

FLOURISHING ENTREPRENEURSHIP ACADEMIC ECOSYSTEMS: SELECTION OF TEACHING METHODS IN A CULTURAL CONTEXT

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ABSTRACT

This paper examines the role of entrepreneurship education in the development of flourishing academic entrepreneurship ecosystems, with particular attention to the influence of sociocultural and psychological barriers. Building on the entrepreneurial ecosystem approach, the study conceptualizes universities as central actors that connect education, innovation, and regional development through formal and informal institutional mechanisms. The paper integrates insights from entrepreneurship education research, cultural theory, and entrepreneurial psychology to analyze how national cultural dimensions, as operationalized by Hofstede's framework, shape students' entrepreneurial intentions and behaviors. Using the case of Georgia as a contextual reference, the study identifies key sociocultural barriers, including high power distance, uncertainty avoidance, and collectivist tendencies, as well as psychological barriers such as fear of failure, low self-efficacy, lack of a culture of doing, and limited action orientation. The paper systematizes contemporary educational methods and corporate entrepreneurship instruments relevant for academic ecosystems and proposes a set of practical recommendations for universities aimed at overcoming these barriers. These recommendations address human, social, and financial capital, as well as the development of entrepreneurial spirit and culture. The findings contribute to the literature on academic entrepreneurship by demonstrating how culturally sensitive, action-oriented, and psychologically informed entrepreneurship education can enhance the effectiveness of university-based entrepreneurial ecosystems and support their integration into regional innovation systems.

Keywords: entrepreneurship education; entrepreneurial ecosystems; sociocultural barriers; psychological barriers; experiential learning

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რეზიუმე

ეს ნაშრომი იკვლევს მენარმეობის განათლების როლს აყვავებული აკადემიური მენარმეობის ეკოსისტემების განვითარებაში, განსაკუთრებული ყურადღება ეთმობა სოციოკულტურული და ფსიქოლოგიური ბარიერების გავლენას. მენარმეობის ეკოსისტემის მიდგომაზე დაყრდნობით, კვლევა უნივერსიტეტებს განიხილავს, როგორც ცენტრალურ აქტორებს, რომლებიც აკავშირებენ განათლებას, ინოვაციას და რეგიონულ განვითარებას ფორმალური და არაფორმალური ინსტიტუციური მექანიზმების მეშვეობით. ნაშრომი აერთიანებს მენარმეობის განათლების კვლევის, კულტურის თეორიისა და მენარმეობის ფსიქოლოგიის მიგნებებს, რათა გააანალიზოს, თუ როგორ აყალიბებენ ეროვნული კულტურული განზომილებები, როგორც ეს ჰოფსტედის ჩარჩოშია ასახული, სტუდენტების მენარმეობის განზრახვებსა და ქცევას. საქართველოს შემთხვევის კონტექსტუალურ მითითებად გამოყენებით, კვლევა განსაზღვრავს ძირითად სოციოკულტურულ ბარიერებს, მათ შორის მაღალი ძალაუფლების დისტანციას, გაურკვევლობის თავიდან აცილებას და კოლექტივისტურ ტენდენციებს, ასევე ფსიქოლოგიურ ბარიერებს, როგორცაა ნარეალობის შიში, დაბალი თვითფექტურობა, კეთების კულტურის ნაკლებობა და შეზღუდული მოქმედებაზე ორიენტაცია. ნაშრომი სისტემატიზაციას უკეთებს აკადემიური ეკოსისტემებისთვის რელევანტურ თანამედროვე საგანმანათლებლო მეთოდებსა და კორპორატიული მენარმეობის ინსტრუმენტებს და გვათავაზობს პრაქტიკული რეკომენდაციების ერთობლიობას უნივერსიტეტებისთვის, რომლებიც მიზნად ისახავს ამ ბარიერების დაძლევას. ეს რეკომენდაციები ეხება ადამიანურ, სოციალურ და ფინანსურ კაპიტალს, ასევე მენარმეობის სულისკვეთებისა და კულტურის განვითარებას. დასკვნები ხელს უწყობს აკადემიური მენარმეობის შესახებ ლიტერატურის განვითარებას, რადგან აჩვენებს, თუ როგორ შეუძლია კულტურულად მგრძობიარე, მოქმედებაზე ორიენტირებულ და ფსიქოლოგიურად ინფორმირებულ მენარმეობის განათლებას გააძლიეროს უნივერსიტეტებზე დაფუძნებული მენარმეობის ეკოსისტემების ეფექტურობა და ხელი შეუწყოს მათ ინტეგრაციას რეგიონულ ინოვაციურ სისტემებში.

საკვანძო სიტყვები: მენარმეობის განათლება; მენარმეობის ეკოსისტემები; სოციოკულტურული ბარიერები; ფსიქოლოგიური ბარიერები; გამოცდილებითი სწავლება.



INTRODUCTION

Flourishing entrepreneurship academic ecosystems are vibrant regional systems in which universities, startups, industry, investors, government, and the community collaborate (Acs et al., 2017; Spigel & Harrison, 2018). They provide a flourishing network of mentorship, talent, and knowledge sharing to foster entrepreneurial spirit and new

venture creation through strong institutional activities, resource ties, and actor linkages (Audretsch et al., 2019). By bridging education with real-world application, sustainable development goals, and inner development goals, such ecosystems create self-sustaining growth. Despite the growing diffusion of entrepreneurship education worldwide, substantial variation remains in its

effectiveness across national and institutional contexts. While many universities formally adopt entrepreneurship programs, only a limited share of students translate entrepreneurial intentions into concrete entrepreneurial action. Prior research consistently documents this intention-action gap, particularly among students and recent graduates, even in contexts where entrepreneurship is socially valued and institutionally supported (Sieger, 2024; Van Gelderen et al., 2020). This gap raises a fundamental problem for both entrepreneurship education research and ecosystem theory: why do entrepreneurship education initiatives succeed in some academic contexts but remain weak or symbolic in others?

Existing studies increasingly suggest that the effectiveness of entrepreneurship education cannot be understood independently of its sociocultural and psychological context. Informal institutions, such as cultural norms, shared beliefs, and dominant value systems, shape how individuals perceive risk, autonomy, authority, and failure, thereby influencing entrepreneurial behavior beyond formal curricula and policy instruments (Hayton et al., 2002; Urbano et al., 2019). At the individual level, psychological factors such as fear of failure, self-efficacy, locus of control, and action orientation play a decisive role in determining whether entrepreneurial intentions materialize into behavior. However, these dimensions are often treated separately in the literature, resulting in fragmented explanations of entrepreneurial engagement within universities.

In parallel, entrepreneurship education research has expanded rapidly, evolving from a narrow focus on business creation skills toward broader concepts of opportunity recognition, experiential learning, and entrepreneurial mindset development (Neck et al., 2014; Van Gelderen et al., 2021). Yet, much of this literature implicitly assumes cultural neutrality of educational methods, overlooking how national cultural characteristics may amplify or suppress the impact of educational interventions. As a result, pedagogical models developed in low power-distance, individualistic, and low uncertainty-avoidance contexts are frequently transferred to culturally different environments without systematic adaptation.

This problem is particularly salient in emerging and transition economies, where universities are expected to act as engines of innovation, but where entrepreneurship education often develops within cultural environments characterized by hierarchical social relations, strong uncertainty avoidance, and limited tolerance for failure. Georgia represents a relevant empirical context in this regard. While the country demonstrates growing interest in entrepreneurship and increasing internationalization of higher education, its academic entrepreneurship ecosystem remains comparatively underdeveloped, and student entrepreneurial activity remains limited. Understanding how sociocultural and psychological factors interact with entrepreneurship education in such contexts is therefore critical for advancing both theory and practice.

Against this background, the central problem addressed

in this paper is the misalignment between entrepreneurship education, national cultural context, and students' psychological readiness for entrepreneurial action within academic ecosystems. Specifically, the paper examines how sociocultural characteristics, conceptualized through Hofstede's cultural dimensions (Hofstede et al., 2010), and key psychological barriers jointly shape the outcomes of entrepreneurship education at universities. By integrating insights from entrepreneurial ecosystem theory, cultural analysis, and entrepreneurial psychology, the study seeks to clarify why entrepreneurship education does not automatically lead to entrepreneurial engagement and how this gap manifests within academic entrepreneurship ecosystems.

Using Georgia as a contextual reference, the paper contributes to the literature by offering a structured analysis of the sociocultural and psychological conditions under which academic entrepreneurship ecosystems develop. Rather than focusing on isolated educational tools, the study emphasizes the systemic nature of entrepreneurship education as embedded within cultural norms, institutional arrangements, and individual-level psychological mechanisms. In doing so, it advances a more context-sensitive understanding of how universities function as entrepreneurial actors within regional innovation systems.

LITERATURE REVIEW

The development of entrepreneurship education has long been driven by the pursuit of the global Sustainable Development Goals (SDGs, Rashid, 2019). Flourishing ecosystems have strongly supported and continue to support this as a priority (Leiva-Lugo et al., 2024). However, more recently, the Inner Development Goals (IDG) movement has emerged, facilitating authentic self-development and the flourishing of the entrepreneurial personality. Within this paradigm, contemporary entrepreneurship education is developing in a turbulent and volatile environment, shaping a new field, entrepreneurial career and life design (ECLD), with a focus on individual well-being.

Global innovation leadership in several world cities (e.g., San Francisco, Boston, and others) is ensured by the following core components: corporations, investors, startups, universities and their ecosystems, and the broader innovation ecosystem of the city (Acs et al., 2017; Audretsch et al., 2019).

The innovation ecosystem of any flourishing region or techno-hub includes the following elements (Spigel & Harrison, 2018):

- Accelerator structures
- Workspaces and startup hubs
- Professional communities
- Online ecosystem services
- Analytical and research organizations
- Legal support for startups
- Regional support for innovation

Technological development based on processes, models, and mechanisms of intrapreneurial entrepreneurship also presupposes close interaction between enterprises and universi-

ties and is grounded in entrepreneurship education at all levels: startup, corporation, ecosystem, etc. (Audretsch et al., 2019).

Four types of innovation strategies are commonly distinguished, differing in terms of sources of innovation (internal or external), the volume of financial resources allocated to innovation, and the set of instruments employed. In practice,

most enterprises combine internal and external innovation tools depending on their strategic objectives and organizational culture (Spigel & Harrison, 2018). Each strategic direction includes a set of instruments that organizations may use depending on the goals they seek to achieve (see Figure 1, Figure 2).

FIGURE 1. TYPES OF CORPORATE INNOVATION DEVELOPMENT STRATEGIES

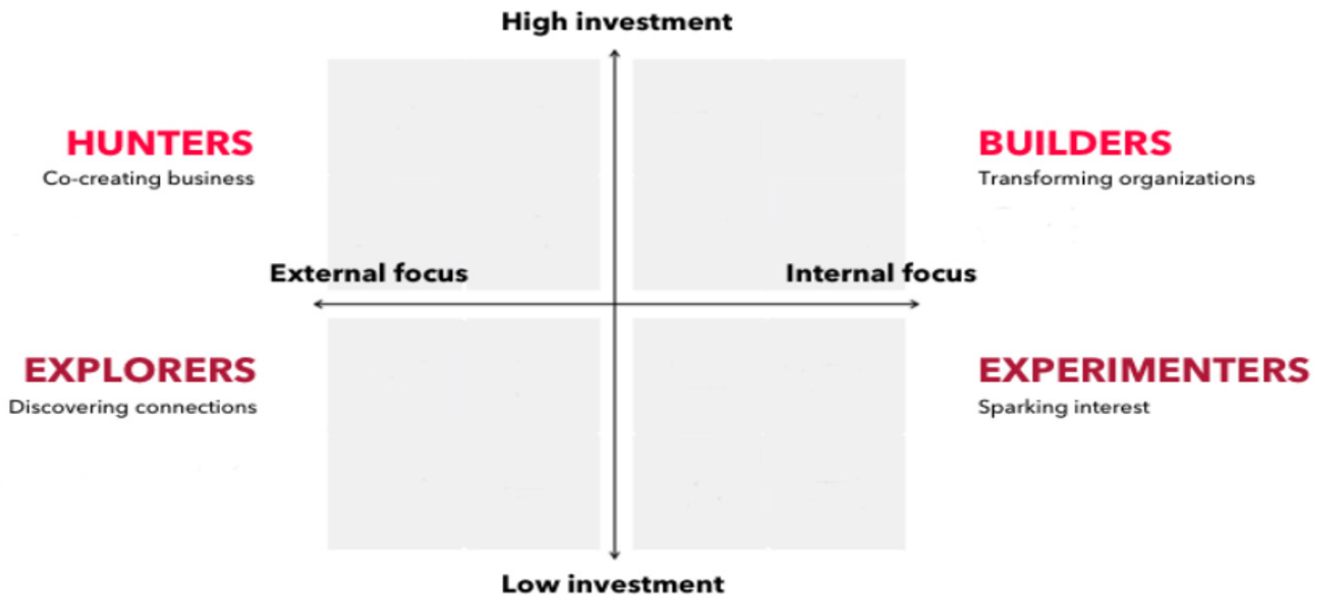
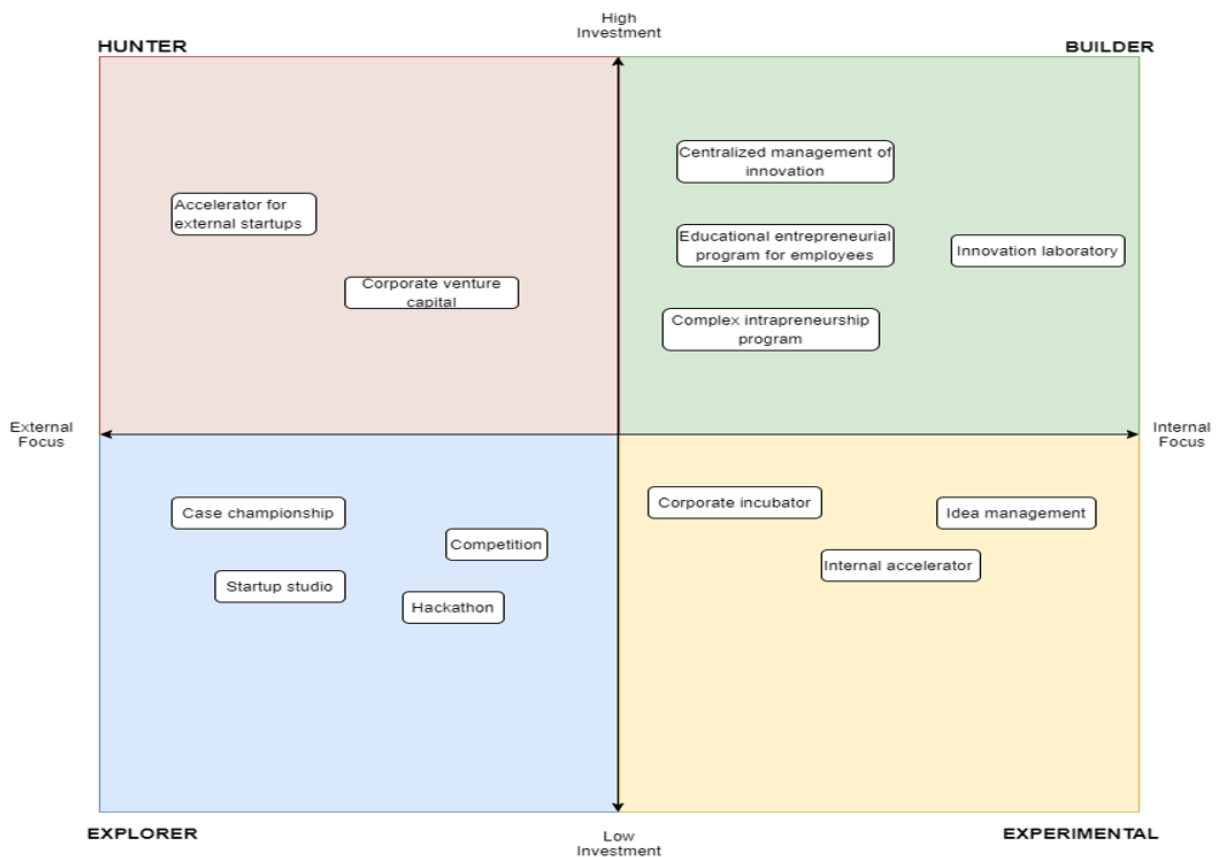


FIGURE 2. CORPORATE ENTREPRENEURSHIP INSTRUMENTS ON THE MAP OF INNOVATION STRATEGIES



Note. Source: (Board of Innovation, n.d.), adapted by the authors

Prior research identifies a set of corporate entrepreneurship instruments used to implement innovation-oriented (flourishing) strategies, including:

1. Corporate internal accelerators – programs to accelerate employee-led projects and innovations (Weiblen & Chesbrough, 2015).
2. Accelerators for external startups – programs that support external startups while fostering corporate innovation partnerships (Kohler, 2016).
3. Corporate incubators – structured support for internal or external projects to develop ideas into viable businesses (Hausberg & Korreck, 2020).
4. Comprehensive internal entrepreneurship programs – holistic programs combining training, mentoring, and project support for employees’ entrepreneurial initiatives (Kuratko et al., 2005).
5. Innovation laboratories – dedicated labs for experimentation, prototyping, and testing innovative solutions (Tidd & Bessant, 2021).
6. Startup studios (venture builders) – internal teams that continuously build, test, and launch new ventures or products (Weiblen & Chesbrough, 2015).
7. Corporate venture capital (CVC) – investment units providing funding to external startups to gain strategic innovation benefits (Chesbrough, 2002).
8. Innovation cases and competitions – internal or external challenges designed to generate innovative solutions and ideas (Björk & Magnusson, 2009).
9. Hackathons and bootcamps – intensive, short-term events to rapidly develop prototypes and innovative solutions (Jurgelevičius et al., 2025).
10. Idea management systems – platforms and processes to collect, evaluate, and prioritize employee ideas (Girotra et al., 2010).

11. Employee entrepreneurship education programs – structured training programs to develop entrepreneurial skills and mindsets among employees (Hornsby et al., 2002).

The Hunters group includes instruments that help attract external projects into the company. The Builders group encompasses instruments that facilitate the development of projects internally within the company. The Explorers group consists of instruments that enable companies to identify promising solutions or potential external partners without committing the same level of resources as the Hunters. The Experimenters group comprises instruments that support the development of internal projects at an early stage, requiring fewer resources compared to the Builders (see Figure 2).

For the development of flourishing university entrepreneurship ecosystems, it is advisable to invest both in the university ecosystem and simultaneously in the regional innovation ecosystem. The level of entrepreneurial development within universities, including entrepreneurship education, forms the foundation for the potential development of the entire regional innovation ecosystem.

At present, the innovation ecosystem in Georgia is de-

veloping but at a pace that is insufficient compared to leading global cities and technology hubs. Universities should unquestionably serve as a key component of the regional ecosystem.

According to international research from GUESSS (Sieger, 2024), two major challenges in the development of entrepreneurship among young people worldwide have been identified:

- Lack of perseverance and resilience among students due to the absence of a clear answer to the question “Why a new venture?” Students are often reluctant to engage in entrepreneurship immediately after graduation and subsequently lose real interest in entrepreneurial activities at the post-graduate and executive education levels.

- Limited conversion of entrepreneurial intentions into actions: Once students gain their first professional experience, their long-term entrepreneurial intentions rarely translate into actual entrepreneurial activities.

Unfortunately, in the countries of the former USSR, sustainable development of research in entrepreneurship, entrepreneurial education, and entrepreneurial psychology has not yet emerged. These disciplines are critical for studying the effectiveness of mechanisms, models, and teaching methods necessary for the development of flourishing academic entrepreneurship ecosystems. Meanwhile, research in entrepreneurship and business has long been advancing actively in Europe, India, China, and Brazil (Belousova et al., 2024).

Entrepreneurship education aimed at developing flourishing academic entrepreneurship ecosystems requires granting universities significant autonomy in designing their own educational approaches. In European practice, universities may pursue diverse approaches and goals in entrepreneurship development. For instance, in Germany, some universities, such as the Munich University of Applied Sciences, offer master’s programs in technology entrepreneurship that are largely discipline-free, focusing instead on co-creation and team-based project work (Stahl et al., 2010). Other institutions, such as the Technical University of Berlin, approach entrepreneurship primarily from a research-oriented perspective, with master’s students able to develop projects only after completing the theoretical foundation. Still others, such as the University of Stuttgart, emphasize both technology entrepreneurship and corporate intrapreneurship, integrating these dimensions within their programs (Belousova et al., 2024).

DEVELOPMENT OF ACADEMIC ENTREPRENEURSHIP AND BARRIERS TO ENTREPRENEURIAL ENGAGEMENT

Worldwide, there is a sustained interest in entrepreneurship among young people (Åstebro et al., 2012). A career as an entrepreneur is becoming increasingly attractive for individuals at the threshold of choosing their professional path, as this option allows for active realization of personal potential and the flourishing development of personality

while maintaining personal freedom (Martinez et al., 2007).

The growing disillusionment with employment in large companies is another factor driving attention to the phenomenon of entrepreneurship (Kolvereid, 1996). The values gained through self-employment, such as genuine self-development, autonomy, and the challenge of solving complex problems, are becoming increasingly important for many individuals (Lüthje & Franke, 2003; Van Gelderen et al., 2020). According to the Global Entrepreneurship Monitor (GEM), entrepreneurial intentions among the 18-34 age group are 1.6 times higher than in older populations (Schøtt T., 2015); however, the proportion of those who actually decide to start entrepreneurial activity remains significantly lower.

Entrepreneurship education is understood as the set of knowledge and skills necessary for entrepreneurial activity that students acquire during their university studies (Lüthje & Franke, 2003; Van Gelderen et al., 2020). In this context, entrepreneurship education is interpreted in a broad sense and encompasses various types of university offerings, including curriculum activities (programs, courses, and seminars on entrepreneurship), co-curriculum activities (networking events, mentorship programs, entrepreneurship communities, etc.), and financial support provided by the university. These offerings help develop students' entrepreneurial mindset and provide them with competencies that may incline young people toward choosing an entrepreneurial career (Morris et al., 2017; Täks et al., 2014).

Entrepreneurship education is one of the fastest-growing academic fields worldwide, attracting increasing interest due to its ability to bridge current business practice with academic theory (Van Gelderen et al., 2020). New pedagogical approaches and diverse teaching methods are emerging, reshaping societal perceptions of entrepreneurship education. In recent years, entrepreneurship education has evolved from teaching students how to start a new business to focusing on the identification and exploitation of entrepreneurial opportunities. This approach emphasizes helping students acquire specific skills and knowledge in real-world contexts (Kolvereid, 1996; Martinez et al., 2007).

In the concept of entrepreneurship education, five levels of learning can be distinguished (Johannisson, 1991; Souitaris et al., 2007): acquiring knowledge about the value characteristics and motivation of entrepreneurs ("know-why" competencies); improving practical skills and abilities that can be applied in practice ("know-how" competencies); obtaining knowledge about entrepreneurship itself ("know-what" competencies); enhancing interpersonal communication skills and expanding social networks ("know-who" competencies); and improving the ability to identify and manage new opportunities ("know-when" competencies).

Regarding the set of behavioral competencies and skills, it is worth highlighting the work of Dutch professor Marco Van Gelderen (Van Gelderen et al., 2020, 2021) in the field of entrepreneurial psychology, who identifies key entrepreneurial skills such as proactivity, leadership, self-reflection, motivation, and creativity, and, given the contemporary tech-

nological context, also adaptability and flexibility. The core entrepreneurial skills, idea generation, the ability to take action, demonstrating positive perseverance, persuasion, networking, and teamwork, are predicted by leading global experts to remain essential through 2030 (Van Gelderen et al., 2021). These abilities are crucial to develop in students studying entrepreneurship, both through practical training and through the study of entrepreneurial theory.

Previous research has shown that a supportive entrepreneurial environment at the university helps to shape students' positive attitudes toward entrepreneurship and can inspire them to start new ventures (Athayde, 2009; Fretschner & Weber, 2013; Shchegolev, 2014).

Personal motivation and an individual's confidence in their ability to start a new business are important factors influencing entrepreneurial behavior. In particular, entrepreneur-specific traits such as achievement motivation and risk-taking propensity can be developed through the process of entrepreneurship education (Johannisson, 1991).

Models of entrepreneurial intentions have shown that an individual's assessment of their competencies and capabilities regarding starting a new business is positively associated with entrepreneurial intentions (Segal et al., 2005). Entrepreneurship education helps to enhance skills in identifying new market opportunities. Students who develop these skills are more likely to discover and exploit new market opportunities, as well as act innovatively, turning new ideas into concrete entrepreneurial solutions (Rae, 2003).

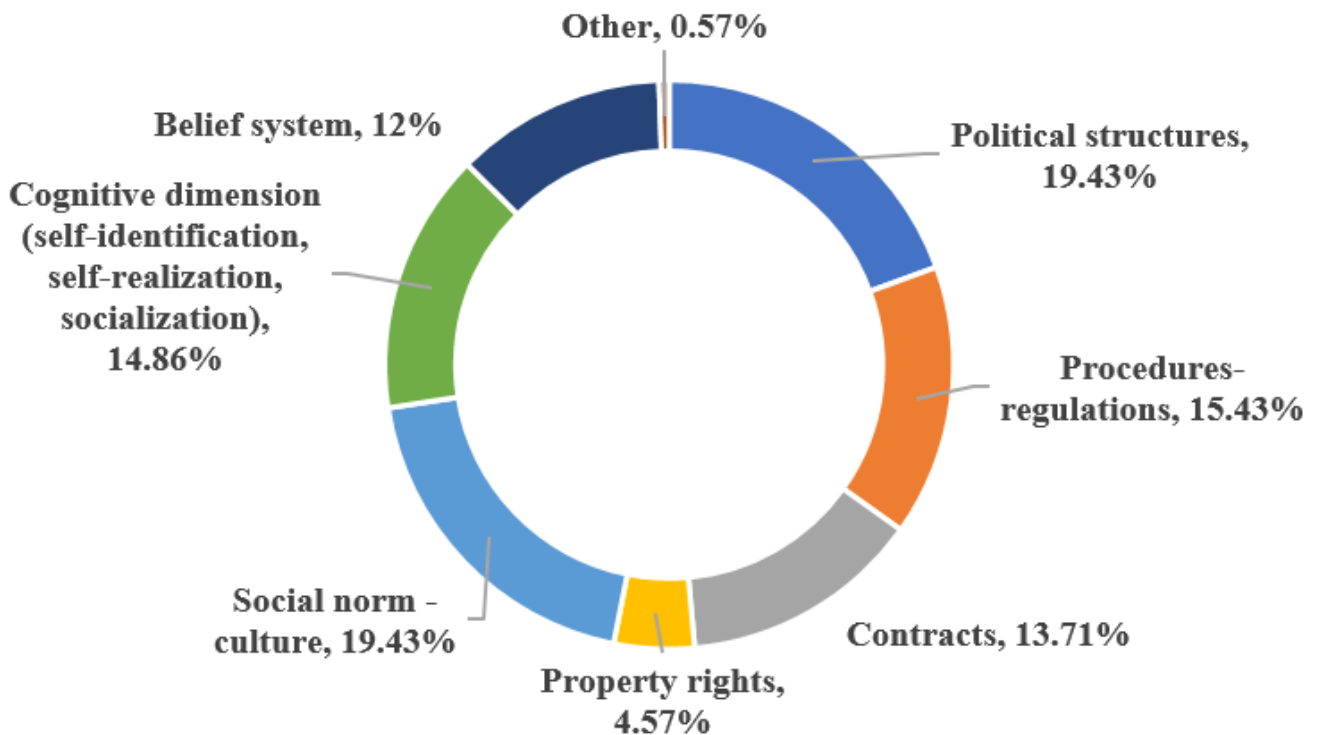
A flourishing university ecosystem should include key components such as entrepreneurship programs and courses, engagement of alumni entrepreneurs, prototyping services, the organization of international accelerators, and other supportive structures. The concept of the ecosystem is based on the interdependence of its elements. However, for effective functioning and the realization of concrete entrepreneurial activities within the ecosystem, clear coordination and open communication are required, which should rely on shared values and goals.

The university environment, as part of the entrepreneurial ecosystem, can be considered as a combination of the following spheres:

1. Curriculum programs and entrepreneurship courses.
2. Co-curriculum activities, including project support and expertise.
3. Programs providing access to student funding.
4. Entrepreneurial values and the entrepreneurial spirit within the academic environment.

Entrepreneurship education is one of the most important elements in building an entrepreneurial ecosystem; however, it is often overlooked in existing educational programs. The effectiveness of academic entrepreneurship is closely linked to the successful overcoming of key barriers to its development. Every country has its own national cultural characteristics and infrastructural limitations that shape the specificity of entrepreneurship, including academic entrepreneurship. In addition, barriers include *sociocultural and*

FIGURE 3. FREQUENCY OF MENTIONS OF FORMAL AND INFORMAL INSTITUTIONS INFLUENCING ENTREPRENEURIAL ACTIVITY IN ACADEMIC LITERATURE (1993-2018).



Note. Source: (Urbano et al., 2019).

psychological factors, which are influenced both by students' age-related characteristics and other factors. The following discussion examines these barriers and approaches to their potential mitigation.

Sociocultural Barriers. In the development of entrepreneurship, attention is often focused on institutions, both formal (e.g., political structures, regulatory procedures, and norms) and informal (e.g., socio-cultural values and norms, belief systems, see Figure 3). It is generally recognized that informal institutions can have a greater influence on entrepreneurship than contracts, procedures, political structures, or property rights associated with formal institutions (Urbano et al., 2019).

Moreover, when informal institutions are considered together with factors closely related to cognition and career choice, it becomes evident that the development of entrepreneurship in a country or region largely depends on the development of entrepreneurship education, the dissemination of entrepreneurial experience within society, and the adoption of entrepreneurial value orientations.

Culture plays a critical role in shaping young people's readiness to engage in entrepreneurial activity, as the norms and values shared within a society influence students' perceptions of various career prospects. Cultural values have a significant impact on entrepreneurial activity, and some cultures encourage and foster entrepreneurial behavior more than others (Licht & Siegel, 2009). Culture can influence the psychological characteristics of individuals, including their values, motives (Hayton et al., 2002), and beliefs, as well as their readiness to become entrepreneurs (Davidsson & Wiklund, 1997). Cultural

values affect the extent to which entrepreneurial behavioral patterns, such as independence, creativity, and risk-taking, are considered desirable within a society.

The most commonly used model for studying the characteristics of national culture is the framework developed by Dutch sociologist Geert Hofstede, who analyzes all countries based on six cultural dimensions (Hofstede et al., 2010).

TABLE 1. HOFSTEDE'S CULTURAL DIMENSIONS

Country	PDI	IDV	MAS	UAI	LTO	IVR
Australia	38	90	61	51	21	71
China	80	20	66	30	87	24
Finland	33	63	26	59	38	57
Germany	35	67	66	65	83	40
India	77	48	56	40	51	26
Italy	50	76	70	75	61	30
Japan	54	46	95	92	88	42
South Korea	60	18	39	85	100	29
Mexico	81	30	69	82	24	97
Netherlands	38	80	14	53	67	68
Serbia	86	25	43	92	52	28
Sweden	31	71	5	29	53	78
Turkey	66	37	45	85	46	49
USA	40	91	62	46	26	68

Note. (Hofstede et al., 2010; Minkov & Hofstede, 2014)

1. Power Distance Index (PDI) – a societal characteristic that describes the rigidity of existing social hierarchies and the extent to which such hierarchies are accepted by members of society (e.g., China, Russia, Serbia). The index reflects not merely the presence of hierarchy but its influence on interpersonal interactions and the functioning of social institutions.

2. The development of entrepreneurial intentions through entrepreneurship education is less pronounced in cultures with high power distance compared to cultures with low power distance. Characteristics such as social inequality and the privileges of those in positions of authority, which are typical of high power distance cultures, often impose limitations on entrepreneurial intentions and actual entrepreneurial behavior among the majority of individuals who are not part of the elite (Goktan & Gunay, 2011).

3. Individualism Index (IDV) – in contrast to collectivism, individualism reflects a focus on personal goals, self-perception as an “I,” protection of private interests, and relationships between individuals not burdened by strong obligations to act collectively (e.g., Australia, Netherlands, USA). Collectivist cultures, by contrast, emphasize group goals, self-perception as “we,” and the maintenance of relationships and social norms (e.g., China, Serbia, South Korea).

4. A stronger positive relationship between entrepreneurship education and students’ entrepreneurial intentions is observed in individualistic cultures compared to collectivist cultures. This finding aligns with the traditional understanding of an entrepreneur as an individual founder and highlights the pursuit of autonomy as an essential characteristic and motivation for entrepreneurs (Van Gelderen et al., 2020).

5. Masculinity Index (MAS) reflects a society’s orientation toward achievement and success at any cost. Countries with high scores on this dimension are classified as “masculine” (e.g., Italy, Mexico, USA, Japan) and are characterized by traits such as competitiveness, self-confidence, and goal orientation. Countries with low scores (e.g., Finland, Netherlands, Sweden) are considered “feminine” and emphasize the importance of relationships, cultural values, and quality of life.

6. In cultures with a high level of masculinity, there is generally greater self-confidence and goal orientation, which are essential for entrepreneurship. In cultures with a low level of masculinity, it is necessary to actively develop fundamental entrepreneurial skills, such as perseverance, initiative, and proactive action (Shane, 1993; Van Gelderen et al., 2020).

7. Uncertainty Avoidance Index (UAI) reflects the degree to which members of a society perceive and respond to unfamiliar or ambiguous situations. Countries with high levels of uncertainty avoidance tend to avoid ambiguous and unclear situations, strive to establish clear behavioral rules, rely on traditions and established norms, prefer in-group consensus, and show lower tolerance toward individuals with different life positions or ways of thinking (e.g., Ser-

bia, South Korea, Japan). Countries with low uncertainty avoidance are characterized by a higher level of personal initiative, acceptance of risk, and a more relaxed attitude toward disagreement and diversity of opinions (e.g., China, India, Sweden).

8. In cultures characterized by a high level of uncertainty avoidance, the relationship between entrepreneurship education and students’ entrepreneurial intentions is weaker than in societies with low uncertainty avoidance. Uncertainty avoidance reflects the way societies cope with the unpredictability of the future at the individual level (Hofstede et al., 2010). This uncertainty often becomes a source of anxiety and is expressed in a lower propensity for developing new ideas and engaging in innovative behavior, as well as in a reduced willingness to try something new or different (Kreiser et al., 2010; Shane, 1993; Urbano et al., 2019). Such an environment may suppress entrepreneurial intentions even when students possess the necessary skills and knowledge to create and manage their own businesses.

9. The Long-Term Orientation Index (LTO) determines short-term or long-term focus on the future, orientation toward solving strategic, long-term goals, and the desire to look ahead. Cultures with high values on this parameter (China, Germany, South Korea, Japan) are characterized by prudence, persistence in achieving goals, and resilience.

10. The Indulgence versus Restraint Index (IVR) is essentially a measure of happiness, the degree of satisfaction with simple joys of life. Societies with high indulgence scores are defined as allowing relatively free gratification of basic and natural human desires related to enjoying life and having fun (Australia, Mexico, Sweden). Low scores characterize societies that control the satisfaction of needs and regulate it through social norms (China, Russia, India).

Overcoming Sociocultural Barriers in Education. Hofstede’s cultural dimensions reflect societal expectations regarding individuals’ behavior and beliefs. However, students’ entrepreneurial intentions may be shaped by their personal cultural perceptions of the surrounding environment. Thus, the negative effect of individualism on students’ entrepreneurial intentions can be explained by the collectivist nature of the university environment, while the effect of power distance may be attributed to the excessively high authority of instructors within universities. In societies characterized by a significant power distance, individuals often face unequal distributions of resources and opportunities for success, which frequently hinders the development of readiness for entrepreneurial activity. A contemporary assessment of power distance in Georgia indicates the beginning of a shift in young people’s perceptions of societal hierarchy, which may undoubtedly have a positive impact on the future development of entrepreneurship in the country.

Nevertheless, it should be noted that Georgia’s national culture, according to Hofstede’s projections, is associated with a high power distance index, a not very high level of individualism, a low masculinity index, and a high level of uncertainty avoidance. In this regard, any educational pro-

gram in entrepreneurship should view these characteristics not as barriers, but as new opportunities for differentiation from other educational programs:

1. Instructors in entrepreneurship education programs can act more as experts or mentors, engaging with learners on an equal footing in terms of exchanging opinions; this approach partially mitigates, for example, a high power distance index.

2. Through the development of extracurricular activities, such as business idea competitions, acceleration programs, and expert councils for final qualification projects conceived as startups, a competitive culture among students is fostered. On the one hand, this aligns well with the principles of individualism, achievement motivation, and competition; on the other hand, it helps to build a community of individuals jointly developing an entrepreneurial cultural environment. In this way, a relatively low level of individualism is partially overcome.

3. In cultures with a low level of masculinity, it is necessary to more actively develop basic entrepreneurial skills (perseverance, the ability to act, etc.) through trainings, action days, and classes built around participant competition, among other approaches.

4. By creating a multinational, cross-cultural, and interdisciplinary environment, fears associated with uncertainty avoidance and with creating something new can be reduced. This includes the implementation of international core and supplementary educational programs in entrepreneurship and business development, as well as network-based international acceleration programs involving students from different countries, both engineers and entrepreneurs.

Psychological Barriers. Most Georgian people highly value the status and attractiveness of an entrepreneurial career, reflecting public opinion that views entrepreneurship as an appealing individual choice (Natsvlishvili, 2011). However, even in such a favorable context, students often face psychological barriers that prevent them from translating entrepreneurial intentions into concrete action.

The key psychological barriers include fear of failure, low internal locus of control, limited risk-taking propensity, weak need for achievement, lack of role models, low autonomy or independence, insufficient improvisational capacity, student immaturity or low initiative, lack of a culture of doing, and perceived significance of barriers, including access to funding. Fear of failure can inhibit students from taking the first steps toward launching a venture. Low internal locus of control reflects the belief that outcomes are determined by external circumstances rather than one's own efforts, which can reduce initiative and persistence (Ajzen, 1991; Rotter, 1966). Limited risk-taking propensity can prevent students from engaging in uncertain but potentially rewarding entrepreneurial activities (Hisrich & Peters, 1995), whereas weak need for achievement may reduce motivation to pursue challenging goals (Rauch & Frese, 2007).

A lack of role models, including mentors or visible successful entrepreneurs, can limit students' confidence and

reduce the perceived attainability of entrepreneurial success (Bosma et al., 2012; Van Auken et al., 2006). Low autonomy or independence constrains self-directed decision-making and reduces initiative in pursuing entrepreneurial tasks (Van Gelderen et al., 2020), while insufficient improvisational capacity impairs the ability to respond creatively to novel challenges or unexpected problems (Hmieleski & Corbett, 2006). Student immaturity or low initiative reflects underdeveloped behavioral maturity, responsibility, or proactive engagement in learning, which can limit practical experience and readiness for entrepreneurship.

The lack of a culture of doing refers to insufficient engagement in practical, hands-on entrepreneurial activities. Students often lack early exposure to project-based work, simulations, business cases, and team-based international projects that develop entrepreneurial skills (Kolb, 2015; Neck et al., 2014). Finally, students' perception of the significance of barriers, including limited access to funding, can reduce initiative.

Together, these barriers constitute internal and perception-based obstacles that may prevent students from acting on their entrepreneurial intentions, despite favorable societal attitudes toward entrepreneurship.

Overcoming Psychological Barriers in Entrepreneurship Education. To address psychological barriers, entrepreneurship education should be designed to strengthen the underlying mechanisms that enable students to act on their entrepreneurial intentions and reduce inhibiting factors. Evidence from Georgia indicates that students' entrepreneurial intentions are shaped by both individual traits and educational exposure, with opportunity-driven intentions particularly sensitive to access to role models, practical experience, and structured learning interventions (Bzhalava et al., 2017).

Reducing fear of failure and enhancing self-efficacy. Prior experience working in startups, particularly in companies established within the last five years, provides students with practical insights into entrepreneurial processes, even if they are not owners. Such experience is especially beneficial for students intending to launch their own startups. Universities should provide structured opportunities for internships in startups founded by peers or external organizations. Integrating activities that develop perseverance, action-taking, and problem-solving can reduce fear of failure and enhance self-efficacy (Hmieleski & Corbett, 2006; Van Gelderen et al., 2020). Guest lectures and case discussions that openly address experiences of failure normalize setbacks and foster resilience, while psychological training modules focusing on leadership, communication, and decision-making strengthen internal locus of control and autonomy.

Developing risk-taking, achievement motivation, and improvisation skills. Curricula should include exercises and workshops that encourage students to take calculated risks, set challenging goals, and respond creatively to unexpected problems. Learning-by-doing approaches, including project-based learning, simulations, business competitions, and

applied exercises, allow students to practice these skills in a safe environment, gradually overcoming barriers related to risk aversion, weak achievement motivation, and low improvisational capacity (Bosma et al., 2012; Kolb, 2015; Neck et al., 2014; Rauch & Frese, 2007). Early engagement in international student teams and action-based experiential programs fosters a culture of doing and provides initial project experience.

Addressing student immaturity and perceived external barriers. Complementing formal coursework with extra-curricular entrepreneurial engagement, including optional workshops, practical projects, collaborative ventures, and participation in international accelerators, enables students to develop initiative, responsibility, and proactive engagement. Additionally, students' perception of barriers, including access to funding, can inhibit entrepreneurial action (Bzhalava et al., 2017). To counteract these perceptions, universities can implement "teach the teacher" programs to enhance faculty expertise in entrepreneurship education, integrate real business cases and mentorship from entrepreneurs, and provide accessible platforms with information on grants, micro-grants, and financial prizes. These measures help students view challenges as manageable opportunities rather than insurmountable obstacles, fostering resilience and readiness for entrepreneurial engagement.

The development of interdisciplinary activities in academic entrepreneurship can foster projects involving new, market-demanded innovative products. In many countries, universities and their units can be granted the right to create educational programs based on their own principles and mechanisms, including experimental approaches, with horizontal participation from different departments (faculties, chairs, entrepreneurship centers, etc.). It is essential to provide students with a formal opportunity to initiate projects within the university to promote interdisciplinary activities and events.

With the ongoing internationalization of Georgian universities and the growing number of programs taught in foreign languages, greater attention should be paid to talented students and graduates by both universities themselves and by regional and national authorities. Foreign students come to Georgia from developed economies due to their interest in career development opportunities, but after receiving high-quality education, they often do not integrate into the Georgian business, academic, and institutional environment.

A cross-cultural environment among students and faculty constitutes a critical foundation for fostering entrepreneurial spirit among young people. Research indicates that the multinational composition of student entrepreneurial teams positively influences both motivation and the effectiveness of their project work (Gassmann, 2001; Stahl et al., 2010). Georgia, in particular, represents an attractive region for the development of an international student entrepreneurial ecosystem.

At the postgraduate level, the vast majority of Georgian students are already employed in external organizations

(Gulua & Kharadze, N., 2018), which poses a challenge to the development of entrepreneurial teams. Therefore, students should be encouraged to pursue master's-level education at a more mature stage, after gaining institutional or industry experience. In the United States, most undergraduates leave university to work for several years before selecting a graduate program that meets their real needs (Sieger, 2024). Germany shows a similar pattern: students often take temporary breaks from their studies, especially evident in the context of Universities of Applied Sciences.

Promoting a federal or regional policy-supported gap between undergraduate and graduate studies is important for the development of actual entrepreneurial projects at the postgraduate and executive education levels, where entrepreneurial training can be meaningfully embedded. Successful startup studios worldwide, such as Stanford Venture Studio, primarily target master's students and, to a lesser extent, doctoral candidates, providing structured mentorship, resources, and networking opportunities that enhance experiential learning in entrepreneurship (*Stanford Venture Studio*, n.d.).

A similar approach could be adopted by Georgian universities, for example through the creation of scientific project teams composed of "early-career researcher – master's student – bachelor's student." These teams need not be confined to a single program or university; regional inter-university scientific teams could be developed to advance innovative projects aligned with market needs. This reflects broader trends in academic entrepreneurship, where universities are expected to foster interdisciplinary collaboration and innovation (Belousova et al., 2024).

By combining theoretical knowledge, hands-on experience, and targeted psychological interventions, entrepreneurship education can effectively mitigate the internal and perception-based barriers that limit students' translation of intentions into entrepreneurial action.

Figure 1 summarises the review above and illustrates the diversity of approaches for developing self-directed learning among Georgian students through co-curricular activities (outside the formal curriculum) (see figure 4).

RECOMMENDATIONS AND GENERAL PRINCIPLES IN ENTREPRENEURSHIP EDUCATION

The development of entrepreneurship, including entrepreneurship education in universities (academic entrepreneurship), provides a foundation for the potential growth of a flourishing regional innovation ecosystem. Based on the preceding analysis and existing research, several key principles and methods in entrepreneurship education can be identified, along with practical recommendations for advancing entrepreneurship in Georgian universities.

Recommendations at the Human Capital Level. Universities should adopt a consistent modern global terminology and glossary for entrepreneurship and its teaching. In particular, entrepreneurship should be framed primarily as the process of recognizing opportunities and creating value,

FIGURE 4. FOUR AREAS OF ENTREPRENEURSHIP EDUCATION

<p style="text-align: center;">Entrepreneurship Research Theses</p> <p>Entrepreneurship competency course: elective for any student International exchanges, intercultural teams, and double-degree programs in entrepreneurship Courses embedded in the curriculum delivered by entrepreneurs, business angels, and investors</p>	<p style="text-align: center;">Practical Experience through International Accelerator Programs</p> <p>MOOCs on entrepreneurship Startup-based graduation theses Corporate accelerators and real project cases from international corporations</p>
<p style="text-align: center;">Internships in External Startups</p> <p>Co-creation methods Student-conducted interviews with entrepreneurs as a learning method Rapid entrepreneurial cases, including video cases Participation in entrepreneurial events organized by international partners Workshops on “teach the teacher” methods for entrepreneurship education Participation of students in short-term international schools International accelerator programs in online format Guest lectures by international researchers</p>	<p style="text-align: center;">Project Presentation and Networking</p> <p>Presentation of projects to panels including real investors, business angels, and entrepreneurs Informal networking events in entrepreneurship, including student-organized events Fast-track programs for student entrepreneurs Idea competitions with financial rewards</p>

regardless of the resources controlled by the entrepreneur. Special emphasis should be placed on cultivating general entrepreneurial skills, including creativity, perseverance, action orientation, and persuasive ability. Authentic self-development of students is a critical factor for fostering flourishing academic entrepreneurship ecosystems, and enhancing perseverance among Georgian student entrepreneurs can substantially contribute to this goal.

Reducing hierarchical perceptions between instructors and students is also recommended to create a more collaborative learning environment, counteracting the traditional assumption that “the instructor is senior.” Entrepreneurship education should integrate: (1) learning-by-doing approaches, such as project-based learning and simulations, alongside co-creative methods; (2) continuous promotion of self-directed learning, including extracurricular initiatives; (3) reasoning- and observation-based learning rather than rote memorization, for example, student-conducted interviews with entrepreneurs or case study analyses; and (4) psychological training, including action days and initial project experience in cross-cultural student teams.

Recommendations at the Social Capital Level. Entrepreneurship education should foster interdisciplinarity and cooperation, both across academic programs and courses within universities and between different universities. International market and team orientation should be emphasized in student entrepreneurial projects, ensuring that students achieve proficiency in at least one foreign language. In addition, the development of general entrepreneurial skills, such as relationship-building, networking, public speaking, and teamwork, should be prioritized. Cultivating a competitive achievement culture through participation in international accelerators, business idea competitions, and similar initiatives is also recommended, with appropriate grant support provided for winning projects.

Recommendations at the Financial Capital Level. Universities should ensure broad and open access to information about all available grants, federal, regional, university-level, and international, to enable direct use in student projects. Students should be encouraged to view the absence or limitation of resources not as a barrier, but as an entrepreneurial

opportunity.

Recommendations at the Level of Entrepreneurial Spirit and Culture. Entrepreneurship education should be grounded in cross-cultural engagement, including mandatory experience in international teams and active involvement of foreign students. Programs should also consider students’ genuine entrepreneurial motivations, such as aspirations for authentic self-development, societal contribution, and the pursuit of autonomy and independence, particularly in contexts where youth interest in large employers is declining.

CONCLUSION

The development of flourishing academic entrepreneurship ecosystems is inseparable from the quality, design, and cultural embeddedness of entrepreneurship education. This paper has shown that universities play a pivotal role not only as providers of knowledge and skills, but also as environments in which entrepreneurial intentions are formed, tested, and transformed into action. Entrepreneurship education constitutes a foundational mechanism through which academic institutions influence regional innovation ecosystems, particularly in emerging and transition economies.

The analysis demonstrates that sociocultural factors, such as power distance, individualism, collectivism, masculinity, and uncertainty avoidance, significantly condition the relationship between entrepreneurship education and entrepreneurial intentions. In the Georgian context, these cultural characteristics should not be treated solely as constraints; rather, they can be reframed as opportunities for differentiation and targeted pedagogical design. Educational practices that reduce hierarchical distance between instructors and students, foster interdisciplinary and international collaboration, and emphasize experiential, learning-by-doing approaches are especially effective in mitigating sociocultural barriers.

In addition to cultural constraints, psychological barriers remain a critical impediment to students’ entrepreneurial engagement. Fear of failure, low internal locus of control, weak achievement motivation, and limited exposure to practical entrepreneurial experience inhibit the translation of entrepreneurial intentions into concrete action. The

paper highlights that these barriers can be systematically addressed through educational interventions that combine practical project work, early-stage entrepreneurial experience, role models, mentoring, and psychological skill development focused on perseverance, autonomy, and action orientation.

Based on the analysis, the paper formulates practical recommendations at multiple levels: human capital development through entrepreneurial skill formation and self-directed learning; social capital enhancement through interdisciplinary, international, and network-based collaboration; financial capital support through transparent access to funding instruments; and the cultivation of entrepreneurial culture grounded in cross-cultural engagement and authentic self-development. Together, these measures create conditions for sustainable academic entrepreneurship and strengthen the integration of universities into regional innovation ecosystems.

Overall, the study contributes to the understanding of how entrepreneurship education can be designed as a strategic instrument for building flourishing academic entrepreneurship ecosystems. By aligning educational methods with cultural context and psychological mechanisms, universities can move beyond intention formation toward sustained entrepreneurial action, thereby reinforcing their role as key drivers of innovation, resilience, and long-term regional development.

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