Design and Validation of a Curriculum Model based on Entrepreneurial Thinking in High School (Case Study: Secondary Schools in the West of Guilan Province)

Arzhangh Khoshnoud Calesara *[1], Masoud Emaminezhad [2], Mozhghan Mohamadi Naeeni[3]

Received Date:22/06/2023 Accepted Date:17/12/2023

Pp: 228-242

Abstract

Introduction: The purpose of this research was to design and validate a curriculum model based on entrepreneurial thinking in the second secondary course in the west of Gilan province.

Method:the statistical population in the qualitative section included all entrepreneurship experts, researchers and technical and professional experts, and colleagues of education departments of Gilan province. In the academic year of 1991-1992, 15 people were selected by purposive sampling method, and in the quantitative part, including all the students and students of conservatories in Gilan province, 1864 people, and 320 people were studied by multi-stage cluster sampling method. In the qualitative part, data collection was done through semi-structured interviews, and in the quantitative part, a researcher-made questionnaire consisting of 128 questions on a five-point Likert scale was used. The data were collected using the structural equation modeling method and software SPSS22 and PLS3 were analyzed.

Finding: the results showed that the curriculum model based on entrepreneurial thinking has 3 comprehensive topics, 6 organizational topics, and 128 basic topics. Based on the findings of the present research, it can be concluded that the aforementioned components can be used to design a curriculum model based on entrepreneurial thinking in secondary school.

Key Words: Curriculum Model, Design, Entrepreneurial Thinking, Secondary Schools, Validation.

[1]- PhD Student in curriculum planning, Arak Branch, Islamic Azad University, Arak, Iran.

[2] - Assistant Professor, Department of Management, Astara Branch, Islamic Azad University, Astara, Iran (Corresponding Author) Ma.Emaminejad1346@iau.ac..

* Corresponding Author:

[3]- Assistant Professor, Department of Educational Sciences, Arak Branch, Islamic Azad University, Arak, Iran.

Introduction

Education is one of the important factors of economic development, for its dynamism and growth, the school must be linked to the real world, and in addition to providing specialized knowledge in scientific fields, it must help students acquire knowledge and skills to successfully face the situation and the requirements of the new era, including entrepreneurial thinking (Maghamdoust, Hatami, Talaie, & Shams, 2019). The position of entrepreneurship is special in all developed and developing countries. The development of entrepreneurial culture, promotion, and foundation for it, is a serious economic, social, and cultural necessity for every country and the important point is that entrepreneurship is not something that is suddenly created in someone's mind, but, it is the result of a process that should be started from childhood, and gradually completed in higher periods (Sule & Ariawaty, 2021).

The experiences of different countries in this field indicated that entrepreneurship education, in basic education courses, such as preschool and primary school, emphasizes entrepreneurial elements such as creativity, growth, and flourishing of entrepreneurial behaviors (Barlian, 2021). Entrepreneurship means value creation and its valuable consequences are sustainable economic and social development, increasing the spirit of teamwork and creativity, increasing sustainable employment, reducing social damages, etc. Due to Iran's need for entrepreneurship development, the issue of entrepreneurship and its education has been raised and included in the curriculum. Considering the youth of the Iranian society, of which a significant population is looking for jobs, the need for entrepreneurship and new and emerging perspectives in this field is twofold (Hamzehlou, Hezarjaribi, Safari, & Momeni, 2022). Graduates' success in meeting society's expectations depends on their specialized and individual skills (Ekoja & Odu, 2016). Successful graduates are those who are not only equipped with specialized skills, but also other skills such as innovation, creativity, problem-solving, planning, teamwork, using opportunities, self-confidence, responsibility, flexibility, risk-taking, and optimism should be cultivated in them, and schools should be a place to cultivate these skills (Baniameriyan, 2018).

Today, the issue of employment, or the issue of employment and unemployment, is not only one of the most important social issues of the world and our country Iran, but also, considering the rate of population growth in the last two decades, it is one of the most important social challenges of the next few decades (Rahimiyan, Saremi, Dehghani, & Mobaraki, 2020). Solving this problem has faced the policymakers of most countries with great challenges, so the stability and deterioration of some governments can depend on solving the unemployment crisis (Doanh, Thang, Nga, Van, & Hoa, 2021). The unemployment crisis is, in fact, a threat to the whole society; graduate unemployment, in particular, will have irreparable consequences in social, economic, and political dimensions (Bavafa, Dehghani, Javadipour, & Mohamadkazemi, 2021). Unfortunately, there is no significant progress in this

field, the reason for which is the lack of attention to proper entrepreneurship education at different levels of education. The question is: "How far have secondary school curricula been able to achieve their goals in creating an entrepreneurial attitude and the characteristics of entrepreneurs in students?" (Omidi, Hashemi, Ghaltash, & Mashinchi, 2019).

Rezaie, Naderi, and Safari (2020), contended that the lack of interest and motivation to study, the weak scientific foundation of students, the lack of proper relationship between science and industry, the poor physical condition of vocational schools, the use of non-specialist teachers in entrepreneurship education, using inappropriate teaching-learning methods, allocating low budget to vocational school, low quantity and quality of educational equipment and facilities, are some of the problems and obstacles to the development of entrepreneurial knowledge and skills. According to the research results of Davari, Ramazanpour, Afrasiyabi, and Davari (2018), entrepreneurship policies, business environment, and entrepreneurship development are not in a favorable situation. Metallo, Agrifoglio, Briganti, Mercurio, & Ferrara (2021) showed in their research that there is a significant difference between the entrepreneurial ability of students who have received entrepreneurship training and those who have not. The results of this research indicate the efficiency of the existing entrepreneurship program, and the fact that there is a significant difference in entrepreneurship competence between students who have received entrepreneurship training and those who have not indicates the need to formulate an alternative program. Moreover, according to the research results of Venotha and Alex (2021), the current curriculum of entrepreneurship has not been effective, and it reminds the need to design an alternative. The research of Wilkerson (2021) also confirmed the ineffectiveness of the entrepreneurship curriculum and admits that there is no significant difference between the entrepreneurial talent of those who have received entrepreneurship training and those who have not.

In each education period, various factors are involved in the educational system, one of the most important of which is the curriculum which plays a decisive and effective role in realizing the goals and missions of this system (Gutterman, 2016). Moreover, curricula are one of the most important and challenging topics of human knowledge, and there are many areas for its development and expansion (Fathi Vajargah, 2016). A curriculum is a set of systematic and planned educational opportunities and their consequent results, which educators are exposed to to acquire the necessary competencies to understand and correct the situation. Since students spend most of their time in schools, school curricula take priority. So, the stronger the curricula, the more effectively the educational goals are achieved (Alonso-Gonzalez, Plata-Rugeles, Peris-Ortiz, & Rueda-Armento, 2017).

Although the performed activities and measures based on the requirements of the time and related needs have been significant, due to the changes and new needs arising from these changes, the interest and acceptance of fields related to entrepreneurship, in some areas have decreased, and the effectiveness of some curricula is unclear, or in some areas, there are serious

gaps for the design and implementation of new programs (Rafiee, Yarmohamadiyan, & Kashtiaray, 2019). The important issue is that, as a result of the inconsistency of the curricula of the educational fields with the real needs of the labor market, in various fields of study and the acceptance of students in Iranian universities, unfortunately, every day, the number of graduates of various fields of study increases, most of them are unemployed, or if they are employed, they are engaged in work unrelated to their field of study. the number of graduates of various fields of study increases, most of them are unemployed, or if they are employed, they are engaged in work unrelated to their field of study. Indeed, our higher education graduates do not have the necessary practical and applied abilities and skills in the technical and professional fields, and their interest in being employed in government institutions, despite the low salaries and benefits, points to this issue (Mirzaie, Amraie, & Nazari, 2021). On the other hand, graduates of vocational schools do not show much interest in production jobs, and consider such jobs as laborious, low-income, and far from the dignity of a university graduate. While, the authorities and the society expect them to create jobs for others in addition to their employment, and to play a key role in the development of various jobs (Nikfarjam, 2018).

Accordingly, designing an alternative and appropriate model of employment-generating curriculum, with entrepreneurial elements, is one of the most important reasons for conducting the present research, and no research has been conducted in this field before; this research, considering the emphasis of upstream documents such as the fundamental evolution document of education on the training of entrepreneurial and capable educators, aims to provide the field of employment and entrepreneurship of secondary school graduates by designing and validating the ideal curriculum model based on entrepreneurial thinking in secondary school. And in this way, it is trying to determine what are the characteristics of the desirable secondary school curriculum, with an entrepreneurial approach and what is the validity of this program.

Research Methodology

Design and Context of the Study

Qualitative methodology was used to answer the research question, and in terms of research philosophy, it is in the category of applied positivism paradigm, and terms of the field of qualitative research, it has an inductive approach. This research is exploratory in terms of its purpose and explores the variables and their relationship. The required information was collected by interviewing experts and used qualitatively. The research community of the current research included 15 principals of second secondary schools in the west of Gilan province. Sampling has been done using the non-probability judgment (targeted) method. Interviews were conducted with research samples. The characteristics of the experts of all principals of second secondary schools in the west of Gilan province have been considered. To provide a model for a curriculum based on entrepreneurial thinking, second

secondary schools in the west of Gilan province were interviewed. For sampling, the snowball method was used and semi-structured interviews were conducted with open and general questions of up to 10 people until we reached data saturation, but for more certainty, interviews were conducted with up to 15 people. Finally, the factors were identified using the database technique. In the quantitative part, 320 people were selected and included in the study using a multi-stage cluster method.

Instruments

To collect the required data, a semi-structured interview and a researcher-made questionnaire including 128 questions on a five-point Likert scale were used. The pilot study findings were examined using the CVR test and Cronbach's alpha to determine the reliability and validity of the questionnaires. The items on the questionnaires were given to three experienced professors in the subject who were Ph.D. holders to check for ambiguity to ensure face and content validity. Their feedback assisted the researchers in enhancing the quality of the final instruments used. Accordingly, the validity and credibility of the qualitative data analysis were checked as Creswell and Plano Clark (2018) explained by asking peers to examine the data, i.e., peer-reviewing.

Data Analysis Procedure

In the inferential part, the Kolmogorov-Smirnov test was used to check the normality of the data, and structural equation modeling was used to confirm the curriculum model based on entrepreneurial thinking in secondary school. All analyses were performed using SPSS22 and PLS3 software.

Research Results

Data analysis began by using free coding of all the lines of the interview text, and after reviewing the text of the interviews, integrated and coherent meanings that made up a category were separated, and then these concepts were named. Axial coding was achieved by combining primary codes. According to the results, the curriculum model based on entrepreneurial thinking has 3 inclusive themes, 6 organizing themes, and 128 basic themes. The results of descriptive results are shown in Table 1.

Table 1: Central and dispersion indices related to research variables

Organizer themes	Average	SD	Min.	Max.	Skewness	Kurtosis
Individual competencies	95.681	14.429	31.00	119.00	-0.735	0.377
Cognitive competencies	97.966	14.544	58.00	124.00	-0.264	-0.832
Communication	38.450	5.191	14.00	49.00	-0.710	0.908

competencies						
Management competencies	49.000	6.808	24.00	62.00	-0.444	-0.401
Professional competencies	116.287	15.987	59.00	148.00	-0.420	-0.509
Wealth competencies	81.690	11.401	41.00	102.00	-0.441	-0.564

Table 1 shows the results of the average and standard deviation of the research variables. Moreover, according to the skewness and kurtosis values in the range of (-2, 2), it can be said that the data distribution is normal.
The Kolmogorov-Smirnov test was used to analyze the normality of the collected data. In this test, the null hypothesis (H0) indicates that the variable is normal and the opposite hypothesis (H1) indicates that the variable is not normal. The results of this test are shown in Table 2.

Table 2: Output of the Kolmogorov-Smirnov test to analyze the data normality

Variables	Kolmogorov-Smirnov statistic	Significance level	Test result
Individual competencies	2.384	0.001	The data distribution is not normal
Cognitive competencies	1.317	0.042	The data distribution is not normal
Communication competencies	2.195	0.001	The data distribution is not normal
Management competencies	2.218	0.001	The data distribution is not normal
Professional competencies	1.771	0.004	The data distribution is not normal
Wealth competencies	2.266	0.001	The data distribution is not normal

According to the results of Table 2, the significance level of the research variables is <0.05, which means that these variables are not normal and the null hypothesis is accepted.

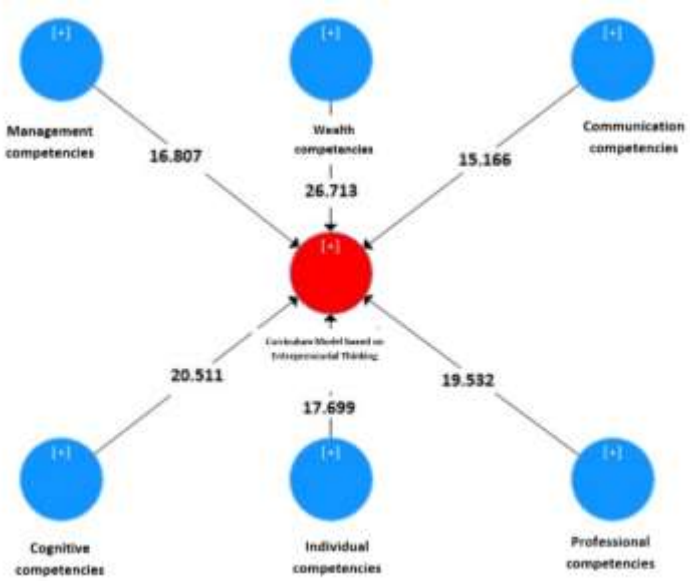


Fig. 1: T-values of relationships of the main research model

Figure 1, shows Load Factors, in the standard estimation mode and significance level of them. The load factors of the model in the standard estimation mode show the influence of each variable or item in explaining the variance of the main structure scores. In other words, the Load Factor indicates the degree of correlation of each observed variable (questionnaire question) with the latent variable (factors). The t-value judges the significance of the Load Factor.

Table 3: Values of general model fit criteria

Anticipatory structures	Criterion structure	path coefficient (β)	t- value	The significance level	F2
Individual competencies	Curriculum Model Based on Entrepreneurial Thinking	0.641	17.699	0.001	2.773
Cognitive competencies		0.722	20.511	0.001	3.295
Communication competencies		0.503	15.166	0.001	1.338
Management competencies		0.577	16.807	0.001	22.064
Professional competencies		0.703	19.532	0.001	3.044
Wealth competencies		0.735	26.713	0.001	3.694

According to the results of Table 3, because the significance level is analyzed at the error level of 0.05, the absolute t-value > critical value of 1.96, and the significance level < 0.05, so all load factors are significant.

Discussion and Conclusion

Today, we see many graduates who find it difficult to find a job after graduation. This problem is important not only for graduates but also for students who have not yet graduated. This is because students who are still studying can see the problems that students face after graduation. A large number of graduates are the reason many of them are unemployed, which has led to an increase in unemployment over the years. In the first quarter of 2017, a total of 516,000 unemployed people were registered, of which 238, 286 were unemployed graduates. This high number is worrying for the country and will become more serious if it is not addressed immediately because it can have a negative impact on the progress and development of the country.

Today, entrepreneurship education is highly emphasized by the government, so graduates tend to Graduates from higher education choose entrepreneurship as their career. This is because entrepreneurship education gives young people the opportunity to discover hidden talents that reveal abilities and skills they do not know. Entrepreneurship training has a positive effect on the lives of students, both entrepreneurs and non-entrepreneurs. The introduction of entrepreneurship education in the university has helped to solve the frustration of many parties, especially students and parents in creating more jobs than job seekers. A curriculum based on entrepreneurial thinking as a new educational method can have very positive effects on secondary schools. By teaching students creative thinking and innovation as well as entrepreneurial abilities, these programs prepare them to face life and professional challenges.

The first impact of these programs on secondary schools is to increase students' entrepreneurial abilities. By encouraging students to conceptualize, plan, and implement small business plans, these programs lead them to learn the necessary skills to start and manage businesses. Also, curricula based on entrepreneurial thinking can help improve students' motivation and self-confidence. do By creating opportunities to experience success and failure in the educational environment, these programs give students the belief that they are capable of changing and improving their situation. These positive beliefs prepare them to face life's challenges and achieve their personal and professional goals. Entrepreneurial thinking programs encourage students to self-empower. These programs teach students self-confidence, flexibility, and decision-making power, all of which are essential skills for future personal and professional growth. Programs based on entrepreneurial thinking allow students to experiment and implement their own ideas. This allows them to become aware of the flow of entrepreneurship and the process of starting a business and gain practical experience in this field. These programs can strengthen the connection between students and the local community. Through collaboration with local companies, non-profit institutions, or universities, students can learn about business realities and local needs and establish useful relationships. In general, curricula based on entrepreneurial thinking in secondary schools can prepare students for success. prepare them for today's

and tomorrow's world, as well as teach them motivation, social communication, and business skills.

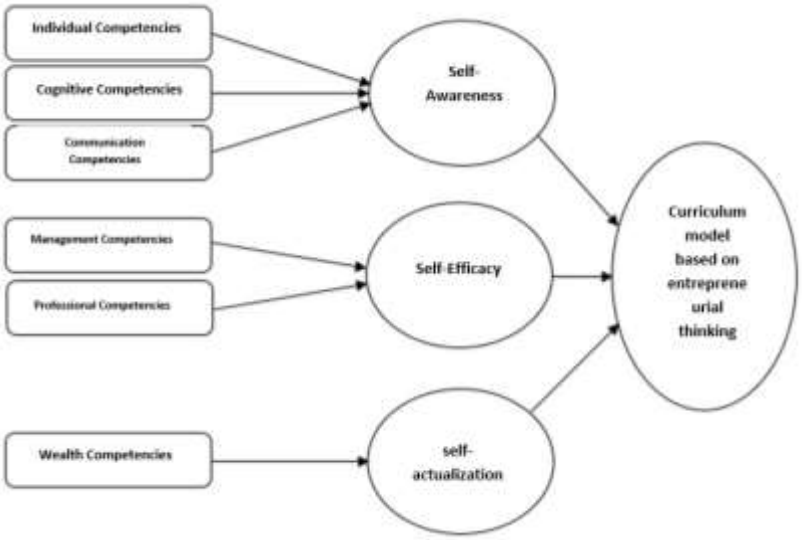
As stated before, the current research aims to design and validate a curriculum model based on entrepreneurial thinking in secondary school (case study: upper secondary school in the west of Gilan province). In the first research question, the results showed the curriculum model based on entrepreneurial thinking, including 3 inclusive themes (self-awareness, self-efficacy, and self-actualization), 6 organizing themes (individual, perceptive, communication, managerial, professional, and wealth competencies), and there are 128 basic themes. In the conducted investigations, no research has specifically found these results, but the mentioned finding is somehow aligned with the results of Davari et al. (2018) and Hamzehlou et al. (2022).

In this regard, Alonso-Gonzalez et al (2017) believed that among all the needed skills by graduates, the entrepreneurial skill is the most valuable skill that intelligent people should be equipped with to face the basic challenges of the 21st century, especially the problem of unemployment. In explaining this result, it can be said that entrepreneurship includes the concept of doing things differently from the existing usual methods. Entrepreneurship is a dynamic process of making increasing wealth. In entrepreneurship, it is not enough to have new ideas, they should lead to successful production, absorption, and exploitation of every innovative thing in society. This is why many researchers consider innovation and entrepreneurship as two very close and similar concepts. The entrepreneur is the accelerator of changes in the business world. He is an independent thinker who dares to be different in an environment of common events. An entrepreneur is someone who organizes, manages, and accepts the risks of a business or organization. Entrepreneurship leads to innovation, job creation, human resource development, and customer satisfaction. Such evidence has influenced researchers in applying social-cognitive models and theories to identify entrepreneurial intention, especially in the career planning of young people.

The result of the research's second question was that the prioritization of the effective factors on the curriculum based on entrepreneurial thinking includes individual, wealth, cognitive, professional, personal, managerial, and communication competencies, respectively. In the conducted investigations, no research has specifically found these results, but the mentioned findings are somehow in agreement with the results of Jeddi Gargari, Mohebzadegan, and Azizi (2021), Kirkley (2017), Pret and Cogan (2019), and Rezaie et al. (2020). In this regard, Jamei (2018) believed that the position of entrepreneurship is special in all developed and developing countries. The development of entrepreneurial culture, promotion, and foundation for it, is a serious economic, social, and cultural necessity for every country and the important point is that entrepreneurship is not something that is suddenly created in someone's mind, but, it is the result of a process that should be started from childhood, and gradually completed in higher periods. The experiences of different countries in this field indicate that entrepreneurship education, in basic education courses, such as preschool and primary school, emphasizes

entrepreneurial elements such as creativity, growth, and flourishing of entrepreneurial behaviors. Entrepreneurship means value creation and its valuable consequences are sustainable economic and social development, increasing the spirit of teamwork and creativity, increasing sustainable employment, reducing social damages, etc. Due to Iran's need for entrepreneurship development, the issue of entrepreneurship and its education has been raised and included in the curriculum. Considering the youth of the Iranian society, of which a significant population is looking for jobs, the need for entrepreneurship and new and emerging perspectives in this field is twofold. Successful graduates are those who are not only equipped with specialized skills, but also other skills such as innovation, creativity, problem-solving, planning, teamwork, using opportunities, self-confidence, responsibility, flexibility, risk-taking, and optimism should be cultivated in them, and schools should be a place to cultivate these skills.

Considering the third research question, the curriculum model based on entrepreneurial thinking is as follows:



Therefore, this research tries to present the curriculum model based on the aforementioned entrepreneurial thinking in a structured and purposeful way, on three levels, in the form of a conceptual model for upper secondary school students in the west of Gilan province.

The results of the fourth research question showed that the overall model, including both parts of the measurement model and the structural model, is a perfect fit. In other words, the Load Factor indicates the degree of correlation of each observed variable (questionnaire question) with the latent variable (factors). The t-value judges the significance of the Load Factor. Accordingly, because the significance level is analyzed at the error level of 0.05, the absolute t-value > critical value of 1.96, and the significance level < 0.05, so all load factors are significant. In the conducted investigations, no research has specifically found these results, but the mentioned finding is somehow aligned with the results of Fellnhofer (2017), Goudarzi, Maleki, Khosravi, and Abbaspour, (2021), Maghamdoust et al. (2019), and Omidi et al. (2019). In

this regard, according to Sobhani-Najad, Najafi, Ahmedabadi Arani, and Abdullah (2018), the nature of implementing any curriculum requires the application of homogeneous and compatible changes in other dimensions and elements of the curriculum, parallel to the goals and content. Therefore, according to the research results, teachers believe that the rest of the curriculum elements are not consistent with the goals and content. The allocated time is limited and inflexible so it is not possible to finish all the contents of textbooks using process-oriented teaching methods, including problem-solving, laboratory methods, and cooperative learning. Thus, teachers necessarily use traditional methods and lectures to teach. These methods hinder the learner's dynamism and deprive them of the possibility of constructing knowledge by themselves, which is the main philosophy of the process-oriented curriculum. Simply having a positive attitude towards the curriculum or its foundations is not enough for the effective implementation and realization of goals, rather, a positive attitude towards other factors of education, including the ability of students to learn, the nature of science, research-based methods, etc., are essential for the realization Process-oriented curriculum goals.

To explain this result, several articles have been reviewed about the personal characteristics of advanced entrepreneurs, as well as to identify effective factors in the formation of entrepreneurial thinking. Researchers believe that, among the permanent and conventional personality traits, overconfidence, optimism, stubbornness, and strong passion may influence entrepreneurial thinking. Moreover, several psychological characteristics have been proposed, which affect entrepreneurial thinking. The first attempts to investigate the desire and effort of people to do entrepreneurial activities are rooted in psychological studies. To better present the characteristics of entrepreneurs, experts proposed the concept of the need for success. Accordingly, they believe that people with a high level of need for success have a greater desire to engage in entrepreneurial activities. Entrepreneurial intentions and movements can be considered as functions of entrepreneurs' abilities. The background and skills of every entrepreneur predict entrepreneurial activities. For people who work in advanced companies, a high level of management skills is needed; technical and functional skills are essential in entrepreneurial environments that require extensive knowledge.

In another explanation for this result, it can be said that entrepreneurial activities may be explained due to the effects of the surrounding work environment. Researchers have emphasized that government policies, local context characteristics (such as access to logistics infrastructure, financial investors, and side effects), and more specifically, university support mechanisms, affect entrepreneurial activities. Several articles focus on the predictive power of the environment, in entrepreneurial intentions and movements. Researchers, with special attention to new and independent investments, have shown that newly established companies are not equally distributed in all high-technology advanced industries. In addition to the examined dimensions, organizational dimensions are also one of the reasons

for the formation of entrepreneurial thinking. These factors are especially important for people who want to promote entrepreneurship through valuation in existing companies. Venotha and Alex (2021) investigated the effect of organizational structure on the entrepreneurial intentions of the top manager. They compared companies with an organic structure to companies with a mechanical structure and found that there is a positive and direct relationship between organic organizations and the entrepreneurial intention of the chief executive. Psychological characteristics (such as willingness to take risks and self-efficacy in the field of entrepreneurship) along with advanced skills and abilities affect entrepreneurial intentions. Other researchers, by studying the role of contextual dimensions, confirm that environmental influences, such as job opportunities, destination market heterogeneity, and environmental support such as financial, political, and infrastructure support, affect entrepreneurship. However, despite years of research, researchers currently have a limited understanding of the factors or processes that create or develop entrepreneurial intentions.

The following recommendations are provided based on the current research

Results:

Revision and modification of curricula in secondary school should be pursued seriously, based on the newly designed models.

In designing secondary school curricula, while taking into account the macro policies of the educational system, a deep and accurate needs assessment should be done, and the needs of the labor market, the characteristics of the program audience, and the needs of the social and economic environment should also be taken into account, and in this process, we should not forget to involve the executors of entrepreneurship training programs.

The participation of executers and trainers can guarantee the implementation of the compiled curriculum as well as possible, and cause their mobility, and the dynamics of the compiled content.

In designing curricula, it is necessary to get the support of influential and competent groups; In addition, administrative, legal, and other constraints must be recognized to minimize conflict between the developed curriculum and the operational curriculum.

Training entrepreneurship in upper secondary school is facing challenges such as the following that should be taken into account: the decreasing trend of interest in entrepreneurship training courses, and their non-continuity as in the past, executive management factors, social factors, cultural factors, structural and legal factors and economic factors, lack of correct attitude towards the connection of entrepreneurship education with increasing the level of knowledge and skills People's entrepreneurship, and the low level of teachers' communication skills.

The establishment of entrepreneurial and smart schools, with the aim of training and identifying entrepreneurial students, designing an entrepreneurship training program, as well as teaching entrepreneurship from

elementary school, and meeting students with successful entrepreneurs are some other recommendations.

References

Alonso-Gonzalez, A., Plata-Rugeles, D., *Peris-Ortiz, M., & Rueda-Armento, C. (2017). Entrepreneurial initiatives in Colombian universities: The innovation, entrepreneurship, and business center of Sergio Arboleda University*. universities. Springer International Publishing AG.

Baniameriyan, M. (2018). Designing and *validating the curriculum model of higher technical and professional education based on the promotion of entrepreneurial intention*. Doctoral dissertation, University of Tehran. (Persian)

Barlian, E. (2021). A Model-narrative of Artisan entrepreneur's resources and capabilities. *Psychology and Education Journal*, 58(3), 1444-1451.

Bavafa, D., Dehghani, M., Javadipour, M., & Mohamadkazemi, R. (2021). Synthesis of an entrepreneurial curriculum model in the field of educational sciences based on Aker's spider web network. *Journal of Modern Educational Ideas*, 17(3), 231-250. (Persian)

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage.

Davari, A., Ramazanpour, GH., Afrasiyabi, R., & Davari, E. (2018). The effect of entrepreneurship policies and business environment on entrepreneurship development. *Journal of Entrepreneurship Development*, 11(2), 321-339. (Persian)

Doanh, D.C., Thang, H.N., Nga, N.T.V., Van, P.T., & Hoa, P.T. (2021). Entrepreneurial behavior: The effects of the fear and anxiety of COVID-19 and business opportunity recognition. *Entrepreneurial Business and Economics Review*, 9(3), 7-23.

Ekoja, I.I., & Odu, A.O. (2016). Developing and implementing entrepreneurship. Curriculum in Nigerian library and information science programs. *International Journal of Library and Information Science*, 8(6), 48-53.

Fathi Vajarghah, K. (2016). *Basic principles and concepts of curriculum planning*. Tehran: Elmeh Ostadan Publications. (Persian)

Fellnhofer, K. (2017). The power of passion in entrepreneurship education: Entrepreneurial role models encourage passion? *Journal of Entrepreneurship Education*, 20(1), 58-87.

goudarzi, F., maleki, H., khosravi, M., & abbaspour, A. (2021). Elements of the secondary school social education curriculum based on the Tyler model: Characteristics and requirements. *Research in Teaching*, 9(1), 254-234.

Gutterman, A.S. (2016). Entrepreneurship: Library of resources for growth-oriented entrepreneurs definitions and types of entrepreneurship. *International Center for Growth-Oriented Entrepreneurship*.

Hamzehlou, N., Hezarjaribi, J., Safari, R., & Momeni, M. (2022). Designing a path analysis model of entrepreneurial behavior in professional entrepreneurship, *Journal of International Business Management*, 5(1), 205-221. (Persian)

Jamei, R. (2018). Investigating the appropriateness of the content and methods of accounting education (MA) with the labor market required skills: From the perspective of accounting professors and members of the Iranian Society of CPAs, *Journal of research in teaching*, 6(3), 13. [Persian]

Jeddi Gargari, J., Mohebzadegan, Y., & Azizi, M. (2021). Developing a model for entrepreneurship education for high school students, *School Administration*, 9(1), 261-231.

Kirkley, W. (2017). Cultivating entrepreneurial behavior: entrepreneurship education in secondary schools, *Asia Pacific Journal of Innovation and Entrepreneurship*, 11

(1), 17-37.

Maghamdoust, A., Hatami, J., Talaie, E., & Shams, G.H. (2019). Designing and validating the ideal model of associate degree curriculum with an entrepreneurial approach, *Iranian Curriculum Studies Quarterly*, 14(54), 117-152. (Persian)

Metallo, C., Agrifoglio, R., Briganti, P., Mercurio, L., & Ferrara, M. (2021). Entrepreneurial behavior and new venture creation: The psychoanalytic perspective, *Journal of Innovation & Knowledge*, 6(1), 35-42.

Mirzaie, D., Amraie, S., & Nazari, N. (2021). The relationship between organizational culture and entrepreneurship. *Police Cultural Studies Quarterly*, 8(4), 13-21. (Persian)

Nikfarjam, H. (2018). *Presenting a curriculum model for Jihad Keshavarzi Institute of Scientific-Applied Higher Education with an entrepreneurial approach*, Doctoral dissertation in the field of curriculum planning, Kharazmi University. (Persian)

Omidi, J., Hashemi, S.A., Ghaltash, A., & Mashinchi, A.A. (2019). Mental constructions of educational managers from the curriculum of entrepreneurship education for schools, *Journal of Curriculum Studies of Iran*, 14(53), 101-134. (Persian)

Pret, T., & Cogan, A. (2019). Artisan entrepreneurship: A systematic literature review and research agenda, *International Journal of Entrepreneurial Behavior & Research*, 25(4), 592–614.

Rafiee, N., Yarmohamadiyan, M.H., & Kashtiaray, N. (2019). Designing a template for the content of entrepreneurship education for humanities, *Scientific Quarterly Journal of Teaching and Research*, 7(4), 150-169. (Persian)

Rahimiyan, N., Saremi, A., Dehghani, M., & Mobaraki, M.H. (2020). Analyzing the implemented curriculum of the faculty of entrepreneurship of Tehran University and providing solutions; A narrative research, *Journal of Higher Education Curriculum Studies*, 11(22), 221-248. (Persian)

Rezaie, B., Naderi, N., & Safari, M. (2020). Identifying barriers to entrepreneurship education in Kermanshah schools, *Scientific Quarterly Journal of School Management*, 8(3), 51-66. (Persian)

Sobhani-Najad, M., Najafi, H., Ahmedabadi Arani, N., & Abdullah, Y.A. (2018). The implications of the multicultural curriculum of Michel Foucault and Henri Giroud on the revision and redesign of the curriculum of the elementary school in Iran, *Research in curriculum planning (knowledge and research in educational sciences - curriculum planning)*, 16(33), 68-48.

Sule, E.T., & Ariawaty, R.N. (2021). Influence of knowledge management on innovative behavior and its impact on managerial performance of medium-scale batik industry owners in west Java, Indonesia. **PalArch's** *Journal of Archaeology of Egypt/Egyptology*, 18(2), 436-455.

Venotha, A.S., & Alex, K. (2021). Women entrepreneurs: Making headway toward ownership by dint of effective leadership, *Journal of Xi'an Shiyou University, Natural Science Edition*, 17(1), 88–93.

Wilkerson, J. M. (2021). Resolving the artisan entrepreneur's oppositional identity with venturing in a declining city context, *American Journal of Management*, 21(4), 30-43