Original Article

Designing and Validating a Human Resource Development Model Based on Good Governance in Universities of Medical Sciences Affiliated with the Ministry of Health

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Abstract

Background & Objective: Today, the development of human resources is the most important part of the strategic planning of organizations. In addition, human resource empowerment is a key factor for the success of corporations. In this regard, good governance has been introduced as the solution for the development problem. The present study aimed to design and validate a human resource development model based on good governance in universities of medical sciences affiliated with the ministry of health.

Materials & Methods: The present mixed study included two qualitative and quantitative stages. The qualitative stage was carried out through conventional content analysis and by assessing relevant texts and conducting semi-structured in-depth interviews with 12 experts in the field of human resources at the ministry of health and the universities of medical sciences. Following designing the human resource development model, its validity and goodness of fit were assessed in the quantitative stage by filling a questionnaire by 162 experts of the field using confirmatory factor analysis and the SWARA technique.

Results: In this study, the human resource development model based on good governance included 10 factors of responsiveness, transparency, capacity building, attitude and identification, coordination, consequentialism, the effectiveness of roles and responsibilities, sociocultural development, individual development, and educational development, which were classified into six categories of causal conditions, axial phenomenon, underlying factors, confounding factors, strategies, and outcomes. The relationship between the mentioned factors was presented in the model. Furthermore, the prioritization of main criteria revealed the higher significance of attitude and identification, coordination, sociocultural development and educational development, respectively, compared to other criteria.

Conclusion: According to the results of the study, responsiveness, transparency, attitude and identification, coordination, consequentialism, and effectiveness of roles and responsibilities on the path of human resource development based on good governance led to sociocultural, individual and educational development.

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Introduction

Given the evolution and position of human resource management in today's world, human resource management philosophy makes it completely clear that first, the necessary coordination must be made between the organization and its human resources to access joint organizational objectives, and second, achieving the organizational and workforce goals must be guaranteed (1). Human resources are the most important asset and competitive advantage of any organization, and human resource development is one of the most pivotal issues in human resource management area (2). Since the middle of last century, human resource management's paradigms have shifted, as follows: the development of workforce relations, employee management, human resource management and human resource development. In fact, human resource development involves different aspects of empowerment and delegation of employees in the organization. Today, this area has undergone fundamental changes and has mainly focused on self-actualization and demonstrating the potential talents of employees (3). In human resource development, learning and development are used to recognize, evaluate and contribute to the improvement of key competencies, which enable the person to finish their current and future job with personal planning through training (4).

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In other words, human resource development is related to the training of employees and other non-employed individuals provided by the organization, which depends on organizational goals (5).

Increase of knowledge and improvement of individual and organizational skills of employees are unavoidable in today's changing world. In fact, organizations that ignore the planning of employee skill and knowledge improvement will face difficulties (6). Today, the way of thinking and the thinking system of the person are considered with the development of education concept in addition to learning related skills and techniques, emphasizing the term "development" instead of "learning" (7). The evolution of human resource development paradigms includes structured learning, skill improvement training, human resource improvement education and skill management and career development (8). In management literature, the issue of good governance has been mentioned following fundamental changes in the attitude toward the management of general affairs. In general, good governance refers to the joint and defined role of three public, private and civil society sectors in community management (9). Good governance is reflected in adopting predictable and explicit policies of the government, transparent bureaucracy, transparent accountability of executive bodies to their activities, active participation of the people in social and political affairs, and equality of all before the law (10).

Today, most developing countries have used good governance as the only solution for economic development following being disappointed from implementing structurally modified policies such as privatization and deregulation. In fact, the importance of this issue increases every day (11). According to the World Bank and United Nations, the principles of good governance include responsiveness, participation, autonomy, legitimacy, competence, accountability and rule of law (12). In fact, good governance is one of the basic outstanding features for successful economic-social growth of a country. Governments often play a key role in health, education, capital market regulation, and macroeconomic stability (13). Given that most human community crisis include a wide range of choices to achieve health and education and have access to resources required for a standard life, good governance can eliminate the barriers to achieving these goals. In fact, improvement of the government's system increases life quality of people through poverty eradication, healthcare and education (14).

The relationship between good governance and development can be assessed from three perspectives; the first approach is democratic government, which focuses on legitimacy, accountability and human rights. The second approach deals with effective governance which is more related to management abilities than governance. The third approach is related to coordinated performance, which leads to actions and interactions between the government and other actors (15). Good governance is a concept that has emerged as the key to the development conundrum. Since one of the end goals of the government is to improve people's health and welfare, the investment of the government in the field of health has been recognized as one of its most important responsibilities. Therefore, deficiency and inadequacy in providing health services in each country is considered as one of the weaknesses of governments. Accordingly, it is crucial to evaluate the quality of work put in the field of health and treatment by governments (16). Studies conducted on good governance in the fields of higher education have mostly focused on theoretical issues related to higher education governance and have attempted to assess challenges, underlying factors and related outcomes. However, with regard to barriers to the success of academics, we must talk about the shape and scope of interactions among universities (17). When expressed in higher education system, good governance emphasizes laws and mechanisms through which multiple higher education stakeholders can affect the decisions made in this area (18).

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Over the past few years, studies have been conducted on the relationship between human resource development and good governance. In a study, Delgoashaei et al. (2008) designed a human resource development model for the health sector of Iran. Results revealed that in health sector of Iran, especially Ministry of Health, human resource development should be set as priority and supported by the head of the organization. In the proposed, model human resources had the most powerful effect (19). In a study entitled "The Effect of Education Related to Work and Job Displacement and Performance Evaluation and Job Achievement on Human Resource Development in Staff of Ilam University of Medical Sciences", Kazemi et al. (2015) realized that the application of appropriate education and assessment strategies could have significant impact on human resources performance and development (20). Sarem and Markazi Moghaddam (2015) analyzed success critical factors for human resource development at health sector and reported that the successful human resource development in the health sector required the establishment of an advanced and dynamic educational system, high-ranking managers' support of human resource development programs, correction of attitude toward human resources, correction of the country's macro-education system in training human resources needed in the health sector and establishment of human resource performance management system (21). Lopez et al. evaluated human resources as a determining factor of organizational learning. According to their results, optional recruitment, strategic training and employee participation in decision making had a positive effect on organizational learning. Therefore, it was suggested that employees' organizational learning be constantly assessed (22). In a study entitled "good governance", Grindle (2017) introduced good governance as a vague concept despite the research conducted in this area in the past two decades, which has stimulated thinking about the role of governance in the development process. The way good governance helps changing for the better is more important than its impact popularity. Researchers and experts, who are concerned with the role of government in development and support reforms, must focus on understanding ways to improve governance (23). Khalkhali et al. (2020) evaluated the conceptual framework for the realization of good governance in Iran's general education. According to their results, the realization of good governance in the public education system of the country was conceptualizing based on the six constructs of consequentialism, the effectiveness of roles and tasks, promotion of values, transparency, capacity building and responsiveness (24).

Pourhassan et al. (2020) provided a four-tier model for feasibility and effective deployment of good governance in higher education. The findings showed that managing the process of change in education and research based on environmental changes, having skilled staff, and removing barriers to access to education were the most important dimensions of good governance (25). Sadeghian et al. (2020) designed an empowerment model based on good governance: a qualitative approach. According to their results, human resource was a good indicator of the superiority of one organization over other organizations. In addition, equipping and preparing these resources to face change was of particular importance, and all organizations with any mission should allocate the most capital, time and program to nurture human beings at different dimensions (26). In a study entitled "investigating the causal relationship between human development and good governance; an application of the causality panel method", Kazemi et al. (2017) reported a bilateral causal relationship between good governance and human resource development in the long-term. Meanwhile, there was a unilateral relationship in the short-term from human resource development to good governance (27). Rudra (2011) conducted a research entitled "good governance and human development" to evaluate the

effect of good governance on human development in the past two decades using panel data analysis. According to the results, improving the indicators of good governance had direct effects on human development (28).

While different models have been used to formulate human resource development, they have not been compatible to the special condition of Iran, which made them unusable in this country. Almost all Iranian organizations lack an organized approach to their human resource systems. The lack of sufficient attention to this area by most organizations is considering human resources as an operational cost and not an important investment. Meanwhile, adopting a good strategy for human resource development, systems design, training, promotion and career development of employees, in the long run will lead to optimal and sustainable profits (29). Introducing the governance paradigm and experiencing the inefficiency of industrial sector's models in the health sector have turned experts' attention to the use of governance models in these systems (30). Despite the scattered implementation of some management models in some units of the health sector, including the implementation of the clinical governance model and accreditation model in hospitals and educational centers under the Ministry of Health and Medical Education and the establishment of human resource excellence model in some universities of medical sciences and comparing the above patterns with the pattern of good governance, it seems that the good governance model could be used to develop human resources in all health units. Meanwhile, the mentioned patterns are more specialized and applicable in specialized fields. Identifying and explaining such a pattern in the Ministry of Health and universities of medical sciences, which are among the most important and influential specialized organizations in the country's economy and development, can highlight the need for this research. Accordingly, the expertise, skills and development of human resources in the field of health and medical education make achieving the goals of national development and using the human resource development system necessary. Therefore, the main goal of the present study was to find a suitable human resource development model for universities of medical sciences of the country based on the good governance approach.

Materials and Methods

The present study was fundamental in terms of objective and a mixed qualitative research performed with two consecutive qualitative and quantitative methods. In the qualitative method, dimensions, components and indicators of the human resource development model based on good governance were identified and the research model was designed through conventional content analysis and based on library studies (evaluation of valid texts and references) and interviews with excerpts. In general, conventional content analysis is used when there are limited theories about the concept understudy in the literature. In this mode, researchers arrange for categories to arise from data (31). In the quantitative method, the Delphi method was used for screening the indexes, whereas confirmatory factor analysis and SWARA technique were exploited to validate the research model and prioritize the effective components and dimensions, respectively. In addition, data were collected using a questionnaire. In the qualitative section, the statistical population included 12 active executive and academic experts in the ministry of health and universities of medical sciences, selected by snowball and theoretical sampling method. The characteristics of these subjects are presented in Table 1. Following receiving consent from the subjects, interviews were made through in-person visits or phone calls. In the quantitative section, 162 experts related to human resource development in the ministry of health and universities of medical sciences were selected by stratified sampling using the Cochran formula.

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Table 1: Demographic characteristics (qualitative and quantitative part)

Demographic characteristics		Frequency (Qualitative part)	percent (Qualitative part)	Frequency (Quantitative part)	percent (Quantitative part)
Gender	Man	10	83%	110	68%
	woman	2	17%	52	32%
Age	Less than 35 years	2	16%	38	24%
	35 to 45 years	5	42%	68	42%
	More than 45 years	5	42%	56	34%
qualification	Bachelor	–	–	107	66%
	Masters	6	50%	51	31%
	P.H.D	6	50%	4	3%
Organizational position	University faculty	7	58%	–	–
	Manager	5	42%	21	13%
	expert	0	–	141	87%
Work Experience	5 to 15 years	5	42%	84	52%
	More than 15 years	7	58%	78	48%
Total		12	100%	162	100%

In the qualitative section, 12 semi-structured, in-depth interviews were made, each lasting for an average of 40 minutes. The interviews involved four open questions: 1) what are the effective intra-organizational factors affecting human resource development with the good governance approach in universities of medical sciences affiliated with the ministry of health? 2) what are the extra-organizational factors affecting human resource development with the good governance approach in universities of medical sciences affiliated with the ministry of health? 3) what strategies do you propose to develop human resources with a good governance approach in universities of medical sciences affiliated with the ministry of health? 4) what would be the outcomes of human resource development with the good governance approach go in universities of medical sciences affiliated with the ministry of health? In addition, a more general question was: is there any other area that needs attention? The Interviews continued until reaching data saturation. Following receiving consent from the interviewees, the interviews were recorded as audio files and were transcribed verbatim. Afterwards, data analysis was carried out by open coding (coding all concepts and assigning a class to each concept), axial coding (identifying a causal and logical relationship between classes and recognizing core classes), and selective coding (class integration and refinement). To ensure data reliability, we used strategies proposed by Strauss and Corbin, including adherence to methodology principles (theoretical sampling, theoretical saturation, continuous comparison and theory building), determining the goal of appropriate research, self-knowledge, continuous study and education, reflexivity (sensitivity, empathy, respect

and honesty of the researcher) and participation seeking (using the opinions of others and theoretical comparison) throughout the study (32).

In the open coding stage, initial codes were extracted and then 70 secondary codes were classified in six classes of 10 organizing themes during the axial coding stage. In the selective coding stage, the relationship between other classes was determined based on the opinions of experts following determining the core class. Moreover, the Fuzzy Delphi method with triangular fuzzy numbers and a seven-degree fuzzy range was used in two stages to screen and find the final indexes. In the first stage, 67 indexes extracted from the qualitative stage were evaluated by 12 experts. In the end, two indexes were integrated with the consensus of the experts, whereas 12 indexes were excluded and 6 indexes were added. In the second stage, the Fuzzy Delphi method continued for the remaining indexes. At this stage, six indexes were evaluated based on the viewpoints of 12 experts. No question was eliminated in the second round, which demonstrated the end of the Fuzzy process since the comparison of mean points of questions in the first and second stages showed a difference extremely below the threshold (0.2). In this study, credibility, transferability, confirmability, and dependability were evaluated using two criteria of Holstein coefficient or percentage of agreement observation and Scott's pi. In the qualitative section, the correlation between the view of experts was estimated at 0.957 using the Holstein coefficient at the level of initial code analysis, which was considerable. In addition, Scott's pi was estimated at 0.913. At the index analysis level, the Holstein coefficient and Scott's pi were calculated at 0.882 and 0.764, respectively, which were favorable. Furthermore, construct validity (factor load above 0.3 and t-statistic above 1.96) was used to assess the research tools' reliability and validity in the quantitative section. Moreover, convergent validity (mean extracted variance above 0.5) and composite reliability (CR) (above 0.7), and Cronbach's alpha calculation (above 0.7) were used in this regard. The values of all of the mentioned coefficients were above the standard level. It is notable that during the interviews, people were ensured of the confidentiality terms regarding their personal information (publication of data anonymously).

Results

Results obtained from 12 interviews are presented in Table 2.

According to which 60 indexes were classified into six main classes (organizing themes). Table 3 shows 10 basic themes identified and confirmed as model indexes, components, and dimensions.

Causative Conditions

Component 1) "responsiveness" is the main principle of good governance. It cannot be applied without transparency and the rule of law. In this regard, it is extremely crucial to focus on areas such as clarity of duties for organizational management and employees, the organization's responsiveness to its stakeholders, a clear organizational policy related to responsiveness to and respecting service users, different and effective relationships, accessibility of objectives, projects and financial contracts, and, in general, the organization's information and output, and adopting a clear approach to involve employees in decision-making and designing an effective system to realize the rights of organization's staff.

In this regard, one of the university teachers (code 4) stated: "the Ministry of Health and the universities of medical sciences should adopt a clear policy in order to respond to internal and external stakeholders and pay attention to the clear position of the organization's management and employees towards performing their duties."

Component 2) "transparency" means the free flow of information and simple access to information for all. In addition, transparency can be defined as awareness of community members of how to make and implement decisions. Regarding the component of transparency in good governance in medical

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universities, important issues include preparing a formal statement by the organization to explain the types of decisions made by executives and brokers to users as well as stakeholders of the organization, providing suitable information for managers along with strong analysis, transparency with full details, ensuring the provision of transparent information about technical and executive discussions in a timely manner, providing good counseling and information from different information resources of the organization along with the willingness to create the ability to understand the accuracy of information required in organizational management. In this respect, one of the human resources executive managers (code 7) expressed: "one of the most important characteristics of transparency in the organization is free to access of stakeholders to free flow of information and transparency in the decision-making of managers. The Ministry of Health and medical universities must adopt a clear approach in this regard.

Axial category

Component 1) "governance capacity building and development" are the foundation of human resource development, which is possible with education and learning. Regarding the capacity building component of good governance in medical universities, it is important to focus on issues such as identifying the necessary skills of appointed managers for their duties, the necessity of developing skills required for organization's decision-making process, formation of a committee to identify and recruit people required for achieving organizational goals, generation of situations that lead to more skill development and updating the knowledge of employees and managers, and identification of any educational or development need in this regard.

According to some of the managers and teachers (codes 2, 6, 8): "in order to build the capacity of good governance at the ministry of health to develop human resources, human resources must be empowered through developing the necessary skills related to managers and employees' decision-making and updating their knowledge, as well as carrying out an educational and developmental needs assessment and creating conditions for further increase the skills of people."

Context

Component 1) "attitude and identification" refer to measures taken by systems to maintain a common sense of uniqueness with a common culture. In this respect, attention must be paid to the organization's emphasis on employee socialization, visibility of organizational values for intra-organizational and extra-organizational people, organization's effort to transfer organizational values and concepts, a clear organizational succession planning, enhancing the individual identity of employees, the importance of the support of employees by the organization, logical behaviors and actions of organization's employees, staff's positive attitude toward organizational changes and the existence of deep attitudes of employees. One of the teachers of human resources (code 3) marked: "identification of human resources and creating a sense of organizational planning are possible through specific and continuous planning in line with improving organizational values and creating a positive attitude toward them."

Intervening conditions

Component 1) "coordination" mostly refers to mechanisms that cause a connection among the system's components. In terms of these components in medical universities, it is necessary to focus on issues such as the presence of a guaranteed and significant relationship between different organizational sectors, the active presence of employees in the organization's learning and functional activities, creation and expansion of work activities in the learning network to realize continuous learning, providing the necessary facilities for presenting multiple types of education for developing the staff in line with performing duties out of the scope of their job responsibilities, holding unity of procedure meetings to establish human resource coordination,

designing and implementing team working shops and activities to coordinate the staff, and accelerating and developing communication channels in the organization. According to one of the development vice-chancellors of the university (code 10): "in order to coordinate human resources in the Ministry of Health, it is very important to design and implement team activities and workshops, and to develop communication channels in the organization and to establish a unified procedure."

Strategies

Component 1) "consequentialism" is a component of good governance. In this regard, it is necessary to heed attention to issues such as presenting a clear statement about the organizational goals by the organization's management, accurate assessment of service quality, effective review of service quality with the approach of having the required information, the ability to provide opinions and suggestions by users and non-users regarding service quality, and using the information obtained in planning and decision-making processes.

Component 2) "effectiveness of roles and tasks" in the good governance of medical sciences requires attention to the transparency of the organization for all members who are involved in the decision-making process, equal conditions in decision-making, presentation of a clear statement of the roles and responsibilities related to executive and non-executive managers, division of the roles of the head and executive managers from each other, application of organizational decisions in line with organizational objectives while taking group interests and stakeholder organizations into account, effective use of the opinions of people and service users, proper implementation of organizational strategies and increase of organization's knowledge of the level of changes that could guarantee organizational success.

Consequences

Component 1) "individual development" means increasing self-knowledge, increasing reasoning and expanding one's worldview vision in the workplace. In regard, to establish individual development of human resources in medical universities, it is important to focus on employees' level of experience that matches their field of work, employees' talent and skill in delivering the job, employees' sufficient mastery in skills required for the job, employees' confidence in their ability to successfully perform the tasks, the existence of talents required to do the work, the existence of mental power and basic knowledge about the job, achieving goals considered for employees by a person and the organization, the ability to find new methods to achieve individual and organizational objectives, creation of the ability to learn independently and practicing the method that is mentally considered by employees. According to some of the experts (codes 5, 8, 11): "individual development can be one of the important outcomes of the implementation of good governance indices in the field of human resources. However, this requires attention to occupational and non-occupational mental and practical skills and abilities of employees in line with achieving individual and organizational goals."

Component 2) "educational development" means a person's growth in various educational fields by using different and continuous educational methods. Regarding the educational development of human resources in medical universities, it is crucial to pay attention to issues such as designing in-service training based on specialized and professional needs of employees, designing in-service training based on employees' interests, designing educational courses that fit the occupational knowledge of employees, holding in-service training courses for employees continuously, holding continuous education courses for employees, using different learning methods to train employees, using different facilities to hold educational courses and employing experts and teachers of the field of human resources. According to one of the human resource educators (code 9): "given the special field of work in the ministry of health and medical universities, education development can be

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provided by laying the foundation for the suitable facility supply for the education of managers and staff, using various educational methods, using continuous training courses, and applying accessible educational technologies."

Component 3) "sociocultural development" means a person's growth in cultural and teamwork areas. In this regard, the most important factors that must be considered are encouraging employees to join in specialized associations, encouraging employees to do social activities, form teams and perform group work, encouraging teamwork among employees and persuading them to work with each other in different sectors, and paying attention to organizational culture and its development. According to one of the experts (code 5): "paying attention to the group and cultural work in universities and persuading employees to perform collective activities and encouraging teamwork in the organization, will lead to socio-cultural development." Following the development of consensus among experts and review of literature, the identified variables were presented in the form of the final model in Figure 1:

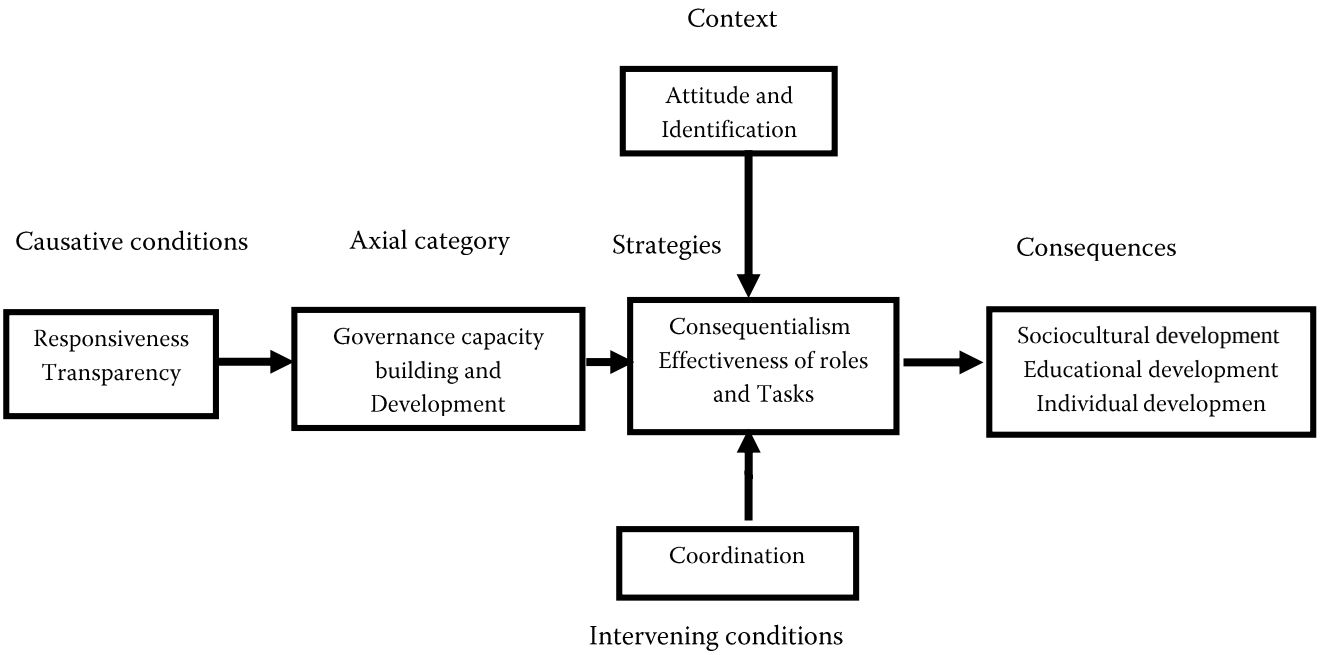

Figure 1: Human resource development model based on good governance

Based on the results of construct validity, the observed load factor in all cases was greater than 0.4, which showed a significantly suitable correlation between the visible and hidden variables. According to the measurement results, the bootstrap value (t-statistic) of all cases was greater than the critical value of 1.96, which demonstrated a significant correlation between visible and invisible variables. Therefore, it could be concluded that all constructs were assessed accurately. In terms of convergent validity assessment, Fornell and Larcker (1981) believe that a model will have convergent validity if the value of AVE is above 0.5. As shown in Table 4, the mean AVE was greater than 0.5, which confirmed the convergent validity of the model.

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Table 2: Components and indicators of human resource development based on good governance

Axial coding (concept codes)	Open coding (secondary code)
Responsiveness	Defining the position of the organization's management and employees towards performing their duties
	Accountability of the organization to its stakeholders
	Clear policy of the organization in order to respond to service users and honor the client
	Different and effective communication
	Availability of goals, plans, financial contracts and general information and outputs of the organization
	Clearly approach to involve employees in decision-making
	Designing an effective system for realizing the rights of the organization's employees
Transparency	Prepare an official statement by the organization to explain the types of decisions made by the CEO and brokers, for users as well as stakeholders of the organization
	Provide appropriate information for managers with robust, transparent and thorough analytics
	Ensure that transparent information on technical and executive issues is provided in a timely manner
	Providing good information and advice from various information sources of the organization along with desire
	Creating the ability in the manager of the organization to determine the accuracy of the information she needs
Attitude and Identification	Organizational emphasis on employee socialization
	Visibility of organizational values for people inside and outside the organization
	Organizational efforts to convey organizational concepts and values
	Specific organizational program for succession
	Strengthen the individual identity of employees
	The importance of presence in the organization for employees
	Rational actions and behavior of the organization's employees
	Positive attitude of employees to organizational changes
	Existence of deep and principled attitudes of employees
Axialcoding(conceptcodes)	**Open coding (secondary code)**
Coordination	Existence of meaningful and guaranteed connection between different parts of the organization
	Active participation of employees in the learning and functional activities of the organization
	Establishment and development of learning network work activities in order to achieve continuous learning
	Providing the necessary facilities to provide multiple trainings for the development of individuals in order to perform tasks outside their limited job area
	Holding meetings on unity of procedure for coordination of human resources
	Design and implementation of team activities and workshops to coordinate employees
	Accelerate and develop communication channels in the organization

Continue of Table 2: Components and indicators of human resource development based on good governance

Axial coding (concept codes)	Open coding (secondary code)
Governance capacity building and Development	Recognize the necessary skills of appointed managers for their duties
	Requirement to develop the necessary decision-making skills by the organization
	Forming a committee to identify and attract people needed to achieve organizational goals
	Creatingopportunities todevelopmore skills and update the knowledge of employees and managers
	Identify any training and development needs
Consequentialism	Provide a clear statement of the organization's intentions by the organization's management
	Accurate assessment of service quality
	Effective and regular review of service quality with the approach of having information
	Existence of conditions in order to provide comments and suggestions of users and non-users regarding the quality of services
	Benefit from the information obtained regarding the quality of services in the planning and decision-making processes
Socio-cultural development	Encourage employees to participate in specialized associations
	Encourage employees to social activities, form teams and working groups
	Encourage teamwork among employees and pay attention to organizational culture
	Encourage employees to work together in different areas of work
Effectiveness of roles and Tasks	Transparency of the organization for all members influencing decision-making and having equal conditions in decisions
	Provide a clear statement of the roles and responsibilities of executive and non-executive directors
	Separating the roles of the chairman and the executive director from each other
	Making organizational decisions for the goals and objectives of the organization, taking into account the interests of the group and stakeholders
	Effective use of the point of view of people and users of services
	Correct execution of organizational strategies
	Awareness of the organization about the amount of changes to ensure success
Educational development	Designing in-service training based on the professional and specialized needs of employees
	Design in-service training based on the interests and tastes of employees
	Appropriateness of the trainings held in line with the professional knowledge of the employees
	Continuous in-service training of employees
	Holding continuous training for employees
	Apply various training methods to staff learning
	Use of various facilities and equipment in holding training courses
	Benefit from professors and experts in the field of human resources
Individual development	Employees have relevant work experience
	Employees have the talent and skills in the field of assigned job
	Adequate mastery of employees in the skills required for the job
	Reassure employees of their capabilities to do things successfully
	Having the necessary skills to do the job
	Existence of mental strength and capability and knowledge and basic information in the job
	Achieving the goals that the individual and the organization have set for the employees.
	Ability to find different ways to achieve individual and organizational goals
	Creating the ability to learn independently
	The ability to follow and practice the way employees think mentally

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Table 3: Forming the main classes

Classes (theme)	subtheme(Categories)
Causative conditions	Responsiveness transparency
Context	Attitude and identification
Intervening conditions	coordination
Axial category	Governance capacity building and Development
Strategies	Consequentialism Effectiveness of roles and tasks
Consequences	Socio-cultural development Educational development Individual development

Table 4: Convergent validity

Main Categories	symbol	AVE
Attitude and Identification	C01	0.709
Coordination	C02	0.829
Socio-cultural development	C03	0.751
Educational development	C04	0.630
Consequentialism	C05	0.563
Effectiveness of roles and Tasks	C06	0.516
Responsiveness	C07	0.793
Governance capacity building and Development	C08	0.778
Individual developmen	C09	0.548
Transparency	C10	0.777

In addition, CR and Cronbach's alpha were used to assess the reliability of research indices. The results of the reliability study of the research tool can be seen in Table 5.

Table 5: Reliability of the main categories

Main Categories	CR	Cronbach's alpha
Attitude and Identification	0.880	0.794
Coordination	0.936	0.897
Socio-cultural development	0.900	0.834
Educational development	0.835	0.706
Consequentialism	0.865	0.806
Effectiveness of roles and Tasks	0.761	0.743
Responsiveness	0.920	0.870
Governance capacity building and Development	0.949	0.863
Individual developmen	0.857	0.796
Transparency	0.874	0.712

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In this regard, reliability was approved at a Cronbach's alpha of >0.7 for all variables. Moreover, CR was larger than AVE and greater than 0.7 for all cases, which also confirmed reliability in this regard.

Using the SWARA technique, 60 indices were classified into 10 dimensions or main criteria- i.e., organizing themes. First, the desired criteria were written in order based on the level of importance. Afterwards, the most important criteria were in the higher categories and the less important criteria were in the lower categories. The prioritization results are shown in Table 6.

Table 6: Prioritization of organizing themes

X	Wj	Crisp
Attitude and Identification	(0.188,0.267,0.367)	0.274
Coordination	(0.123,0.207,0.319)	0.216
Socio-cultural development	(0.078,0.155,0.273)	0.169
Educational development	(0.049,0.115,0.233)	0.132
Consequentialism	(0.03,0.083,0.194)	0.103
Effectiveness of roles and Tasks	(0.018,0.059,0.159)	0.079
Responsiveness	(0.011,0.04,0.124)	0.059
Governance capacity building and Development	(0.007,0.031,0.108)	0.049
Individual development	(0.005,0.024,0.094)	0.041
Transparency	(0.003,0.018,0.081)	0.034

Therefore, the main criteria determined in the prioritization process were respectively attitude and identification, coordination, sociocultural development, educational development and consequentialism.

Discussion

In the present research, factors affecting the human resource development model based on good governance were classified into six categories of "causal conditions", "axial phenomenon", "underlying factors", "confounding factors", "strategies" and "outcomes". The foregoing criteria had the dimensions of "responsiveness and transparency", "governance development and capacity building", "attitude and identification", "coordination", "consequentialism and effectiveness of roles and responsibilities" and "sociocultural development, individual development and educational development", respectively. Ultimately, the quantitative section determined that the main criteria of attitude and identification, coordination, sociocultural development, educational development and consequentialism had the highest priority, respectively. Each category and its dimensions are discussed in the following section. In the end, some suggestions are made for determining the model of human resource development based on good governance.

In a study, Delgoashaei et al. (19) indicated that in the health sector of Iran, especially the Ministry of Health, human resource development should be set as a priority and supported by the head of the organization. In the proposed model, the human resources component had the highest effect. In this regard, our findings are in line with the results obtained by Sadeghian et al. (26), who referred to the effectiveness of human resources, regarding

responsiveness, transparency and individual development. According to Sarem and Markazi Moghaddam (21), the country needs to establish an advanced and dynamic education system, support senior managers of human resource development programs, improve attitudes towards human resources, and reform the country's education system in training the required manpower to achieve success in human resource development. In another study by Kazemi et al. (20) entitled "The Effect of Education Related to Work and Job Displacement and Performance Evaluation and Job Achievement on Human Resource Development", a great emphasis was made on the use of appropriate staff learning strategies, which could have a significant impact on human resource development and performance in the university and affiliated units, which is consistent with our findings regarding the main categories of attitude and identification and sociocultural development. In a study, Pourhassan et al. (25) presented a model to establish the effect of good governance on higher education, reporting that having specialized human resources and eliminating barriers to access to education had the highest priority as the dimensions of good governance, which is congruent with our findings (governance development and capacity building). According to Rudra et al. (28), improvement of good governance indices had a direct effect on human resources, which is in accordance with our findings (transparency and responsiveness). Moreover, Khalkhali (24) demonstrated that good governance could be realized in the general education system of the country by focusing on six constructs of consequentialism, the effectiveness of roles and responsibilities, improving values, transparency, capacity building and responsiveness, which is in line with our findings (consequentialism, effectiveness of roles and responsibilities, transparency, responsiveness and capacity building).

In a study by Kazemi (27), the results were indicative of a bilateral causal relationship between good governance and human development in the long term. However, the relationship was unilateral in the short term and from human development to good governance. The results of the foregoing study are consistent with our findings regarding the factors of coordination and governance development and capacity building. According to Lopez (22), elective recruitment, strategic training and employee participation in decision making had a positive impact on organizational learning that should be continuously evaluated in employees' organizational learning. Grindle (23) evaluated the effect of good governance on the improvement of conditions and the development trend. The results of the mentioned study are congruent with our findings in terms of governance development and capacity building and educational development. However, the difference and innovation of the present research were assessing the role of good governance in the development of human resources by dividing conditional factors, strategies and consequences.

Conclusion

According to the results of the present study, the most important factors for designing a human resource development model in universities of medical sciences included providing staff-specialized services in areas related to human resource development to the staff units of universities of medical sciences by using the most appropriate approaches, models, methods and tools of human resource management and planning. With regard to limited human resources for sustainable development, quality of work-life, justice, effectiveness, efficiency, responsibility, observance of rules and regulations are important in line with the support of health activities, as well as medical education and research. As mentioned, good governance is a novel narration of concepts such as democracy, responsiveness, participation, and rule of law. It provides a framework that accumulates all values and goals in one place and follows human development such as economic, political, social and cultural development with a focus

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on people by creating maximum convergence and alignment. In other words, good governance narrates human-centered development.

The human resource development model based on good governance encompassed 10 factors divided into six categories of causal conditions (responsiveness and transparency), axial phenomenon (governance development and capacity building), underlying factors (attitude and identification), confounding factors (coordination), strategies (consequentialism, effectiveness of roles and responsibilities), and outcomes (sociocultural development, individual development and educational development). The relationship among the mentioned factors was mentioned in a model. Responsiveness, transparency, attitude and identification, coordination, consequentialism, and effectiveness of roles and responsibilities on the path of human resource development based on good governance led to sociocultural, individual and educational development. It is notable that the human development components are part of human capital that have long-term effects, similar to that of education. Accordingly, good governance will not have significant impacts in short term. The impact of these components on human development increases over time. Therefore, the outcomes of using a human resource development model based on good governance in universities of medical sciences affiliated with the ministry of health were sociocultural, individual, and, specifically, educational development. Regarding human resource development in universities of medical sciences, it is worth mentioning that human resource improvement does not occur by only using technical and specialized training. In fact, staff development must happen through different methods, which is not possible without adopting a certain approach and accurately managing the field of specialized human resource supply and development by designing novel structures.

According to the previous studies in the field, our findings could be included as an organizational requirement and be reviewed based on environmental conditions and infrastructure. Senior managers of the Ministry of Health and heads of medical universities can avoid sectoral measures by strategic and operational planning and organizing scattered activities related to the subject. In addition, they can provide a platform for human resource development based on good governance with an integrated approach. It is suggested that structural, legal, cultural and psychological barriers to good governance in universities of medical sciences be assessed. Moreover, it is recommended that the scope of the research be expanded to larger communities and data mining be used to extract rules of interdependence between rank data along with the use of analytical approaches.

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