

Explaining the Factors Related to the Improvement of Organizational Capabilities with an Organizational Learning Approach

Parisa Saadati¹, Mahmoud Ghorbani², Said khayatmoghadam³

1. Department of Educational Sciences, Mashhad Branch, Islamic Azad University, Mashhad, Iran

2. Department of Educational Sciences, Mashhad Branch, Islamic Azad University, Mashhad, Iran, corresponding author email: Mhgh2020@gmail.com

3. Department of Industrial Management, Mashhad Branch, Islamic Azad University, Mashhad, Iran

Article Info

Article type:

Research Article

Article history:

Received 11 Sep. 2023

Received in revised form 28

Feb. 2024

Accepted 21 Mar. 2024

Published online 01 Jun. 2024

Keywords:

Organizational capabilities,
Organizational learning,
Organization,
Capability enhancement,
Educational management

ABSTRACT

Objective: This study constitutes applied research with a qualitative methodology, employing the Delphi technique to elucidate the factors.

Methods: The qualitative segment's statistical population comprised managers, experts, officials, and professionals from the General Department of Education in Razavi Khorasan and the seven districts of Mashhad. Following the development of the preliminary conceptual model based on the research's theoretical framework and qualitative analysis, 25 experts were engaged to review the model's dimensions and components.

Results: Subsequently, the validation of each item was assessed through three distinct Delphi stages. The final questionnaire was then refined based on feedback received, ensuring its validity in the research context. The research tool's validity was further evaluated through face validity, as per experts' evaluations. Additionally, factor analysis was conducted. By analyzing data from a pre-test involving 25 participants from the sample group, Cronbach's alpha coefficient exceeded 0.8, indicating the tool's high reliability.

Conclusions: The study identified four dimensions, namely empowerment, learning, managerial, and operational, along with 16 components contributing to enhancing organizational capabilities. Furthermore, organizational learning aspects encompass continuous learning, empowerment, commitment, and application of knowledge, incorporating a total of 12 components.

Cite this article: Saadati P., Ghorbani, M. & Khayatmoghadam, S. (2024). Explaining the factors related to the improvement of organizational capabilities with an organizational learning approach. *Iranian Journal of Educational Research*, 3 (2), 185-204.

DOI: <https://doi.org/10.22034/3.2.185>



© The Author(s).

DOI: <https://doi.org/10.22034/3.2.185>

Publisher: University of Hormozgan.

Introduction

In the contemporary landscape of leading enterprises, human resources are regarded as the most valuable asset, the primary driver of production, and the catalyst for competitive advantage and fundamental capabilities, constituting a vital component of an organization's strategic assets and reserves, and are recognized as a crucial and integrated element of the establishment ([Bayraktar & Şencan, 2017](#)). Presently, in cases where entities possess cutting-edge technology and access to top-notch facilities, lacking adept and effective human resources or the inability to harness existing workforce competently, renders them ineffectual in influencing the surroundings and achieving success in competitive domains. Organizational competencies are established on the foundation of adept blends of knowledge, skills, and behaviors exclusively stemming from personnel, in conjunction with other factors under the organization's purview ([Verle et al., 2014](#)). For any entity or enterprise in any locality or sector, the cornerstone of prosperity does not solely rest on leveraging a singular source for gaining an edge; rather, premier and prosperous corporations comprehend the necessity of perpetually enhancing their competitive prowess and capacities to realize further success. Organizations necessitate diverse resources for their sustained existence, and to optimize the utilization of these resources, they must be endowed with capabilities and fortify them. Capability, as perceived by administrators, embodies the organization's aptitude to forge competencies and endure constraints and deficiencies to realize specific objectives. Contemporary enterprises and the commercial milieu have borne witness to swift and exceedingly cutthroat transformations over the past few decades. Organizations have gradually grasped the significance of empowering personnel and affording them avenues for involvement in decision-making processes, deeming autonomy as exceedingly crucial and invaluable ([García-Juan et al., 2019](#)). Educational institutions, particularly schools, are currently grappling with escalating challenges. Schools confront the burgeoning proliferation of knowledge, information, and technology, alongside the escalating intricacy of political, economic, social, and cultural circumstances within societies, while striving to fulfill the fundamental educational objectives of nurturing learning, growth, and development in students, facilitating excellence within society ([Starr, 2014](#)). Educational establishments can no longer subsist and enhance themselves solely on prior knowledge, necessitating adeptness in navigating turbulent and fluctuating circumstances through diligent effort. To synchronize the human resources within an organization, the cultivation

of professional learning should be an ongoing endeavor, fostered by the establishment of a conducive organizational training environment. Based on the aforementioned prelude, the researcher endeavors to formulate and ascertain the validity and reliability of the organizational capabilities' questionnaire utilizing an organizational learning framework.

In the present day, the immense and intricate organizations established many years ago are now deemed obsolete, resembling dinosaurs unable to adapt to their surroundings and ultimately becoming extinct. Conventional large organizations lack the essential power and adaptability needed to conform to the evolving environment, particularly concerning global issues, and are compelled to either restructure or acquire tools to handle global transformations for their survival. Establishing a learning organization and embedding organizational learning is considered a crucial tool ([Azugh et al., 2015](#)). Due to the rapid pace of changes in competitive markets, enhancing organizational performance stands out as a primary objective for managers. Therefore, the effective utilization of organizational capabilities is identified as a key factor in performance enhancement. Contemporary competition revolves around investing in knowledge, fostering continuous learning, and training proficient employees rather than solely possessing assets ([Damirchi et al., 2019](#)). To sustain their competitive edge in the market, companies consistently push forward. Numerous companies globally devise strategies and formulate implementation plans to achieve this objective. However, without ongoing monitoring and assessment of the costs and time dedicated to drafting and executing these strategies, the desired impact will not be realized ([Safari et al., 2019](#)). [Helfat and Peteraf \(2015\)](#) have characterized organizational capabilities as an organization's capacity to execute a series of coordinated tasks using organizational resources to attain a specific outcome. These capabilities are indispensable for effectively resolving organizational challenges. Each organization's interpretation of these abilities and capacities differs from one another. Initiating a harmonized assemblage can serve as the initial step in this domain ([Valian et al., 2017](#)).

In the contemporary era, the proficient management of human resources has escalated in significance to the extent that it surpasses other management classifications, emphasizing the enhancement of human resources and cultivating an environment conducive to enhancing the knowledge and attitudes of human resources as an essential requirement. Consequently, successful organizations today witness all their employees striving to enhance their capabilities, with the

manager's responsibility being to facilitate suitable conditions for this training and empowerment process. One fundamental strategy in creating such conditions is the managers' focus on organizational learning ([Inyega & Muchemi, 2020](#)).

Organizational learning is a continuous, dynamic, and interactive process involving individuals, groups, and organizations. It signifies an organization's endeavor to leverage the intellectual and social capital of individuals to comprehend the organization's potential for innovation ([Yu et al., 2013](#)), enabling the development of new products and services, the exploration of new markets and technologies, and the capacity for companies to adjust and evolve in response to emerging market needs ([Smith et al., 2005](#)). The enhancement of actions through comprehension and improved knowledge characterizes organizational learning as one of the fundamental capabilities of an organization and a primary duty of organizational leaders ([Ojha et al., 2018](#)). The process of organizational learning encompasses the acquisition, generation, dissemination, interpretation, and retention of knowledge and information within the organization to facilitate successful adaptation and alignment with evolving circumstances. Essentially, organizational learning entails engaging in work to learn and learning to carry out tasks ([KHURSHID, 2023](#)). Learning transfer within each organization stands as a crucial component determining the employees' success and ultimately the organization's triumph ([Saadati et al., 2022](#)). Despite the considerable focus on organizational training, research indicates that many of these initiatives lack the requisite efficacy in terms of learning transfer, with the application of acquired skills in the workplace, a key gauge of training program effectiveness, occurring to a limited extent ([Blume et al., 2010](#)). Numerous organizations invest extensive hours in training their employees without providing guidance on how to apply this knowledge, inevitably diminishing the effectiveness of such programs. Consequently, it is imperative to introduce a fresh agenda aimed at scrutinizing the transition process ([Baldwin et al., 2017](#)). Given the prevailing environmental uncertainty confronting organizations, the cultivation of a learning culture is essential for sustaining competitive advantages in business and commerce. Organizational learning lays the groundwork for the structured development of knowledge within organizations ([Ju et al., 2006](#)). Effective completion of organizational learning processes is vital for enhancing learning capabilities within the organization. Absent knowledge management, organizational development of group or individual learning capacities remains unattainable ([Smith et al., 2005](#)). To thrive in the current dynamic and competitive landscape, organizations are

compelled to undergo transformations and adapt to their surroundings, with learning serving as the sole pathway to adaptation. Survival, competition, and growth in such an environment necessitate organizations to elevate their learning capacity beyond previous levels ([Orafaye Jamshidi et al., 2019](#)).

Based on the study conducted by [Shen and Tang \(2018\)](#), it is evident that the transmission of knowledge within educational settings is a multi-phase phenomenon rather than a straightforward one, and is subject to numerous interacting factors. Consequently, as noted by [Seiberling and Kauffeld \(2017\)](#), organizations seeking to enhance job performance, individual growth, and overall success through training initiatives must identify the variables influencing knowledge transfer. The pivotal factors affecting the efficacy of learning transfer are recognized to be the organizational characteristics, trainee attributes, and training features. The development of organizational competencies serves as a fundamental strategy for organizations to attain proficiency, gain a competitive edge, and ensure longevity amidst competitive and tumultuous business environments. This notion has given rise to varying definitions and interpretations, thereby contributing to the intricacy and uncertainty faced by managers and stakeholders involved in organizational capacity management. A crucial initial step in managing such capabilities is the construction of a model delineating the organizational competencies. Given that the resources and potentials of each organization are distinct, their capabilities are inherently unique ([Mohammadpour Zarandi & Ghaderi, 2014](#)).

A retrospective examination of scholarly works concerning knowledge transfer reveals a disproportion in the emphasis placed on organizational factors vis-à-vis educational and individual elements in the realm of training course efficacy assessment. The learnings are now being applied in the work environment, and despite the appropriateness of the comprehensive features and the effective design and implementation of the training, it is within the environment where the training is enacted. Each organization possesses distinct characteristics and context that can significantly influence employee motivation for knowledge transfer; Consequently, through adjustments in its characteristics and educational strategies, an organization can establish a conducive setting for the implementation of training among its workforce. Furthermore, prior research findings suggest a lack of emphasis on transferring learning to the work environment within educational institutions; Hence, training serves as a crucial tactic for fostering knowledge, skills, abilities, and

competencies among an organization's employees. In light of the aforementioned points, this study seeks to address the fundamental inquiry regarding the appropriate qualitative model for enhancing organizational capacities through an exploration of organizational learning. It aims to delve into the dimensions and components of this model.

Material and Methods

From the viewpoint of this study, the objective is developmental-applicative and framed in terms of qualitative methodology. The statistical community within the qualitative sector comprises the supervisors, aides, and department heads across the seven districts of education and upbringing, along with the general administration of Khorasan Razavi province, Iran. Additionally, it includes the faculty members of the educational sciences and educational management department at the university in 2022. Within this study, the researcher has identified 25 individuals with suitable expertise to serve as experts or selected members of the Delphi panel, constituting the qualitative statistical population.

During the initial phase of the Delphi initiative, a questionnaire was distributed by the researcher to a group of experts. This questionnaire encompassed the dimensions, components, and proposed indicators aimed at elucidating the factors contributing to enhancing organizational capabilities through an organizational learning approach. The outcomes reveal that a majority of the identified indicators were endorsed by the expert panel, with one indicator displaying a level of agreement below the established confidence threshold. Consequently, this particular indicator was eliminated in the subsequent phase of the Delphi process. Expert panel members were then tasked with assessing the remaining indicators, which were not initially included in the questionnaire, but contribute significantly to enhancing organizational capabilities through an organizational learning approach. Following the integration of their feedback in the revised Delphi model, the components and indicators retained from the initial stage were once again presented to the expert panel in the form of a questionnaire featuring a five-point Likert scale. This aimed to ascertain the perceived importance of each identified indicator. The findings from this phase demonstrate that all indicators within the assessment tool received a rating exceeding 4 in both domains of improving organizational capabilities and organizational learning. Consequently, during this phase of the Delphi technique, all indicators underwent thorough examination.

Table 1. Position of Delphi panel members

Position	Frequency	Percentage
Professors of the Department of Educational Sciences and Educational Management	11	44
Education officials	14	56
Total	25	100

Results

In Table 2, some concepts of descriptive statistics of variables including mean, standard deviation, skewness and kurtosis are presented. Meanwhile, the central parameters are a group of descriptive parameters of a statistical distribution that express the characteristics of the data relative to the center of the distribution. The mean, as the balance point and the center of gravity of a statistical distribution, is one of the suitable central indicators to show the centrality of the data.

Another group of community describing parameters are dispersion parameters. Dispersion parameters are a measure to determine the degree of dispersion of data from each other or their degree of dispersion compared to the average. One of the most important dispersion parameters is the standard deviation. The higher the standard deviation of a statistical distribution, it indicates that these data have more dispersion. Skewness indicates the asymmetry of the abundance curve. If the coefficient of skewness is zero, the society is completely symmetrical, and if the coefficient is positive, there is a skew to the right, and if it is negative, there is a skew to the left. In general, if the skewness and kurtosis are not in the interval (2, -2), the data is far from the normal distribution. (Of course, some statisticians may consider this interval to be smaller or larger). The value of observed skewness for the studied variables is in the range (2, -2). It means that in terms of the skewness of the research variables, it is normal and its distribution is symmetrical. The stretching value of the variables is also in the range. This shows that the distribution of the variables has a normal distribution. So, they probably have a normal distribution.

Table 2. Central indicators, dispersion and distribution of factors

Components	N	Mean	SD	Skewness	Kurtosis
Organizational capabilities	44	159.27	15.75	-1.90	1.84
Empowerment	11	42.08	6.55	-1.33	1.11
Learning capabilities	9	32.22	4.28	-1.54	1.91
managerial	10	30.16	4.71	0.224	-0.230
operational	14	53.80	6.96	-1.028	1.08
Organizational Learning	25	97.20	9.35	-0.759	0.575
Continuous learning	5	19.14	3.07	-1.51	1.72
Empowering learning	6	25.87	3.87	-0.747	0.061
Commitment	6	21.78	4.26	-0.99	-1.43
Application of knowledge	8	30.40	4.67	0.511	1.31

Using the Kolmogorov-Smirnov test, it is possible to determine the normal, uniform distribution. The table below specifies the value of K-S.

Table 3. K-s test results

Variable	K-S	P
Organizational capabilities	0.193	0.001
Empowerment	0.263	0.001
Learning capabilities	0.177	0.001
Managerial	0.07	0.001
Operational	0.227	0.001
Organizational Learning	0.088	0.001
Continuous learning	0.177	0.001
Empowering learning	0.134	0.001
Commitment	0.169	0.001
Application of knowledge	0.167	0.001

Considering that the K-s test is in the non-parametric group, the value of the significance level is less than 0.05, which means it is not normal, and the output of the above table shows that the P values in the above-mentioned test are smaller than 0.05. The null hypothesis in the K-S test is that the data follow the desired distribution. With the K-S test, the type of hypothesis analysis and testing method is determined, and here its non-parametric type is determined.

Correlation test of variables

Sperman's correlation test (non-parametric correlation method) is used to check the relationship between variables. In Table 4, Sperman's method was used to check the relationship between variables. According to the significance level which is less than 0.05 in all relationships, it is confirmed that the relationship between the variables is significant.

Table 4. Matrix of correlation coefficients between the main research variables

Variable		Organizational learning	Continuous learning	Empowering learning	Commitment	Application of knowledge
Organizational capabilities	Correlation	0.631	0.557	0.662	0.626	0.570
	P	0.016	0.012	0.032	0.043	0.026
Empowerment	Correlation	0.655	0.590	0.542	0.522	0.605
	P	0.038	0.002	0.045	0.031	0.035
Learning capabilities	Correlation	0.567	0.545	0.588	0.622	0.545
	P	0.007	0.047	0.003	0.045	0.020
Managerial	Correlation	0.525	0.553	0.588	0.622	0.454
	P	0.047	0.040	0.003	0.045	0.020
Operational	Correlation	0.578	0.585	0.514	0.518	0.577
	P	0.004	0.003	0.023	0.048	0.012

Questionnaire questions must be correlated with each other to a certain extent, and the presence of excessive correlation causes multiple collinearities, which prevents the extraction of independent factors. On the other hand, if the correlation between the questions of the questionnaire is less than a certain limit, we will find the problem of the unity matrix. The unity matrix is a matrix whose main diagonal is 1 and the other houses of the matrix are zero. Bartlett's sphericity test was used in this study to investigate this issue. The significance of Bartlett's sphericity test indicates that there is enough correlation in the matrix of items to continue the factor analysis. Also, the Kaiser–Meyer–Olkin (KMO) test, which is known as a test for measuring the adequacy of the sample size, examines whether the questionnaire questions can be categorized into a smaller set of factors or not. The value of this index is obtained between 0 and 1, if it is 0.5 or more, the number of data is suitable for factor analysis. The details of the results of KMO test and Bartlett's sphericity test were calculated with a value of 0.744, which is greater than the value of 0.7, and the Bartlett test statistic is significance, which indicates the adequacy of sampling and indicates appropriate being the correlation matrix for the factor analysis of the data.

The model fit criteria

1 -The first criterion: factor load: Table 5 shows the values of the factor loadings of all the items, which must be greater than the limit of 0.4 to accept the convergent validity of the model variables. Also, the t-values between items and variables should be more than the limit of 1.96, which indicates the confirmation of the relationships between the items and the underlying variables.

Table 5. Factor loading coefficients of the items

Item	Empowerment	Learning capabilities	Managerial capabilities	Operational	Continuous learning	Empowering learning	Commitment	Application of knowledge
Creativity and support of new ideas	0.81							
Using the available facilities to	0.70							
Presenting creative ideas	0.73							
The speed of responding to	0.76							
Answering administrative letters as	0.81							
Integration and coordination of	0.84							
Two-way and continuous	0.78							
Promotion of research resources in	0.82							
Flexibility in the organization's	0.81							
Interaction between upper managers	0.79							
Human resources planning and	0.80							
Supporting and facilitating		0.81						
Creating a positive attitude towards		0.76						
Attention to progress and research		0.73						
Encouragement and support for		0.75						
Solving problems collectively in the		0.52						
Creating learning opportunities in		0.66						
Creating opportunities to share		0.82						
Promoting new ideas in the		0.61						
Justifying and training newly hired		0.65						
Achieving and obtaining a			0.72					
The organization's emphasis on			0.62					
Extra-organizational interactions			0.81					
Providing the latest and most unique			0.42					
Distribute information and facilitate			0.83					
Systematic process of			0.79					
Coordination between service			0.54					
Encouraging knowledge sharing			0.46					
Continuous, comprehensive and			0.70					
Creating a collaborative			0.76					
Forecasting the needs of employees				0.42				
Recruiting efficient and expert				0.46				
Protection of individual rights				0.86				
Coordination between production				0.83				
Needs assessment of production and				0.81				

Ease of communication and				0.74				
Healthy and safe working				0.74				
Trust your superiors				0.70				
Ability to work in a production and				0.74				
Providing services to the				0.74				
Creating a marketing perspective				0.80				
Creating satisfaction for the client in				0.74				
Correct understanding of your work				0.70				
Information and awareness of the				0.71				
Encouragement and support for					0.74			
Understanding the situation based					0.82			
Integrated training of employees in					0.78			
Physical environment suitable for					0.99			
Communication with the external					0.55			
Sharing with other personnel about						0.72		
Having learning resources for						0.87		
The speed and extent of employees'						0.89		
Easy sharing of learning resources						0.72		
Empowering the knowledge process						0.53		
Creating a common vision centered						0.93		
Fair evaluation of employees'							0.92	
The possibility of learning from the							0.89	
Extensive support and support of							0.82	
Creating a perspective of							0.74	
The importance of knowledge							0.61	
Alignment of individual evaluation							0.62	
Setting up and preparing								0.70
The quality of internal hardware and								0.61
Considering personal knowledge in								0.75
Participation in training workshops								0.64
Holding training workshops for								0.63
Encouraging employees to improve								0.73
Leave and mission of employees to								0.86
Expanding organizational learning								0.58

As can be seen in Table 5, at this stage, all the presented factor loadings are more than the minimum value of 0.4 and the T value is higher than 1.96, which indicates their proper reliability. Also, according to table 6, the factor loading and T value of the components are significant.

Table 6. Factor loading and T value

Association	Factor loading	T value
Organization capabilities / empowerment	0.94	60.03
Organization capabilities / learning capabilities	0.77	13.66
Organization capabilities / management capabilities	0.88	10.89
Organizational / operational capabilities	0.95	85.58
Organizational learning / continuous learning	0.51	10.03
Organizational learning / empowerment	0.55	10.19
Organizational learning/commitment	0.82	18.27
Organizational learning / knowledge application	0.80	18.37
Organization capabilities/organizational learning	0.51	10.04

2- The second criterion: examining the combined reliability coefficient

This index was introduced by Verts et al. (1974) that to check the internal consistency of the measurement model in the PIs method, the combined reliability criterion (CR) is used. If its value exceeds 0.7, it indicates the appropriate internal stability for the measurement model.

Table 7. Combined reliability coefficient

Association	CR
Organization capabilities / empowerment	0.91
Organization capabilities / learning capabilities	0.94
Organization capabilities / management capabilities	0.95
Organizational / operational capabilities	0.95
Organizational learning / continuous learning	0.93
Organizational learning / empowerment	0.89
Organizational learning/commitment	0.79
Organizational learning / knowledge application	0.96
Organization capabilities/organizational learning	0.94

3- Third criterion: Convergent validity

Average Variance Extracted (AVE) was proposed by Fornell and Larcker (1981) as an index to measure the internal validity of the measurement model. In simpler words, this index shows the degree of correlation of a construct with its indicators. A minimum value of 0.5 is considered for this index.

Table 8. Convergent validity test results

Association	AVE	Square
Organization capabilities / empowerment	0.91	0.95
Organization capabilities / learning capabilities	0.73	0.85
Organization capabilities / management capabilities	0.90	0.95
Organizational / operational capabilities	0.80	0.89
Organizational learning / continuous learning	0.87	0.93
Organizational learning / empowerment	0.88	0.94
Organizational learning/commitment	0.91	0.95
Organizational learning / knowledge application	0.79	0.88
Organization capabilities/organizational learning	0.79	0.89

Divergent validity also measures the ability of a measurement model to differentiate the hidden variable observables of that model with other observables in the model, and it is actually a complement to convergent validity which is measured through the Fornell-Larker test. The diameter of this table should be from the numbers The bottom and right side should be bigger.

Table 9. The results of divergent validity by Fornell and Larcker method

	Empowerment	Learning capabilities	Managerial	Operational	Continuous learning	Empowering learning	Commitment	Application of knowledge
Empowerment	1							
Learning capabilities	0.930	0.933						
Managerial	0.933	0.836	0.943					
Operational	0.960	0.880	0.868	0.921				
Continuous learning	0.858	0.787	0.841	0.806	0.950			
Empowering learning	0.897	0.891	0.819	0.819	0.850	0.901		
Commitment	0.899	0.894	0.870	0.841	0.847	0.897	0.921	
Application of knowledge	0.901	0.867	0.875	0.867	0.811	0.818	0.911	0.948

5. The fifth criterion: partial least squares fit index

The value of Q2, which is greater than 0.03 for all relationships. The value of SRMR is equal to 0.041, which should be less than 0.08, and this condition is met. The NFI value equal to 0.810 should be close to one, which is also acceptable. The GOF value is used as a measure to measure

the overall performance of the model. This index is manually calculated as the average R^2 and the average shared values. The limits of GOF index are between zero and one and one of the three values is 0.01, 0.25 and 0.36 as weak, medium and strong values, respectively. The average shared values of this model is 0.917 and the average R^2 is equal to 0.590. Finally, the GOF index of this model is 0.542, which indicates a strong and favorable overall value of the model.

Table 10. The overall fit of the relationship

Association	Q2	R2
Organization capabilities / empowerment	0.124	0.888
Organization capabilities / learning capabilities	0.141	0.600
Organization capabilities / management capabilities	0.089	0.788
Organizational / operational capabilities	0.098	0.904
Organizational learning / continuous learning	0.124	0.259
Organizational learning / empowerment	0.098	0.303
Organizational learning/commitment	0.112	0.674
Organizational learning / knowledge application	0.116	0.641
Organization capabilities/organizational learning	0.124	0.258

6. Sixth criterion: the quality test of the measurement and structural model

Another test to evaluate the reflective measurement model is its quality check test, which uses the validity of the subscription. If the value of SSE/SSO-1 is positive, the quality of the measuring tool is suitable. This index actually measures the ability of the path model in predicting the observable variables of the objects through their corresponding hidden variables (components). According to the output of the algorithm in table 11, the relationship between organizational capabilities and organizational learning has obtained positive values that are acceptable at a high level (proper fit).

Table 11. The output of the quality test of the measurement and structural model

Component	SSO	SSE	1-SSE/SSO
Empowerment	23.04	1978.15	0.141
Learning capabilities	19584	15677.63	0.199
Managerial	4992	4215.15	0.155
Operational	3456	3215.47	0.069
Organizational Learning	1920	1587.16	0.173
Continuous learning	6912	6345.15	0.082
Empowering learning	1895.95	1684.12	0.111
Commitment	2451.12	2184.18	0.108

Discussion

The aim of this study was to elucidate the factors contributing to the enhancement of organizational capabilities utilizing the organizational learning approach within the educational context of Razavi Khorasan. To achieve this objective, a survey comprising 70 items was developed employing Delphi procedures. Subsequently, a panel of experts evaluated the survey, leading to the elimination of one item. Eventually, 69 items across 8 dimensions underwent exploratory factor analysis. The findings revealed that subsequent to validating the questionnaire's dimensions, exploratory factor analysis was conducted to assess the appropriateness of the items for measuring each dimension. The outcomes indicated that all standard factor loadings exceeded the critical threshold of 0.4, thereby confirming all items. Subsequent to this, external reliability of the questionnaires was assessed initially through Cronbach's alpha method. The results indicated that all factors exhibited coefficients exceeding 0.7, representing the absolute coefficient of each dimension. The assessment of internal reliability of the questionnaire was carried out using composite reliability, which evaluates the interrelation of structures rather than absolute calculations of their reliability. The results confirmed the composite reliability of all constructs or dimensions.

Finally, the convergent validity was ascertained through the average variance extracted, signifying coefficients surpassing the critical value of 0.5 and thus confirming the validity. Convergent validity scrutinizes the correlation between each construct and its respective items, with a higher correlation indicating better fit. Divergent validity of the questionnaire was assessed utilizing the Fornell and Larcker method, which confirmed the validity of the questionnaire. The results demonstrated that the latent variables in the study, positioned along the main diagonal of the

matrix, exhibited stronger correlations with their corresponding indicators compared to other constructs. Consequently, it can be asserted that the underlying variables or dimensions of the questionnaire display more substantial interactions with their indicators than with alternative constructs, affirming the model's validity in evaluating the organizational capabilities pertaining to the efficacy of organizational learning within the realm of education.

The management process benefits from the availability of precise and accurate information in decision-making and event analysis, which facilitates identifying weaknesses and related events. The quality and clarity of recorded documents contribute to passing valuable knowledge to future generations. The current research findings are consistent with those of several previous studies conducted by different authors over the years.

An exploration of the theoretical underpinnings concerning enhancing organizational capabilities and learning reveals that this remains a significant challenge for top-level managers across all administrative departments striving to enhance their organizations.

[Khakre et al. \(2018\)](#) outlined 25 key components crucial for transferring learning to the work environment, ranging from organizational structure to job characteristics and career management. Various scholars have highlighted different aspects, including ethical leadership, collaborative decision-making, and employee empowerment, as essential for organizational success. Additionally, the importance of human resource management in translating learning theory into practice has been emphasized by [Salamat Ahvazi et al. \(2020\)](#) and [Schneider et al. \(2014\)](#). [Khunsoonthornkit and Panjakajornsak \(2018\)](#) delineated seven dimensions of learning within the organizational setting, encompassing continuous learning, inquiry and dialogue, collaboration and teamwork, empowerment of employees, establishment of a system, consideration of a systemic approach within the organization, interaction with the environment, and strategic leadership. [Damirchi et al. \(2019\)](#), through the development of an empowerment model for *Sepah* Bank employees grounded in organizational learning, articulated that the model acquired incorporates the relationships between organizational learning and employee empowerment, as well as the elements, metrics, and outcomes of empowerment derived from organizational learning.

Research Limitations

One limitation of this study is its reliance on a qualitative methodology using the Delphi technique, which, while robust, can be subject to the subjective biases of the experts involved. The statistical

population was limited to managers, experts, officials, and professionals from the General Department of Education in Razavi Khorasan and the seven districts of Mashhad. This geographical and professional limitation may affect the generalizability of the findings to other regions or sectors. Additionally, the study's focus on specific dimensions and components might overlook other relevant factors that could enhance organizational capabilities. Future research could consider a more diverse sample and include other factors that may influence organizational capabilities.

Research Suggestions

For future research, it would be beneficial to expand the study to include a broader and more diverse range of participants across different geographical regions and sectors to enhance the generalizability of the findings. Researchers could also employ a mixed-methods approach, incorporating both qualitative and quantitative methodologies, to provide a more comprehensive understanding of the factors influencing organizational capabilities. Further investigation into the interrelationships between the identified dimensions and components could offer deeper insights into how these factors interact and contribute to organizational success. Additionally, longitudinal studies could be conducted to assess the long-term impact of these factors on organizational performance and adaptability.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by the ethics committee of the Islamic Azad University. The patients/participants provided their written informed consent to participate in this study.

Author contributions

All authors contributed to the study conception and design, material preparation, data collection, and analysis. All authors contributed to the article and approved the submitted version.

Funding

The authors did (not) receive support from any organization for the submitted work.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

- Azugh, Z., Danesh Ara, N., & Sharbati, H. (2015). A study on the skills of learning organizations in each level of organizational learning. *International Conference on New Researches in Management, Economics and Accounting*, 4, 1-12.
- Baldwin, T. T., Kevin Ford, J., & Blume, B. D. (2017). The state of transfer of training research: Moving toward more consumer-centric inquiry. *Human Resource Development Quarterly*, 28(1), 17-28.
- Bayraktar, O., & Şencan, H. (2017). Employees' approaches to human resources from the asset–resource concepts perspective. *International Journal of Business and Social Science*, 8(9), 116-127.
- Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Transfer of training: A meta-analytic review. *Journal of management*, 36(4), 1065-1105.
- Damirchi, M., Hoseini, R., & Oladian, M. (2019). Designing an Empowerment pattern for Sepah bank staff based on Organizational Learning. *Quarterly Journal of Training and Development of Human Resources*, 6(20), 1-25.

- García-Juan, B., Escrig-Tena, A. B., & Roca-Puig, V. (2019). The empowerment–organizational performance link in local governments. *Personnel review*, 48(1), 118-140.
- Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic management journal*, 36(6), 831-850.
- Inyega, J., & Muchemi, G. (2020). Attitude towards undergraduate training in Agriculture and Veterinary Sciences by Secondary School Students, Teachers and Parents in Kenya. *Journal of Pedagogy, Andragogy and Heutagogy in Academic Practice*, 1(1), 8-18.
- Ju, T. L., Li, C. Y., & Lee, T. S. (2006). A contingency model for knowledge management capability and innovation. *Industrial Management & Data Systems*, 106(6), 855-877.
- Khakre, F., Malekian, F., Saidipour, B., & Kaviani, E. (2018). Designing a model of organizational factors effective on the transfer of learning to the work environment based on the foundation's data theory. *Research in Teaching*, 6(4), 66-85.
https://trj.uok.ac.ir/article_61039_c740b7be59599eb11d42e6c7d0291f9e.pdf
- Khunsoonthornkit, A., & Panjakajornsak, V. (2018). Structural equation model to assess the impact of learning organization and commitment on the performance of research organizations. *Kasetsart Journal of Social Sciences*, 39(3), 457-462.
- KHURSHID, N. (2023). *Left Universalism: Towards a Muslim Feminist Ethics* YORK UNIVERSITY TORONTO].
- Mohammadpour Zarandi, H., & Ghaderi, J. (2014). Organizational Excellence Assessment of Tehran Municipality According to EFQM Model [Research]. *Journal of Urban Economics and Management*, 2(7), 1-13. <http://iueam.ir/article-1-74-fa.html>
- Ojha, D., Struckell, E., Acharya, C., & Patel, P. C. (2018). Supply chain organizational learning, exploration, exploitation, and firm performance: A creation-dispersion perspective. *International Journal of Production Economics*, 204, 70-82.
- Orafaye Jamshidi, S., Orafaye Jamshidi, S., & Mirzaei, H. (2019). Explaining the Employee Organizational Learning Model Based on Improving Productivity and Reducing Burnout: The Case of Tabriz Payam-e Noor University. *The Journal of Productivity Management*, 13(49), 41-68.
- Saadati, P., Ghorbani, M., & Khayatmoghadam, S. (2022). The Role of Organizational Capabilities on Organizational Learning in Employees of The Razavi Khorasan General Directorate of

- Education: A Case Study. *Iranian Evolutionary Educational Psychology Journal*, 4(3), 645-655.
- Safari, H., Sadeghi Moghaddam, M. R., Garosi Mokhtarzade, N., & Moradi Moghaddam, M. (2019). Developing a Conceptual Model of Organizational Excellence Maturity Based on Organizational Capabilities (Case Study: Mobile Telecommunication Company of Iran (Hamrahe Aval)). *Industrial Management Journal*, 11(1), 21-44. <https://doi.org/10.22059/imj.2018.263644.1007477>
- Salamat Ahvazi, M., Hosseinpour, M., & Shahi, S. (2020). Identification of components and presentation of human resource management development model based on performance evaluation and organizational learning of mahshahr special economic zone [Research]. *Journal of Psychological Science*, 19(90), 773-786. <http://psychologicalscience.ir/article-1-587-fa.html>
- Schneider, K., Pältz, M., & Stauche, H. (2014). *Transfer of learning in organizations*. Springer.
- Seiberling, C., & Kauffeld, S. (2017). Volition to transfer: Mastering obstacles in training transfer. *Personnel review*, 46(4), 809-823.
- Shen, J., & Tang, C. (2018). How does training improve customer service quality? The roles of transfer of training and job satisfaction. *European management journal*, 36(6), 708-716.
- Smith, K. G., Collins, C. J., & Clark, K. D. (2005). Existing knowledge, knowledge creation capability, and the rate of new product introduction in high-technology firms. *Academy of management journal*, 48(2), 346-357.
- Starr, K. (2014). Implications of radically transformational challenges confronting education business leadership. *Business Education & Accreditation*, 6(2), 99-110.
- Valian, H., koushki Jahromi, A., & Boudlaie, H. (2017). Designing a Model of Information Technology Capabilities in Government Organizations. *Business Intelligence Management Studies*, 5(20), 5-40. <https://doi.org/10.22054/ims.2018.8615>
- Verle, K., Markič, M., Kodrič, B., & Gorenc Zoran, A. (2014). Managerial competencies and organizational structures. *Industrial Management & Data Systems*, 114(6), 922-935.
- Yu, Y., Dong, X.-Y., Shen, K. N., Khalifa, M., & Hao, J.-X. (2013). Strategies, technologies, and organizational learning for developing organizational innovativeness in emerging economies. *Journal of business research*, 66(12), 2507-2514.