024) A study titled "Leadership Agility of School Leaders in Indonesia During a Crisis: A Grounded Theory

Approach" demonstrated that successful leadership in educational organizations thrives amidst challenges. As the post-COVID-19 era unfolds, school leaders must engage in self-assessment and actively participate in rebuilding and reevaluating their institutions. Efforts to revisit decisions made and to determine how to resume normal operations, while maintaining a focus on learning, are essential. This research highlights the importance of adaptability, resilience, active learning, role modeling, and a forward-thinking mindset for educational leaders during new crises in schools.

Lūsēna-Ezera et al (2023) A study titled "Learning Organization Approaches in Latvian Schools: Perspectives of School Staff, Students, and Parents" aims to analyze the current performance of the implementation of the school as a learning organization (SLO²) approach in public and vocational education in Latvia. The OECD³-integrated SLO model was utilized to ascertain whether differences exist in the perceptions of school staff, students, and parents regarding the current execution of the SLO approach. A concurrent triangulation design was employed, wherein qualitative data (from 38 school staff) and quantitative data (from 990 students and 620 parents) were simultaneously collected. Subsequently, the data were analyzed separately before merging and triangulating the study results. One of the key prerequisites for transforming a school into a learning organization is leadership, executed daily by the school principal or a broader management team. Research findings indicate that, based on the analysis of student and parent feedback, learning leadership is one of the weakest dimensions of School Learning Organizations (SLO). The study also concludes that the perceptions of students and parents regarding learning are not overly positive when related to the external environment and the broader educational system. This highlights the need to enhance

staff awareness about the importance of collaboration in the current implementation of the SLO approach. It is essential to ensure that purposeful collaboration and coordinated action at the school level are undertaken to achieve the institution's shared goals.

Tran (2023) A study titled "The Library as a Learning Organization: The Impact of Leadership Skills on Organizational Citizenship Behavior in Vietnamese Libraries" aimed to examine the influence of leadership skills (technical, human, and conceptual) on organizational citizenship behavior within Vietnamese libraries, with organizational culture serving as a mediating factor. Utilizing a quantitative approach, data were collected from a sample of 356 participants employed across various libraries in Vietnam. The findings indicate that leadership skills significantly impact organizational citizenship behavior; however, only human skills have a meaningful effect on bureaucratic culture. This study also revealed that bureaucratic culture plays a crucial role in influencing the organizational citizenship behavior of organizations. Furthermore, bureaucratic culture was identified as a mediator in the relationship between human skills and organizational citizenship behavior.

Acevedo & Diaz-Molina (2023) A study titled "Learning Organizations in Emerging Economies: The Impact of Knowledge Management on Innovative Culture in Chilean Companies" aimed to investigate the influence of knowledge management on the development of an innovative culture within learning organizations in emerging economies. Utilizing a quantitative approach, the research employed a survey with a composite sample of 10,567 workers from 69 larger Chilean companies. Results were analyzed through exploratory factor analysis and multilevel regression. The findings provide significant insights into the positive impact of knowledge management—encompassing knowledge acquisition,

² School as a Learning Organization

³ Organization for Economic Co-operation and Development

dissemination, and responsiveness—on innovative culture. Furthermore, the study indicates that managers who implement knowledge routines that foster a learning culture through skills in discovery, creativity, empowerment, and collaboration are more successful in their overall innovative efforts.

Malik (2023) A study titled "Measuring the Impact of Learning Organizations on Proactive Work Behavior: The Mediating Role of Employee Resilience" aimed to investigate the role of learning organizations in enhancing proactive work behaviors among employees. Data for this study were collected over two measurement periods (six months apart) using a structured questionnaire distributed among employees in the active IT service organizations in India. Confirmatory factor analysis was employed to test the proposed measurement model. The study's findings indicate that employees' perceptions of a learning organization (measured at Time 1) positively predict proactive work behavior (measured at Time 2), with this relationship mediated by employee resilience (measured at Time 1). This research suggests that organizational leaders aiming to enhance proactive behavior among employees should prioritize investments in developing a learning organization and focus on fostering employee resilience. Indeed, while it is essential to address adverse events and emphasize stress management, organizations should concentrate on building their employees' adaptability.

Kazemi et al (2020) A study titled "Evaluation of Learning Organization Components at Kabul University from the Perspectives of Faculty Members and Students" indicated that the realization level of learning organization components at Kabul University is at a moderate level. Notably, the index rankings reveal that emphasis on the components of "shared vision" and "team learning" exceeds that of "mental models," "systemic thinking," and "personal mastery." Overall, the findings underscore the need for greater attention from planners and university administrators

to the characteristics of learning organizations. Consequently, higher education institutions must consistently strive towards becoming learning organizations without any hesitation to enhance their performance. Given the need for these centers to leverage learning leadership and the existing research gap in this area, the aim of this study is to design a conceptual model of learning organization leadership specifically for higher education institutions in the Fars province?

Research Methodology

The research method employed for this study is a qualitative case study, utilizing thematic analysis as outlined by Attride-Stirling (2011). Basic themes comprise the codes and key points derived from the text. A thorough examination of the text allows for the identification of the smallest codes, which are selected as foundational themes. Organizing themes emerge from the consolidation and synthesis of these basic themes. Researchers must review the primary codes and group similar concepts together, applying their discernment and expertise to assign appropriate names to each code category. Ultimately, overarching themes encapsulate the dominant themes that represent the text as a whole.

The sample size was determined based on the theory of saturation, where the researcher encounters recurring data. For instance, when similar statements and opinions are repeatedly heard during the ongoing interviews, the researcher can infer that data saturation has been achieved. However, it is suggested that once the researcher feels the data collected is repetitious, a few additional interviews should be conducted to confirm this belief. Throughout the interviews, saturation was reached after 21 interviews, but to ensure robust results, the process continued until 25 participants were interviewed. Participants were selected using purposive sampling with a criterion-based technique. Consequently, the selection method for qualitative participants was criterion-based, requiring a minimum of 10

years of experience at the relevant university, a rank of assistant professor or higher, and at least 5 years of management experience within the same higher education institution. Among the participants, 15 were male and 10 were female, comprising 15 assistant professors, 7 associate professors, and 3 full professors.

Data collection was conducted through semi-structured interviews. It is noteworthy that the criteria for sample selection in the qualitative segment included a minimum of 10 years of work experience, over 5 years of management, and a willingness to participate in the research and respond to questions, which were key considerations in purposeful sampling. The interview questions were developed using relevant literature and findings from qualitative research. In a semi-structured approach, the researcher asks a set of predefined questions but retains the flexibility to explore additional questions if a compelling or new line of inquiry arises during the interview process (Young et al., 2014). This adaptability helps the researcher delve deeper into the topic. Therefore, the semi-structured interview method was chosen for data collection. Prior to the interview sessions, participants were provided with an introduction to transformational leadership and the interview themes. According to Hooman (2011), the interview process continued with knowledgeable key informants, experts, and educational specialists until a comprehensive understanding of the various aspects and components of leadership in a learning organization was achieved. Initially, questions addressed the appropriate structure for transformational leadership in a learning organization, the context or environment for such leadership, and the content of transformational leadership, among others. Each interview lasted approximately 45 minutes, and recordings were made with the interviewees' consent, followed by transcription of the discussions.

Data analysis was conducted using thematic analysis based on the method outlined by Attride-Stirling (2011), ultimately leading to

the development of a thematic network. In the initial step, segments of participants' interview texts were extracted, recorded on paper, and subjected to preliminary coding in separate tables. Subsequently, codes with semantic similarities were grouped to derive basic themes. These basic themes were then categorized into organizing themes based on practical similarities. Finally, the organizing themes were synthesized into an abstract and overarching theme, culminating in the compilation of a final thematic categorization table. To ensure the research's validity and robustness, the criteria established by Lincoln and Guba were applied. According to their framework, qualitative studies should be evaluated using four criteria: credibility, dependability, confirmability, and transferability. This research specifically employed the indicators of credibility and transferability.

To ensure the accuracy and appropriateness of the extracted codes, the coded texts were presented to two participants familiar with qualitative research methods for review and, when necessary, revision. These measures were implemented to maintain the validity and reliability of the data and the outcomes derived from the study. In order to enhance the transferability and applicability of the data in similar contexts, the greatest diversity in sampling was employed. This approach facilitates broader generalizability of the data. Furthermore, the study incorporated sampling from various levels to maximize data diversity, and the relevance of the data underlines the confirmation and accuracy of the interviews. These efforts collectively aim to ensure the transferability and reliability of the research results. To assess the reliability of the coding outcomes, a Holistic coefficient was utilized.

The Holsti coefficient is a measurement criterion assessing the degree of agreement between two coding schemes, representing the percentage of shared elements relative to the total number of items coded by both schemes. The formula for calculating the Holsti coefficient is as follows:

$$H = 2 * (a * d - b * c) / ((a + c) * (b + d))$$

The overall Holsti index of above 0.90 indicates a high level of confidence in the validity of qualitative analysis. However, various studies have considered a Holsti index value above 0.80 as acceptable. In this research, the computed value was determined to be 0.87.

Findings

In this phase, a thematic analysis method was employed to extract and categorize themes, requiring three distinct stages. The first stage, descriptive coding, involved identifying elements within each model as codes, from which the basic themes—characterized by recurring and distinctive features in the text—were identified. The second stage, interpretive coding, classified these basic themes based on theoretical foundations and conducted interviews, resulting in what are referred to as organizing

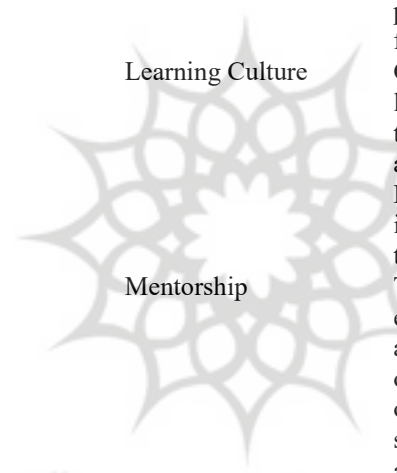
or axial themes. The final stage determined the overarching theme that encompasses all identified themes (King & Brooks, 2018). Ultimately, a total of 210 initial codes were extracted, which, after multiple reviews and the removal of redundancies, were categorized and merged based on similarities and relevance into 72 basic themes, 16 organizing themes, and 4 main themes, as detailed in Table 1.

The conceptual framework of the leadership model for learning organizations in higher education institutions in Fars Province was developed through a systematic review of interviews and the guidance of supervisors and advisors. Feedback from participants was incorporated, leading to the refinement and abstraction of themes. In this phase of thematic analysis, efforts were made to organize the initial themes into abstract categories, which are presented in Table 1.

Table 1.

Core Themes, Organizer, and Comprehensive Elements of the Organizational Learning Leadership Model

Key component	Overarching theme	Organizing themes	Core subjects
Leadership of the learning organization	Structuralism	Flexibility	Aligning the organizational structure with current needs. Utilizing technology to expedite processes. Focusing on network structures. Enhancing horizontal communication within the university.
		Decomplexification	Prevent the quantitative expansion of university departments. Reduce organizational levels. Eliminate unnecessary departments within the university. Merge and outsource functions.
		Decentralization	Involving individuals in decision-making processes. Eliminating unnecessary administrative policies. Delegating authority and transferring power to designated levels. Ensuring fluidity and openness within the university structure. Paying attention to various communication tools.
	Contextual Analysis	Core technology	Aligning your organization and employees with modern technologies. Keeping pace with rapid technological advancements. Establishing performance-based electronic systems and instant feedback mechanisms.
		Policy Making	Having a plan to address challenges such as declining student enrollment and securing funding. Providing solutions to make education more effective. Considering learning as a lifelong strategy. Continuous improvement towards university development. Efforts towards

Key component	Overarching theme	Organizing themes	Core subjects
Transformationalism		Networking	organizational renewal. Creating an appropriate organizational plan for potential changes. Improving order and changing attitudes and beliefs.
		Strategic Thinking	Establishing a mutually beneficial relationship with customers and the community. Utilizing virtual and internet networks to advance organizational goals. Introducing university achievements to the community. Holding periodic internal and external meetings and seminars. Inviting local, regional, and national officials to the university and keeping them informed about the university's progress.
		Learning Culture	Having a plan for globalization and international activities. A precise understanding of the internal and external environment. Assessing the successes and failures of oneself and colleagues and transforming opportunities. Having a long-term vision. Establishing a shared perspective and tangible goals. Creating a favorable organizational atmosphere.
		Mentorship	Creating a conducive environment for learning. Encouraging and motivating staff to learn and share knowledge. Paying attention to diversity in the university. Modeling for learning. Injecting new insights for learning and implementing them within the organization.
		Customer Orientation	The role of coaches and teachers for employees in learning. Being risk-taking and innovative leaders. Understanding others' personal experiences to promote organizational learning. Assisting and supporting employees in achieving personal and organizational goals. Modeling appropriate behaviors for the production, dissemination, and application of knowledge in the university.
		Team Spirit	Attention to a culture of equity and inclusion. Engaging with clients and gathering information. Identifying potential and existing clients along with their needs. Considering the opinions of faculty members, staff, and students in planning.
		Magnificent Leader	Promoting group activities at the university. Empowering staff, students, and faculty members towards collective insight. Networking and team building. Creating teams tasked with addressing internal issues.
		Leader Pragmatism	Decisiveness in decision-making. Creativity and innovation in decisions. Patience in a university environment and in interactions with stakeholders. Utilizing intelligence and insight in dealings with others.
			Listening attentively and curiously as a leader or manager to stakeholders' remarks.

Key component	Overarching theme	Organizing themes	Core subjects
		Support in Knowledge Creation	Considering the speech and opinions of stakeholders in practice. Asking questions to achieve precision. Providing timely and accurate feedback.
		Support in Knowledge Sharing	Focusing on product and process-centric learning and organization. Paying attention to principles and styles of discipline in knowledge production and sharing. Having a system thinking approach and holistic perspective. Maintaining employee independence in knowledge production and its application and sharing. Using training to enhance employee capabilities. Supporting the development of individuals' skills and paying attention to it.
		Science Orientation	Providing sufficient human resources and resources for learning in the university. Assisting in cultivating the learning mindset of organizational members and consciously guiding and encouraging employee learning. Identifying learning resources and being supportive for individuals.
			Facilitating the transfer of individual and group knowledge to the organization. Helping in the sharing and application of learning within the university. Training for knowledge sharing and learning.

As seen in Table 1, after reviewing and removing repetitive core themes, a total of 72 core themes, 16 organizing themes, and 4 comprehensive themes were ultimately categorized.

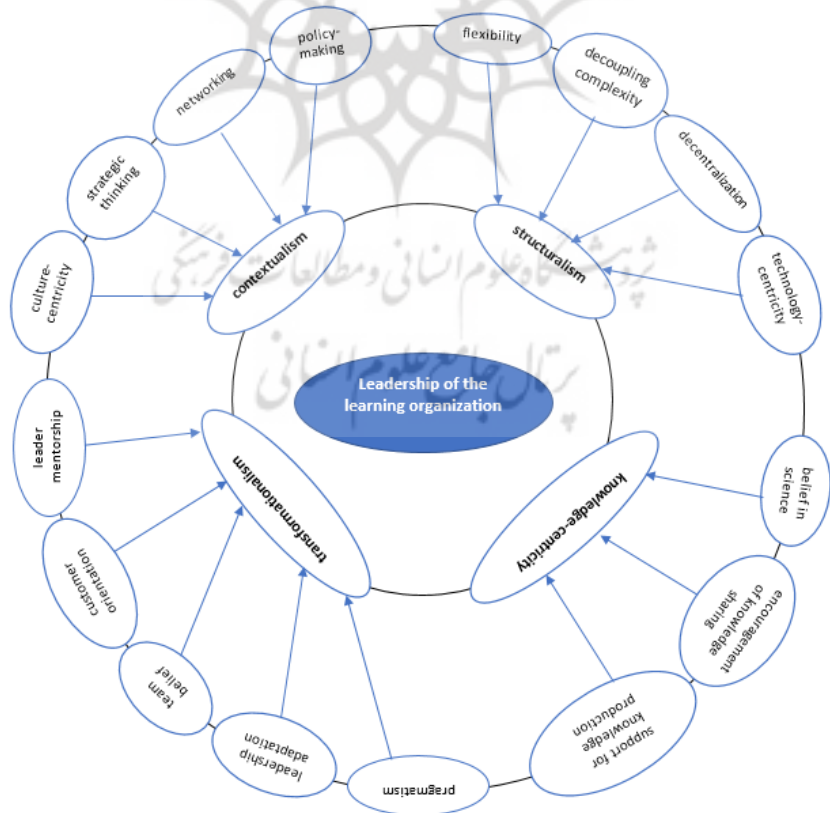


Figure 1. *The Network of Themes of the Components of the Learning Organization Leadership Model*

Final Research Model

Following the completion of the analysis and assessment of various data, the final research model is presented as follows.

As shown in the above figure, the network of themes of the components of the learning organization leadership model in higher education institutions consists of four overarching themes: structuralism, contextualism, transformationalism, and knowledge-centricity. Each of these overarching themes encompasses its own organizing themes. Structuralism includes organizing themes such as flexibility, decoupling complexity, decentralization, and technology-centricity. The overarching theme of contextualism includes policy-

making, networking, strategic thinking, and culture-centricity. The overarching theme of transformationalism incorporates elements such as leader mentorship, customer orientation, team belief, Magnificent Leader, and pragmatism. Additionally, the overarching theme of knowledge-centricity includes support for knowledge production, encouragement of knowledge sharing, and belief in science. Following the identification of these components and based on previous studies, along with guidance from the supervisor and consultant, and the theoretical sensitivity of the model, a proposal for the leadership of learning organizations in higher education institutions in Fars Province is suggested.

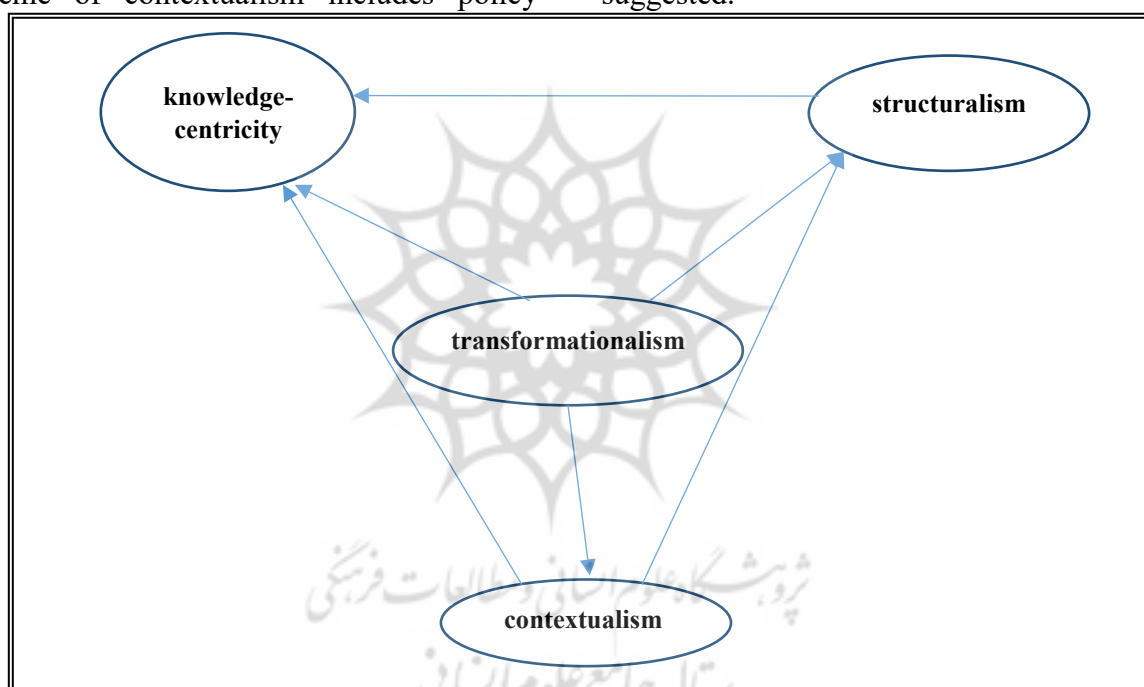


Figure 2. The Learning Organization Leadership Model in Higher Education Institutions in Fars Province

Discussion and Conclusion

This section provides a description and explanation of the findings. Based on the research objective and findings, the conceptual framework of the learning organization leadership model in higher education institutions in Fars Province is the focal point of this article. Given the research gap in this area, using qualitative research methods and thematic analysis in the style of Attride-Stirling, indicators and criteria of the framework were discovered and reported.

The findings indicated that the conceptual framework of the learning organization leadership model in higher education institutions includes the main dimensions: structuralism, contextualism, transformationalism, and knowledge-centricity.

Structuralism

In today's variable work environment, organizational structures are considered important components because of their

significance on operational effectiveness and achievement of goals (Conner & Douglas, 2005; Armstrong & Rasheed, 2013). The foundational dimensions in the overarching theme of structuralism include flexibility, decoupling complexity, decentralization, and technology-centricity.

Flexibility: Clearly, the role of managerial flexibility is more pronounced in the success of businesses with specialized and international characteristics (Ross, 2017). Organizations are facing increasing and uncertain competition and, to adapt their structure to current needs, the use of technology to streamline operations, attention to network structures, and the horizontal development of communication at universities seem essential. In this context, Ross (2017) also concluded that one of the features of a learning organization is its flexibility.

Decoupling Complexity: Understanding the nature and rules of simplification is crucial to overcoming organizational complexity challenges. Although governmental organizations are also exposed to rapid changes due to technological advancements and the growing trend of globalization, in the "continuously evolving process of technology and growing globalization, due to the need to confront new challenges and remain in a chaotic and competitive market, these organizations have increasingly and naturally become complex." This finding aligns with the results of Ferastkhah (2016). From the perspective of research participants, decoupling complexity includes indicators such as preventing the quantitative expansion of university sectors, reducing organizational levels, eliminating unnecessary departments, integration, and outsourcing. Currently, the Director General of the Department of Higher Education Expansion at the Ministry of Science has stated that quality enhancement is the most important motto for this ministry in the higher education arena, indicating that, under current conditions, quantitative development cannot help alleviate the problems faced by universities and society.

Decentralization: Decentralization facilitates and accelerates decision-making while eliminating redundant administrative policies; it increases competition among local governments, promotes regional development, and enhances transparency and accountability by bringing government closer to the people. One of the fundamental changes in new institutions is the transition from a tall and centralized organizational structure, where a powerful individual dominates, to a horizontal and decentralized framework where power is broadly dispersed. Kamali (2014) noted this issue in his research. Decentralization has been recognized as one of the indicators for reducing the power gap, particularly at the level of government organizations, which refers to the delegation of authority to lower levels, and at the state level, which means delegating power in administrative and political matters to local units and organizations. In the first case, it results in a reduction of the power gap within the organizational structure among different levels, while in the latter, it reduces the power gap between the government and the people (World Bank, 2008).

Technology-centric approach: The rapid advancement of science and technology on one hand, combined with its inherent complexity on the other, has made it impossible for organizations to solely achieve technological capabilities. Therefore, organizations rely on external sources of knowledge and technology to meet their needed innovations. External sources include competing organizations, suppliers, students, universities, research centers, and others. A technology-centric approach supports timely programs and the establishment of informational connections, creates electronic performance-based systems, and reduces costs within the organization. Beyond positively influencing organizational performance and impacting corporate capabilities, it provides a mechanism for storing, accessing, and efficiently sharing information. Additionally, it enables organizations to leverage the

flexibility of their value chains, resulting in agility and ultimately increasing their competitive advantage. The agility of an organization is a function of the integration of its information technology. The issue of accessing external technology resources for organizations located in developing countries is also significant from another perspective: these organizations can more rapidly close their technological gap with developed countries and shift their research and development sectors from focusing solely on "incremental innovations" to creating conditions for "radical innovations." This finding aligns with the research of Swafford et al., 2008, and Karami Pour et al., 2014.

Contextual analysis: The context or environment refers to the collection of factors whose changes impact the characteristics of the organization, as well as the factors whose characteristics change as a result of organizational behavior. In this case, contextual analysis includes elements such as policy-making, networking, strategic thinking, and a culture of learning.

Policy-making: Since education is one of the most central and decisive social inputs in achieving national development, it is essential to engage in professional policy-making within the educational system, emphasizing future studies and foresight to address conflicts and challenges. Therefore, education should be oriented towards the future and consider future outlooks. The closest study that can be compared to this aspect is the research by Jafari and Karimi (2017). Policies are needed to establish programs for tackling challenges such as declining student enrollment and attracting funding, providing strategies to enhance educational effectiveness, recognizing learning as a lifelong strategy, continuously improving university development, striving for organizational renewal, creating organizational plans for potential changes, improving order and changing attitudes and beliefs, and drafting and approving strategic documents with oversight from higher authorities, including provincial supervisory boards acting based on these documents.

Networking: Undoubtedly, networks are a powerful support for universities in advancing social, scientific, and cultural goals. Holding virtual meetings has numerous advantages, the most significant being the lack of requirement for a specific location for gatherings. This reduces travel, consequently cutting costs and saving time. Additionally, the challenge of determining a suitable time and place for an in-person meeting and coordinating with all participants is alleviated by conducting meetings virtually through platforms equipped with the necessary interactive tools. Just as communication and information technology has transformed many everyday processes in organizations, the use of virtual and internet networks for learning or electronic education has heralded the realization of goals that seemed out of reach two decades ago. The development and advancement of information and communication technology has transformed the educational landscape and led to the emergence and expansion of new educational tools and opportunities in the virtual space, which aligns with the findings of Hosseinzadeh et al. (2012).

Strategic Thinking: This approach creates the foundation for developing a correct understanding of business. Strategic thinking calls managers towards rapid learning and the creative application of new value creation. This way of thinking brings distinct perspectives compared to competitors, which can lead to innovative strategies and competitive advantages. If the strategic function is seen as creating a competitive edge, then strategic thinking is essential for the survival and growth of organizations in today's competitive environment. On the other hand, designing and implementing coherent training and development programs for strategic thinking is unavoidable. The future direction of an organization relies on the strategic thinking of top managers; the forward-looking concepts and mental frameworks can foster expectations for strategic actions and outcomes when present and reinforced in managers. One of the main

challenges for managers is the lack or insufficiency of the ability to identify strategic priorities and delineate a shared vision. Thus, in the realm of strategic skills, the ability to create a shared vision and achieve collective agreement on future-generating organizational flows is necessary. Strategic thinking cannot be injected; it must be practiced. While understanding the concepts of strategic thinking and studying them is a prerequisite for practicing strategic thinking, it is not sufficient alone. It is not feasible to prescribe a set of empowering packages for developing strategic thinking and expect individuals to become strategic thinkers simply by successfully completing these packages. This point is also aligned with the findings of Ghafariyan (2009) and Namdari Varposhti et al. (2023).

Learning Culture: One of the responsibilities of universities is to empower students and faculty in various fields, which can be influenced by their learning culture. A learning culture is one where learning is valued and barriers to learning are not tolerated. The goal of an organizational learning culture is to exchange valuable knowledge and information that leads to creativity, improved performance, and sustainable competitive advantage within the organization. A genuine learning culture continuously challenges the way things are done, ensuring continuous improvement and the capacity to embrace change. Organizations that have established a strong learning culture perform well in creating, acquiring, and transferring knowledge, as well as in changing behaviors to provide new insights. Therefore, the goal of fostering a learning culture is to exchange valuable knowledge aimed at guiding innovation, improving performance, and enhancing the organization's competitiveness. The learning culture encompasses the time and space in which learning occurs, the individuals involved, the material conditions present during the learning process, and the locations where topics are formally or informally prescribed, such as conventional classroom sessions and student groups along with their

professors. The findings of this section align with the research results of Pasha et al. (2022), Prewitt (2003), Kucharska (2020), Khodami and Asanlu (2015), Dixon (2020), Khodam Abbasi et al. (2017), and Barabasch et al. (2020).

Transformationalism: Transformation is a new form of change that occurs in a more complex manner within any organization. Today, the survival of any organization hinges on its ability to react swiftly to changes. In recent years, the country's education system has faced numerous issues such as the lack of a philosophy grounded in local theoretical foundations derived from value systems, the absence of purpose-driven cultural engineering, a deviation from its primary mission, neglecting secondary aspects, a lack of participatory engagement and interaction with cultural heritage, and an inability to effectively utilize a large pool of educated individuals. In light of these issues, the implementation of the fundamental transformation document was initiated to address existing problems; however, several years after its introduction, we have not witnessed significant changes in the system. Transformationalism includes (servant leadership, customer orientation, team reliance, Majestic Leader, and pragmatism of the leader), which aligns with the findings of research by Andam et al. (2014), Jahaniyan (2014), and Mowgeli et al. (2016).

Servant leadership: According to Imam Khomeini (RA), the servant leadership approach of an educational leader includes sincerity, a sense of duty, and a commitment to service. Sincerity means making divine service the guiding principle of one's actions. A sense of duty involves viewing oneself as obligated to fulfill their responsibilities, regardless of whether the organization's goals are achieved or not; such an outlook from the organization's leader will significantly impact both the quality and the advancement of the organization. Service means that effective leaders in educational organizations should consider serving their subordinates as a selfless duty and should not shy away from any efforts in this regard (Imam's sayings).

Furthermore, this concept aligns with the findings of Moaednia's research (2006), which states that in mentoring-oriented organizations, coaching has become increasingly common and has transformed into an inseparable part of the organizational learning culture. Coaching is a skill that managers should develop and utilize to become leaders in the role of mentors. These organizations are innovative and responsive to understanding the personal experiences of others to foster organizational learning, modeling appropriate behaviors to generate, share, and apply knowledge, adapting to competitors' skill changes, evolving customer needs, shifts in societal morale, changes in international business conditions, and government regulations, thereby reevaluating their production methods and transforming themselves.

Customer-centricity means placing the customer at the center of the organization's strategy and goals. This strategy is based on the needs and satisfaction of customers. The main element of customer-centricity is researching and analyzing customer needs. In reality, a customer-centric organization must have a deep understanding of the needs and expectations of its customers. Customer-centricity involves attention to a culture of equal consideration, focusing on customers' perspectives, and delivering what they want, rather than what is readily available in the market. Customer-centric organizations do not aim for a one-off transaction; instead, they establish close relationships with their customers. They excel at meeting the unique needs of their clients because it is only through building a sincere and close connection and understanding customers that they become aware of their profound needs. Since developing a customer-centric culture is a prerequisite for fostering customer-oriented behaviors and embedding these behaviors within the organization, it is crucial that human resources systems and processes align with this value for customer-centric behaviors to manifest. The next mechanism for being customer-centric is the mechanism of training. In fact, it must be said

that training is the best method for addressing the shortcomings of other tools. Just as in large companies, the education and learning manager, who falls within the ranks of senior management, organizes necessary training on the organization's strategic topics for employees. This aligns with Mohammad Esmaeili's (2018) findings that one of the main concerns for managers is the development of customer-oriented behaviors.

Team Trust: Team building within an organization, which combines diverse realities and viewpoints to create new capabilities, fosters innovation. Dynamic team building enhances performance and improves interactions among members, leading to increased creativity, flexibility, and ultimately organizational effectiveness, especially in today's complex environment. When achieving goals requires the expertise, experience, and skills of various individuals, team building forms, and the amalgamation of different realities and perspectives promotes innovation. This concept is consistent with the findings of Dehnavi and colleagues (2023). Therefore, team trust can facilitate the promotion of group activities in universities and contribute to empowering employees, students, and faculty members toward collective insight.

Majestic Leader: According to transformational leadership theory, followers observe heroic traits and extraordinary leadership abilities in these leaders. These leaders have a vision and accept risks to achieve their goals, being very sensitive to followers' needs and exhibiting outstanding behaviors. They possess personality traits like extroversion, self-confidence, goal orientation, decisiveness in decision-making, creativity and innovation in their choices, patience in organizational settings, and skillful handling of stakeholders through intelligence and insight. Research indicates a significant correlation between transformational leadership, high performance, and follower satisfaction. Individuals who work for these leaders have greater motivation to exert their efforts because they like their leader, respect them,

and experience higher levels of satisfaction. The clearer and more precisely the organizational values are articulated for employees, provided they are accepted by individuals, the greater the emotional commitment and sense of belonging employees will feel towards the organization. As a result, they will exert more effort and develop a deeper attachment to the organization. Managers should prioritize internal relationships, create opportunities for improving communication, and strive to involve employees in decision-making processes to enhance their commitment and sense of belonging. This component is aligned with the findings of the research by Pashae, Yusef-Kandi, and Hassani (2021).

Pragmatic Leadership: Pragmatic leadership is an exchange relationship between the leader and followers aimed at achieving mutual benefits. A pragmatic leader operates within the existing organizational culture and structure, carefully listens to stakeholders, continues discussions until reaching the desired outcome, and takes into account the opinions and inputs of stakeholders during decision-making. They are capable of providing accurate and timely feedback, setting standards for work and performance, clearly explaining their expectations to followers, and promising rewards in exchange for meeting those expectations. A pragmatic leader's primary concern is identifying the needs of followers, aligning promised rewards, and securing resources to meet those needs. In this approach, the leader guides followers towards optimal performance levels by clarifying their requests and rewarding appropriate behaviors. Conversely, an effective leadership style is essential for fostering a supportive environment for empowered employees. Unlike autocratic managers who seek to undermine subordinates, empowered managers act as guides, facilitators, and mentors. This aligns with the findings of research conducted by Bass (2009), Harms and Credé (2010), and Clapp-Smith et al. (2019).

Scholarship

Leadership plays a crucial role in the effectiveness of knowledge management initiatives within organizations. In all credible models of knowledge management implementation, "leadership" is considered one of the core components. Organizations that can succeed in knowledge management are those with informed, engaged, and supportive leaders. In such cases, employees are more motivated to engage in knowledge-related activities, ultimately leading the organization to achieve a higher level of maturity. Knowledge management encompasses support for knowledge creation, knowledge sharing, and the promotion of a culture of learning.

Support for knowledge creation: Knowledge Creation and Management (KCM) is one of the main strategies for enhancing improvement in any organization, including educational institutions. There has been a growing focus on KCM in educational service providers, such as schools or higher education institutions, compared to other organizations. Knowledge can be generated through various processes, from bold innovation efforts to research activities. In educational organizations, the generation of new knowledge and awareness, along with innovations and initiatives, is not merely a specialized task, but rather a collective behavior that all members of the organization engage in. Consequently, the leader in the organization focuses on process-oriented learning, principles, and a disciplined style in the production and sharing of knowledge; adopts a system thinking and holistic perspective; upholds employee independence in producing and utilizing knowledge; and emphasizes training and skill development to enhance employee capabilities. Today, given the importance and value of knowledge in the success and advancement of organizations, managing this intangible resource has become one of the most critical organizational issues. Therefore, with the recognition of knowledge as a strategic resource for organizations and its significance in an organization's capacity and

sustainability in a competitive environment, there is an urgent need to develop methods for knowledge production, sharing, and application within organizations. This conclusion aligns with the findings of the studies by Rodríguez-Gómez and Sallán (2015), Wiig (1997), and Jazayeri and Alvani (2018).

Knowledge Sharing Support: In most books and articles written about knowledge management, the appropriate distribution of knowledge from the right individuals to the right people at the right time is emphasized as one of the greatest challenges of knowledge sharing. This is because if the tacit knowledge held in individuals' minds cannot be effectively shared with others, it gradually fades and loses its effectiveness. Therefore, knowledge sharing is a reflection of social interactions within organizations and requires individuals to share what they know. This concept aligns with the findings of Riege (2005), which state that knowledge sharing is a complex yet value-generating activity that serves as the foundation for many management strategies, enabling adequate resources for learning within organizations. Consequently, it is essential that organizations not only recognize this topic's significance in their success and knowledge creation but also take steps to identify and eliminate or mitigate barriers to foster a more favorable environment for knowledge sharing.

Knowledge Belief: Knowledge belief significantly aids in the transfer of individual and group knowledge while facilitating learning and its application within organizations. Knowledge belief is one of the distinguishing factors of developed nations compared to less developed ones. For organizations to effectively meet fundamental goals and societal interests, they must be rich in knowledge, capabilities, and expertise to promote knowledge creation and sharing within their bodies. This component is consistent with the research conducted by Salmani-Jolodar and Gholam-Aliei (2016).

In conclusion, based on the findings of the present study and the detailed examinations

carried out, it can be concluded that the proposed model for developing leadership in learning organizations within higher education institutions can serve as a fundamental approach for promoting learning organizations in higher education institutions in Fars's province and even across the country. Identifying the key components influencing leadership in learning organizations within higher education and considering them in macro-planning and educational management can pave the way for the widespread application of this research at the national level. This research, by identifying the components and factors affecting leadership in learning organizations in higher education and developing a suitable proposed model, can be a useful tool for managers and educational planners in expanding this methodology.

Practical recommendations from the research

Considering the results of this study on leadership in learning organizations within higher education institutions and the organizing themes, several research suggestions for future researchers in this field are as follows:

1. Developing a model for the connection between higher education institutions and lifelong learning within these institutions.
2. Although measuring changes in organizational behavior over time is quite complex and challenging, paying attention to these changes as a result of organizational learning can represent a novel approach in this area.
3. Creating a model to articulate the relationship between learning organizations and the concepts of learning and forgetting organizations (organizational unlearning).
4. Presenting and promoting models for maintaining and sustaining organizational learning (clarifying the concept of sustainable learning organizations).
5. Research can investigate how leadership in learning organizations can enhance a culture of interaction and collaboration,

as well as its impact on the interactions among students, staff, and faculty members. These studies can be conducted through field observations, interviews, and questionnaires, contributing to the understanding of the factors that influence the establishment of a culture of interaction and collaboration in universities.

6. Research can explore how leadership in learning organizations can facilitate the professional development of employees and its impact on their performance and satisfaction. These studies can be carried out using questionnaires, interviews, and field observations, helping to identify the role of learner-centered leadership in the professional development of staff in higher education institutions.

Ultimately, the research conducted in this area can aid in the development of suitable policies and structures in higher education institutions and improve the performance of leaders.

Ethical Notes

Adherence to Research Ethics Principles

In the present study, consent forms were completed by all participants.

Funding Support

The costs of the present study were covered by the authors of the article.

Authors' Contributions

Design and Conceptualization: Hamideh Mohammadi, Nader Shahamat, Ebadallah Ahmadi, Reza Zarei.

Conflict of Interest

According to the authors, there is no conflict of interest in this article.

References

- Acevedo, J. and Diaz-Molina, I. (2023), "Learning organizations in emerging economies: the effect of knowledge management on innovative culture in Chilean companies", *The Learning Organization*, Vol. 30 No. 1, pp. 37-54.
- Al-Mousavi Al-Khomeini, R. (2005). *The collection of twenty-two volumes of Imam's scriptures*. Tehran: orouj Publishing.
- Amwoobai-Moghadam, M. & Allahyari, R. (2023). Explaining the role of organizational learning in learning organizations. *Philosophy approach in schools and organizations*, 2(2), 67-83.
- Andam, R. Khachian, A. & Asgari, M. (2014). Effective factors on change management in physical education faculties. *Management of Government Organizations*, 3(No. 2 (Sec. 10)), 20-7.
- Armstrong, O.E., & Rasheed, A. (2013). Structural Dimensions and Functions of Structure Influencing Agribusiness Enterprises: Mechanistic Vs Organic Systems Approach, *Journal of Business and Management*, 6 (6), 1-63.
- Assefa, Y. Gebremeskel, M. M. Moges, B.T. and Tilwani, S. A. (2024), "Transformation of higher education institutions from rhetoric commitment to a place of lifelong learning organizations: a meta synthesis study", *Journal of Applied Research in Higher Education*, Vol. ahead-of-print No. ahead-of-print.
- Attride-Stirling, J. (2001), "Thematic Networks: An Analytic Tool for Qualitative Research", *Qualitative Research*, Vol. 1, No. 3, Pp. 385-405.
- Barabasch A, Keller A, Caldart D. (2020). Effects of an Innovative Learning Culture on the Competences of Learners: Workplace Learning in Switzerland in the Context of Apprenticeships. In *Handbook of Research on Operational Quality Assurance in Higher Education for Life Long Learning*. IGI Global. 166-187.
- Barkhoda, S. J. & Amini, A. (2022). Analyzing the challenges of visionary leadership in secondary schools (compilation of a foundation data theory). *A bimonthly scientific-research journal of a new approach in educational management*. 13 (4): 1-21.
- Bass, B. M., & Bass, R. (2009). *The Bass Handbook of Leadership: Theory, Research, and Managerial Applications*, Fourth Edition. Simon & Schuster. New York.
- Bazohori, S. Yari-Haj-Atalo, J. & Maleki-Avarsi, S. (2021). Explaining self-leadership and self-efficacy of teachers based on transformational leadership with the mediating role of the learning organization in Mashhad schools. *School management scientific research quarterly*. 8(4). pp. 156-131.
- Castro, J., Castro, S., Pramono, R. & Prasetya, A., (2024). Leadership Agility of Indonesian School Leaders During a Crisis: A Grounded Theory Approach. *Journal of Educational and Social Research*. 14. 93. 10.36941/jesr-2024-0008.

- Clapp-Smith, R., Hammond, M. M., Lester, G. V., & Palanski, M. (2019). Promoting Identity Development in Leadership Education: A Multidomain Approach to Developing the Whole Leader. *Journal of Management Education*, 43(1), 10-34.
- Conner, D.S., & Douglas, S.C. (2005). Organizationally-induced work stress, The role of employee bureaucratic orientation, *Personnel Review*, 34 (2), 201-224
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
- Dehnavi, M. Ghorbani, M. Karimi, M. & Zendeh-Del, A. (2023). Designing and compiling a team-oriented organization model with an organizational innovation approach (a case study of growth centers and science and technology parks in Razavi Khorasan). *Technological Development Quarterly*, 74 (19), 25-34.
- Dixon, K.S. (2020). Christian Leaders as Educators: Leading a Culture of Learning and Innovation. In: Henson, J. (eds) *Modern Metaphors of Christian Leadership*. Christian Faith Perspectives in Leadership and Business. Palgrave Macmillan, Cham. 171-189.
- Ebrahimpour, H. Khalili, H. Asghari-Nyari, Y. (2014). Analysis of the role of servant leadership in organizational entrepreneurship, *Public Management Research*, 7th year, 26th issue, pp. 27-44.
- Ferastkhah, M. (2016). *Qualitative research method in social sciences with emphasis on grounded theory (grand theory, GTM)*. Tehran, Aghah publishing.
- Ghanbari, C. & Mohammadi, P. (2023). The role of enabling leadership of school principals in the professional development of teachers by mediating organizational learning. *Applied Educational Leadership Quarterly*. 4 (2). (Consecutive 14): 23-40.
- Harms, P. D. & Crede, M. (2010). Remaining Issues in Emotional Intelligence Research: Construct Overlap, Method Artifacts, and Lack of Incremental Validity, *Industrial and Organizational Psychology*, 3, 154–158.
- Jafari, A. & Karimi, F. (2017). Professional policymaking in the education system in the third millennium with an emphasis on future studies. *Shabbak*, 3(10 (series 29)), 45-56.
- Jazayeri, A. S. & Alvani, S. M. (2018). Examining the effects of organizational forgetfulness on learning and acceptance of information technology innovations. *Development and Transformation Management Quarterly*. 2017(32). pp. 1-10.
- Kamali, Y. (2014). Examining the role of decentralization in achieving administrative health. *Strategic and macro policies*, 2(No. 5), 111-132.
- Kazemi, K. Amini, M. Babaei Fard, A. (2020). Evaluation of the components of the learning organization in Kabul University from the perspective of faculty members and students. *Iranian Quarterly Journal of Comparative Education*.
- Khodam-Abbasi, N. Shahriaripour, R. & Amin-Bidokhti, A. A. (2017). Presenting the innovation model in the university based on learning culture and knowledge management. *Higher Education Letter*, 10(37), 33-60.
- Khodami, S. & Asanlu B. (2015). Examining the capability of customer knowledge management in creating innovation in the business model (APCO Company). *Organizational resource management researches*. 5 (4): 49-71.
- King, N., & Brooks, J. (2018). Thematic analysis in organizational research. *The SAGE handbook of qualitative business and management research methods: Methods and challenges*, 219-236
- Kucharska, W. (2020). "The Power of Mistakes: Constant Learning Culture and Technology," GUT FME Working Paper Series A 61, Faculty of Management and Economics, Gdansk University of Technology.
- Lūsēna-Ezera, I. Siliņa-Jasjukeviča, G. Lastovska, A. Surikova, S. Kaulēns, O. & Linde, I. (2023). Learning Organization Practices in Latvian Schools: Perspectives from School Staff, Students, and Parents. *Educ. Sci.* 13, 1000.
- Malik, P. (2023), "Measuring the impact of learning organization on proactive work behavior: mediating role of employee resilience", *Asia-Pacific Journal of Business Administration*, Vol. 15 No. 3, pp. 325-344.
- Marquardt, J. M. (2002). *Building the learning organization: Mastering the five elements for cooperate learning*. Translated by Zali, M. R. (2006). Tehran: Tehran University Publication (in Persian).
- Moaednia, F. (2006). *Management and leadership of transformation*. Tadbir magazine. No. 167. pp. 27-23.
- Mohammadesmaeili, N. (2018). Identifying the mechanisms of customer-oriented culture development in the organization (case study:

- three companies from Mapna Group). *Public Management Research*, 11(39), 249-273.
- Mowgeli, A. Darvish, H. Abbasi, N. & Mohammadi, F. (2016). Investigating and ranking the effective factors on the transformational organization model in the education organization (Education study of Fars province). *Public Management Research*, 9(31), 29-50.
- Namdari-Varposhti, M. Safarian-Hamdani, S. & Khatirpasha, K. (2023). Designing a development model for managers' strategic thinking competence (case study: a government educational research organization). *Scientific Quarterly of Standard and Quality Management*, 13(1), 196-235.
- Pasha, G. A. Khatir-Pasha, K. & Yousefi-Saeidabadi, R. (2022). A review of innovation management with the mediating role of learning culture in medical science education. *Clinical excellence*. 12 (1): 1-13.
- Pashaei-Yusuf-Kandi, A. & Hassani, M. (2021). Examining the role of organizational values, communication satisfaction and charismatic's leadership on job performance with emphasis on the mediating role of psychological components related to nurses' work. *Ergonomics*, 9(2), 30-41.
- Peyvasteh, A. A. Radsar, M. Ismaili, M. & Alizadeh, H. (2020). The effect of learner leadership on the desire to change the attitude of police officers with the mediating role of organizational trust in Tabriz city. *Police Management Researches (police management studies)*, 15(1), 125-147.
- Prewitt, V. (2003), "Leadership development for learning organizations", *Leadership & Organization Development Journal*, Vol. 24 No. 2, pp. 58-61.
- Riege, Andreas. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*. 9. 18-35.
- Rodríguez-Gómez, D. & Sallán, J. (2015). Unravelling knowledge creation and management in educational organizations: barriers and enablers. *Knowledge Management Research & Practice*. 13. 149-159.
- Ross, J. M., (2017), "Human factors for naval marine vehicle design and operation", CRC Press.
- Salmani-Jolodar, E. & Gholam-Aliei, H. (2016). Identifying individual barriers to knowledge sharing in public and private organizations. *International Conference of Management Elites*. Tehran: Shahid Beheshti University.
- Samimi, S. (2022). Structural analysis of the dimensions of knowledge leadership and its relationship with organizational learning capacity: the case of the General Directorate of Education of Hamadan province. *Journal of strategic studies of education and training*, serial 1: 1-21
- Swafford, Patricia M. & Ghosh, Soumen & Murthy, Nagesh, 2008. "Achieving supply chain agility through IT integration and flexibility," *International Journal of Production Economics*, Elsevier, vol. 116(2), pages 288-297, December.
- Tran, Q.H.N. (2023), "Library as a learning organization: the influence of leadership skills on organizational citizenship behavior at Vietnamese libraries", *The Learning Organization*, Vol. 30 No. 3, pp. 339-354.
- Wiig, K. (1997). Role of knowledge-based systems in support of knowledge management. In J.