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Presenting a Model of Decentralization for Iran's Education

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Article Info	ABSTRACT				
Article type:	Objective: The present study was undertaken with the objective of developing a theoretical				
Research Article	framework predicated upon the determinants influencing the decentralization of education in				
Article history:	Iran.				
Received 19 Jan. 2024	Methods : In the course of this investigation, both internal and external determinants pertinent				
Received in revised form 15	to the decentralization of educational systems were delineated. This study employed a				
	qualitative methodological approach, specifically utilizing inductive content analysis. The				
Mar. 2024	qualitative segment of the study encompassed a statistical population comprised of experts				
Accepted 23 May. 2024	specializing in educational management, as well as education administrators from the				
Published online 01 Dec. 2024	provinces of East Azerbaijan and West Azerbaijan. From this cohort, a selection of 20				
	knowledgeable experts with substantial experience in educational management was made				
Keywords:	through purposeful sampling. These individuals engaged in research interviews that were				
Education,	conducted in a semi-structured format. The dependability of the interviews was substantiated				
Model Decentralization,	by soliciting evaluations from professionals in the domain of educational management. The				
Delegation,	data obtained from the interviews were meticulously analyzed and systematically coded.				
Structure	Results : The outcomes of the final conceptual framework revealed that the factors identified				
	within the qualitative component encompassed both internal and external variables				
	influencing the decentralization of education in Iran. Out of the 858 identified indicators, 28				
	primary components were discerned, and these dimensions and components were				
	subsequently designated in accordance with the prevailing literature, context, and theoretical				
	frameworks.				
	Conclusions: By leveraging the insights garnered from these findings, a model was				
	articulated, emphasizing the critical factors underlying the decentralization of education in				
	Iran.				
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Introduction

Today, the phenomenon of globalization, coupled with the advent of information and communication technologies, has effectively transformed the globe into a diminutive community. This circumstance, along with the intricacy and unpredictability inherent in the contemporary environment, necessitates that bureaucratic organizations characterized by hierarchical frameworks, elevated degrees of formality, and centralized authority, evolve towards more adaptable and responsive structures capable of addressing environmental fluctuations. Concurrently, educational institutions, which rank among the most intricate and influential entities within society, have also gravitated towards decentralization, thereby facilitating the proximity of decision-making to the populace and stakeholders, in order to fulfill the new mandates established by global advancements. Indeed, in contemporary times, decentralization, in conjunction with the delegation of authority to private entities, has emerged as a prevalent strategy for reforming educational systems in recent years. The phenomenon of decentralization within the Iranian educational framework, akin to its counterparts in other nations, has garnered the attention of officials and planners (Hasanbandi et al., 2022).

Throughout the developmental process, alterations and transformations concerning the structural organization, curricula, objectives, and methodologies across all social institutions, particularly in education, constitute an unavoidable imperative. During the closing decades of the twentieth century, education systems have increasingly aligned with the cultural, economic, and social evolutions of this period, gravitating towards participatory and decentralized paradigms. These paradigms, which emerge as a response to environmental shifts and evolving societal attitudes and expectations, promise enhanced involvement of diverse societal segments—including parents, administrators, educators, school support staff, and students—in the decision-making processes, thereby bolstering the effectiveness and efficiency of educational systems (Amin Beidokhti et al., 2017). Iran is characterized by a diverse array of climates, economic and social conditions, and subcultural contexts. Such conditions have resulted in the inhabitants of each region possessing varying educational requirements in comparison to other areas, contingent on their distinctive and, in some cases, unique circumstances. Given that sustainable development within any society mandates a focus on regional talents, capabilities, and human capital, the provision of uniform education, devoid of consideration for local characteristics and needs, fails to facilitate the

identification and development of human capital competencies, ultimately rendering a substantial portion of educational expenditures ineffective for cultural, economic, social, and human resource advancement. Centralization within the educational system has, on one hand, imposed standardized programs without regard for local exigencies and has proven insufficient in addressing needs and environmental shifts, culminating in diminished system productivity. The proliferation of headquarters units at the central level has instigated the emergence of redundant tasks and parallel activities, consequently resulting in delays in the identification of needs and the execution of timely and effective decision-making. For these reasons, the discourse surrounding solutions for the decentralization of the nation's public education system has become a focal point of scholarly and political dialogue in recent decades. In this context, decentralization can be construed as a rational response to the prevailing circumstances and challenges of today (Karimi et al., 2023).

The educational framework, encompassing its myriad sensitivities, intricate technicalities, multifaceted activities, and obligations across diverse domains such as students, faculty, physical infrastructure, equipment and facilities, fiscal management, as well as scientific and research divisions, necessitates varying degrees of authority, responsibility, and mechanisms for accountability. This framework is presently governed through a centralized paradigm of management and decision-making. Nonetheless, the principal challenge confronting education resides within this centralized paradigm of governance and decision-making. Given the extensive reach of this system's operations to the most isolated regions of the nation, the intercommunication among the units' activities must traverse multiple stages and channels. Consequently, a decision emanating from the uppermost echelons of management must navigate a protracted pathway prior to its execution, necessitating the formulation of circulars and directives that must be communicated from superior entities to subordinate units until they culminate in actionable outcomes. Throughout this process, there exists a substantial likelihood that the content may be subject to varied interpretations or that the prompt execution of directives may be hindered. Furthermore, in instances where directives are formulated in general terms, each educational entity may interpret and implement them according to its own comprehension; conversely, if directives delineate the execution of tasks in meticulous detail, they may fail to adapt to the unique local and indigenous conditions prevalent in various regions and geographical locales within the nation,

resulting in challenges during practical application (Fatholahi & Alizadeh, 2023). At present, the Iranian educational system operates under a centralized framework, wherein the formulation of educational objectives, curricula, and activities occurs at the headquarters with subsequent notifications dispatched to schools for execution. This method of planning and communication, often accompanied by numerous plans that frequently exhibit inefficacy, yields little more than cognitive and physical fatigue for educational institutions. Within this centralized structure, the proliferation of plans and programs across all educational strata precludes opportunities for creativity, innovation, and the generation of novel ideas. In this context, the primary stakeholders in education—administrators, educators, and students—are largely excluded from the processes of educational policy formulation and decision-making. Consequently, a pronounced gap has developed between planning authorities and educational practitioners, with the roots of numerous educational challenges traceable to this disconnect between headquarters and schools. As articulated by Welch-Devine, decentralized management represents a pivotal phenomenon that has substantially influenced educational development planning across numerous nations globally in recent years (Welch-Devine, 2012). It is imperative to recognize that local officials often possess greater awareness of the indigenous context than central authorities, thereby enhancing their capacity for creativity and innovation. They also facilitate the potential for securing financial support from local sources. It is evident that in such a scenario, education is effectively aligned with both industrial sectors and the national economy.

Among the essential requirements to facilitate decentralization, particularly in the realm of education, are methodologies aimed at fortifying indigenous cultures, communities, and economies; as school administrators possess the capacity to formulate programs and activities that enable students to cultivate a sense of belonging within society, thereby fostering an awareness of their societal roles, which subsequently exerts a beneficial influence on their motivation and learning outcomes (Amin Khandaghi & Dehghani, 2011).

Findings from various domestic studies indicate that in Iran, despite the imperative nature of educational decentralization, a foundational and operational framework for decentralization is conspicuously absent. Fatholahi et al. (2022) demonstrated that financial decentralization correlates with a reduction in the attrition rates of secondary school students. Furthermore, an increase in income decentralization is associated with enhanced per capita educational

expenditures for students, which in turn elevates the overall quality of education within schools. Nevertheless, a discernible negative and significant correlation exists between cost decentralization and financial decentralization. Additionally, the impact of financial decentralization on the teacher-student ratio is characterized by a positive and significant relationship. Thus, it can be inferred that both income and cost decentralization contribute to the enhancement of educational quality.

KHodaverdi Samani et al. (2021) established that the influence of expenditure decentralization on the efficacy of educational services is both positive and significant. Moreover, the positive and significant effects of per capita income and urbanization rates on the efficiency of educational services are noted, whereas the Gini coefficient exhibits a negative and significant effect. Hasanbandi et al. (2022) concluded that the educational framework in Ahvaz is inadequately prepared to implement policies aimed at reducing centralization, as evidenced by the research components. An analysis of the interviews indicated that numerous factors contribute to this predicament, including the overarching and ambiguous perspective on centralization, the absence of justification regarding its necessity and significance for practitioners, the inappropriateness of the system for the selection and appointment of administrators, and the substandard quality of managerial empowerment initiatives. The findings from Maleki and Agha Mohammadi (2015) research indicate that decentralization, in conjunction with the distinctive opportunities it presents for growth and advancement, encompasses challenges and barriers that warrant discussion and scrutiny at both regional and national strata. The outcomes of the investigation reveal that the challenges and hindrances faced in the educational development planning process can be analyzed and deliberated upon at both centralized and decentralized tiers. At decentralized tiers, notable issues include the scarcity of specialized personnel and inadequate programs, conceptual dilemmas, centralized political and administrative frameworks, sectoral perspectives, absence of a regional management apparatus, and a deficient planning culture. In contrast, at centralized levels, pertinent concerns include the absence of a comprehensive definition of development, centralization in planning endeavors, a lack of prioritization in program objectives due to constraints, and governmental weaknesses in program implementation, among others. Furthermore, the research findings suggest that the educational development planning process initiated concurrently with economic, cultural, and social development initiatives, characterized by a prescriptive nature. The analytical results provided by Haghighi (2012) corroborate that both cohorts of interviewees underscored the imperative of decentralization. Nevertheless, senior administrators contend that since education is governed by the political and legal frameworks of the nation, alongside the constitutional emphasis on decentralization, the realization of decentralization is improbable and challenging; however, delegation remains plausible. Conversely, experts advocate for the expedited decentralization at educational levels. Kaewkumkong and Jaiborisudhi (2021) conducted an evaluation and comparative analysis of educational decentralization policies within Thailand and South Korea. The methodological approach of the study encompassed documentary analysis, fieldwork, and interviews, with findings articulated through descriptive analysis. The results indicated that the educational decentralization policies of the two nations exhibit numerous similarities at the macro level, as both countries have instituted laws and regulations to facilitate the advancement of their educational decentralization policies. Kameshwara et al. (2020) empirically scrutinized the correlation between the decentralization of educational systems and student performance. To this end, the Program for International Student Assessment (2015) data were employed to execute multilevel analyses for each participating nation. The application of random intercept models revealed that decentralization did not exert a statistically significant impact on student achievement. Sow and Razafimahefa (2015), in a comparative study involving developed and developing nations utilizing a panel methodology, concluded that a U-shaped and nonlinear relationship exists between fiscal decentralization and efficiency within the education and health sectors; in essence, they identified the optimal level of decentralization necessary for efficacy. Kyriacou and Roca-Sagalés (2019), in their investigation entitled, Investigating the Impact of Fiscal Decentralization on Regional Inequality, explored the phenomenon across 16 municipalities and provinces in South Korea, employing multiple regression analysis to assess the influence of fiscal decentralization on regional disparities. The findings of this study indicated that the decentralization of local government revenues and expenditures affects regional inequality differently. The financial independence ratio and the indicators of financial self-reliance, which pertain to the decentralization of governmental revenue management, exhibit a statistically significant correlation with regional disparities.

Moreover, to guarantee the successful implementation of school-based management, it is imperative that all stakeholders possess a comprehensive understanding of the initiative, while district and school leaders must endorse the plans, maintain open lines of communication, and allocate sufficient time for its execution. In an article entitled "The Impact of Decentralization in Romanian Schools," <u>Camelia et al. (2014)</u> assert that the most effective form of the decentralization process is one that aligns harmoniously with the national context.

International research underscores the context-dependent nature of the issue and advocates for the establishment of necessary foundational work prior to the implementation of decentralization. A synthesis of both domestic and international research reveals that each study has predominantly concentrated on a singular facet of structural, financial, or political decentralization, or has examined the implications of decentralization within a specific educational level, or has employed an analytical and historical lens. The majority of inquiries within the domain of curriculum decentralization and school decentralization have adopted a school-centric approach. A comprehensive and integrative perspective has not been applied to the phenomenon of decentralization, particularly from the vantage point of managerial decentralization, and the interrelations among structural, political, and financial decentralization have not been concurrently scrutinized, while the complications arising from centralization have been addressed in a unidimensional fashion. In light of the aforementioned considerations, the current investigation endeavors to examine the indicators and intra-organizational determinants that exert influence on the decentralization of the Iranian educational system, as well as the external indicators and factors that affect the decentralization of education within the context of Iran.

Material and Methods

The statistical population pertinent to the qualitative segment of this investigation encompasses all professionals, administrators, heads, and deputies within the general education sectors of the East and West Azerbaijan provinces during the academic year 2023. In this inquiry, the quantitative sample comprises a subset of the accessible statistical populations, which the researcher identifies through purposive sampling methodologies. This research employed structured interviews, which were subsequently recorded and transcribed into textual format; thereafter, content analysis, coding, and the extraction of primary indicators were conducted, culminating in the presentation

of a decentralization model. Subsequently, the validity and reliability of the identified components, evaluated through the Content Validity Ratio (CVR) and Content Validity Index (CVI), received affirmation from twelve experts specializing in the field of educational management. In the quantitative aspect of the study, both descriptive and inferential statistical techniques, including the Kolmogorov-Smirnov test, confirmatory factor analysis, and path analysis, were utilized to analyze the data, facilitated by the employment of two software programs: SPSS and LISREL software.

Results

To address the research inquiries, the insights of educational experts and scholars specializing in educational management were gathered utilizing a qualitative methodology and a semi-structured interview instrument. During the interview sessions, while documenting the interviewee's responses, analogous inquiries were posed, and the interviewee was solicited for increasingly comprehensive elucidations to arrive at a resolution and clarify uncertainties. Table 1 delineates the primary factors identified for the initial inquiry by the interviewees subsequent to the coding and synthesizing process.

Question 1: What are the internal organizational indicators and components influencing the decentralization of education in Iran?

Table 1. Principal factors and elements of internal organizational decentralization in Iranian education

No.	Factor	Components	No.	Factor	Components
1	Organizational Human Resources	Regional heads - members of the Education Council - managers - teachers - recruitment of personnel - senior managers of the organization - education system officials	2	Organizational structure	Type of structure - Strong internal structure - non-government schools - Organizational structure - Open and closed system - Participation in plans and programs - Flexibility of structure
3	Organizational Laws	Procedures - internal organizational policies - planning - teacher selection - the perspective and policy of the ruling system - laws and regulations - changing the decision-making process	4	Organizational hierarchy	Planning - Circular - Vertical Command - Top-down Planning - Programmers - Classification - Operational Levels - Bottom-up Approach
5	Organizational Culture	Employee attitude - individual thinking and insight - cultures - organizational atmosphere -	6	Specialization and commitment	Enabling Individuals - Knowledgeable Human Resources - Expertise of Individuals - Growth and Improvement

		consumerist view - flexibility - innovation - unity - belief and belief - acceptance of decisions - attitude of officials - attitude to structure - attitude to change - individual opinions - resistance to change - culture of participation of teachers and parents		of individuals in the organization	of Human Resources - Expert and Experienced Managers - Lack of Knowledge and Expertise - Interested and Expert Individuals - Empowerment - Professional Qualifications - Learning Opportunities - New Educational Methods - Promotion and Expertise of Teachers - Strong Commitment - Accountable Managers - Meritocracy - Training
7	Stakeholders	Student parents - members of the parent and teacher association - members of the student council - parents and interested individuals	8	Delegation of authority	Delegation of Authority - Decision- Making Authority - Participation - Power - Policy-Making Authority - Increasing Managers' Authority - Decision-Making Independence
9	Financial Resources	Financial capacity of regions - facilities of other organizations - financial resources - financial authority - financial support - organizational facilities and equipment	10	Educational equipment	Educational Facilities and Equipment - Textbook Content - Developing Educational Content - Equipping Schools - Educational Opportunities - Learning Knowledge and Skills - Organizational Equipment and Facilities

Table 1 illustrates the internal organizational factors and indicators that influence the decentralization process of education, which encompass: organizational human resources, organizational structure, organizational policies, organizational hierarchy, organizational culture, the expertise and commitment of organizational personnel, educational stakeholders, the organizational budget, and educational resources within the organization. According to authorities in the domain of educational management, each of the aforementioned factors holds significant relevance in the execution of the decentralization process in education and must be meticulously regarded to enact any form of strategic initiative aligned with educational decentralization. Any formulation of plans and policies regarding educational decentralization will confront deficiencies and ultimately fail if the role of these intra-organizational factors is disregarded. Among the factors identified, educational experts placed considerable emphasis on the importance of the policies and programs instituted by the organization for the operationalization of educational decentralization, as well as the extent to which officials within the educational system are predisposed to formulate policies and initiatives pertaining to the decentralization of the educational framework.

Question 2. What are the indicators and external factors influencing the decentralization of education in Iran?

Table 2. Principal factors and external determinants of educational decentralization in Iran

N.T.	Frater Compared to					
No.	Factor	Components	No.	Factor	Components	
1	Laws	Administrative bureaucracy - Education system - Constitution - Parliament resolutions - Legislators' goals - Structures governing society - Major goals of the political system	2	External expert force	Specialty of individuals in the community - educational groups and stakeholders - Specialization of individuals in the community - Thinkers - Authors - Researchers - Externally committed and specialized individuals	
3	Culture of the Society	Level of community awareness - Type of geographical area - Local and regional issues - Regional culture - Role of community - Community culture - Open society - Community perspective - Cultural, social, geographical differences - Cultural context - Native culture - Impact of native cultures - Politicized culture	4	Political system	Government and policy-maker attitudes - Political agents - Representatives - Consumer perspective - Political work - International relations - Government attitude - Planning and Budget Organization attitude - Political individuals' hangout - Group pressure - Party pressure - Other organizations' pressure - Political perspective - Legislators' support	
5	Financial Resources	Economic conditions - Capital attraction - Private sector - Public participation - Private sector - Family income	6	Educational equipment	Textbook printing - School construction - Mass media - School construction - Media - Technology - Educational content production - Media support - Investment in educational equipment	
7	Planning	 Budget spending - Donors' and parents' assistance - Budget allocation Support of parents and beneficiaries 	8	Participation of other organizations	Government institutions - Governorship - Governorship - Municipality - Interaction with industry - Cooperation with universities - Cooperation with research centers - Inter-organizational capacity building	

Table 2 depicts the external factors and indicators that significantly affect the educational decentralization process, which include: macro-policies, the scientific capacity of society, the political framework of the nation, the national economy, educational infrastructure, macro-planning, the involvement of relevant organizations, and the prevailing societal structure and culture. According to the experts who participated in the interviews, numerous external factors exert influence on the decentralization of education. Among the paramount factors are macro-policies that are intrinsically linked to education and delineate the trajectory of planning and prospective advancements within the education organization. Consequently, during this process, the role of policymakers in shaping educational policies and strategies must not be underestimated. Thus, the foremost and most critical aspect in the decentralization of education is the disposition

and viewpoint of political system officials concerning the matter of educational decentralization, which materializes and is expressed in the policymaking process.

According to the indicators and variables derived from interviews and coding methodologies, the conceptual framework for the decentralization of education in Iran is illustrated in Figure 1. As depicted in this model, the internal and external factors influencing the decentralization of education are interconnected and mutually influence one another. Consequently, in the realms of strategic planning and policy formulation concerning educational decentralization, it is imperative that all internal and external factors impacting the educational organization be duly acknowledged.

Question 3: What is the model of decentralization of education in Iran?

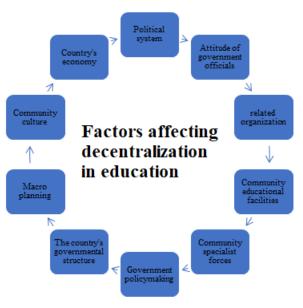


Figure 1. Iranian Education Decentralization Model

Figure 1 elucidates the model of education decentralization in Iran, grounded in the empirical findings from consultations with experts in educational management. As indicated in the figure, all external and internal variables that influence the decentralization of education are interrelated and exert direct or indirect influences on one another. Thus, educational administrators and policymakers are urged to take into account all relevant factors when strategizing and executing initiatives aimed at the decentralization of education.

In Table 3, the descriptive indicators of variables including mean, standard deviation, skewness, and kurtosis are displayed. Based on the values presented in Table 3, the data exhibit a normal distribution.

Table 3. Descriptive data related to the categories of external factors effective in decentralization

External Factors	Mean	Max.	Min.	SD	Kurtosis	Skewness
Culture of the society	3.74	3.85	3.63	0.996	-0.613	0.063
Policymaking	3.8	3.93	3.70	0.996	-0.614	0.063
Economy of the country	3.84	3.98	3.71	1.194	-0.812	-0.285
Major planning	3.88	4.01	3.76	1.134	-0.811	-0.198
Educational facilities	3.91	4.03	3.79	1.036	-0.659	-0.364
Expert workforce	4.06	4.17	3.95	0.993	-0.823	-0.062
Related organizations	3.67	3.79	3.57	0.986	-0.408	-0.365
Political system	3.92	4.03	3.82	0.925	-0.411	-0.560

Table 4. Descriptive data related to the categories of internal factors effective in decentralization

Internal factors	Mean	Max.	Min.	SD	Kurtosis	Skewness
Educational stakeholders	3.90	3.99	3.80	0.872	-0.150	-0.741
2Expert human resources	4.16	4.25	4.07	0.818	-0.410	-1.093
3Organizational structure	3.97	4.06	3.88	0.835	-0.346	-0.648
Organizational budget	4.14	4.24	4.14	0.889	-0.419	-1.151
Organizational policies	3.99	4.09	3.90	0.871	-0.311	-0.807
Organizational culture	4	4.09	3.90	0.869	0.036	0.456
Delegation of authority	3.87	3.97	3.77	0.870	-0.419	-0.199
Committed human resources	4.10	4.20	4	0.909	-0.722	-0.141
Educational equipment	4.03	4.13	3.92	0.975	-0.763	-0.053
Organizational policymaking	3.94	4.04	3.84	0.871	-0.558	-0.156

According to the findings summarized in Tables 3 and 4, the indices of mean and standard deviation signify a suitable dispersion of the data, while the skewness and kurtosis indices affirm the normality of the distribution concerning both internal and external factors that influence the decentralization of education.

Prioritization of internal and external factors effective in decentralization of education

Table 5 presents the conclusive outcomes of the Friedman test. By analyzing this table, one can ascertain whether the disparities between the mean ranks of external factors influencing decentralization are statistically significant. Given that the significant level equals 0.001, which is less than the significance threshold of 0.05, it can be inferred that there exists a statistically significant disparity among the questionnaire items regarding their importance; from the managerial viewpoint, these items exhibit differing levels of value and significance.

Table 5. Significance of the Friedman test for external factors influencing the decentralization of education

N	307
Chi-squared value	61.760
DF	7
P	0.001

Table 6 elucidates the mean rankings of each external factor that influences the decentralization of education.

Table 6. Mean rankings of external factors influencing the decentralization of education

External factors	Mean rank
1-Expert human resources	5.06
2-Political system	4.69
3-Educational facilities of the society	4.63
4-Major planning	4.57
5-National economy	4.53
6-Policymaking	4.43
7-Culture of the society	4.17
8-Related organizations	3.94

Through the analysis of the median values associated with each factor, it becomes feasible to ascertain which factor possesses a superior median value, thereby indicating its relative importance. According to the quartile analysis, the factor of expert human resources, with a median value of 5.06, emerges as the most critical factor. Subsequently, the political system factor, with a median of 4.69, is deemed significantly important, while the educational facilities of the country, with a median of 4.63, ranks third in terms of importance from the perspective of managers.

Investigation of prioritization of internal factors influencing the decentralization of education

Table 7 presents the conclusive outcomes of the Friedman test. This table facilitates the understanding of whether the variations among the mean ranks of the internal factors impacting decentralization are statistically significant.

Table 7. Significance of the Friedman test for internal factors influencing the decentralization of education

N	307
Chi-squared value	77.958
DF	9
P	0.001

Given that significant level is equal to 0.001, which is less than the significance level of 0.05, it can be concluded that there is a statistically significant difference among the questionnaire items concerning their importance; from the managerial perspective, these items are not valued equally. Table 8 delineates the average ratings of each of the internal factors that influence the decentralization of education.

Table 8. Mean ratings of internal factors influencing the decentralization of education

Internal factors	Mean rank
1- Organizational expert human resources	6.03
2- Committed organizational resources	6
3- Organizational budget	6
4- Educational equipment	5.61
5- Organizational culture	5.37
6- Organizational structure	5.29
7- Organizational policymaking	5.24
8- Community culture	4.17
9- Educational stakeholders	5.03
10- Organizational delegation of authority	5

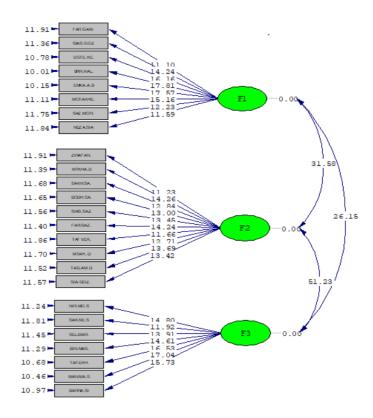
By analyzing the median values of each factor, it becomes possible to determine which factor possesses a higher median value, thereby signifying its greater importance. According to the quartile analysis, the factor of organizational expert human resources, with a median value of 6.03, is identified as the most significant. Following this, the factor of committed organizational resources and the organizational budget, which has a median of 6.00, is also deemed highly important, while the factor concerning organizational educational equipment, with a median of 5.61, is ranked third in the perspective of managers.

First-order confirmatory factor analysis

In the context of first-order confirmatory factor analysis, the association between the latent variables (factors) and the observable variables (items) is quantified. In this analytical approach, the interrelationships among the latent variables are not scrutinized. This particular measurement model is exclusively aimed at validating the accurate measurement of the latent variables. Within first-order confirmatory factor analysis, it is feasible to examine the relationship of a single factor with multiple items, or multiple factors with multiple items.

Table 9. Observable variables and factor loadings

Factor	Item	Loading factor		
External factors	1-Culture of the society as an external factor	0.59		
	2-Policymaking as an external factor	0.75		
	3-The economy of the country as an external factor	0.94		
	4-Major planning as an external factor	0.95		
	5-Educational equipment as an external factor	0.86		
	6-Expert force of the society as an external factor	0.75		
	7-Related organizations as an external factor	0.62		
	8-The political system of the country as an external factor	0.57		
Internal factors	1-Stakeholders as an internal factor	0.52		
	2-Expert human force as an internal factor	0.59		
	3-Organizational structure as an internal factor 4-Organizational budget as an internal factor			
	5-Organizational policy as an internal factor	0.60		
	6-Organizational culture as an internal factor	0.62		
	7-Delegation of authority as an internal factor	0.54		
	8-Committed human force as an internal factor			
	9-Educational facilities as an internal factor			
	10-Organizational policymaking as an internal factor	0.60		



Chi-Square=816.50, df=272, P-value=0.00000, RMSEA=0.080

Figure 2. First-order confirmatory factor analysis model

As evidenced by Figure 2 and Table 9, the majority of the factor loadings derived from the model fit are greater than 0.4.

Discussion

The decentralization of the educational sector has emerged as an increasingly prevalent phenomenon in developing nations. Advocates assert that this paradigm enhances operational efficiency and more effectively addresses the diverse educational needs of individuals concerning resources and pedagogical approaches. Policymakers frequently concur that decentralization constitutes one of the most efficacious strategies for ensuring both flexibility and educational quality (Fatholahi et al., 2022). Education represents one of the most intricate institutions within any societal framework, with its success hinging upon the organization's capacity to adapt to novel developments in the external milieu. To augment the adaptability of this intricate system, the policy of diminishing centralization has been accentuated in various foundational documents issued by the Ministry of Education of the Islamic Republic of Iran, including the National Education Document (2009), the Fundamental Education Transformation Document (2011), and the Fundamental Strategic Document of the Deputy for Primary Education (2011). However, to effectively implement and execute any proposed plan or program, it is imperative to first ascertain the factors and indicators that significantly influence its realization. Consequently, this study aimed to identify and delineate the factors and indicators that are instrumental in facilitating the decentralization of education in Iran, as perceived by experts in the domain of educational management and corroborated by credible scholarly literature.

By synthesizing the internal and external factors that influence the decentralization of education, we can succinctly enumerate the factors identified (political system, policymakers, human resources, financial resources, cultural context, educational infrastructure). The identified factors align with domestic researches (Amin Beidokhti et al., 2017; Ghafari & Rostampor, 2021; KHodaverdi Samani et al., 2021; Mohammadi et al., 2020).

According to senior education administrators and experts, decentralization is deemed essential; however, senior managers contend that, given that education is inherently linked to the nation's political and legal framework and that the constitution underscores centralization, the prospects for decentralization are improbable and fraught with challenges, although devolution remains a

feasible option. Notably, experts have underscored the necessity for expedited decentralization at the educational level. The political system, akin to any governance structure, exhibits a distinctive sensitivity towards education and tends to favor centralized decision-making and program formulation within this sector. Nevertheless, this sensitivity has not translated into prioritization by the political system with regard to the allocation of funding and resources for schools. In stark contrast to this aforementioned sensitivity, political authorities have historically maintained a myopic perspective on education, consistently demonstrating a lack of attention to fulfilling the institution's needs. Consequently, the education sector has persistently encountered challenges in securing adequate financial resources. It is noteworthy that the limited financial resources available have also been allocated to regions and provinces in a manner that is both selective and inequitable, disproportionately influenced by political affiliations and the power dynamics of representatives. Therefore, certain provinces are endowed with more suitable human and financial resources, which has resulted in disparities in conditions and facilities across various provinces and regions.

Conversely, the intervention of elected officials and political entities in the hiring and dismissal of educational administrators has engendered a degree of instability in educational management. Such instability is exemplified by the average tenure of an educational minister, which is estimated to extend slightly beyond two years. This management instability, in turn, has precipitated fluctuations in regulations, programs, and guidelines, while the brief tenures of these ministers have hindered the effective implementation and stabilization of such initiatives. This volatility has fostered a state of confusion and procedural stagnation within the administrative bodies, leading to a plethora of incomplete plans and programs, thereby squandering limited educational resources and engendering skepticism towards both the organization's personnel and the broader society.

The vastness of the educational organization, compounded by the pervasive influence of politics, has resulted in various factions anticipating employment opportunities within the education sector irrespective of their fundamental competencies. Such expectations are frequently bolstered by members of the Islamic Consultative Assembly, who cite the necessity of addressing voter expectations, and often endorse initiatives devoid of professional and financial justification, compelling the education sector to hire individuals lacking relevant qualifications. This predicament arises at a time when a considerable number of university graduates possessing pertinent skills and a willingness to contribute to education and training remain unemployed. It is

feasible to rectify prevailing attitudes and mitigate internal resistance through the implementation of training and orientation programs, alongside assurances regarding the future career trajectories of individuals and groups. However, garnering the support of influential and powerful external institutions necessitates robust governmental legislation and mechanisms. The establishment of a strategic council is imperative for exercising authority in the execution of approved measures. This council should comprise representatives from the highest levels of government, strategic managers, esteemed experts within the political framework, and select former ministers of education and training.

Fiscal decentralization constitutes one of the most pivotal transformations impacting the decentralization of education. The allocation of financial responsibilities and their dissemination to subordinate tiers have emerged as a crucial element of the decentralization process. As the central government begins to curtail financial provisions for local educational institutions, educational authorities at regional and municipal levels endeavor to identify alternative funding sources for education, thereby facilitating the establishment of diverse financing frameworks for education through local taxation, tuition fees, international aid, local fundraising initiatives, revenue from significant activities, and public assistance to bridge the gap created by the central government (McGinn & Welsh, 1999). In the context of Iran, the pronounced centralization of the educational system is reflected in the considerable proportion of government funding allocated for education, wherein the government's predominant dependence on fluctuating oil revenues has precipitated instability in educational financing and engendered challenges in effective planning (Fatholahi & Alizadeh, 2023).

Given the critical role and significance of education in fostering societal growth and prosperity across various dimensions, coupled with the emergence of myriad societal challenges attributable to educational inefficiency, the necessity for a focused discourse on educational issues is manifest. A primary determinant of the observed inefficiency and suboptimal productivity within the educational sector is its centralized governance structure.

Among the previously mentioned factors, the perspectives and viewpoints of policymakers and legislators regarding the decentralization of education have been underscored by educational experts as the principal and most impactful element. Following the political and legislative considerations, the aspect of financial decentralization in education merits attention. Within this

framework, the evaluation of the societal services rendered by education can be scrutinized, facilitating the potential for the education system to generate self-sustaining income. Should the financing challenges within the educational system be effectively addressed, other influential determinants of educational decentralization, such as the provision of specialized personnel and educational resources, may be realized through the development of appropriate programs and policies within a defined temporal framework.

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 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.

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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.

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