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Designing a Competency Model for Educational Employee Students and Graduates in Management and Educational Planning

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Abstract

Background

Entrepreneurship education seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. The present study has been developed with the aim of designing a Competency Model for Educational Employee Students and Graduates in Management and Educational Planning.

Materials and Methods

This is a mixed (qualitative and quantitative) and applied research. Statistical population of the research in the qualitative d graduates of Psychology and Educational Sciences have been selected as the ssection consists of 23 Professors, entrepreneurs, and graduates of Psychology and Educational Sciences through purposeful sampling. In the quantitative section, 125 professors, entrepreneurs anample, using Morgan Table and through available sampling method. In addition, Delphi method in the qualitative section, and structural equations in the quantitative section have been used for information analysis.

Results

Qualitative results showed that in this research, 6 main competency titles and 42 subordinate competency titles have been identified for entrepreneurship in educational sciences, and the results of quantitative section confirmed these competencies through structural equations. Research results also showed that competency in learning management and human resource development and policy making and professional management of educational business and learning have been of greater importance than other competencies in success of an entrepreneur in the field of educational sciences.

Conclusion

Based on the results, the framework suggests that one's system should include skills, knowledge, and attitudes that are the constituents of learning behaviors within a range that facilitate the development and use of such behaviors to lead to optimal learning outcomes.

Key Words: Competency Model, Entrepreneurship, Iran, Students.

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1- INTRODUCTION

Today, entrepreneurship education has become one of the most important and widespread activities. During the 2000s, universities designed various educational programs for organizations based on characteristics of trained groups and regional and national needs. In Europe, United States and Canada fundamental steps have been taken to support entrepreneurial activities. These supports include practical guidance, counseling, providing financial loans, and holding special courses on entrepreneurship in and out of universities (1). In our beloved country, Iran, having talented population and abundant natural resources, national production is at a low level and the educated population has little productive employment. On this basis, the priority of job creation has become the agenda of institutions and organizations. Since many companies are on the verge of shutting down due to low productivity rate, lack of demand, etc., and the country's competitive position in global markets is also very weak, entrepreneurial development approach seems necessary (1). Weakness of policy making institutions in recognizing entrepreneurship issue and lack of previous experiences in the country for entrepreneurship development and support of entrepreneurs are considered among the main primary obstacles. The status of entrepreneurship education, especially at the higher education level of the country, does not have a coherent pattern and is fragmentary and disordered. Considering the importance and role of entrepreneurship and given the problems of society, promotion of entrepreneurship, providing the ground for an entrepreneurship-supporting culture, and educating entrepreneurs is essential for all societies, especially developing societies like ours; and this is one of the tasks and visions of higher education (2).

Certainly, realization of such missions requires necessary changes in the elements of higher education because higher education institutions such as universities are considered among the very important sub-systems of a community and have a crucial and important role in comprehensive sustainable development and of course, playing this role depends upon a variety of conditions, including presence of suitable elements and inputs consistent with changes and needs (3). Higher education must, like a living creature, always be aware of its environment and internal elements, and through identifying environmental changes and its own position, make the changes necessary for continuation of life dynamically, and of course, these changes must be done in all elements including goals and tasks, its structure and plans in a coordinated manner so that their relationship can be maintained logically and it can continue its life (4).

One of the most important elements of higher education is educational curriculum, which should have appropriate fitness in line with the related goals and tasks and changes according to the curriculum so that it can play its effective role (5). Academic curricula should be such that they create the capability and competence required for dealing with specialized fields in students and graduates, and have the required fitness; therefore, reviewing and designing of academic curricula is considered necessary for improvement of the mentioned conditions (6). Competency model in an educational system can have many applications, such that it can be used for educational needs assessment of individuals, preparation and evaluation of educational curriculum, evaluation of efficiency and educational effectiveness and, ultimately, planning for its growth and development. In fact, it means that the entire process of designing an educational

system can be done based on competency (7). In Iran, the issue of employment of graduates and their skills has become one of the main concerns of the government, educational and industrial centers, planners and policymakers, families and students. In fact, in order to plan and act logically, all the four mentioned pillars require assessing the graduates and being aware of the capabilities of the provided training, skills required by the market and their educational and research programs, because graduates are the first group that can comment well on their education and skills (6). Attraction of graduates of universities and higher education institutions in the labor market is subject to having some abilities and features, part of which should be created during university studies. It seems that inappropriateness between the educational processes and materials in fields of study in universities, and the skills and abilities required by the labor market is the most important factor in failure of graduates in employment and finding a job; also, lack of close relationship between universities and different sectors of society in Iran has led to lack of appropriateness between student admission capacity and market demand for specialist human force. In such conditions, there is a need for "entrepreneurs" who are able to, through creativity, innovation, diligence, self-confidence, and tolerance of ambiguity, throw new blood in the body of economy of the country and take an effective step toward solving the employment crisis. Today's societies need people who are determined to succeed and are able to turn a dream into reality and have an autonomous spirit to explore new situations. If attention is paid to the economic and social effects of entrepreneurship, the role of specialists and graduates in community development will be clarified and graduates will respond to various needs of the community (8).

The number of unemployed graduates of universities indicates inappropriate relationship between higher education curricula and the area of industry and professions and potential capabilities existing in the industry, and indicates lack of specialties required in the industry and the increase in the number of educated unemployed people lacking necessary skills. Competency-based curriculum planning is a strategy that can be used to develop fundamental competencies in students, and to provide educated specialists for employment in the industry and to reduce unemployed graduates and to increase effectiveness in the area of higher education and industry. The few researches that have been conducted on employment of higher education graduates in Iran show that higher education curricula had not been so successful in developing and enhancing required competencies in graduates; and after entering the field of profession, due to lack of competency, it led to waste in costs and reduced effectiveness of the job (9).

The main purpose of using competencies in training and learning is to increase the likelihood of transfer of learning experiences in performance-based organizational outcomes. The objective of higher education institutions is not only to help students to learn certain behaviors and transfer them to job-related tasks (close transfer), but also to prepare students for competent performance when opportunities will exist in future (far transfer). To realize this goal, educational institutions use a wide range of evaluations to identify competencies in order to help students to be prepared for future professional environment (10). When many members in a community accept entrepreneurship as a job, that community grows rapidly, such that entrepreneurship leads to new employment and reduction in unemployment rate. The characteristics and competencies required by graduates of

Educational Sciences in order for successful entrance to business area to have maximum overlap with entrepreneurial characteristics. Therefore, attention to development of entrepreneurship and its related competencies can be an appropriate guide to achieve the goals of this research.

Research foundations

The study conducted by Akbari (2008) showed that researchers have used different approaches to study entrepreneurship. Studying entrepreneurship includes a wide range of management, economics, sociology, and psychology disciplines. Therefore, it has an interdisciplinary nature. For this reason, psychologists come to help economics and their efforts for the three decades from the 1970s to the 1990s focus on identifying common psychological characteristics of entrepreneurs. According to psychological attitude, individual and specific characteristics dispose people to entrepreneurship. The increasing emphasis on individual characteristics of entrepreneurs led to development of an attitude that later became known as "characteristics approach" or "personality approach" (11).

Salehi Omran and Rahmani Ghahdarijani in a study entitled "Investigation of focal competencies in Professional and Technical Education Programs: an overview of theoretical discussions and countries' experiences" state that preparation and setting of focal skills and competencies in the contents of Professional and Technical Education Programs is one of the most important challenges for educational curriculum planners. Key competencies such as problem solving skills, computer skills, strategic thinking, English language proficiency, etc. have always had a special place in job and employment sectors (12).

Results of the research by Raeesi et al., investigating the relationship between personality traits of managers and entrepreneurship showed that there is a direct and significant relationship between personality traits of managers and organizational entrepreneurship (13). Results of the study by Sabbaghian et al., examining entrepreneurial characteristics of university students, showed that the variables of creativity, risk taking, need for success, believing in internal control, independence, and tolerance of ambiguity have a significant relationship with entrepreneurship. In addition, the results showed that there is no significant difference in entrepreneurship characteristics between students of different faculties (14).

In a study entitled "Competency-based model for construction supervisors in developing countries", Serpell states that the study purpose is to analyze the role of construction supervisors, including supervisors and headmen, as the front line administrators. This role acts as the critical function of labor and a source of value added for construction management. Methodology: the main model has been presented based on competency management framework of workforce for professional training and issuance of certificate of construction supervisors in the country of Chile and other developing countries. Results: this case study has shown that significant potential of competency framework for Chilean construction sector has not been developed by human resource management methods. Specifically, this framework can be an effective method to achieve the competencies required by construction supervisor, through which the trained workers in many developing countries must be treated. Competency framework can help companies create more objective plans for designing and implementing educational programs (15).

In a study titled "Acquiring assessment skills", Mohar examines the link between educational experiences and competency, which is the result of a field survey seeking to examine assessors' perceptions of participation. The assessors of new and graduate students were asked to describe their educational experiences of assessment and state how the importance of each experience implies creation of special evaluation competencies. Analysis of comparison of correlated groups for determining the share of each of the created educational experiences led to creation of each of the competencies. The results show that the perceived share of experiences of different trainings changes depending on the evaluated competency (16). Howard in his study examined the impact of development of entrepreneurship capabilities (creativity, risk taking, internal control, motivation for progress, and independence) on students' entrepreneurship and concluded that there is a direct relationship between these capabilities and entrepreneurial ability of individuals (17).

2- MATERIALS AND METHODS

The present study has a mixed (qualitative-quantitative) approach in terms of strategy, and is an applied research in terms of purpose. Interviews with experts were used for collecting qualitative data; and collecting quantitative data was done using semi-structured questionnaire. In the questionnaire, Likert five-point scale has been used to determine the weight and significance of each job opportunity. Validity of the questionnaire was obtained through examination of theoretical literature and the opinions of some of the professors of Educational Sciences about its content validity. Reliability of the questionnaire was calculated using Cronbach's alpha test as equal to 0.852. In order to obtain validity in the qualitative section of research, methods such as usefulness of the gathered information and multilateral point of view (such as noting and recording the interviews and multiple analyses) have been used. On the other hand, in order to identify weaknesses and strengths of the interview questions and to resolve them, experimental interviews (prototype) were conducted to prepare a list of competencies and sub-competencies in order to ensure validity of interview stage. The statistical population of this research in the qualitative section is consisted of the professors of Educational Sciences, social activists, and entrepreneurs, especially in the field of education, and the professors of entrepreneurship, that after interviewing about 23 people, the information was saturated. In the qualitative section of this research, available and "targeted sampling" strategy has been used. Among the total number of identified individuals, the final questionnaire was sent to 125 people and 95 questionnaires were returned. Theme analysis method was used to analyze the research data in the qualitative section; and after data analysis, through open and axial coding, by development of questionnaires containing the identified indicators, quantitative data were collected in order to verify the obtained framework and confirm the mentioned indices. In the quantitative section, in order to achieve the two goals of approving the framework and ensuring goodness of fit, the sample population using some indices has prioritized them.

3- RESULTS

3-1. Results of the qualitative section

Results of the qualitative section of the research showed that the list of entrepreneurship-based competencies and sub-competencies for graduates of Educational Sciences, that in the present study, 6 main competencies and 42 psychosocial sub-competencies of entrepreneurship have been obtained based on Delphi technique. These competencies

have been obtained from among 11 competencies and 68 sub-competencies after final review and approval. The first competency is policies and management of business education and learning (PMBEL) (with sub-competencies including educational policies; selling educational services; development and designing of educational businesses and learning; financial management of contracts; educational marketing; business intelligence and risk management).

The second competency is IT Management (ITM) (with sub-competencies including: exploiting social networks; development of scenario and designing of educational games; designing and development of educational and learning information database; designing educational management dashboards; exploiting cloud services; use of specialized training and learning software programs). The third competency is Decision making and problem solving (DMPS) (with sub-competencies including analysis; problem solving; creativity and innovation; critical thinking). The fourth competency is effective interactions and communications (EIC) (with sub-competencies including individual skills; interpersonal relationship; professional ethics; individual development). The fifth competency is management and leadership (ML) (with sub-competencies including management and support (logistics); team building; performance management; and motivation management). The sixth competency is management of learning and human resource development (MLHRD) (with sub-competencies including pathology and development of long-term plans; organizational educational needs assessment; competencies management (development of competency and evaluation and IDP); designing of new learning services (Journal Club, Grants, mentoring, coaching, etc.); assessment of learning services; monitoring of learning services; evaluation of educational, and learning financial resources; research (statistics and research method); management of educational and learning projects; development of educational and learning programs (EDC); providing educational services; talent management; management of educational units; establishment and audit of educational quality and learning management standards; designing and implementation of organizations' educational science management system; evaluating sublime systems of education and learning).

3-2. Results of quantitative section

Descriptive statistics of all entrepreneurship-based competencies in terms of statistical indices is as shown in the **Table.1**. For example, for policies and management of business education and learning (PMBEL), the minimum of comments is 1.40, the maximum of comments is 4.53, and the average and standard deviation of comments are 2.8756 and 0.437, respectively.

3-2-1. Goodness of fit of entrepreneurship-based competencies measurement model

The results related to fitness of entrepreneurship-based competencies measurement model obtained is shown in **Table.2**. In the fourth column of **Table.2**, coefficients of factor loads have been shown. The criterion value for appropriateness of coefficients of factor loads is 0.4. In this table, all values of coefficients of factor loads of questions are greater than 0.4, which indicate that this criterion is appropriate. In addition, according to the fifth and sixth columns of the table, Cronbach's alpha and combined reliability of each dimension of organizational image variable are shown. Given that appropriate value for Cronbach's alpha and combined reliability is 0.7, and according to the results of the

above table, these criteria have adopted a suitable value for latent variables, and appropriateness of reliability status can be confirmed. The table's final column also shows convergent validity of variables. Given that, appropriate value for Average Variance Extracted (AVE) is 0.5 and according to the results of the table, this criterion has adopted a suitable value for latent variables, and thus, appropriateness of convergent validity of the research is confirmed.

Table-1: Descriptive statistics of entrepreneurship-based competencies for graduates of Educational Sciences.

Variables	Sign	Observance	Minimum	Maximum	Mean	Standard deviation	Variance
Policies and management of business education and learning	PMBEL	95	1.40	4.53	2.8756	0.6614	0.437
IT management	ITM	95	1.00	5.00	3.6218	1.0386	1.709
Decision making and problem solving	DMPS	95	1.00	5.00	2.7487	1.0519	1.107
Effective interactions and communications	EIC	95	1.00	5.00	2.6530	1.2568	1.580
Management and leadership	ML	95	1.00	5.00	2.4803	1.0170	1.034
Manage learning and human resource development	MLHRD	95	1.00	5.00	2.8744	1.0078	1.016

PMBEL: policies and management of business education and learning; ITM: IT Management; DMPS: decision-making and problem solving; EIC: effective interactions and communication; ML: management and leadership; MLHRD: management of learning and human resource development.

Table-2: Fitness indices of entrepreneurship-based competencies model.

Factors	Sign	Indicator	Factor loads	Cronbach's alpha coefficient (Alpha>0.7)	Combined reliability coefficient (CR>0.7)	Convergent validity (AVE>0.5)
Policies and management of business education and learning	PMBEL	PMBEL1 PMBEL2 PMBEL3 PMBEL4 PMBEL5 PMBEL6 PMBEL7	0.966 0.938 0.936 0.919 0.755 0.842 0.801	0.947	0.961	0.831
IT management	ITM	ITM ITM ITM ITM ITM ITM	0.849 0.884 0.729 0942 0.955 0.827	0.866	0.909	0.713
Decision making and problem solving	DMPS	DMPS1 DMPS2 DMPS3 DMPS4	0.925 0.987 0.940 0.923	0.927	0.944	0.774

Effective interactions and communications	EIC	EIC1 EIC2 EIC3 EIC4	0.736 0.812 0.816 0.832	0.928	0.947	0.783
Management and leadership	ML	ML1 ML2 ML3 ML4	0.868 0.731 0.876 0.852	0.831	0.885	0.660
Manage learning and human resource development	MLHRD	MLHRD1 MLHRD2 MLHRD3 MLHRD4 MLHRD5 MLHRD6 MLHRD7 MLHRD8 MLHRD9 MLHRD10 MLHRD11 MLHRD12 MLHRD13 MLHRD14 MLHRD15 MLHRD16 MLHRD17	0..987 0.940 0.923 0736 0.816 0.925 0.729 0.942 0.955 0.827 0966 0.938 0.936 0.919 0.755 0.832 0868	0.947	0.961	0.831

PMBEL: policies and management of business education and learning; ITM: IT Management; DMPS: decision-making and problem solving; EIC: effective interactions and communication; ML: management and leadership; MLHRD: management of learning and human resource development.

3-2-2. Divergent validity of entrepreneurship-based competency fitness measurement model

Acceptable divergent validity of a model demonstrates that a structure in the model, compared to other structures, has more interaction with its indices. According to the results of **Table.3**, this is examined through a matrix whose items include values of correlation coefficients between structures and square root of AVE values related to each structure. Based on the results of correlations and square root of AVE which are shown on the diameter of **Table.3**, divergent validity of the measurement model at structure level can be concluded in terms of Fornell-Larcker criteria (20). Therefore, all main competencies and sub-competencies are confirmed.

Table-3: Divergent validity measurement matrix through Fornell and Larcker method.

Structures	Policies and management of business education and learning	IT management	Decision making and problem solving	Effective interactions and communications	Management and leadership	Manage learning and human resource development
Policies and management of business education and learning	0.783					
IT management	0.283	0.660				
Decision making and problem solving	0.149	0.011	0.831			

Effective interactions and communications	0.719	0.431	0.594	0.725		
Management and leadership	0.128	0.102	0.104	0.447	0.713	
Manage learning and human resource development	0.024	0.039	0.117	0.396	0.115	0.774

3-2-3. Factor analysis of entrepreneurship-based competencies

In conducting factor analysis, firstly it must be ensured whether the available data can be used for analysis or not? Therefore, we first examine appropriateness of data for factor analysis. There are several methods to do this, among which calculation of KMO value whose value always fluctuates between zero and one can be mentioned. If KMO value is less than 0.5, the data is not suitable for factor analysis, and if the value is between 0.50 and 0.69, then factor analysis is possible with more caution, but if its value is greater than 0.7, the correlations existing between the data will be appropriate for factor analysis. On the other hand, Bartlett test has been used in order to ensure data appropriateness showing that the matrix of correlations that are the basis of analysis is not zero in the population.

In other words, using Bartlett test, sampling adequacy can be ensured. The obtained results shown in **Table.4** indicate suitability of existing correlations between the data for factor analysis and sampling adequacy. Given the KMO number (greater than 0.7), and significance number of Bartlett test ($P<0.05$), it can be said that the data is suitable for performing factor analysis and has the required conditions.

According to **Figure.1**, appropriate value for AVE is 0.5, and according to the results of the **Figure.1**, this criterion has adopted a suitable value for latent variables; thus, appropriateness of convergent validity of the research is confirmed. Therefore, entrepreneurial competencies model for graduates of Educational Sciences is confirmed (*Please see the figure at the end of paper*).

Table-4: Results of KMO index and Bartlett test for customer satisfaction.

Sampling test (KMO)	0.819
Bartlett test	5177.460
Degree of freedom	190
Significance level	0.000

4- DISCUSSION

In the era of accountability when the expectations of organizations and individuals in the community have increased about the provision and reception of services, the type of education in various occupations has undergone fundamental changes. Experience has shown that traditional training alone does not have sufficient effectiveness in practical jobs, especially related to health care. Therefore, adopting a suitable educational designing pattern and approach is one of the first and most effective steps to create an efficient and effective educational system. Competency-based education is one of the most effective training methods, which is based on the needs of individuals and in accordance with the requirements and competencies required in doing the task. Since competency includes knowledge, ability, skill, attitude and motivation, competency-based education also emphasizes competency components and the obtained results. Competency-based

education looks at the difference in talents of people as a temporal difference. In this viewpoint and based on acceptance of this logic; professional competency is not an either "be" or "not be", but competency is considered as a route, which has a starting point and as the route is continued we will reach a point where there is the least competency required for being accepted in the profession; this route continues up to the level of mastery and excellent level of competency, that no precise end point can be considered for it. On this basis, competency-based education essentially emphasizes determination of minimum competence as a criterion; while providing conditions for obtaining competency at higher levels; and the most important advantage of this method is that it will lead to safe functioning and high quality care in the graduates and consequently, it leads to patient satisfaction, professional development and lower unemployment costs in the community. Therefore, by employing a competency-based education program, one can expect growth of professional competencies, development of decision-making skills, and resolution of problems and efficiency (21).

This study has been conducted to design an entrepreneurship-based competency model. This framework suggests that in a system, the skills, knowledge, and attitudes should be considered, and the factors constituting learning behaviors be in a range that development and use of such behaviors facilitates guidance toward desired learning outcomes. This study emphasizes learning behaviors that include a system of produced entrepreneurial learning patterns. Under competency framework, results are suggested saying that entrepreneurship learner, more than having an awareness of learning opportunities, desires to learn or gather experience, skills and knowledge. Therefore, entrepreneurship is a behavior, not a personality trait; and its basis relies on concept and theory and knowledge, not inspiration and illumination, and this behavior must be created through proper training of standards and competencies. According to the research results and the advantages of designing curriculum based on competency, the most important difference between competency-based curriculums and other educational programs is in the same competency approach. In traditional educational programs, which are usually held as lectures too, what often occurs is transfer of knowledge, while in competency-based development approach; knowledge transfer is only a small part of educational programs because, as stated, competency in addition to knowledge includes ability, skill, attitude and motivation. In these programs, the aim is that the person learns competency practically. Accordingly, after presentation of knowledge, competency practice is done which focuses on basic competencies (knowledge, skills, and attitudes). These patterns are also consistent with the findings in previous studies related to identifying behaviors related to entrepreneurial learning.

The main reason in this study regarding entrepreneurship training is to place more emphasis on behavioral changes in entrepreneurial learning model, in order to pay more attention to learning knowledge and attitudinal changes. Also, regarding learning activities incompetency-based program, features such as risk taking, combined nature of activities, attention to individual and group activities, relationship with the world of profession, being facilitator of the link between opinion, and action and participatory nature of activities were obtained, which are consistent with the results obtained by by Serpell, and Ferrada (18), Calman (10), and Frank et al. (19). In addition, due to weakness of economic system in recruiting workforce, competency-based curriculum can be used in order to train competent

graduates. Several approaches are used in development of curricula, each of which has advantages and limitations. Competency-based curriculum is an approach that has a good potential for developing competencies in graduates, and using it, learning profession, integration of practical and theoretical training, development of competencies, and development of basic skills can be strengthened and corrected. As mentioned in the aforementioned model, the basis of this model is identification of basic competencies and development of programs for their training. The curriculum developers in general (education and higher education) in the present era and at the beginning of the 21st century should also note that curriculum should be designed in such a way that it creates and strengthens required competencies (knowledge, skills, attitudes) in order for success of graduates in their professional and life situations.

Regardless of the problems of the Iranian economic system in attracting university graduates and considering the issues presented in this research, higher education can be used for education to be able to educate competent and desirable graduates, the importance and necessity of competency-based curriculum planning in Iranian higher education is more evident than before. Investigation of the subject literature and domestic and foreign studies show that the model presented in this research has considered more complete competencies in five categories; and by presenting a comprehensive model of core competencies, has evaluated all psychological dimensions necessary for entrepreneurship in Educational Sciences and Psychology; the previous studies have not considered this holistic view and value and personality dimensions have been less considered by researchers.

In addition, research findings show that competency in learning management and human resource development, policymaking, and professional management of educational business and learning have had greater importance in success of an entrepreneur in Educational Sciences, compared to other competencies. Also, among sub-competencies, designing new learning services (Journal Clubs, Grants, networking, coaching, etc.), talent management, management of educational and learning projects, pathology and development of long-term plans, and provision of educational services have been more important than other sub-competencies. Considering the research results and in order to use the advantages of entrepreneurship-based competency in Iranian higher education, the following activities can be recommended:

1. It is suggested that, given the fact that entrepreneurial personality traits can be trained and transmitted and educational environment has an effective role in shaping them, in educational environments related to managers, entrepreneurial personality traits will be trained and strengthened so that in this way, the ground will be provided for emergence and occurrence of entrepreneurship in managers. This can be realized through addition of training programs or through holding of in-service training workshops.

2. The results of the present study showed that entrepreneurship competencies can be used as an exceptional opportunity for policy-makers and planners in the area of employment in order to utilize and plan for entrepreneurship growth and development in the employment system of the country. Therefore, it is suggested that the Ministry of Sciences, when changing the curricula in order to develop entrepreneurship, develop and implement the competencies needed for each discipline in order for entrepreneurship.

3. Given the results of this study, it is suggested that employment officials pay

attention to lack of tangible difference between managers in different areas in having entrepreneurial features, and act unworriedly in order to design domestic and foreign businesses so that the ground will be provided for graduates of Educational Sciences to become actual entrepreneurs all over the world.

4. Review of curricula and existing teaching and learning methods related to competency-based curriculum (emphasis on teaching competencies instead of mere focus on teaching curriculum subjects).

5. Identification of basic competencies of each university discipline in Bachelor's degree, Master's degree, Ph.D., and design of a curriculum based on development of these competencies and

6. Provision of a ground for better connection between higher education and community and industry, and more awareness of human resource needs of the community and industry in order to be used in developing competency-based curriculum; and using industry capacities in students' learning opportunities and also having their financial and informational supports, and have established universities in order to provide their competent human resources.

5- CONCLUSIONS

The findings of the present study showed that among the factors influencing the identification of entrepreneurship-based curriculum characteristics related to introducing entrepreneurial opportunities in the field of education and paying attention to new learning methods in the development of education graduates had a higher impact factor than other factors. Among the challenges of entrepreneurship-based curriculum are the lack of investment and entrepreneurial resources, and the shortage of experts and faculty familiar with specific disciplines along with entrepreneurial components having a higher impact factor than others.

6- CONFLICT OF INTEREST: None.

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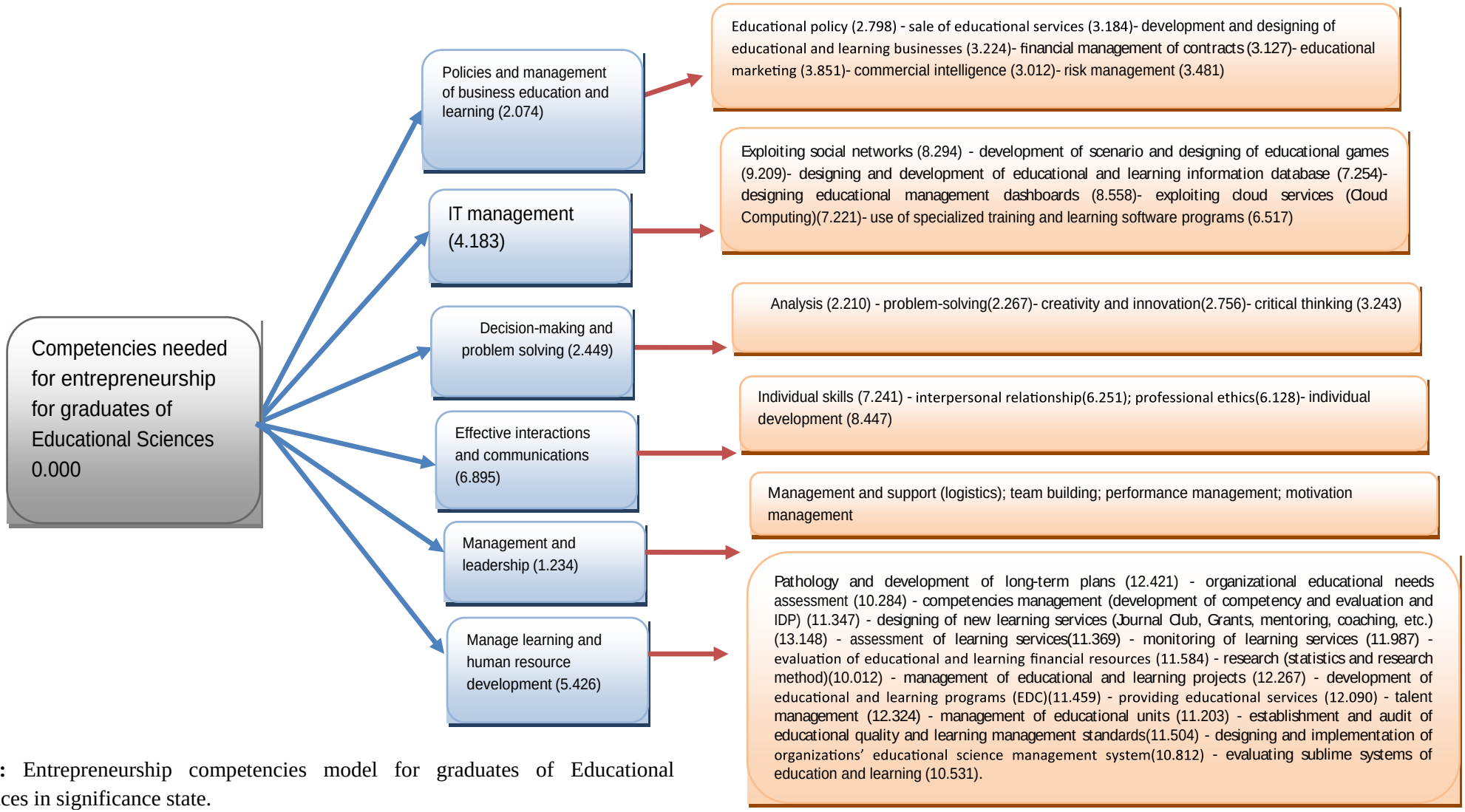

Fig.1: Entrepreneurship competencies model for graduates of Educational Sciences in significance state.

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