

Identifying The Factors Affecting The Development Of An Entrepreneurial University Based On The Islamic Revolution Approach

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Abstract

The function of universities and higher education institutions have been transformed in last years, and their role as an engine of economic development has increased in the social changes of various ecosystems. Identifying the factors affecting the developing of entrepreneurship in universities can be a way forward in transforming the current situation of higher education institutions and universities into entrepreneurial universities. This research aimed to identify the factors that are effective in developing an entrepreneurial university based on the Islamic revolution approach. The research method has been fundamental in terms of objective and based on the mixed method; It has been in the category of survey-cross-sectional studies in terms of the time. The statistical population of the research in qualitative analysis included 30 specialists and experts (academic administrators, specialists in management and entrepreneurship fields) in the state universities of Mashhad (Ferdowsi University and Payam-e Noor University) which have been selected using the snowball method and purposive judgment. In the quantitative section, Cochran's formula was used to calculate the sample size; Based on that, the statistical sample size was 300 people from the faculty members of the state universities of Mashhad (Ferdowsi University and Payam Noor-e University) who were selected by stratified random method. Interviews and questionnaires were used as the tools of collecting research data. In the following, eight indices and 26 sub-indices were identified and evaluated using thematic analysis method. The results of the findings showed that the factors of goals and mission, management and leadership, entrepreneurship characteristics of professors, entrepreneurship characteristics of employees and students in the current situation were above the mean. Regarding the indices of internal units and structure, relationship with industries, financial institutions, commercialization, according to the actions taken, more attention was needed.

Keywords: Entrepreneurial University, Approach based on the Islamic Revolution, Entrepreneurship.

Introduction

Iran has been seriously faced with the problem of unemployment during the last few years; In such a situation, entrepreneurship and creating job opportunities is considered as one of the most suitable solutions to overcome this problem

(Nehzati, 2016). Emphasizing the role of education in training the human forces of a society and its essential role in the process of national development, the people of a society expect the education systems in general and the higher education system in particular to

contribute to the comprehensive development structure of a country (Nehzati, 2016). If the higher education system has the ability to respond to the needs of society and students in the field of human resources education and training, research and consulting services, also it has the possibility of growth and excellence and adaptation to the tremendous scientific, technological and environmental developments, it will be able to compete in the field of endurance as a dynamic, efficient and effective system, and while solving its past problems and issues, it will have the ability to deal with new issues, and will remain efficient and up-to-date by applying new policies and solutions (Omidvar, 2016). The future success of universities depends on their ability to respond to changes and developments. Therefore, to recognize and meet the needs of the future, it is necessary for the leaders and policy makers of the universities to make deep and extensive changes in their missions and goals and to manage the university with completely new and different methods from the past so that the survival and growth of the universities would be possible. Creating change and transformation in higher education systems and universities as a vital necessity in the path of development, on the one hand, requires a comprehensive study of theoretical foundations, and on the other hand, it requires the precise identification of bottlenecks, limitations, strengths and weaknesses, and existing threats and opportunities. Universities and higher education centers of any society represent the highest level of thinking and science of that society, and they manifest the principles of the worldview and belief and value system of the society. They are effective by educating future thinkers, scientists, and managers in contributing to various intellectual, religious, cultural, and political movements of the society (Fair, 2006). The different universities of the world, in addition to what they have in common, have characteristics that distinguish them from each other due to belonging to societies with different

insights and values (Naeem, 2016). The lack of considering the ideals of an Islamic university will cause them and other organizations to distance from the policies and perspectives of an Islamic model. If the attitudes of Imam Khomeini (RA) are placed at the forefront of university programs and administrations, and professors, students, and especially university administrators consider their main duty to be the fulfillment of Imam (RA)'s guidelines in the field of universities and society and act accordingly, they will definitely witness the reduction of the existing harms, including the distancing of universities from the pains of society, and the growth of cultural, political, religious, scientific and specialized quality indices of universities, and all people and organizations will benefit from it (Omidvar, 2016). In the statements of the Supreme Leader, the Islamization of universities and especially the entrepreneurship and the issue of universities being central, have the special place and importance. As he has stated, universities and higher education centers as the arm of research should be the solution to the problems of the society and the issues raised in the society should be investigated inside the university; Academic professors and elites should also minimize dependencies by relying on the power of self-confidence or the term "we can" and doing creative and innovative work in various scientific and research fields. Relying on the resources of the existing capacities, they put the country on the path of development and progress; In such a situation, the young entrepreneurs, as productive people, can influence the society by their will and perseverance through self-improvement, breaking the propaganda blockade, cultivating seedlings of hope for the future and driving away fear, and with civilization along with research and production of science. The above contents show the basic necessities of the implementation of this plan, but the following items can be mentioned to

express the necessity and practical importance of this research more precisely:

- The university without paying attention to the standards of the Islamic Revolution will not only reduce the existing problems, but it will cause new crises that make it necessary to make the fundamental changes in the programs, management and leadership of universities and a special look at the patterns of the Islamic revolution.

- The expansion of the concept of entrepreneurship, innovation and creativity in all production and service fields has required universities to pay close attention to the concept of entrepreneurship according to the patterns of the Islamic Revolution.

- To maintain the superior position in the production, distribution, and dissemination of knowledge, universities are forced to accept the concept of entrepreneurship in student education, conduct need-based and applied research, and accurately respond to the needs of specialized consulting.

- The discussion of entrepreneurship in universities has so far emphasized more on the aspects of education and promotion of this concept, and creating an entrepreneurial university in two dimensions, hardware and software, requires providing a detailed conceptual framework that will be possible through comprehensive studies and applied and developmental research. On the other hand, the globalization of markets has made it necessary to encourage and support entrepreneurship in countries. Therefore, the main problem of this research is to identify the main components of the entrepreneurial university, emphasizing the approaches of the Islamic Revolution.

Goals of Research

- 1- Determining the components of the entrepreneur university model based on the Islamic revolution approach

- 2- Determining the current state of the entrepreneurial university model based on the Islamic revolution approach

- 3- Determining the gap between the current state and the desired model of the entrepreneurial university based on the Islamic revolution approach

Literature Review

Zamani and Khalaj (2019) in a research entitled "Payam Noor University and The Horizon of Combined Education in The Future" expressed their findings as follows: In 2016, university units and majors were put on the agenda to improve management methods and make enterprise agile and create new organizations and structures regionally in line with the realization of the first paragraph of the 11th strategy operational plan of Payam-E Noor University in 2020-2040 organizing centers. In the first phase of the plan, 160 units out of the 490 existing ones in the university have been organized, and academic fields have also been organized by converting scientific departments into faculties. over 2016-2019, the university tried to move the researches towards application, entrepreneurship and creativity. The establishment of several growth centers, innovation and creativity centers in different provinces shows the orientation of the university towards entrepreneurial universities. Strengthening the electronic platform and optimal use of existing facilities to improve the process of content production and conducting electronic tests are among the university's priorities, which have always been of interest during the past three years. The strategic plan of Payam-e Noor University in the development of e-learning in three fields of technology, education and organization is ongoing. Development of required infrastructure, development of modern

educational tools based on new technologies; Creating appropriate organizational structures and trained human resources, production of up-to-date, dynamic and tailored electronic content, providing financial resources and personalizing education are a part of Payam-e Noor University's electronic education vision.

Namjoo (2020) in a research entitled "A Review on the Islamic Revolution and Entrepreneurial University" expressed that an entrepreneurial university should have the ability to innovate, identify and create opportunities, work in a group and respond to the challenges ahead and try to create an inherent change in the organizational characteristics. The third-generation university should be able to transform existing research and knowledge into solutions that improve the economic, social, cultural, political and environmental conditions and reduce the problems of inefficiency, racial discrimination, and inequality. The entrepreneurial university itself is a large laboratory for testing and measuring all kinds of managerial, educational, research, production and operational hypotheses. Unfortunately, in the discussion of entrepreneurship and efficiency, the eyes are only focused on the domestic labor market and there is no attention to the international labor market. Almighty God emphasizes in the Holy Book that believers have a duty to try and free themselves from dependence, including economic dependence. The development of knowledge-based fields and entrepreneurship in the higher education system should be based on the intellectual foundations of the Islamic system, religious teachings, lack of trust and reliance on outsiders. The development of knowledge-based fields and entrepreneurship in the higher education system should be based on the intellectual foundations of the Islamic system, religious teachings and lack of trust and reliance on outsiders. In the higher education of universities, there is no clear strategic research document to guide professors and students.

Therefore, setting goals and formulating specific strategies in this field should be considered by the policy makers of the entrepreneurial university.

In a research entitled "Leadership and Governance of Entrepreneurial University in Iran" Eshtehardi et al. (2018) stated that one of the axes that need to be considered in entrepreneurial university is leadership and governance. The results showed that among the five investigated universities, only Amir Kabir University can clearly see the place of entrepreneurship in the university's strategy. In none of the studied universities, the entrepreneurship strategy document has not yet reached the implementation stage. In Amirkabir University, the Technology and Innovation Development Center is a management organization that is responsible for coordinating and integrating the entrepreneurial activities of the university. In Kashan, Sharif Industrial and Allameh Tabatabai universities, this responsibility was assigned to the Technology Council, the Council of Research Directors and the Entrepreneurship and Career Guidance Committee of the university, respectively. The autonomy and independence of the faculties and university units in the studied universities were very limited. Among the surveyed universities, this delegation of authority took place only in Shahid Beheshti and Allameh universities regarding the conclusion of the contract. Also, linking entrepreneurial goals with the university's international strategy was an issue that was not given much attention by universities.

Mansouri et al. (2018) in a research entitled "Presenting A Comprehensive Model of Factors Affecting the Realization of An Entrepreneurial University in The Country" stated that despite the importance of the activities of entrepreneurial universities in the country, today most of the universities are in the second generation of universities, i.e. research-oriented universities, and there is little activity in the direction of

commercializing research findings, training entrepreneurial people and thus becoming the third generation of universities. It is clear that the realization of an entrepreneurial university requires identifying and extracting the components that are effective in creating an entrepreneurial university and creating the necessary entrepreneurial infrastructure according to the extracted components. The findings of the content analysis indicated that the factors affecting the realization of the entrepreneurial university in seven main themes (educational factors, cultural and social factors, individual factors, structural factors, financial factors, managerial factors and communication and commercialization factors) are considered. Also, the results of the implementation of the interpretative structural modeling method showed that based on the presented comprehensive model, cultural and social factors, individual factors and organizational factors are the factors that have the most impact and are known as the basis of the model. Also, managerial, communication and commercialization factors and educational factors have the lowest level of influence and the highest level of effectiveness.

Dehghani Qahfarkhi and Okhravi (2018) in a research entitled "Identifying the Indices of Entrepreneurial Universities as the Third Generation of Universities" stated that science systems in the world have been changing and evolving for a long time in harmony with the social and economic changes of countries but in recent decades, due to the globalization of the economy, the interrelationship between the economy and technology, and the fact that innovation is recognized as the basic component of industrial competitiveness and economic power, the scientific and academic system has faced fundamental changes in its socio-economic environment and the way it communicates with society, and society's expectations from this system have changed and increased. Considering

that both motivation for progress and entrepreneurship can be taught and learned, and with planning and policy-making, students' motivation for progress can be increased, and as a result, the spirit of entrepreneurship can be strengthened in them, and finally, students can be led to entrepreneurship, the aim of the research was to examine the concepts and characteristics of the entrepreneurial university, the context of its emergence and the evolution of the entrepreneurial university by reviewing the existing literature.

Boldorino et al. (2020) conducted a research on entrepreneurship education through successful entrepreneurial models in higher education institutions. Their findings emphasized that if educators want to improve the effectiveness of education focused on the development of entrepreneurial skills, graduate programs must be designed differently for business and non-business students because studying successful entrepreneurial stories has a different effect on these two groups.

In a study, Okti et al. (2020) investigated the teaching of entrepreneurial university model in Islamic Azad Universities of Sistan and Baluchistan province. The results showed that there is a significant difference between the components of Entrepreneurship University and Islamic Azad University in the presented model ($p < 0.05$). It seems that for the development of academic entrepreneurship in the Islamic Azad Universities of Sistan and Baluchistan, institutional infrastructure reforms and institutional innovations are necessary to be taken into consideration by all members of the university to promote the organizational culture of entrepreneurship.

Klafsten et al. (2019) in a research entitled "Entrepreneurial University Stimulating Economic and Social Development" investigated the key strategies for university entrepreneurship. In this study, internal factors, entrepreneurship

crossings, external factors, entrepreneurship education and learning were recognized as factors influencing the realization of entrepreneurial university.

Delmarco et al. (2018) to investigate the effective components in creating an entrepreneurial university in a study entitled "Creating an Entrepreneurial University in an Emerging Economy", considered the five dimensions of the entrepreneurial perspective including access to external links, access to academic resources, arrangement innovation and scientific research.

The results of the research indicated that the educational quality of entrepreneurship, in addition to having a close relationship with applied research, encouraged academics to turn their business plans into startups.

Baral et al. (2018) in a research entitled "Effect of The University Environment on The Desire for Entrepreneurship in Private and Public Universities" identified the difference between the environment of private and public universities and its effect on the desire for entrepreneurship. The results of the mentioned study showed that students of private universities are more inclined to entrepreneurship.

Theoretical Literature

Entrepreneurship

The word entrepreneurship originates from the French root "Entreprendre" which means to commit and also means middleman or broker; It is a concept that has been studied from many different perspectives. Many believe that entrepreneurship is the engine of economic development in the developed and developing countries. Three important reasons for paying attention to the issue of entrepreneurship are wealth production, technological development and productive employment. This is despite the fact that, in many cases, this concept has been mistakenly defined as simply equivalent to job

creation (Safarian Navkhi, 2018). Entrepreneurship training is an important category that the developed countries have paid serious attention to in the process of economic-social development and have prioritized the training of entrepreneurs in their development plans. Studies show that entrepreneur training programs in different countries have been completed with the policies and executive support of governments (Mirkolahi, 2015). The emergence of the phenomenon of entrepreneurship in the educational sector is a special discussion in the literature of educational management in the field of democratic responsibility of education managers. Entrepreneurship is an organizational process that includes the improvement and development of current and new services and programs, technological innovation (techniques, procedures and rules and new administrative and selective processes), organizational innovation, new management processes and new structuring methods in the educational sector through using the new model of resource allocation to create value for citizens. The entry of entrepreneurship into management in education is due to the importance of the role of education in societies and efforts to create transformation in government organizations and improve their performance. Therefore, there have been many discussions about the nature and application of entrepreneurship in the public sector, as a solution to solve the chronic problems of administrative and government services. One of the results of the spread of this attitude is the creation of the theory of re-creation of the state. The importance of the educational and research system in the development of entrepreneurship and the training of entrepreneurs is more clearly defined based on the studies done regarding educational programs in the field of entrepreneurship in developed countries and developing countries. Identifying the skill needs of managers of educational groups based on the

theory of Wetten, Cameron and Woods, in order of priority, we can refer to effective motivation skills, conflict management skills, constructive communication skills and problem-solving management skills (Mehdizadeh, 2020). Based on this, updating the duties, responsibilities and identifying the competencies of education managers is a prerequisite for designing educational and development programs, which are classified in ten topics from the experts' point of view, which include:

A- Common (general) competencies: personality and moral characteristics, perceptual competence, striving for excellence, interpersonal competence.

B- Special competencies that include: technical and job competencies, organizational competencies that have sub-competencies such as business competency, leadership, performance management, strategic thinking, decision making.

On the other hand, the results of the surveys have also indicated that effective leadership in education consists of two dimensions (role and responsibility and the dimension of competence and competence of effective leadership), (Delshad, 2020).

Entrepreneur University

An entrepreneurial university is a university that provides students with sufficient education so that they can become entrepreneurs, create an entrepreneurial structure in the university, and spread entrepreneurial culture in the university and society. Entrepreneurial university creates entrepreneurial attitudes among faculty members, staff and students and cultivates entrepreneurial skills among them (Sadeghi et al., 2018). Looking at the university generations, the first-generation universities were education-oriented and based on training human resources. Later, another revolution took place based on internal dynamics

and external effects in academic and scientific structures. This academic revolution took place in Germany at the end of the 19th century, after which Humboldt's research-oriented universities were introduced as the second generation of universities. Conducting special researches, these universities helped to fulfill the needs and industrial development to some extent (Azizi and Shafizadeh, 2016).

Despite this, these two generations of academics were more concerned with providing knowledge and conducting research and were less related to industry (Gibb, 2012). This basic question has always been raised among scholars and scientific activists, whether university entrepreneurship is compatible with the university's triple missions of education, research, and social services or not (Kikha, 2018); This question has led to the formation of favorable views in this field. Empirical evidence shows that entrepreneurship plays an effective role in economic development, increasing competition, creating jobs, developing justice, reducing poverty, increasing national income, and solving the problems of society, the government, and the public sector. Based on this, the mission of the universities has changed over time, along with the global developments and transformations and to respond to the urgent needs of the societies, and is moving towards participation in the entrepreneurial paradigm.

In this view, regarding the quick coordination with environmental changes, the obvious difference in management with traditional universities, carrying out new activities based on the development of entrepreneurial culture at all levels of the university, participation in economic development through investment or commercialization, knowledge and technology and job creation, university is known to increase the level of well-being as well as reduce social corruption, etc. (Sadeghi et al., 2018).

The Approach Based on The Islamic Revolution

The Islamic revolution approach means that the scientific and cultural perspective of the Islamic Republic system, the charter of the revolution, the doctrine of the scientific, jihadist and revolutionary forces are in the path of the progress of the Muslim nation of Iran and according to the criteria of the Islamic revolution. In the Islamic revolution approach, one should not have the look towards the West and East, but one should have a solution for humanization and continuation of the Islamic Revolution in the direction of development and formulation of codified plans for the future of the country according to the indices of the Islamic Revolution (Omidvar, 2016). In recent years, in developed and even developing countries, in addition to the fact that entrepreneurship topics have been brought to the field of education, universities have also established entrepreneurship centers and faculties for this purpose. The highway to reach a society capable of solving social challenges and problems is to create and expand an entrepreneurial university with an emphasis on the competencies of managers. On the other hand, the Supreme Leader, as the compiler of the general strategies of the country, in the past many years, has emphasized the resistance economy and the use of domestic ability and knowledge to solve the problems and issues of the country, and many of these problems will be solved in the shadow of moving towards an entrepreneurial university (Hosseini et al., 2018).

Method

This research was basic in terms of purpose, based on mixed method; It was also in the category of survey-cross-sectional studies in terms of the time. The statistical population of the research in qualitative analysis included 30 specialists and experts (academic administrators, specialists in management and entrepreneurship fields) in the state universities of Mashhad (Ferdowsi University and Payam-e Noor University), who were selected using the

snowball and purposive judgment method. Criteria for selecting experts are criteria such as management experiences, theoretical mastery, teaching experiences, practical experience, willingness and ability to participate in research and access. In the quantitative part, Cochran's formula was used to calculate the sample size; The statistical sample size included 300 people from the scientific members of the state universities of Mashhad (Ferdowsi University and Payam-e Noor University) who were randomly selected by stratified random method. The tools for collecting research data were interviews and questionnaires. The CVR index has been checked with the cooperation of 30 experts for the validity of the interviews; So that the minimum acceptable CVR was 0.33 for $N=30$ based on the number of experts. Considering that the content relative coefficient of all the extracted themes was found to be higher than 0.7, it can be concluded that all the themes were recognized as important in the opinion of all the evaluators. To determine the reliability among the existing methods, the Holstein coefficient was used, and the obtained Holstein coefficient was 0.890, which indicates acceptable reliability and agreement in coding similarity. The reliability of the main variables of the research and its components were used using the techniques of Cronbach's alpha coefficient and composite reliability. The main and subcategories of the entrepreneur university based on the Islamic revolution approach were identified using the theme analysis method. MaxQDA software was used for theme analysis and SPSS/25 software was used to measure the current and desired situation.

Findings

Theme Analysis

Content analysis is one of the widely used methods in qualitative research. Qualitative content analysis is a set of techniques used for the systematic analysis of the text of research

interviews. The main idea of the content analysis process is to preserve the advantages of quantitative content analysis while qualitative analysis. In short, it can be said that the purpose of qualitative research is to increase our understanding of what the main factors are made of and what indices (sub-factors) should be used to measure these factors. The main subject of the study of entrepreneurial universities based on Islamic revolution approach, for this purpose, were structured and semi-structured specialized interviews conducted with the experts. After achieving theoretical saturation, the experts' point

of view has been presented in the form of main and sub-categories of the classification and the initial model of the research.

Codes Obtained from Sources and Interviews

In the interviews, experts were asked questions about the entrepreneurial university model based on Islamic revolution approach, and the researcher also studied various sources regarding the research topic. Finally, all the data were entered into the MAXQDA software and their frequency tables; the final output are presented in Table 1 and Chart 1.

Table 1. Codes and categories obtained by the Entrepreneur University based on Islamic revolution approach

Main category	Subcategories	Primary codes	Frequency of codes
internal environment	Intra-university units	research	1
		cultural	1
		Administrative and financial	1
	Leadership and management	Finding an advantage	3
		opportunity	3
		Understanding innovation	4
	The goals and mission of the university	openness	2
		The position of technology	4
		The position of innovation	4
	Organizational Structure	Focus	4
		formality	2
		Complexity	2
	Characteristics of human resource entrepreneurship	independence	1
		risk taking	1
		Education	5
Internal control center		2	
Creativity		5	
	seek success	2	
external environment	Terms and Conditions	Resistance economy	4

		Regulation of entrepreneurship development in universities	5
		Comprehensive scientific document of the country	5
	Commercialization	Patent law	4
		Cooperation in the field of research and development	5
		Strategic alliances	4
	Communication with industries and financial institutions	Information about industrial innovation	4
Communicate with financial institutions		4	

The diagram below is the conceptual map obtained for the research variables, which is presented based on the final output of the MAXQDA software.

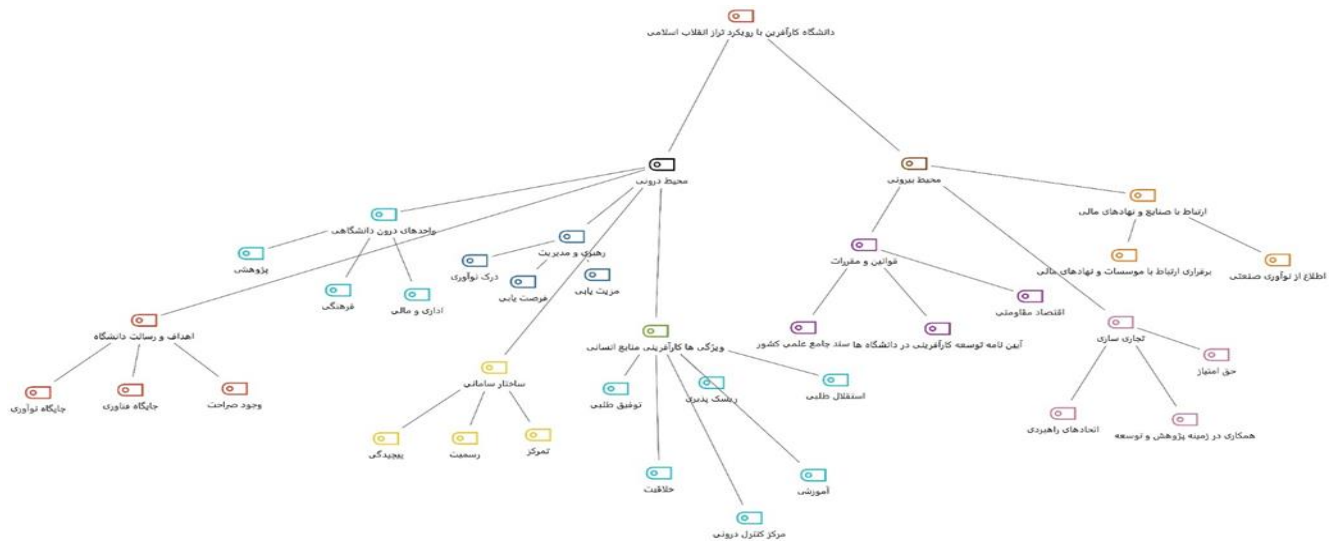


Diagram 1. Conceptual map of factors influencing the development of an entrepreneurial university based on the Islamic revolution approach

Estimates related to the identified indices (sub-categories and indicators) are reported in Table 2.

Table 2. Evaluation indices of validity and reliability of the tool under the categories of internal and external environmental factors

	AVE	Cronbach's alpha	Composite reliability
Intra-university units	0.646	0.734	0.738
Leadership and management	0.688	0.786	0.730
The goals and mission of the university	0.546	0.832	0.822
Organizational Structure	0.514	0.752	0.754
Characteristics of human resource entrepreneurship	0.533	0.805	0.818
Terms and Conditions	0.587	0.872	0.875
Commercialization	0.695	0.742	0.749
Communication with industries and financial institutions	0.540	0.872	0.867

According to the values of Table 3, the index related to convergent and auditory credit in total indicate that convergent and critical validity under the categories of "internal and external environmental factors of entrepreneurial university based on the Islamic revolution approach" are in a desired condition. The values related to Cronbach's alpha coefficient and mixed reliability indicate the high measurement accuracy of the tool under the categories of

"Entrepreneurial University Model based on the Islamic revolution approach" and as a result, the reliability of this tool.

Normality of Research Variables

Before describing and analyzing the main research variables, it was necessary to check the normality of the variables. The results of this test are presented in Table 3.

Table 3. Kolmogorov Smirnov test results to check the normality of research variables

Variable	Aspects	Statistic Z	Sig
Internal units and university structure	research	0.040	0.200
	cultural	0.028	0.200
	Administrative and financial	0.034	0.200
The goals and mission of the university	Finding an advantage	0.054	0.200
	opportunity	0.026	0.200
	Understanding innovation	0.035	0.200
Management and leadership	openness	0.045	0.200
	The position of technology	0.028	0.200
	The position of innovation	0.020	0.200
Characteristics of human resource entrepreneurship	Focus	0.026	0.200
	formality	0.022	0.200
	Complexity	0.027	0.200
	independence	0.043	0.200

	risk taking	0.027	0.200
	Education	0.036	0.200
Organizational Structure	Internal control center	0.028	0.200
	Creativity	0.035	0.200
	seek success	0.025	0.200
Commercialization	Resistance economy	0.035	0.200
	Regulation of entrepreneurship development in universities	0.049	0.200
	Comprehensive scientific document of the country	0.044	0.200
Terms and Conditions	Patent law	0.036	0.200
	Cooperation in the field of research and development	0.051	0.200
	Strategic alliances	0.029	0.200
Communication with industries and financial institutions	Information about industrial innovation	0.032	0.200
	Communicate with financial institutions	0.038	0.200

According to the data in Table 4, considering that the significance level of the test was more than 0.05, as a result, the null hypothesis i.e. the distribution of the variables is normal, was confirmed. In other words, all research variables had a normal distribution. Accordingly, if needed, parametric tests can be used to answer questions and test research hypotheses.

The Current and Desirable State of Each Research Variable

In this part, it will be determined how the status of each of the mentioned variables is in the research community and how far they are from the optimal level, in other words, are less than or more than the optimal level. Regarding the items

designed for each of these variables were designed on a 5-point Likert scale (very little to very much), in other words, if the mean obtained for each variable in the society is equal to or greater than 1, it is a sign of the favorable status of that variable. Given that sampling has been done in the current research, the one-sample t-test was used to compare the mean obtained in each of the variables with the optimal level. This test is used for cases where we want to compare the mean obtained from the sample with a specific number such as the community mean or any other number such as the mean or optimal level. Table 4 shows the results of the T-Tech test to compare the identified indices and their aspects with the desired level.

Table 4. The results of one-sample t-test to compare the identified indices and their aspects with the desired level

variable	Statistics t	aspect	mean	Statistics t	Freedom degree	Significance level
	94.235	research	3.501	88.625	299	0.000
		cultural	3.48	88.618	299	0.000

Internal units and university structure		Administrative and financial	3.43	92.523	299	0.000
The goals and mission of the university	95.404	Finding an advantage	3.47	83.763	299	0.000
		opportunity	3.49	83.831	299	0.000
		Understanding innovation	3.49	94.718	299	0.000
Management and leadership	90.231	openness	3.48	88.457	299	0.000
		The position of technology	3.29	82.672	299	0.000
		The position of innovation	3.091	86.956	299	0.000
Characteristics of human resource entrepreneurship	91.658	Focus	3.07	87.145	299	0.000
		formality	3.39	83.297	299	0.000
		Complexity	3.48	86.726	299	0.000
		independence	3.45	90.604	299	0.000
		risk taking	3.48	89.565	299	0.000
		Education	3.48	87.079	299	0.000
Organizational Structure	94.356	Internal control center	3.49	84.495	299	0.000
		Creativity	3.46	84.820	299	0.000
		seek success	3.49	92.395	299	0.000
Commercialization	88.951	Resistance economy	3.47	84.906	299	0.000
		Regulation of entrepreneurship development in universities	3.08	80.727	299	0.000
		Comprehensive scientific document of the country	3.09	86.753	299	0.000
Terms and Conditions	87.968	Patent law	3.34	86.907	299	0.000
		Cooperation in the field of research and development	3.49	87.055	299	0.000
		Strategic alliances	3.51	82.541	299	0.000
Communication with industries and financial institutions	91.250	Information about industrial innovation	3.43	90.992	299	0.000
		Communicate with financial institutions	3.45	83.895	299	0.000

As presented in table 5, considering that in the identified indices and its dimensions, the

significance level of the test is less than 0.05, as a result, the null hypothesis of the research is

rejected and the hypothesis of the research i.e. there is a significant difference between the obtained average and the desired level, is confirmed. In other words, it can be concluded that there is a significant difference between the status of the research indices and its aspects with the desired level, and according to their mean, the mean of these variables is less than the desired level.

Correlation Between Research Variables

In the following, the correlation between the research variables is given. The study of correlation relations helps to better understand the relations between variables. Considering the normal distribution of all variables, Pearson's correlation test was used to check the relationship between variables. The table below shows the obtained results.

Table 5. Correlation between research variables

	Internal units and university structure	The goals and mission of the university	Management and leadership	Characteristics of human resource entrepreneurship	Organizational Structure	Commercialization	Terms and Conditions	Communication with industries and financial institutions
Internal units and university structure	1							
The goals and mission of the university	0.95** 7	1						
Management and leadership	0.38** 5	0.40** 2	1					
Characteristics of human resource entrepreneurship	0.93** 8	0.93** 9	0.588**	1				
Organizational Structure	0.95** 2	0.97** 8	0.426**	0.910**	1			
Commercialization	0.90** 2	0.67**	0.844**	0.181**	0.760**	1		
Terms and Conditions	0.93** 1	0.89** 8	0.534**	0.944**	0.892**	0.112**	1	

Communication with industries and financial institutions	0.98** 2	0.93** 3	0.347**	0.907**	0.928**	0.121**	0.86** 0	1
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As presented in table above, there are positive relationships between all factors.

Conclusion

According to the results of the main question, 26 factors in two main components and eight subscales are the factors of the entrepreneurial university based on Islamic revolution approach. In response to the research question: what is the gap between the current and desirable state of the entrepreneurial university based on the Islamic revolution approach!?, in each of the desired indices, the current state of the university has been examined according to a 5-point spectrum and the score obtained for each index in the university has been compared with an mean value of 2.5 through a sample t-test. In other words, to check whether it is possible to conclude with at least 95% certainty that the current status of the entrepreneurial university establishment index is favorable or not, a mean comparison test was conducted. In this way, the mean scores of the relevant indices have been calculated and compared with the mean value using T-Test. If the mean status of the index was smaller than the expected value of 2.5 (mean level), it will mean that the university in that index was not ready to establish an entrepreneurial university. The results showed that the average of the analyzed factors was less than the optimal level and there was a gap between the current situation and the desired situation. Also, the university had the ability to correct its current situation. In the past researches, there were no cases that dealt with this issue comprehensively, but specific researches were done regarding the entrepreneurial

university model. Boldorino et al. (2020) conducted a research on entrepreneurship education through successful entrepreneurial models in higher education institutions. Their findings emphasized that if educators want to improve the effectiveness of education focused on the development of entrepreneurial skills, the graduate programs should be designed differently for business and non-business students, because studying successful entrepreneurial stories has a different effect on these two groups. Baral et al. (2018) in a research entitled "Effect of The University Environment on The Desire to Entrepreneurship in Private and Public Universities" identified the difference between the environment of private and public universities and its effect on the desire to entrepreneurship. The results of the mentioned study showed that students of private universities were more inclined to entrepreneurship. The results obtained from the researches by Amrido, Boldorino et al. and Baral et al., it can be said that they are in line with the results of the current research. In a research entitled "Leadership and Governance of Entrepreneurial University in Iran" Eshtredi et al. (2018) stated that one of the aspects that needs to be considered in Entrepreneurial University is leadership and governance. The results showed that among the five investigated universities, only Amir Kabir University can clearly see the position of entrepreneurship in the university's strategy. In none of the investigated universities, the entrepreneurship strategy document has yet reached the implementation stage. In Amirkabir University, the Technology and Innovation Development Center is a management organization that is responsible for coordinating

and integrating the entrepreneurial activities of the university. In Kashan, Sharif Industrial and Allameh Tabatabai universities, this responsibility was delegated to the Technology Council, the Council of Research Directors and the Entrepreneurship and Career Guidance Committee of the university, respectively. The autonomy and independence of the faculties and university units in the studied universities were very limited. The results obtained from the research by Eshtradi et al., it can be said that are in line with the results of the current research.

Recommendations

- According to the findings of the research regarding the management and leadership factor of the university, it is suggested that higher and senior management should adopt more effective strategies to transform the university into an entrepreneurial university.
- According to the results obtained from the research regarding the factor of entrepreneurship and innovation of professors, staff and students, despite the relatively favorable nature of these factors, it is suggested to familiarize them more with the basics of academic entrepreneurship and the development of academic institutes by setting up training courses on entrepreneurship and commercialization of academic ideas.
- Considering the unfavorable situation of the university in terms of internal units and structure, it is suggested to have more flexibility in the three levels of formality, complexity and concentration so that things can be done more easily and the internal units should pursue entrepreneurship and academic innovation more coherently.
- Examining the factors of entrepreneurship laws and regulations, relationship with industries, financial institutions and commercialization, it is suggested to provide the necessary platform for the optimal implementation of the above factors

so that the university can turn to the implementation of the third university mission.

- It is suggested that the current research be carried out in another university with a larger number of statistical samples in order to revalidate the model by further examining the factors found.

Research Limitations

Conducting a mixed research that requires the collection of quantitative and qualitative data, requires more time and energy than single-method research. In this research, given that a mixed research design has been used, first, chemical data should be collected and analyzed, and then quantitative data should be collected. This issue also made the time and stages of the research to be longer. The lack of information sources related to some of the variables discussed in this research, especially in Latin sources, caused a lot of time to be spent searching and checking all kinds of sources. At the same time, the researcher tried to solve this problem to some extent by examining similar sources and establishing theoretical relationships between different concepts. Many universities are still in their closed space and do not want to carry out innovative and entrepreneurial activities of their university.

References

1. Omidar M. (2016). Identifying and Prioritizing Factors Affecting the Establishment of Entrepreneurial University Based on Metacombination Method. Zahedan: University of Sistan And Baluchistan, Faculty of Literature and Human Sciences
2. Dehghani Qahfarokhi, M. Okhravi A. (2018). Identifying the indices of Entrepreneurial University as the Third Generation of Universities, the Third International Conference on New

- Developments in Management, Economics and Accounting, Tehran, Iran Business Excellence Association.
3. Rahimi M. (2017). Designing the Quality Assurance Model of The Entrepreneurial University. Semnan: Semnan University, Faculty of Psychology and Educational Sciences.
 4. Zamani M. Khalaj M. (2019), Payam-e Noor University and the horizon of blended education in the future, 12th year, Sanat Quarterly and College Quarterly, Nos. 43 and 44, pp. 13-29.
 5. Samandar Ali Eshtreddi M. Gudarzi M. Qurbani M. Fakhr Mousavi A. (2018). Leadership and Governance of Entrepreneurial University in Iran. The Third National Entrepreneurship Conference. Tehran.
 6. The Book of the Imam (a collection of 22 volumes of statements, messages, interviews, edicts, Shariah permits and letters), (2006), 4th Edition, Tehran: Institute for Editing and Publishing the Works of Imam Khomeini.
 7. Safarian Navkhi M. (2018). Designing and Assessing the Appropriateness of a Model for An Entrepreneurial University (Case Study: Payam-e Noor University). Amol: Mohaghegh Ardabili University, Faculty of Educational Sciences and Psychology.
 8. Ghafouri R. (2017). Investigating the Impact of Strategic Capabilities on The Formation of An Entrepreneurial University (Case Study: Urmia University). Urmia: Urmia University, Faculty of Economics and Management.
 9. Mohammadzadeh P. Abdi H. Recovery, D; Beheshti, M. (2016). Key Factors Affecting the Success of Entrepreneurs Using Discrete Logit and Probit Models. Iranian Applied Economic Studies Scientific-Research Quarterly, Year 6, No. 24, Pp: 153-175.
 10. Mansouri A. Jalilian N. Zanjehi M. (2019). Presenting A Comprehensive Model of Factors Affecting the Realization of An Entrepreneurial University in The Country, 4th International Industrial Management Conference, Yazd, Yazd University - Iranian Industrial Management Scientific Association.
 11. Namjoo A. (2019), A Review of The Islamic Revolution and Entrepreneurial University, National Conference on Civilization-Building Components in the Declaration of The Second Step of The Revolution, Mashhad.
 12. Nehzati, Z (2016). A Comparative Study of Entrepreneurial University Models with An Emphasis on Social Sciences. Tehran: Allameh Tabataba'i University, Faculty of Social Sciences.
 13. Azizi, M., & Shafizadeh, E. (2013). Entrepreneurial university, necessity, features and requirements. *Social Studies*, 4 – 45.
 14. Barral, M. R. M., Ribeiro, F. G., & Canever, M. D. (2018). Influence of the university environment in the entrepreneurial intention in public and private universities. *RAUSP Management Journal*, 53(1), 122-133
 15. Boldureanu, G., Ionescu, A. M., Bercu, A. M., Bedrule-Grigoruță, M. V., & Boldureanu, D. (2020). Entrepreneurship education through successful entrepreneurial models in higher education institutions. *Sustainability*, 12(3), 1267.
 16. Dalmarco, G., Hulsink, W., & Blois, G. V. (2018). Creating entrepreneurial universities in an emerging economy: Evidence from Brazil. *Technological*

- Forecasting and Social Change, 135, 99-111.
17. Delshad, A., Gholi Ghourchian, N., Jafari, P. (2020). Modeling effective Leadership in University of Applied Science and Technology (UAST). *Journal of New Approaches in Educational Administration*. Article 13, Volume 10, Issue 40, Winter 2020, Page 290-311.
 18. Fair, C. C. (2006). *Islamic Education in Pakistan*. United States Institute of Peace.
 19. Gibb, A. (2012) "Exploring the Synergistic Potential in Entrepreneurial University Development: Towards the Building of a Strategic Framework". *Annals of Innovation & Entrepreneurship* 3, 1-21.
 20. Hosseini, R., Tabatabaieian, K., & Godarzi, R. (2018). Academic entrepreneurship development framework in the humanities in Iran. *Entrepreneurship Development Quarterly*, 11(4).
 21. Keykha, A. (2018). Critical approach to entrepreneurial university. *Proceedings of the Second National Conference on Entrepreneurship at Sharif University of Technology [in Persian]*.
 22. Klotz, M., Fayolle, A., Guerrero, M., Mian, S., Urbano, D., & Wright, M. (2019). The entrepreneurial university as driver for economic growth and social change-Key strategic challenges. *Technological Forecasting and Social Change*, 141, 149-158.
 23. Mehdizadeh, A., Araghieh, A., Lafzi, S. (2020). Identifying Skill Needs of Educational Department Managers at Shahid Beheshti University. *Journal of New Approaches in Educational Administration*. Article 11, Volume 10, Issue 40, Winter 2020, Page 252-267.
 24. Miarkolaei, H., & Miarkolaei, H. (2015). Drawing the map of causal relationships of factors for the development of the capacity of entrepreneurial university as a center of knowledge production through DEMATLE method. *Quarterly Journal of Information and Knowledge Management*, 4, 11-24
 25. Naeem, K. (2016). Financial literacy of social sciences university students: a case study of international islamic university islamabad. *D. IJAEDU-International E-Journal of Advances in Education*, 2(5), 326-331.
 26. Okati, H., Pourkiani, M., Abbasi, F. B., & Rad, N. F. (2020). Educating a New Entrepreneurial University Model in Islamic Azad Universities in Sistan and Baluchestan Province. *Revista Tempos e Espaços em Educação*, 13(32), 1-17.
 27. Sadeghi, F., Moharati, Y., & Khorakian, A., (2018). Investigating the impact factors on university preparedness to become a university with entrepreneurial features (case study: Ferdowsi University of Mashhad). *Technology Development Quarterly*, 55, 43-53