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The Role of Scientific Authority in the Development Process of the Country: A Systematic Review of Domestic Studies

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Abstract

Background & Objective: Scientific authority which means others' continuous referral to an individual or organization and being recognized as a theory-maker, leads to develop a society socially, economically and scientifically. The goal of this study was to explain the role of scientific authority in the development process of the country based on the conducted studies.

Materials and Methods: This study was conducted using the Cochran systematic review on articles from 2001 to 2019. Key words including scientific authority, country development, scientific trying and scientific power were searched in GOOGLE SCHOLAR and Iranian databases such as SID and IRANDOC. In addition, manual research was done. After reviewing the title or abstract of the articles, 343 articles entered the preliminary list, of which 44 qualified articles were required to enter the final evaluation

Results: The most important extracted concepts related to scientific authority included scientific dynamics, civilization, and localization of science, self-belief culture development, systematic reinforcement of interdisciplinary sciences, wealth-making and competition for development.

Conclusion: Scientific authority has an effective role in promoting the country's competitiveness compared to the countries of Iran's 1404 vision document. Therefore, in order to achieve scientific development and authority, it is necessary to conduct strategic planning of scientific research in the country with the aim of identifying capacities and directing research to achieve the goals of the 1404 vision document.

Introduction

Scientific authority activates a specific semantic network in the mind of each person and a scientific organization's ability to achieve scientific authority depends on the degree of overlap of the mental images of its members (1). Scientific development and growth are extremely crucial indexes for each developed or developing country. This issue is so important that cultural domination in each country is realized by economic authority, which is generated from scientific authority. In addition, Islam has made many suggestions about teaching, education, and scientific living, and considers science education as the factor for strengthening the religious foundations and a protector of religion, which prevents errors by scientific individuals. On the other hand, learning science is extremely important and the best solution for preserving the identity, existence, Islam, and independence of the country while guaranteeing a favorable future. In addition, it is the driving force of progress in all areas (2, 3). Sustainable development is a concept recognized as a model for comprehensive enhancement and one of the elements for information development. In this regard, medical universities should create a high development capacity by producing knowledge and providing, organizing, and disseminating information (4, 5).

Today, universities play a key role in the comprehensive scientific, cultural, political, social, and economic development of the country since it is the cradle of social renewal as a scientific and cultural research center, where new ideas, knowledge,

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evolving technology, and creative and dynamic culture appear and grow (6). On the other hand, the medical education system is responsible for training and providing efficient manpower in order to meet the needs of the community and the world in the field of health. Therefore, its goals are set to be achieved to improve the quantity and quality of health services and the country's access to scientific authority at the national and regional levels (7, 8). Overall, it seems that education has successfully improved society, and the development of medical plans should be targeted and organized (9).

From another perspective, scientific advancement can lead to achieving excellent ideals, real values, and human virtues, through which a nation can be effective in the modern world or play a useful role in scientific exchanges. Therefore, science centeredness and its education will cause dignity, a source of life, and freshness of society in addition to establishing independence and denying the domination of those in power and wealth (10). However, more scientific development requires more equipment, encouraging the community, increasing scientific interaction, and supporting scientific associations (11). As a thoughtful institution, the university is responsible for achieving the national development ideals, which necessitates dynamized pillars in the university in compliance with development plans (12, 13). Today, it is completely evident that the dynamism of the scientific system is the driving force of a society and a nation and a factor for achieving dignity and advancement. The dynamism of the scientific system leads to the dynamism and growth of other systems in a country, including the economic, political, and cultural systems. In addition, the dynamism of systems in an interactive network with each other will bring society and government to the point of regional and international authority, power, and dignity (14, 15).

In Iran, authority in science means the global reference to scientific resources produced by Iranian scientists and experts and their identification as the creators of scientific theories and styles. Scientific authority was first expressed by the Supreme Leader of Iran in a meeting with the students and professors of Imam Sadegh University on Eid Ghadir in 2005. While it is first assumed that everyone has a unified concept of the term “scientific authority” in mind, everyone understands an aspect or part of it and acts based on this understanding in case of a desire to take action. The Supreme Leader expects educational centers and universities to focus on science. In general, universities of a country are its scientific foundation. Therefore, they should keep their scientific relations with the world and turn to scientific exchanges. Universities must make the necessary planning and provide the required facilities for researchers. The Supreme Leader has proposed that efforts be made by professors to make scientific advancements in the country. In this regard, the first step is to maintain our scientific courage in all fields (e.g., humanities, experimental sciences, technology, and basic sciences), where priority should be given to basic sciences. Afterwards, theories should be proposed and production, invention, and innovation should be put on the agenda (16, 17) since all people should make efforts in order to acquire knowledge so that we could have an independent country and a community that does not depend on colonizers (18).

Over the past few decades, the significant scientific developments of the country at various levels are no secret. In fact, advancement at general levels, where we are only at the novice level, has been extraordinary and we can even compete with the best scientific centers of the world in this field. However, since humankind is not satisfied with acquiring new sciences and knowledge, he should recognize his weaknesses and pave the scientific path of the country toward the scientific pole of the world in the form of scientific authority by relying on and resolving these weaknesses (19). Achieving the main goals of improving Iran’s position to an advanced country that has advanced knowledge and is capable of producing science and technology by relying on a

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superior share of human resources to achieve the first economic, scientific and technological position in the region of Southwest Asia is the responsibility various parts of the system, especially the scientific and technological units, based on the 20-year vision document. The authority of science and technology in Iran in the next fifty years is not an ideal and dream theme but the illustration of a reality that must happen based on the country's documents and vision and with the efforts of the country's scientists (20, 21). With this background in mind, the present study aimed to determine the role of scientific authority in the development process by conducting a systematic review of articles published in the country.

Materials and Methods

This systematic review was performed to evaluate the role of scientific authority in the development process of the country by assessing the studies published in this field. The researchers applied the Cochrane Database of Systematic Reviews in the present research. Given the study's objective, the area of assessment included the studies published in the country that focused on the role of scientific authority in the development process. The inclusion criteria were, as follows:

1. Type of studies: studies published in scientific research journals were selected and all studies and articles presented in conferences and seminars were reviewed.

2. Date of publication: studies published during 2001-2019 were assessed.

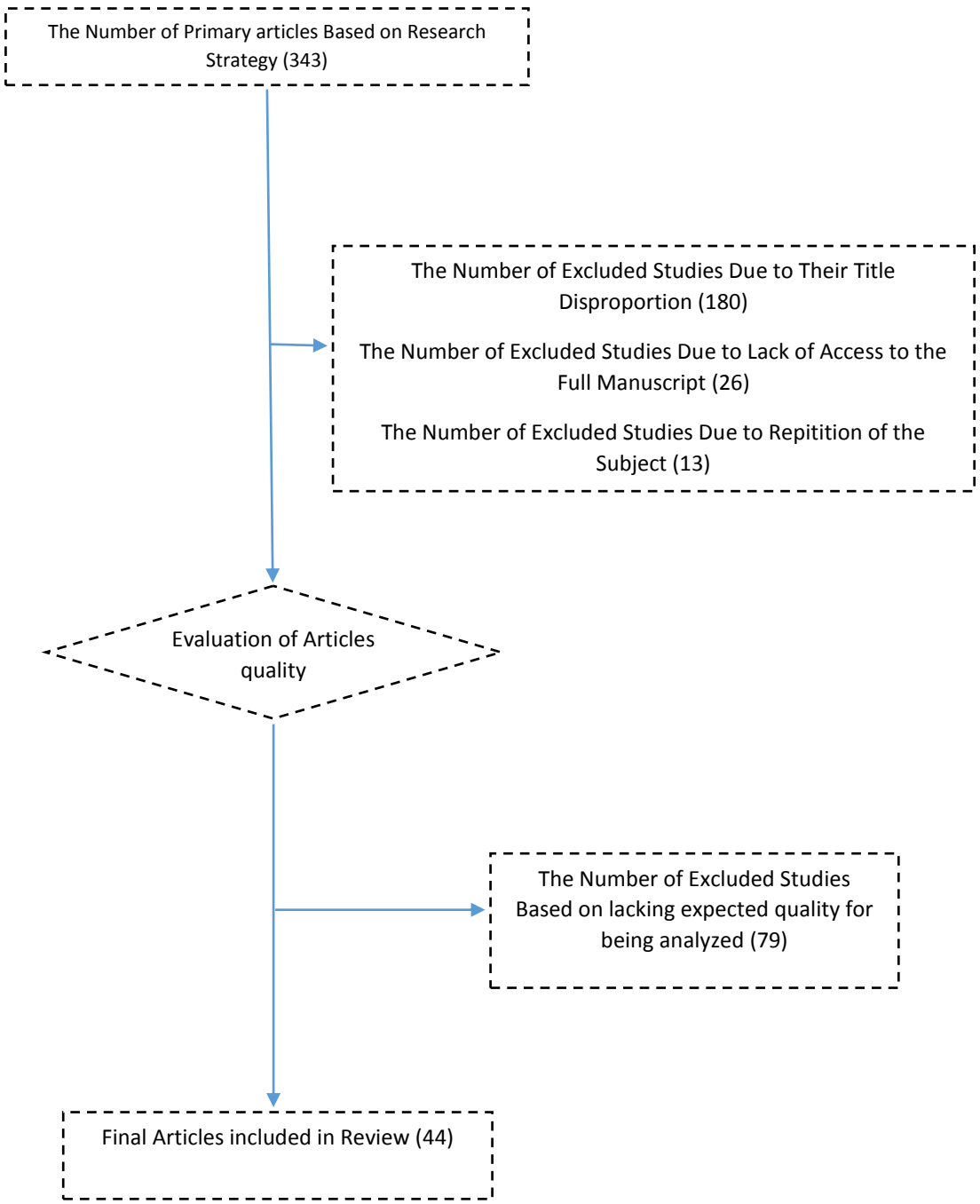
3. Language: the researchers only assessed Farsi articles to understand the concept of scientific authority and its dimensions in the country.

In order to find the most related article, a search was conducted using electronic databases and reviewing related study sources. First, the researchers used Google Scholar to increase the search domain in order to evaluate the electronic databases to find studies conducted in Iran. Afterwards, a more advanced search was carried out using two websites of http://www.sid.ir/fa and http://www.irandoc.ac.ir. After determining a list of proper keywords and related and available databases, the list was sent to some professors and specialists of the field, and their opinions were received in-person or via email to ensure the accuracy and comprehensiveness of the list. The keywords used in the Farsi reference section included scientific authority, development of the country, scientific ijtihad, scientific dignity, scientific autonomy, and scientific leadership. The related articles were assessed after the electronic search of studies published during 2001-2019. The researchers applied Endnote software version 8 to facilitate the management of retrieved references. In the next stage, the list of related articles was evaluated, which led to detecting studies that could not be retrieved from electronic resources. Therefore, the full text of studies was obtained from their authors through emails. In addition, a manual search of articles was carried out after recognizing the main journals. Moreover, some published and unpublished studies were retrieved in-person or via email after collecting studies and identifying relevant experts.

The articles were selected in two stages; the first stage included the assessment of the articles' abstracts, and the second stage involved assessing the main articles based on inclusion criteria. At this stage, studies that failed to meet the inclusion criteria were excluded. The quality of studies was assessed based on the standard checklist of the Critical Appraisal Skills Program (CASP) based on a score of 20, and studies obtained a score above 14 were entered into the study. At this stage, the published studies were evaluated by two individuals separately, and those that met the inclusion criteria and had the most relevance with research objectives were entered. Data details of selected studies were extracted in order to achieve the goal. Accordingly, attention was paid to findings, date of publication, setting, samples, sampling method, statistical tests,

data collection methods, results, and discussion of studies, and data was extracted by two researchers.

The method of narrative analysis (storytelling) was used to analyze the data due to the heterogeneity of the studies and the impossibility of meta-analysis. In total, 343 articles were entered into the primary list after assessing their title or abstract, 44 of which met the inclusion criteria and were re-evaluated for the last time. With regard to research objectives in assessing texts and the inclusion criteria, 44 studies were evaluated to determine the role of scientific authority in the development process of the country.



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Results

In this study, a systematic review was conducted on 44 articles following implementing a search strategy and based on the inclusion and exclusion criteria. Afterwards, data related to the role of scientific authority in the process of developing medical education in the country were extracted (Table 1). The indexes of scientific and technological authority and scientific authority and security can be considered for the science and power components, respectively. Knowledge and knowledge formations are the main axis of development and advancement in the world and a competitive advantage for organizations and communities. Given the outstanding background and abundant capacities in Iran, drawing a roadmap and explaining Iran's scientific goals and aspirations has become the world's scientific and technological reference. All studies were assessed after evaluating the articles using a data collection form, followed by extracting the role of scientific authority in the process of medical education development in the country. The extracted factors in this field are classified and presented in the following axes (Table 2).

Table 1: The characteristics of the Studies Reviewed in the Final Analysis of Systematic Review

Code	The Title of Study	Authors	Type	Year of Publication	Quality evaluation	
					Score	Level
1	Futures driven model of scientific excellency, case study: Gilan University of Medical Sciences	Mohammad Hosseini Moghaddam	Paper	2019	17	Good
2	Identifying dimensions of university autonomy in pursuit of transformation and innovation policies in medical sciences education	Mitra Shabani, Kiumars Niaz Azari, Taraneh Enayati	Paper	2019	18	Good
3	Eight steps in the development of virtual education in educational innovation plan in medical sciences universitie, A review of an experience	Zahra Karimian, Majid Reza Farokhi	Paper	2018	18	Good
4	Extraction and prioritization of strategies achieved by the scientific authority of the Islamic Republic of Iran by the method of performance-importance analysis (IPA)	Meysam Latifi, Reza Tahmasebi Bolokabad, Mojtaba Javadi, Mohamad Hasan Mirzaei Havoshki	Paper	2018	17	Good
5	Developing plan of action and strategic map for nursing sciences development: An experience	AliReza Irajpour, Parvaneh Khorasani	Paper	2017	18	Good
6	Innovative medical education reform at the Isfahan University of Medical Sciences: Readout experience	Fariba Jokar, Ahmad Movahedian Atar, Nikoo Yamani	Paper	2017	17	Good
7	Participation of Scientific Medical Universities in Territorial Agenda and Achievement of Scientific Authority in Health	Mehrdad Mostaghasi, Mahmood Nori Shadkam, Saedeh Haji Hosseini, Reza Behnamfar	Paper	2016	16	Average
8	The Model of Strategic Competencies of the Managers of Universities and Higher Education Institutions from the Perspective of Imam Khomeini and the Supreme Leader, the bedrock of scientific management in the country	Siyamak Vahdati Nia, Mohamad Hoseinpoor	Congress	2016	18	Good
9	A quick look at the country's higher education system and some of its challenges	Monirsadat Hejrati	Congress	2016	17	Good

Continue of Table 1: The characteristics of the Studies Reviewed in the Final Analysis of Systematic Review

10	Illustrating the Relation of Power, Scientific Authority and Technology of the Islamic Republic of Iran in the World with Power and National Security Based on the Principles of the Islamic Republic	Farhad Rahbar, Hasan Hossein Zadeh	Paper	2016	17	Good
11	Production of science and scientific authority, quality or quantity	Reza Dehnavieh, Noora Rafiee	Paper	2016	17	Good
12	Designing and explaining the model of scientific authority in higher education of Iran based on the biography of the country's thinkers with a thematic analysis approach	Mohamad Taban, Ali Yasini, Ardashir Shiri, Esfandyar Mohammadi	Paper	2016	17	Good
13	Measures and strategies of the Supreme Leader in the field of gaining international scientific authority	Fereydoon Abdi	Congres s	2015	15	Average
14	Determining the Relation between Islamic Republic of Iran's Scientific and Technological Authority and Power in The World and its National Security and Power Based on the Foundations of Islamic Revolution	Farhad Rahbar, Hasan Husseinzade	Paper	2015	18	Good
15	Analysis of scientific prospects of the country	Ali Saberi	Paper	2015	16	Average
16	Reflection on the nature of the research functions in the process of scientific development and scientific authority	Abasalat Khorasani, Kourosh Fathi Vajargah, Reza Ghanbari	Confere nce	2015	16	Average
17	Pathology of scientific vitality and dynamism in scientific and academic centers: A study according to " Phenomenology"	Zeinab Mohammadzadeh, Keyvan Salehi	Paper	2015	17	Good
18	Pattern of scientific authority in the Islamic Republic of Iran based on statements by the Supreme Leader	Mohamad Abdolhosseinzadeh, Seyed Mehdi Mortazavi, Mohamad Gholam, Somayeh Norouzi, Mojtaba Javadi, Saeed Nani	Confere nce	2015	17	Good
19	Study the role of information and communication technology in medical education	Fatemeh Sepaseh, Khatereh Khanjankhani, Fatemeh Jabinian Sardehi	Confere nce	2014	16	Average
20	The role of e-universities in the sustainable development of medical education; A library study	Nafiseh Rezaei, Mohamad Reza Amiri, Hosein Vakili Monfared	Paper	2014	15	Average
21	Iran's progress in science production over the last ten years(2002-2012)	Mohamad Amin Erfan Manesh, Tahereh Bashiri	Paper	2014	18	Good
22	Spatial planning as the requisite of purposeful development of medical education in the Islamic Republic of Iran	Shima Tabatabai Sh, Seyed Mohsen Ziaee	Confere nce	2014	16	Average
23	Educational justice and its impact on development	Banafsheh Esmaeilzadeh, Azadeh Azemian, Atekeh Torkzadeh	Confere nce	2014	16	Average
24	The role of academic libraries in the sustainable development of medical education: A library study	Nafiseh Rezaei, Mohamad Reza Amiri, Hosein Vakili Monfared	Paper	2014	15	Average

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Continue of Table 1: The characteristics of the Studies Reviewed in the Final Analysis of Systematic Review

25	Evaluating the performance of medical science study and development centers based on educational ranking results (Rad)	Farangis Shoghi Shafagh Aria, Nader Momtazmanesh, Ali Akbar Haghdoost	Paper	2014	17	Good
26	A study of the country's scientific management from the perspective of the Supreme Leader	Fereydoon Abdi	Congress	2014	17	Good
27	Qualitative development of the medical sciences education process by explaining educational justice in the clinical field from the students' perspective	Saghi Moosavi, Saghar Fatemi, Afshin Shafaghi	Conference	2014	16	Average
28	Investigate and identify the factors in the process of "university development" in Iranian public universities	Isa Samari, Mohamad Yamani Douzi Sorkhabi, Ebrahim Salehi Omran I, Gholam Reza Graeinejad	Paper	2014	17	Good
29	Scientific progress as infrastructure of independence and prosperity of the country	Vahid Khayat Sarkar, Zahra Khayat Sarkar , Fatemeh Khayat Sarkar	Paper	2013	15	Average
30	Scientific progress as the foundation of the country's independence and prosperity	Mohamad Reza Jamali, Moharam Jamali	Conference	2013	15	Average
31	Restoring scientific authority in Iran: The perspective of postgraduate students in Golestan University of Medical Sciences	Mitra Hekmatafshar M, Soheila Kalantari S, Akram Sanagu A, Leila Hasti Jouibari	Paper	2013	18	Good
32	Conceptualization of scientific authority in higher education system	Seyed Reza Javadein, Tahmoores Hasangholipoor, Farajolah Rahnavard, Mohamad Taab	Paper	2012	17	Good
33	Analyzing the disparity between science policies and the regional planning of higher education in iran	Mohamad Reza Ahanchian	Paper	2012	18	Good
34	Interpretation of Scientific Authority for Educational Institutions by Applying Grounded Theory	Gholam Reza Goodarzi, Komeil Roudi	Paper	2012	18	Good
35	Explain human resource development model for achieving scientific authority in Iran's higher education	Mohamad Taab	Dissertation	2012	15	Average
36	Content analysis of overwrite documents to extract macro policies in achieving scientific authority in the field of country education	Sakineh Sharifian, Batool Amini, Roghayeh Gandomkar	Conference	2011	15	Average
37	Passing on the cultural context of the realization of scientific authority in the world	Irandokht Fayyaz, Zahra Afshar Kohan	Conference	2011	16	Average
38	The role and place of the educational system in the process of scientific authority of the country	Irandokht Fayyaz	Conference	2011	15	Average
39	The mission of teaching on the acquisition of scientific authority	Rasool Pourreza	Conference	2011	16	Average

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Continue of Table 1: The characteristics of the Studies Reviewed in the Final Analysis of Systematic Review

40	Evaluation of factors to achieve the scientific reference from the view point of the faculty of Tabriz University of Medical Sciences	Habibolah Qomi, Alireza Zadegan, Vali Alizadeh, Mohamad Taghi Khodayari, Mohamad Ali Hemmati	Paper	2011	17	Good
41	Designing the conceptual model of the Islamic Republic of Iran's scientific System on the basis of the Supreme Leader's instructions	Hadi Khanmohammadi, Mesbaholhoda Bagheri	Paper	2010	17	Good
42	The holding knowledge & innovation based companies, transformation in medical sciences & economic growth	Mashalah Torabi, Maryam Goudarzi	Paper	2009	17	Good
43	A look at the problem of public policy in Iran in the form of sociology of organizations and using the concept of authority	Majid Vaahid	Paper	2005	17	Good
44	University independence, scientific development of the country and seizing opportunities	Mostafa Moeen	Paper	2004	16	Average

Table 2: The Dimensions of Scientific Authority in Developing of Medical Education Extracted from Studies

Dimensions	Concepts Related to Scientific Reference	Year	Authors
Scientific Dynamics	Vision, Goal, Policies, System's Bases, Strategies and Scientific Sub-structures, Educational content, Career Organizations of Scientific System, The process of Interactions of Major Organizations such as Cultural Revolution Supreme Council, Education Ministry, Sciences and Technology Ministry and Health Ministry	2015	Khanmohammadi et al.
	Happiness and Cheerfulness, Positivism Psychology	2015	Mohammadzadeh et al.
Evolution, Innovation and Creativity	Ideals and Mission, Technological Improvements, Increasing environmental Changes and Domestic Expectations, Development of Knowledge Borders, Progress and Development, Institutionalization of Scientific Innovation culture and Scientific Idea-making in Universities	2007	Vahdatinia and Hoseinpoor
	Innovation as a Part of Management and Leadership Culture in Universities	2017	Hejrati
Scientific Interactions	The Impact of scientific Authority in Global Level, Considerable Number of Published Articles of Iranian Researchers in Credible International Journals, Encouragement of Internationally collateral Scientific activities	2012	Erfanmanesh and Bashiri
Communicative Technologies	Reinforcing the Enrichment and Evolution of present Models by Information technology, Communication and Facilitation of Education and Learning process	2015	Sepaseh et al.
Sustaining Development of Medical Sciences	The Role of Information Providing and Libraries of Medical Universities in sustaining Development	2015	Rezaei et al.
	Updating Medical Curriculum based on The last scientific Improvements in the world, Consideration of high ranking documents and Domestication of Medical education	2015	Tabatabaei and Ziaei
	The Impact of Independency in Developing Medical Universities and Establishment of responding System	2019	Shabani et al.

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Continue of Table 2: The Dimensions of Scientific Authority in Developing of Medical Education Extracted from Studies

Internationalization of Education and Research	The Participation of All Stakeholders in Respect of Achieving Authority in National and International Levels, Use of the Experiences of Other countries for Globalization in High education	2019	Hosseinimoghadam and Bashiri
Civilization	Software Movement and Scientific Independence, Production in scientific Field	2012	Goudarzi et al.
Sub-structures of Scientific Authority	Localization of Science and Domestic Knowledge Based on Society's Needs	2013	Hekmat et al.
	Development of Self-belief Culture and National Trust	2011	Ghomi et al.
Global Culture	Promotion of research-centered attitude, Public Culture Improvement and Promoting Book Reading Culture, Reinforcing National Self-belief and Correction of public Perception towards Science	2011	Fayaz et al.
Reinforcing of Interdisciplinary Sciences	Interdisciplinary Studies with Emphasis on Basic Sciences	2015	Saberi
Wealth making	Wealth-making and Economic Growth, National Authority	2015	Abdolhoseinzadeh et al.
Competition for Development	Establishment of Developing Foundations, Improvement of Competition Power with Other Countries, Satisfying social and Basic Responsibilities	2015	Khorasani et al.

Discussion

Science has an irreplaceable effect on the growth and excellence of human beings and society and has inherent dignity. Learning science is so important that science centeredness and learning are considered the best solution for maintaining the identity, existence, Islam, and independence of the country while ensuring a favorable future. In addition, it is the driving force of advancement in all fields. The study of science creates the power and authority of one nation over other nations, and this dignity is due to growth, development, and advancement in the country in a way that the foundations of advanced technologies and material growth related to the issues of life are expanding and causing more welfare to the people of the country. Therefore, the category of science can be studied and analyzed in the form of a system, similar to any other category in the country. As such, the system interacts with other systems and is considered a macro subset of the cultural system. In other words, growth and development in the scientific system of the country lead to the growth and advancement of other systems, including the economic and political systems (22).

In the public mind, the term “scientific authority” creates a network of meanings and concepts, and the multiplicity of meanings and concepts has caused a difference of opinions and a lack of unity of opinion among experts to define a single definition in this regard (23). Realization of the scientific authority vision of Iran requires a generation that attempts to preserve it in today’s competitive world, and higher education students have a big mission in this path as elites and the young generation (24, 25). In universities, passing the path of scientific authority realization is the responsibility of researchers and faculty members and one of their duties that should be completed (26). An important challenge of Iran’s universities is the acquisition and promotion of scientific and cultural identity with the development of organizational autonomy and scientific freedom in

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order to increase efficiency and realize the missions of the university, increase social effectiveness, and responding to government and society and labor market developments and new technologies (27-30). In today's world, the most important evolutions are happening in the field of science and technology. Strategic planning and building capable scientific capacities will be an undeniable necessity to implement the development and scientific progress of the country as a background and context for other areas of development. Given the extensive emphasis on the necessity of improving teaching-learning activities, it is necessary to address related challenges such as physical condition and the provision of clinical instructors (31, 32).

Today, each ability is created based on knowledge, and scientific development and advancement will be associated with the creation of wealth, national and international dignity, and independence. However, achieving this goal requires proper planning and models. Iran's scientific authority is depicting a reality that will be determined in the not too distant future based on strategic plans and by mastering "discourse of scientism and science-centeredness" in the country through transformation processes in various fields of science and knowledge (33, 34). Establishing social and economic justice is the most important principle in achieving educational justice, where there is a need for fair distribution of resources and facilities. Therefore, the development of education and literacy in society and a just education system can create an opportunity for a developed workforce (35). In this regard, attention to strategies that lead to scientific authority can accelerate the pace of reaching this position. This important issue cannot be realized without a strategy (36).

The study of development policies and programs of developed countries shows that countries are aware of the importance and position of science and technology and have considered these two as the axis of their economic, social, political, and cultural development. In addition, they have made strategic planning and large investments to achieve scientific development and authority. The first scientific and technological position in the region is considered for Iran in its 20-year vision plan. In order to achieve this position, the scientific production status of the country should be assessed and compared to other countries to determine moving points, competition borders, and rival countries. The next step is to define an action plan and take futuristic measures in line with the scientific position of Iran based on the current science production level in the country. As knowledge-producing organizations, universities have the main responsibility for realizing and achieving this significant goal (37, 38).

Today, the majority of development specialists and thinkers believe that the foundation of development will be meaningful without the direct intervention of humans. In this regard, humans will be the main axis for development and will play the main role in various dimensions of sustainable development (39). Without a doubt, the higher education system plays an important role in the science and knowledge production of any country. Simultaneously with rising levels of expectations and demographic change, advances in technology have become the current challenges of the education system. It is notable that development programs should be defined and implemented based on all political, cultural, economic, and scientific components of the community (40-44).

Conclusion

Science production and scientific development have a considerable effect on all economic, social, and cultural aspects of a country. In addition, universities play a pivotal role in scientific authority in this field. Therefore, study centers have a great mission as centers of innovation in order to respond to the changing needs and Keep up with new science. Some of the responsibilities of universities include having an ideal vision, macro, and strategic planning, and supervision and coordination in the category of

science based on the country's fundamental needs. This issue has been an important part of scientific management from the perspective of the Supreme Leader. Since all countries have allocated large budgets to their research activities in order to improve their competitiveness with other countries, we cannot overlook the role of scientific research in national development as an effective mechanism. This is mainly due to the fact that research generates knowledge, and knowledge use in practice leads to development. Evaluation of the policies and measures of leading universities showed the increased importance of attention to affairs such as the internationalization of education and research and correcting the structures of universities. Accordingly, territorial planning of higher education provides long-term opportunities for the development of higher education. Therefore, the higher education system is expected to have a direct effect on higher education development programs and contribute to the effectiveness and the growth of higher education policies. Excellence in the field of scientific authority is realized when the balance is established between academic research and education and creativity and innovation are proportional to global needs. As such, universities are responsible for research development and knowledge production and are expected to fulfill this mission the best way possible while taking the scientific experiences, abilities, and facilities into account. In addition, they should play various roles to respond to social and substantive responsibilities. The strategy of scientific authority on the national horizon and at the level of higher education is the result of a series of strategic and long-term decisions of the country. As a result, the integration of macro-policies of the country and the realization of the country's vision document and finally the provision of scientific authority as a continuous set are expected. In order to develop in the world, it is necessary to improve the higher education system in a balanced and sustainable way.

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