

Validation of educational entrepreneurship model in universities and higher education institutions of Iran

Touhid. Shiralipoor¹, Hoda Sadat. Mohseni Sohi^{2*}, Jafar. Ghahremani³

¹ PhD student in educational management, Marand branch, Islamic Azad University, Marand, Iran

² Assistant professor, Department of Educational and Planning, Faculty of Education and Psychology, Alzahra University, Tehran, Iran

³ Assistant professor, educational management department of Marand branch of Islamic Azad University, Marand, Iran

* Corresponding author email address: sadatmohseni@alzahra.ac.ir

Article Info

Article type:

Original Research

How to cite this article:

Shiralipoor, T., Mohseni Sohi, H. S., & Ghahremani, J. (2023). Validation of educational entrepreneurship model in universities and higher education institutions of Iran. *Quarterly Journal of Research and Planning in Higher Education*, 29(3), 117-132.



© 2023 the authors. Published by Institute for Research and Planning in Higher Education (IRPHE), Tehran, Iran. This is an open access article under the terms of the Creative Commons Attribution 4.0 International (CC BY 4.0) License.

ABSTRACT

This research focuses on validating the educational entrepreneurship model in Iranian universities and higher education institutions. The dimensions and components of the qualitative research in this study were investigated using a survey approach. The research community consisted of managers and experts from the entrepreneurship centers of the universities in Tehran. Using the Morgan and Krafcie table, a sample size of 256 people was determined. The sampling was then conducted using the available method. The research tool was a researcher-made questionnaire, which underwent validity and reliability checks using content validity and Cronbach's alpha coefficient, respectively, with the assistance of SPSS software. The Kolmogorov-Smirnov test was used to assess the normality of the data. Statistical analysis in this research was conducted using SPSS and LISREL software. Confirmatory factor analysis was used to validate the model. The factor loading and T-test of 17 main categories were examined in the form of 6 dimensions of the paradigm model in the educational entrepreneurship model of universities, which comprises 108 subcategories. The results indicate that there is a favorable relationship between the observed variable and its component, as well as between the components and the factors dimension, in all 6 categories. Goodness-of-fit indices were examined for all six categories, and the results showed that the model has a good fit based on the acceptance range of each index. The results of this research show that the factors and components identified in the presented model of educational entrepreneurship in Iranian universities and higher education institutions have validity and meaningful relationships. This model can serve as an effective tool for developing and enhancing entrepreneurship education in these institutions.

Keywords: systematic model, entrepreneurship, educational entrepreneurship, foundation data theory, universities and higher education institutions.

Introduction

In the field of higher education and universities, educational entrepreneurship has emerged as an important and new issue. It is seen as a strategy for cultivating ideas, thoughts, initiative, and innovation, as well as directing resources and funds, guiding the market, and serving consumers. This trend has been observed in both developing and developed countries (Elaami & Sayevand, 2020). Studies show that educational entrepreneurship is the process of identifying an educational problem that can be solved with a creative method. The study of educational entrepreneurship reveals newer dimensions (Omer Attali & Yemini, 2017; Cope, 2005). Different factors, such as low competition and the expansion of the field of education, the lack of priority given to education by individuals and organizations due to the economic weakness of society, and the weakness of the culture, pose threats to Iranian educational entrepreneurs (Sayevand, 2020). On the other hand, the economic structure, cultural structure, social structure, educational structure, external environment structure, and individual characteristics have been identified as influential factors on educational entrepreneurship in state universities of the country (Rengiah, 2019; Moradian, Salimi & Jahanian, 2019; Soltanzadeh, Ardalan & Qanbari, 2019). The revised text corrects grammar and punctuation errors, improves sentence structure and clarity, and enhances the overall readability of the text. Universities and educational centers have a significant role in promoting entrepreneurship and imparting relevant skills and abilities to students (Bagheri & Kiani, 2022). The mission of education has long been one of the primary objectives of universities. As a result, the role of the university is constantly evolving and expanding to encompass new dimensions. Entrepreneurial university design is an important aspect for the development of an entrepreneurial mindset and culture (Samandar Ali Eshtehardi, 2022). This research validates the presented model of educational entrepreneurship in universities and higher education institutions of Iran (Shiralipoor, Mohseni Sohi, & Garhami, 2023). Collaboration can play an important role in the development of entrepreneurship in this field. Considering the lack of sufficient research in the field of educational entrepreneurship in Iran's universities and higher education institutions, this study aims to identify and develop the most effective models of educational entrepreneurship in the country. Therefore, this research seeks to answer the question of whether the components and indicators identified in the presented model of educational entrepreneurship in Iranian universities and higher education institutions have a coordinated factor structure in line with the proposed model.

Methodology

The methodological part of validating the executive model of educational entrepreneurship in Iranian universities and institutions of higher education (Shiralipoor et al., 2023) was conducted to ensure the accuracy and reliability of the model. This was achieved through qualitative research using the Corbin model to identify the components and dimensions of the model. To validate the model, a questionnaire related to the components and dimensions of the executive model of educational entrepreneurship, which was obtained from previous qualitative research, was used. In order to assess the validity of the questionnaire used, both face and content validity were employed. Subsequently, the relative coefficient of content validity (CVR) was calculated. Therefore, in the first step, the questionnaire was sent to three experts, and in the next step, it was sent to 20 experts. Also, in order to assess the reliability of the questionnaire, it was initially distributed to a sample of 30 participants. The Cronbach's alpha coefficient was then calculated for each component of the questionnaire using SPSS software. The results indicated that the questionnaire demonstrates high reliability. The statistical population included managers and employees with at least 5 years of experience in entrepreneurship centers and offices at universities and higher education institutions. Based on the statistics found on the websites of the country's top universities (Tarbiat Modares University, Tehran, Sharif Industrial University, Shahid Beheshti University, Ferdowsi Mashhad, Amirkabir Industrial University, Ahvaz), the population size was determined to be 750 people. Using the table of Morgan and Karjesi, a sample of 256 people was determined, and the available method was used for sampling. Finally, out of the total of 256 distributed questionnaires, 250 questionnaires were returned and formed the basis for analysis. The Kolmogorov-Smirnov test was used to assess the normality of the data. In addition, all statistical analyses in this research were conducted using SPSS and Lisrel software. Confirmatory factor analysis was used to validate the model.

Findings

Based on the results of the confirmatory factor analysis test presented in the form of diagrams, it can be said that the implementation model of educational entrepreneurship in universities and higher education institutions of Iran including 108 subcategories, 17 main categories and 6 dimensions has been approved. After the underlying factors with 3 main categories (education, faculty members and culture) and 16 sub-categories, after the causal factors with 3 main categories (personal characteristics, government support and economic structure) and 22 sub-categories, after the category axis with 5 sub-categories, intervening factors dimension with 2 main categories (higher education system and application of new technologies) and 14 sub-categories, strategies dimension with 4 strategies (redefining the field of education in the university, commercialization of education, leadership and Entrepreneurial counseling and student education policies) and 31 sub-categories and consequences dimension with 4 main categories (growth and development of the country, achieving the goals of the higher education system, social welfare and social dynamics) and 20 sub-categories as the factors constituting the model Educational entrepreneurship was recognized and approved in universities and higher education institutions of Iran.

Conclusion

In this research, we validated the model of educational entrepreneurship in the context of universities and institutions of higher education in Iran. The validation conducted in this research showed that this model (Alipour et al., 2023) is a strong and effective tool for understanding the dynamics of educational entrepreneurship in our country. The validation process showed that all the factors and their components in this model show significant relationships and thus confirm its use. Our findings significantly contribute to the field of educational entrepreneurship and align with a growing body of research that recognizes the importance of fostering an educational entrepreneurial mindset in academic institutions. By validating the model, we confirm the idea that universities and higher education institutions can play a central role in driving innovation, creativity and educational entrepreneurial thinking. This research reinforces the importance of factors such as redefining the field of education in the university, policy making, commitment and leadership, governmental and organizational support, strategic planning, student motivation and professors' competencies in promoting educational entrepreneurship. Together, these elements act as building blocks for developing a supportive environment in which educational entrepreneurship can thrive.

References

- Abou- Warda, S. H. (2016). New educational services development. *International journal of educational management*, 30(5), 698-717. <https://doi.org/10.1108/IJEM-11-2014-0142>
- Açıköz, F. K. (2023). *Entrepreneurial environment and varieties of capitalism* Bilkent Üniversitesi (Turkey)]. <https://www.proquest.com/openview/71e47fe12b3b97b64816ac3aa0a6fa66/1?pq-origsite=gscholar&cbl=2026366&diss=y>
- Akgün, E., & Farina, İ. A. (2022). Technological Aspect of Academic and Educational Entrepreneurship. In M. Aldogan Eklund & G. Wanzenried (Eds.), *Academic and Educational Entrepreneurship: Foundations in Theory and Lessons from Practice* (pp. 85-104). Springer International Publishing. https://doi.org/10.1007/978-3-031-10952-2_8
- Audu, P. A. (2022). An Exploratory Study of Entrepreneurship Development in Kogi State. <https://core.ac.uk/download/pdf/542934026.pdf>
- Bagheri, M., & Kiani, M. (2023). Identifying the place of university in education and promotion of students' entrepreneurship capabilities based on fuzzy screening approach. *Quarterly Journal of Research and Planning in Higher Education*, 22(4), 43-67. https://journal.irphe.ac.ir/article_702910_47be9b6450162da583100604c417f58a.pdf
- Cope, J. (2005). Toward a Dynamic Learning Perspective of Entrepreneurship. *Entrepreneurship Theory and Practice*, 29(4), 373-397. <https://doi.org/10.1111/j.1540-6520.2005.00090.x>
- Eklund, M. A., & Wanzenried, G. (2022). *Academic and educational entrepreneurship: Foundations in theory and lessons from practice*. Springer Nature. <https://doi.org/10.1007/978-3-031-10952-2>
- Elami, F., & Sayehvand, Z. (2020). Educational Entrepreneurship: Opportunities and Challenges.
- Fini, R., Grimaldi, R., & Meoli, A. (2020). The effectiveness of university regulations to foster science-based entrepreneurship. *Research Policy*, 49(10), 104048. <https://doi.org/10.1016/j.respol.2020.104048>
- Grèzes, V., & Pillet, L. (2022). International and Cultural Aspects of Academic and Educational Entrepreneurship. In M. Aldogan Eklund & G. Wanzenried (Eds.), *Academic and Educational Entrepreneurship: Foundations in Theory and Lessons from Practice* (pp. 67-75). Springer International Publishing. https://doi.org/10.1007/978-3-031-10952-2_6
- Gryshchenko, I., Ganushchak-Efimenko, L., Shcherbak, V., Nifatova, O., Zos-Kior, M., Hnatenko, I., Martynova, L., & Martynov, A. (2021). Making Use of Competitive Advantages of a University Education Innovation Cluster in the Educational Services Market. *European Journal of Sustainable Development*, 10(2), 336. <https://ecsdev.org/ojs/index.php/ejsd/article/view/1230>
- Hadi, C., Wekke, I. S., & Cahaya, A. (2015). Entrepreneurship and Education: Creating Business Awareness for Students in East Java Indonesia. *Procedia - Social and Behavioral Sciences*, 177, 459-463. <https://doi.org/10.1016/j.sbspro.2015.02.396>

- Hajimirrahimi, S. D., Dezfooli, A. M., Gholami, H., Akbari, M., & Noroozi, A. (2015). Investigating the approaches for development of student's entrepreneurial capabilities in agricultural scientific-applied courses (Case study: Imam Khomeini Higher Education Center (ihec)). *Iranian Journal of Agricultural Economics and Development*, 46(2), 217-231. <https://www.magiran.com/paper/1455630>
- Hobikoğlu, E. H., & Şanlı, B. (2015). Comparative Analysis in the Frame of Business Establishment Criteria and Entrepreneurship Education from the Viewpoint of Economy Policies Supported By Innovative Entrepreneurship. *Procedia - Social and Behavioral Sciences*, 195, 1156-1165. <https://doi.org/10.1016/j.sbspro.2015.06.166>
- Hohmann, C., & Link, P. (2022). Academic Entrepreneurship at the Lucerne University of Applied Sciences and Arts, Switzerland. In M. Aldogan Eklund & G. Wanzenried (Eds.), *Academic and Educational Entrepreneurship: Foundations in Theory and Lessons from Practice* (pp. 137-152). Springer International Publishing. https://doi.org/10.1007/978-3-031-10952-2_11
- Hoppe, M., Westerberg, M., & Leffler, E. (2017). Educational approaches to entrepreneurship in higher education. *Education + Training*, 59(7/8), 751-767. <https://doi.org/10.1108/ET-12-2016-0177>
- Kakouris, A., & Georgiadis, P. (2016). Analysing entrepreneurship education: a bibliometric survey pattern. *Journal of Global Entrepreneurship Research*, 6(1), 6. <https://doi.org/10.1186/s40497-016-0046-y>
- Kakouris, A., & Ketikidis, P. (2012). Editorial: Poles of innovative entrepreneurship: a triple nexus. *International Journal of Innovation and Regional Development*, 4, 3/4, 197-203. https://www.researchgate.net/publication/299854206_Editorial_Poles_of_innovative_entrepreneurship_a_triple_nexus
- Kindel, A. T., & Stevens, M. L. (2021). What is educational entrepreneurship? Strategic action, temporality, and the expansion of US higher education. *Theory and Society*, 50(4), 577-605. <https://doi.org/10.1007/s11186-021-09443-3>
- Martínez, A. C., Benavides, H. A. Q., Charra, L. E. V., Hernández, R. M., & López, M. A. S. (2021). Education for entrepreneurship: In search of the fifth pillar" Learning to be entrepreneurial". *Revista Amazonia Investiga*, 10(44), 73-83. <https://dialnet.unirioja.es/servlet/articulo?codigo=8111626>
- Montes-Martínez, R., & Ramírez-Montoya, M. S. (2021). *Educational and Social Entrepreneurship of Future Teachers in the Framework of Open Education and Sustainable Development* Eighth International Conference on Technological Ecosystems for Enhancing Multiculturality, Salamanca, Spain. <https://doi.org/10.1145/3434780.3436622>
- Moradyan, P., Salimi, M., & Jahanian, R. (2020). Identifying the factors of educational entrepreneurship development in the higher education system. *Journal of Research on Management of Teaching in Marine Sciences*, 7(2), 151-162.
- Omer Attali, M., & Yemini, M. (2017). Initiating consensus: stakeholders define entrepreneurship in education. *Educational Review*, 69(2), 140-157. <https://doi.org/10.1080/00131911.2016.1153457>
- Rengiah, P. (2013). *Effectiveness of entrepreneurship education in developing entrepreneurial intentions among Malaysian university students* https://researchportal.scu.edu.au/esploro/outputs/991012821351302368?institution=61SCU_INST&skipUsageReporting=true&recordUsage=false
- Samandar Ali Eshtehardi, M. (2022). Structural-interpretative modeling of strategies for achieving the mission of education in an entrepreneurial and community-oriented university. *Quarterly Journal of Research and Planning in Higher Education*, 28(2), 33-64. <https://doi.org/10.52547/irphe.28.2.33>
- Scanlan, M. (2011). Organizational learning in schools pursuing social justice: Fostering educational entrepreneurship and boundary spanning. *Scholar-Practitioner Quarterly*. https://epublications.marquette.edu/edu_fac/176/
- Shahidi, S. (2022). Identifying and investigating the foreign model's educational entrepreneurship in higher education and implement native models for Iran. *International Journal of Education and Humanities*, 2(3), 92-107. <https://doi.org/10.58557/ijeh.v2i3.87>
- Shiralipoor, T., Mohseni Sohi, H. S., & Garhami, j. (2023). Designing an educational entrepreneurship model in universities and higher education institutions of Iran. *Sciences and Techniques of Information Management*, -. <https://doi.org/10.22091/stim.2023.8851.1897>
- Soltanzadeh, V., Ardalan, M., & ghanbari, s. (2020). Identifying effective factors on Educational Entrepreneurship in State Public Universities. *Journal of Innovation and Creativity in Human Science*, 10(1), 209-244. http://journal.bpj.ir/article_675705_149471b0ce15e9a11fd1e7d9be69527c.pdf
- Wanzenried, G. (2022). Political and Economic Aspects of Academic and Educational Entrepreneurship. In M. Aldogan Eklund & G. Wanzenried (Eds.), *Academic and Educational Entrepreneurship: Foundations in Theory and Lessons from Practice* (pp. 49-65). Springer International Publishing. https://doi.org/10.1007/978-3-031-10952-2_5
- Webber, C. F., & Scott, S. (2008). Entrepreneurship and Educational Leadership Development: Canadian and Australian Perspectives. *International Electronic Journal for Leadership in Learning*, 12(14), n14. <https://eric.ed.gov/?id=EJ940594>
- Zalali, N., Khosravipour, B., & Zare, A. (2014). The bottlenecks and challenges of employment of agricultural graduates from the point of view of executive managers. *Agricultural Education Management Research Quarterly*.