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EXPLORING ENTREPRENEURIAL READINESS AMONG UNIVERSITY STUDENTS: INSIGHTS FROM A PRELIMINARY STUDY

Dr. Lachezar Afrikanov

New Bulgarian University (Bulgaria)

Abstract. The entrepreneurial readiness of university students and graduates is the focus of this exploratory research, which is a component of the Erasmus+ AIM project. The study employs a questionnaire that has been specifically designed in accordance with the EntreComp framework. The questionnaire evaluated a variety of entrepreneurial readiness factors, such as market knowledge, ambition, and entrepreneurial zeal. The primary findings and conclusions of this article can be used to reevaluate and potentially improve the current entrepreneurship education programmes, including both academic and non-academic ones.

Keywords: entrepreneurial readiness; university students; Erasmus+ AIM project; EntreComp framework; entrepreneurship education; inclusive mentorship; Start-ups, innovation; economic development

Introduction

Entrepreneurial readiness is crucial for economic and societal development, embodying the skills, knowledge, and attitudes essential for innovation and venture creation (Schillo et al. 2016). Nurturing this readiness is especially pivotal in university students, who represent potential future entrepreneurs capable of developing transformative solutions to societal challenges. Universities act as crucial incubators for fostering entrepreneurial spirits, providing the requisite environment, resources, and support for students to venture into entrepreneurship (Hassan 2020).

Entrepreneurial readiness, a synthesis of skills, knowledge, and attitudes, empowers individuals to innovate, create, and undertake risks to form new ventures. In contemporary economic landscapes, nurturing an entrepreneurial spirit is crucial, serving as a catalyst for economic growth, innovation, and employment creation (Li et al. 2023; Dinh et al. 2022).

This study was conducted within the framework of the AIM project, an initiative supported by Erasmus+ and the European Union, combining the collaborative efforts of partners from Sweden, Portugal, Bulgaria, and Austria, each representing

different regions of Europe. The AIM project is structured around the Inclusive Entrepreneurship Mentoring Model (IEMM), designed to equip university students with the necessary skillset to transform innovative ideas into start-ups (Afrikanov & Paraskova 2023). This initiative emphasizes inclusivity in entrepreneurial mentoring, aiming to be accessible to all students regardless of their background and characteristics, thereby addressing social and inclusion challenges, including those posed by immigration. The project seeks to enhance collaboration between universities and industrial companies, offering high-quality internships, mentorship, and one-to-one feedback to students, aiming to contribute to an increase in university students realizing their entrepreneurial potential within five years after graduation. The author of the current article were part of the Bulgarian team, contributing to the development and implementation of the project's objectives.

The literature review conducted for this study illustrates that entrepreneurial mindset is not confined to the initiation of new ventures but extends to encompass a broader, more holistic approach to thinking, problem-solving, and value creation (Mclarty et al. 2022; Benedict & Venter 2010). Such a mindset, when cultivated effectively, can unlock innovative potentials within individuals, paving the way for groundbreaking solutions to complex societal challenges. The review confirmed the pivotal role of this entrepreneurial mindset for university students, highlighting it as a key driver for fostering innovative thinking and proactive problem-solving capabilities (Bosman & Fernhaber 2021). Given the transformative potential of entrepreneurship, the role of universities in nurturing entrepreneurial readiness and competencies gains profound significance. Universities, as the breeding grounds for future innovators and entrepreneurs, bear the responsibility to equip students with the necessary acumen, skills, and mindset to navigate and succeed in the entrepreneurial landscape (Akcil & Suhanberdyyeva 2022). The importance of fostering entrepreneurial readiness within university contexts has been further underlined through the concept of entrepreneurial university (Jami & Gökdeniz 2020). By instilling entrepreneurial values, skills, and knowledge, universities contribute to the development of individuals capable of creating value, driving innovation, and addressing pressing societal needs, ultimately shaping more sustainable and inclusive economies and societies (Zanabazar & Tsolmon 2023).

This study aims to investigate and understand the levels of entrepreneurial potential among a sample of university students, in accordance with the objectives of the AIM project. The research endeavours to uncover insights that can inform and refine the methodologies and approaches employed within the broader project, as well as contribute to the improvement of entrepreneurial education and support in university settings, by examining components such as entrepreneurial spirit, ambition, clarity of business ideas, and market knowledge.

Although the study provides significant initial insights, it is exploratory in nature because of the limitations imposed by the small sample size. The results, obtained

from a small and non-random sample, should be evaluated carefully, since they reflect suggestive trends and patterns rather than definitive evidence. The obtained insights offer a preliminary understanding, which encourages additional thorough investigations using more substantial and varied samples to support and enhance the findings reported in this document.

Research methodology

This study aimed to assess the entrepreneurial readiness of university students and recent graduates. The questionnaire used was based on the EntreComp Framework (2016), which outlines the key competencies needed for entrepreneurial success (Bacigalupo et al. 2016). This framework is widely recognized and used in entrepreneurial research and education due to its robustness and comprehensiveness.

The questionnaire covered several aspects of entrepreneurial readiness, such as entrepreneurial spirit, ambition, clarity of business ideas, and market understanding. Participants rated these aspects on a scale from 1 to 10. The choice of a 10-point scale was to provide more detailed and nuanced responses compared to smaller scales (Wittink & Bayer 2003). This approach allows for a more accurate and differentiated understanding of participants' attitudes and opinions, aligning with the principles of the Likert scale (Likert 1932).

The questionnaire included demographic questions to gather basic information such as name, email, country of residence, university, program, expected graduation year, and year of birth. It then asked respondents to rate their entrepreneurial disposition and skills, based on the EntreComp framework (Bacigalupo et al. 2016), including abilities like identifying opportunities, developing creative ideas, staying focused, and making decisions under uncertainty. The final section asked if respondents were interested in further entrepreneurial support and if they agreed to be contacted for the same.

The respondents were university students from various programmes and universities across Europe. The sample included 60 students and recent graduates from 43 universities, representing a diverse range of academic programs, predominantly in economics, engineering, and health-related fields. Participants came from 15 different countries, with Bulgaria having the highest representation with 16 participants (26.23%), followed by Sweden with 11 participants (18.03%), and Portugal, Austria, and Romania each with 5 participants (8.20%). The ages of participants ranged from 19 to 50, with the most common age being 22.

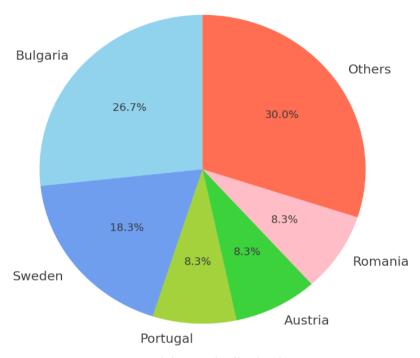


Figure 1. Participant Distribution by Country

However, the sample was non-random and limited in size, which affects the representativeness and generalizability of the findings. These limitations necessitate a careful and cautious interpretation of the results, making the findings indicative and exploratory rather than conclusive.

The data collection process ensured confidentiality and privacy of participants. Participation was voluntary, and respondents were informed about the study's purpose and use of their responses, obtaining their consent before proceeding with the questionnaire.

Given the study's nature and limited sample size, the data analysis focused on descriptive statistics. The responses were analysed to identify patterns, trends, and insights related to entrepreneurial readiness among participants. The analysis summarized the main features of the responses and presented them clearly and accessibly, using graphs and tables where necessary to illustrate the findings. Descriptive statistics provided an initial exploration of the data, revealing potential areas of interest and setting the stage for more in-depth future research with larger and more diverse samples.

Findings

The analysis of entrepreneurial spirit ratings among university students and graduates shows an average of 7.03, with a median and mode of 8, indicating a generally high level of entrepreneurial inclination with moderate variability. Participants also displayed a high level of ambition to start a business, frequently rating this aspect as 10, with a median of 8, suggesting robust entrepreneurial ambitions despite some diversity in responses.

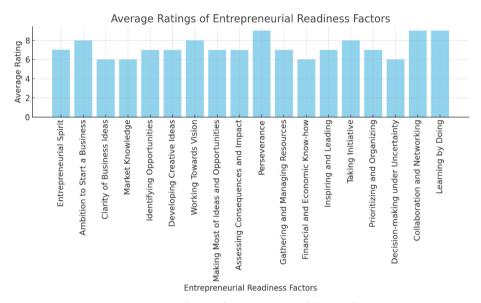


Figure 2. Average Ratings of Entrepreneurial Readiness Factors

For clarity of business ideas, the data indicates a moderate level of understanding, with the most common rating being 8 and a median of 6. This suggests a typical participant has a decent grasp of their business idea, though variability in clarity remains. Similarly, market knowledge ratings reveal a moderate level, with the most common rating being 7 and a median of 6, indicating that while participants have a good understanding of their market, there is room for improvement.

Participants generally rated their competence in identifying opportunities for creating value highly, with a most common rating of 8 and a median of 7, although there is some variation in individual ratings. The ability to develop creative and purposeful ideas also received high ratings, with a median of 7 and frequent rating of 8, showing strong skills in this area despite some diversity in responses.

The competence in working towards their vision received high ratings, with both the median and most common rating being 8, indicating participants feel highly competent, though variability is present. Making the most of ideas and opportunities was also rated highly, with a median of 7 and a most common rating of 6, showing strong skills with some variation.

Participants rated their ability to assess consequences and impact highly, with a median of 7 and frequent rating of 6, indicating confidence in this area with some variability. The ability to stay focused and not give up received high ratings, frequently rated at 9, with a median of 9, demonstrating strong perseverance skills despite some diversity in responses.

Gathering and managing resources was rated moderately to highly, with a median of 7 and most common rating of 8, indicating competence with some room for improvement. Developing financial and economic know-how was rated moderately, with a median of 6 and frequent rating of 8, showing good skills but significant variation among participants.

The competence in inspiring, enthusing, and getting others on board was rated highly, with a median of 7 and frequent rating of 9, indicating strong leadership skills despite some diversity. Taking initiative received high ratings, with both the median and most common rating being 8, showing participants feel highly competent.

Prioritizing, organizing, and following up was also rated highly, with a median of 7 and frequent rating of 8, indicating strong organizational skills with some variability. Making decisions under uncertainty was rated moderately, with a median of 6 and frequent rating of 7, suggesting good decision-making skills but with notable variation.

Finally, the ability to team up, collaborate, and network was rated highly, with a median of 9 and frequent rating of 9, indicating strong collaborative skills. Learning by doing also received high ratings, with both the median and most common rating being 9, showing strong practical learning skills with some diversity in responses.

Overall, while the group of university students and graduates exhibits strong competencies across various entrepreneurial skills, the variability in ratings suggests areas for further improvement.

The analysis of overall entrepreneurial readiness scores reveals a generally high overall readiness among participants. With a mean score of 131.9, participants, on average, achieve about 69.4% of the maximum possible score of 190. This suggests a robust level of entrepreneurial readiness within the group. Additionally, the scores exhibit a wide distribution, ranging from 39 to 177. The lower end (39) represents approximately 20.5% of the maximum score, while the upper end (177) corresponds to about 93.2%. This broad range highlights the diversity in entrepreneurial readiness among participants, indicating varying levels of preparedness and capability within the group.

Conclusions

The analysis of entrepreneurial spirit and readiness among university students and graduates reveals a generally high level of entrepreneurial inclination and readiness within the group. With an average entrepreneurial spirit rating of 7.03 and high median and mode values of 8, it is evident that participants possess a robust entrepreneurial ambition, frequently rating their desire to start a business as 10. This indicates a strong entrepreneurial drive despite some variability in responses.

Participants displayed moderate levels of clarity regarding their business ideas and market knowledge, with median ratings of 6. This suggests that while they have a decent grasp of their concepts and markets, there is significant room for improvement. The competence in identifying opportunities, developing creative ideas, and working towards their vision received high ratings, indicating strong skills in these areas. However, variability in ratings highlights areas where individual capabilities can be further developed.

High ratings for perseverance, collaboration, and practical learning skills reflect a strong entrepreneurial mindset, critical for overcoming challenges and achieving success. Despite these strengths, areas such as financial and economic know-how and decision-making under uncertainty were rated moderately, pointing to specific competencies that need enhancement.

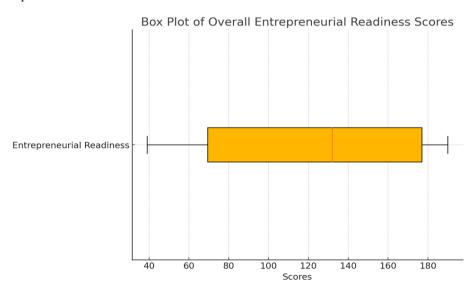


Figure 3. Box Plot of Overall Entrepreneurial Readiness Scores

The overall entrepreneurial readiness scores, with a mean of 131.9 (approximately 69.4% of the maximum score), and a wide range from 39 to 177, underscore

a generally high readiness among participants. This broad distribution highlights the diversity in preparedness and capability, indicating that while many participants are well-prepared, others may need targeted support to reach higher levels of readiness.

The research highlights valuable opportunities for enhancing university-industry collaboration to boost entrepreneurial readiness among students. Despite a strong entrepreneurial drive, gaps exist in practical experience, particularly in market knowledge, financial literacy, and decision-making under uncertainty. Collaborations offering internships, project-based learning, and real-world problem-solving can help bridge these gaps. Mentorship programs with industry professionals can provide targeted guidance, enhancing students' skills where needed. Innovation hubs or incubators can further support students by offering spaces to refine business ideas and receive feedback, fostering both readiness and creativity. Additionally, targeted educational interventions focusing on market and financial skills, co-designed by universities and industries, can better prepare students for entrepreneurial challenges. Ensuring inclusivity and accessibility of entrepreneurial opportunities for all students, regardless of background, is essential for building a diverse and innovative ecosystem.

Recommendations

Universities and entrepreneurship programmes are encouraged to prioritise the enhancement of students' market knowledge and clarity of business ideas by means of practical market research projects, mentorship programmes, and targeted seminars. The integration of more comprehensive financial literacy and economic planning courses into the curriculum can assist in bridging the disparity in financial and economic knowledge, thereby ensuring that participants are better equipped to manage their ventures.

Training students in the art of decision-making under uncertainty, which includes scenario planning and risk assessment exercises, can improve their capacity to make informed decisions in unpredictable environments.

University programmes may use the considerable levels of ambition and tenacity among students by providing advanced entrepreneurial challenges, pitch competitions, and real-world problem-solving chances to further stimulate and refine these abilities. Participants' collaborative abilities can be enhanced by organising networking events, collaborative projects, and team-building exercises, which in turn facilitate the development of effective teams and valuable relationships.

Universities can facilitate the development of a more dynamic and capable entrepreneurial ecosystem by confronting these areas for improvement and capitalising on their existing strengths, thereby better preparing students and graduates for entrepreneurial success.

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Dr. Lachezar Afrikanov ORCID iD: 0000-0002-2272-2798 New Bulgarian University Sofia, Bulgaria E-mail: lafrikanov@nbu.bg