



# The Potential University Environment of Entrepreneurship Development Through the Lens of Business Incubators

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## To cite this article:

Mariana Doga-Mirzac, Viorica Ataman. The Potential University Environment of Entrepreneurship Development Through the Lens of Business Incubators. *International Journal of Economics, Finance and Management Sciences*. Vol. 11, No. 5, 2023, pp. 234-245.

doi: 10.11648/j.ijefm.20231105.13

**Received:** September 9, 2023; **Accepted:** September 27, 2023; **Published:** October 28, 2023

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**Abstract:** In this study the authors aimed to analyze to what extent the existence of business incubators are perceived as a positive factor for the university environment and how beneficial it is to the growth of students' entrepreneurial skills as perceived by teachers. Likewise, the authors aimed to analyze the academic environment from different faculties and their predisposition towards new areas of knowledge in the economic field, especially in entrepreneurship. Business incubators represent an entrepreneurial initiation platform for students, but also a possibility of applying theoretical knowledge in local entrepreneurial practice. The connection between the academic environment, the economic environment and the public authorities needs to be made aware precisely for a revitalization, motivation, support of young entrepreneurs capable of starting businesses from the period of their university studies. The development of entrepreneurial skills will allow the identification of ideas focused on business by carrying out activities with the help of mentors from university business incubators. In this case the role of mentors (volunteers) would be Teaching Staff which can be included as an element in the support system for future entrepreneurs. The potential of university teachers and students from the university environment allows business incubators to be supported with the range of available services offering a support platform in the development of entrepreneurship.

**Keywords:** Business Incubator, Entrepreneurship, University Environment, Entrepreneurial Skills

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## 1. Introduction

### 1.1. The Need for Business Incubators in the University Environment

One of the most significant elements of the university's innovation ecosystem is the educational system. It should also be noted that, during studies oriented towards entrepreneurship and business environment in western universities, students are actively involved in research activities and project development, under the guidance of academics and business trainers who in turn form multidisciplinary teams (of students) and implement the developed innovation-based projects. [8]

The existence and efficient operation of the university business incubator is extremely important in the entrepreneurial ecosystem at the national level. The use of available university resources (qualified teaching staff,

students of the first cycle of Bachelor's and Master's degrees, various experts in Economics and Finance, collaboration with the business environment and state bodies) can minimize the most important risk of the business incubator operation - the selective risk, associated with the wrong business idea choice. Students of different academic programs (finance and banking, business and administration, cybernetics and economic informatics, accounting, marketing and logistics, hotel services and leisure) are one of the most important elements of the business incubator in the university environment, being the main actors in the entrepreneurial ecosystem. The development of new business ideas, the formation of the work team and other stages in the business product development process and the efficient and optimal organization of the business incubator operation depend on their activity in collaboration with the university professors. [13]

The global experience of the development of business incubators located in the university environment proves their

important role in the development of businesses with an innovative aspect for future young entrepreneurs. They provide support to the incubated enterprises not only by offering the spaces, but also by accessing the network in which enterprises of various fields of activity, universities, business incubators and the skills development system are included. Business incubators in the university environment as a component part of the network have a visible positive impact on the economy's progress to innovation. They promote and/or quickly commercialize new ideas and the results of research carried out within the universities, they facilitate the exchange of new technologies, thus increasing production efficiency. [5]

The activity of incubators within universities is focused on education and training, technological tools, patent and business consulting, support in accessing and developing projects, access to information sources, skills and expertise for researchers and students of the three cycles. But first of all, they provide support in consultancy and the development of new projects in the knowledge-based economy, as well as the training of skills in research and the application of new technologies, which divide incubators from the academic

environment based on organizational specificity. [11]

### 1.2. Young People Involved in the Business Environment

Entrepreneurial knowledge is the most important factor in educating an entrepreneurial-minded generation. Thus, the university incubator is a link in the university (academic) environment, which, by offering services, contributes to the support of young entrepreneurs (students, masters, PhD) and is focused on the development of a business environment aimed at the innovative activity of enterprises.

Used the data from National Bureau of Statistics of the Republic of Moldova we determined, that for 2016, the share of young people, aged 15-24, owning their own businesses constitutes 0.2 thousand of the total employed population. Conversely, young people aged 25-34 are more active, they represent 0.12% of the total employed population, over 1000 young people are the owners of their own businesses and people aged 25-34 are also they own their own businesses and represent 1,2 thousand persons (0,14% of the total employed population). Statistical Data Bank confirm the great and untapped potential of the young generation.

*Table 1. Employed population by occupational status and age group, thousand.*

Years	15-24 years		25-34 years		35-	44 years	Total employed population, across all age groups
	Employees	Owners	Employees	Owners	Employees	Owners	
2016	52,3	0,2	217,2	0,7	-	-	1219,5
2019	45,1	-	175,4	0,8	169,8	0,4	872,4
2020	36,0	-	164,1	0,4	168,1	0,7	834,2
2021	34,3	-	161,1	1,0	175,3	1,2	843,4
2022	35,2	-	159,0	1,0	187,8	0,9	864,3

Source: developed according to data from [www.statistica.md](http://www.statistica.md)

Analytical note: Statistical Data Bank of Moldova accessed on 30.12.2023

[http://statbank.statistica.md/PxWeb/pxweb/ro/30%20Statistica%20sociala/30%20Statistica%20sociala\\_\\_03%20FM\\_\\_03%20MUN\\_\\_MUN020/MUN120100.px/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774](http://statbank.statistica.md/PxWeb/pxweb/ro/30%20Statistica%20sociala/30%20Statistica%20sociala__03%20FM__03%20MUN__MUN020/MUN120100.px/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774)

The authors studied the teaching staff's entrepreneurship knowledge degree that can be developed within the business incubators located in the university environment, but also their willingness to know the economic realities of the business environment, their willingness to involve after the teaching activity in the businesses developed within the business incubators, the perception of the university environment on the benefits receive by these incubators development, benefits both for students and for the educational institution notoriety.

## 2. Literature Review

The main reasons that encourage Universities to create business incubators are the following: increasing financial resources due to income from patent concessions or incubation of spin-offs and start-ups; development of technology transfer and relations with the socio-economic environment; active participation in the development of the local economy; image consolidation, attracting students, teachers, businesses. [17]

Analysis of the available information [8] regarding the

innovative infrastructure functioning within the Massachusetts Institute of Technology, USA; University of Cambridge, UK; University of Twente, Netherlands; Aalto University, Finland, enabled them to identify the key areas for their operation.

We emphasize the fact that the National Program in the fields of research and innovation for the years 2020-2023 according to specific objective 1.2. Identifying intelligent specialization niches of the Republic of Moldova for the promotion of research based on excellence in strategic fields, with relevance and impact on the economy and society, aims to carry out the process of entrepreneurial discovery and according to the specific objective 4.1. Developing tools for the transfer of knowledge and scientific results to potential users, aims to stimulate the activity of science and technology parks and innovation incubators. [6]

Entrepreneurial skills and the initiative spirit gain greater importance in the current educational context, for in the recommendation of the European Parliament and the Council of Europe including within the National Program for promoting entrepreneurship and increasing competitiveness in

the years 2023-2027 (PACC Program 2027) on the key skills for continuous learning throughout life, entrepreneurial skills are also mentioned, such as: the recommendation to develop key skills, also oriented towards entrepreneurial skills through practical entrepreneurial experience, which is the key to the new entrepreneurial pedagogical paradigm. These in turn would mean the formation and development of the entrepreneurial environment and the university environment through the lens of business incubators in which each member of society is encouraged to offer business ideas, where they are fair valued. [7]

The program considers the following strategic planning documents: National development strategy "European Moldova 2030", Government activity program "Moldova of good times", Sustainable Development Agenda 2030, Moldova-EU Association Agreement, Moldova-EU Association Agreement and the Action Plan for the implementation of the measures proposed by the European Commission in its Opinion on the Republic of Moldova application on EU accession. [12]

### 3. Data and Methodology

The provided study was conducted according to the database of the Moodle platform of the USM, which had been developed based on a questionnaire.

The questionnaire was developed by the authors of the article and consists of three sections: (A) General information on the respondent, (B) The degree of entrepreneurship knowledge achieved within business incubators, (C) The perception of higher education teachers regarding the creation of university incubators, (D) The perception of higher education teachers regarding the development of entrepreneurial skills of students in university incubators.

According to the established objectives, the analysis carried out by the authors in this article allowed us to highlight the compartment (B) and (D) of the questionnaire, which

highlights entrepreneurial skills and the spirit of initiative in the view of teaching staff, and to emphasize the importance of business incubators in the university environment.

Research objectives:

- 1) Teachers' perception on the concept of business incubator/university incubator;
- 2) The services offered by the university incubator that could be used by teaching staff-entrepreneurs;
- 3) The attractiveness of university incubators for teaching staff;
- 4) The influence of university business incubators on the development of entrepreneurship.

As the research object (in the survey process), 118 teaching staff from the total number (about 375 persons) were involved (participated) from the faculties (1) Faculty of Economic Sciences (FSE); (2) Faculty of Psychology, Educational Sciences (FSE); (3) Faculty of Psychology, Educational Sciences, Sociology and Social Work (FPSESAS); (4) Faculty of International Relations, Political and Administrative Sciences (FRISPA); (5) Faculty of Letters (FL); (6) Faculty of Mathematics and Informatics (FMI).

The faculties that participated in the survey were divided into two compartments taking into account the general field of study, as follows: Social and Behavioral Sciences, Educational Sciences, Political and Administrative Sciences - 53 respondents and Economic Sciences - 65 respondents. [2]

### 4. Results

#### 4.1. Analysis of Respondents from the University Environment

The distribution of respondents according to teaching experience by age groups according to Figure 2, allows us to highlight that the largest number 33 respondents (28% of the total) are aged between 21-25 years old, followed by 29 respondents (24.6%) in groups aged 16-20 years old and 19 respondents (16.1%) aged 10-15 years old.

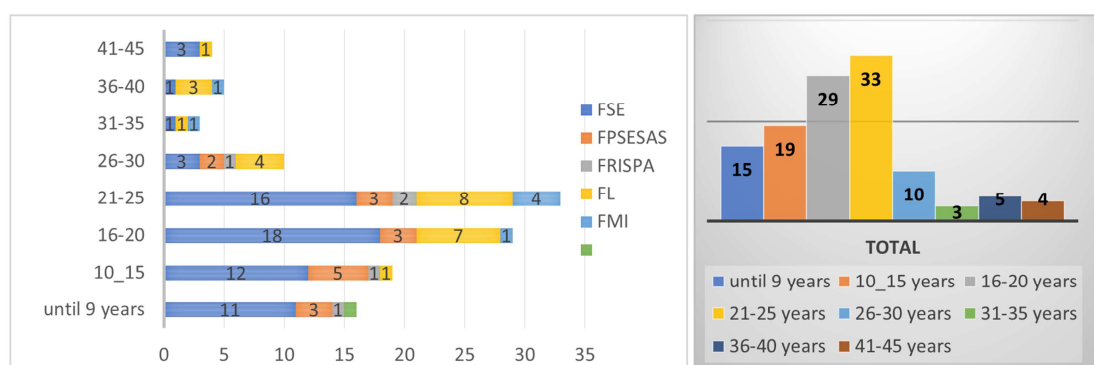
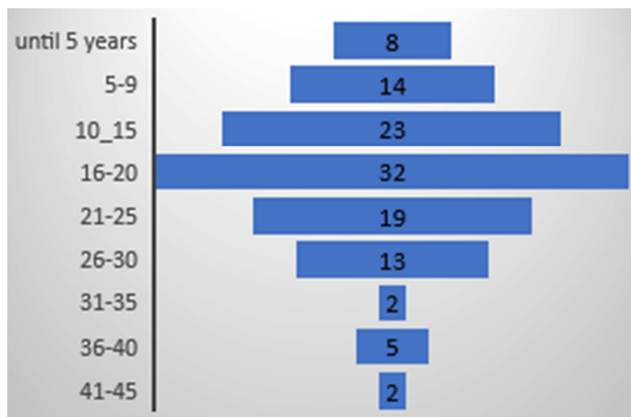


Figure 1. Distribution of respondents by teaching experience (in years), respondents.

The distribution of respondents by research experience by years in their total number (Figure 2) shows that the largest share (27.1%) is held by teachers with research experience aged 16 to 20 years old (32 respondents), followed by groups of 10- 15 years old - 19.5% (23 respondents) and 21-25 years old - 15.3% (19 respondents).

The research component represents an important link in the activity of both university and business environments, having as its priority to connect important actors to maintain and develop the state's economy, with the support of relevant institutions obviously.



**Figure 2.** Distribution of respondents by research experience (in years), respondents.

Under the National Program for research and innovation for the years 2020-2023, it was found that the vulnerability constantly mentioned in the context of scientific activities is related to the weak connection between the scientific community and the business environment. The lack of dialogue between the representatives of the two spheres at the national level results not only in the low degree of implementation of research results, but also in the low level of absorption of new technologies by the business environment.

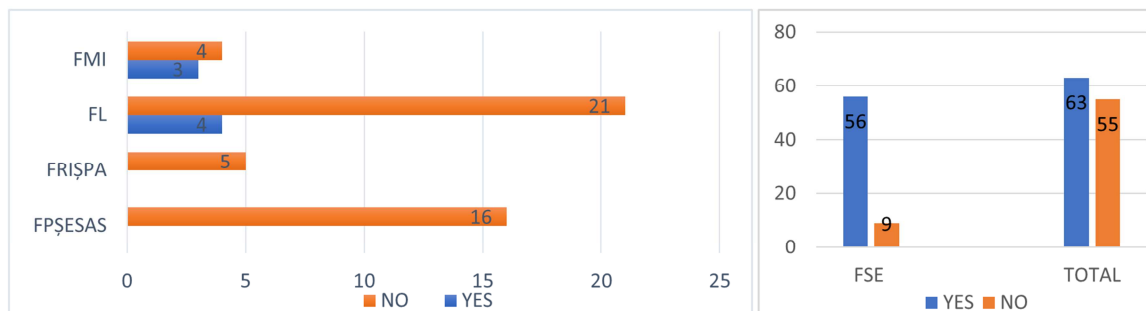
Pursuant to the NBS study - the innovation activity of

enterprises in the Republic of Moldova in 2015-2016, within the cooperation activity regarding the innovation of products and processes, only 13% of innovative enterprises have indicated universities and research institutions as cooperation partners, 28% have indicated suppliers of equipment, materials, components or software as cooperation partners, 26% – other enterprises, and 25% – customers or buyers. [1]

#### 4.2. Entrepreneurial Skills Needed in Entrepreneurial Activity

Training, informational support and consultancy contribute to the increase in entrepreneurial and managerial skills and competences of entrepreneurs, as mentioned in the "Analytical report on the participation of women and men in entrepreneurship". About 1/3 of all entrepreneurs participated in at least one training on how to start or run a business, mainly on their own initiative. The economic sector in which entrepreneurs actively participate in training is agriculture, where more than half of entrepreneurs (54%) had trainings, including 11% of them to comply with the precondition for receiving assistance. [15]

The question "Do you teach or have you taught courses in economic sciences?" got a negative answer from the majority of respondents from faculties with no economic profile. There were 54 respondents out of the total number. (FMI-4, FL-21, FRISPA-5, FPSESAS-16)



**Figure 3.** Distribution of respondents according to the teaching of subjects in the field of economic sciences, respondents.

Respondents (teaching staff) who answered positively, resorted to the question "What is the exact name of the discipline you have taught or are currently teaching?" for which we highlighted the following results:

- 1) *at the Faculty of Letters:* Marketing of the cultural product, Romanian language of communication, (partly topics related to economic intelligence);
- 2) *at the Faculty of Mathematics and Computer Science:* Economic Statistics, ICT, Quality Management of Software/IT products, Electronic Business Development, Information Management, Information Security Audit, IT Security Management, IT Project Management, IT Applications for Project Management.
- 3) *at the Faculty of Economic Sciences:* Information Management and Business Communication, Prices and Tariffs, Business Risk Management, Financial Accounting, Finance, etc.

As per teaching staff (professors) and the ones from the

university environment (also respondents from faculties with no economic profile) we suggest offering them, in turn, the opportunity to acquire the knowledge, skills and attitudes necessary to offer an entrepreneurial education and facilitate entrepreneurial learning. Every current and future teacher should take, during their career, at least one training experience in essential topics and methods related to entrepreneurial learning and entrepreneurial education. [4]

To the question "Are you currently involved / have you been involved in entrepreneurial activities?" we can see from the graphic representation that 64 of the total respondents (54.2%) mentioned that they are not currently involved in initiating or are not active in the business environment; 35 respondents (29.7%) answered positively, and 19 respondents (16.1%) mentioned that they are partially involved in entrepreneurial activity. [2]

The entrepreneur, as seen by the academic environment (economic field), is the person willing to take risks (dangers)

and devote effort and time to start his own business. In turn, the business provides services or goods or focus on their commercialization (marketing division) or manage the business (management, finance divisions etc.). It can be an enterprise enrolled in the university environment (Business Incubator) and it can also be an active start-up in the IT environment, by using or creating (electronic) platforms. It is what we indeed are not able to confirm with respect to the teaching staff versus economic divisions, highlighting that the perception of having the idea and being initiated in one's own business or in the rendering services (consultancy) by applying the skills and methods allowing to form the innovative entrepreneurial spirit within the incubator is rather vague and sometimes unclear.

To the question "Do you currently have /have you had family members involved in entrepreneurship?", 60 respondents (50.8%) answered positively. If we were to analyze the results obtained on respondents from faculties with no economic profile (FMI-71%, FL-52%, FRISPA-50%, FPSESAS - 69%) we can emphasize that a large part of respondents does not turn to family members to be involved in entrepreneurial activity.

Regarding the involvement of the respondents in volunteering, with or without the entrepreneurial component, we can notice the total results are approximately divided in half, 58 respondents – currently volunteer or volunteered in the past and 60 respondents were not involved or did not accept this type (kind) of offer.

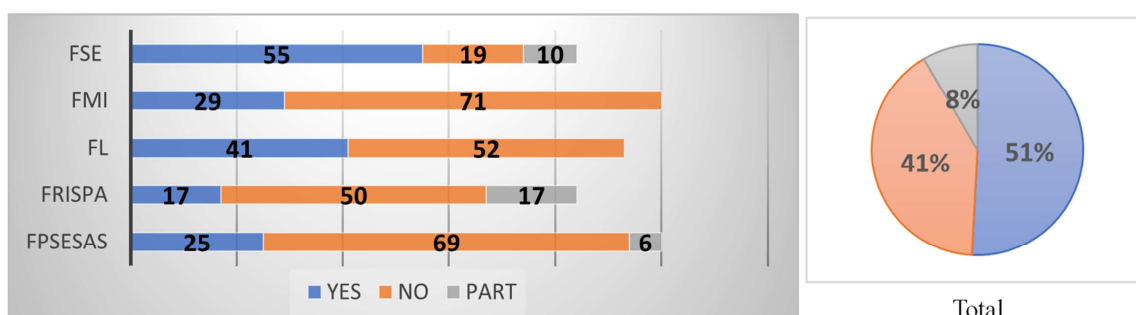


Figure 4. Distribution of respondents in the involvement of family members in entrepreneurial activity, %/respondents.

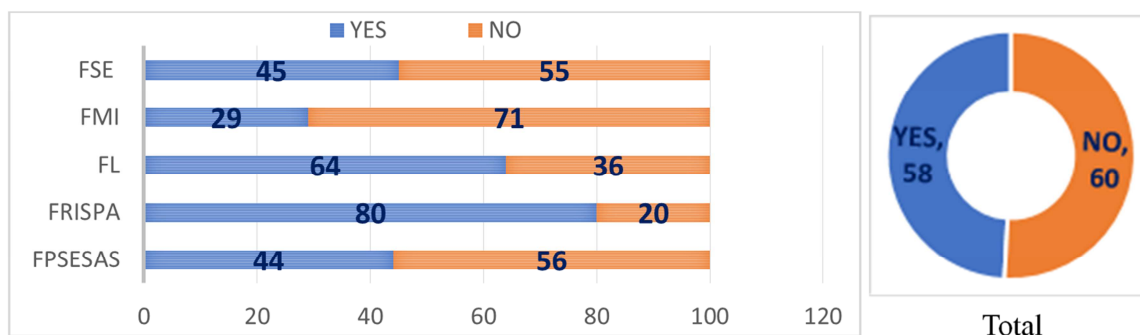


Figure 5. Distribution of respondents in volunteer involvement (with or without the entrepreneurial component), %/respondents.

Volunteering sometimes require knowledge or minimal experience in the respective field, other times they only require the will to get involved and help other people. Whatever the case, volunteering is certainly carried out for pleasure, based on free will and interest towards the selected field. The project "From volunteering to entrepreneurship", via the Erasmus+ program of the European Union for education and training conducted in the period 2014-2020 with a total budget of 14.7 billion euros, was aimed at contributing to the development of skills and employability by offering opportunities of education and training for youth. [16]

The analytical report on participation in entrepreneurship activity provided by the National Bureau of Statistics (NBS) emphasizes that involvement in this activity remains low and is decreasing. The reduced presence in entrepreneurial activities causes the aging of some important sectors of the national economy. In the agricultural and industrial sectors, 30% and 40% of businesses, respectively, are owned by entrepreneurs over the

age of 55. Women's participation in entrepreneurship activities is even lower (around 14.1%). About 7 out of 10 entrepreneurs in the country have university degrees. Although the number of women with higher education diplomas at the national level is higher (by 22.5 p.p.), their presence in entrepreneurial activities is below the level recorded by men (by 0.5 p.p. less). This situation indicates the existence of an educational potential in case of capitalization and completion with entrepreneurial skills and knowledge in the field of starting a business. [15]

This project is an example aimed at teaching staff from the university environment, allowing them to smoothly fit into the entrepreneurial activity via volunteering.

#### 4.3. Teachers' Perception on the Concept of Business Incubator/University Incubator

To the question "Are you familiar with the notion of business incubator or university incubator?", a number of 57



(48.3%) respondents answered positively, 32 respondents (27.1%) highlighted that they partially know the mentioned concepts and 29 respondents (24.6%) do not know about these concepts.

If examine the results obtained on respondents from faculties with no economic profile (FFPE), we will obtain following results per total: Yes-10 respondents, No-24 respondents, Partially-19 respondents, we emphasize that a large part of respondents are not familiar or they are partially familiar with the notion of "business incubator" or "university incubator". [2]

Moreover, we can find out about the business incubator concept treated as: "the place where newly registered businesses are concentrated, in a limited space, whose objective is to increase the chance of growth and the duration of survival of these businesses, providing them modular spaces, and where managerial support and assistance services are offered under facilitated conditions" within the Law on small and medium-sized enterprises no. 179 of 21.07.2016. [9]

Under article 2 of the Law on scientific and technological parks and innovation incubators no. 226 of 01.11.2018 the innovation incubator concept is treated as: "organization in the field of innovation established on the basis of an association contract between legal entities and individuals, aiming to raise the potential of developing and implementing innovations by small and medium-sized enterprises, as well as private

researchers and inventors whose activity is carried out under facilities provided by the state" [10]

Upon carefully analyzing and selecting the respondents' answers to the questions: What associations do you have when hearing the phrase "business incubator" and "university incubator"?, we can definitely mention that most of the respondents both from faculties with no economic profile and from the faculty of economic sciences have interpreted the mentioned phrases as a support / assistance in an idea (start-up) initiation or its development both for the business environment and for the university environment. However, three people from the total number answered they did not know or were not aware about those concepts. One respondent mentioned that "I don't like the semantic innovation business incubator - it is probably a takeover from English (it is business incubator in English) - business initiation, business start-ups, business start-up training, business launching, etc.

To the question "Do you know if there is a university incubator/incubators in the institution where you operate?", the majority of respondents from faculties with no economic profile (FFPE) stated per total that they did not know about the "Inventica-USM" Innovation Incubator within their university and the teaching staff from FSE certainly affirmed (43 respondents out of 65) that the university has two incubators as it had been included in the FSE component (the faculty's organizational chart).

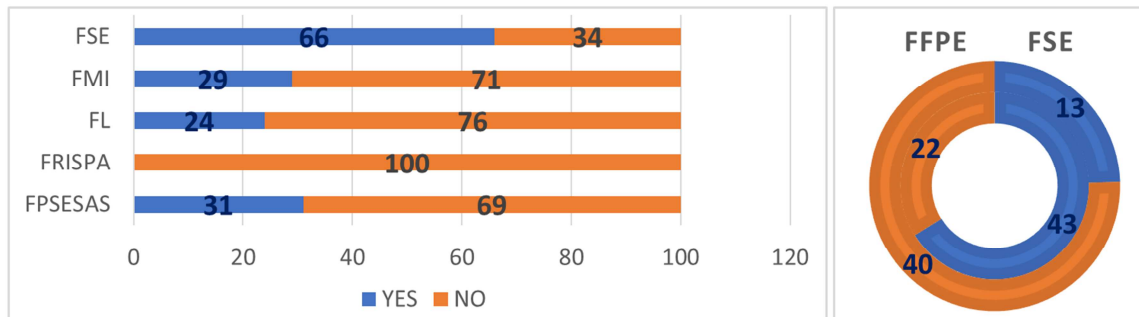


Figure 6. The distribution of respondents depending on the knowledge of existence in the institution where a university incubator operates, %/respondents.

According to the answers to the question "Do you know if there are business incubators or university incubators in other institutions?" we can firmly confirm the results to the previous question, with an emphasis on faculties with no economic profile (FFPE), per total are the same to this question: 36 out

of 53 respondents do not know about the existence of business incubators or university incubators in other institutions, except teachers from the IMF (71%) being involved in research projects as a base for innovative technologies. [2]

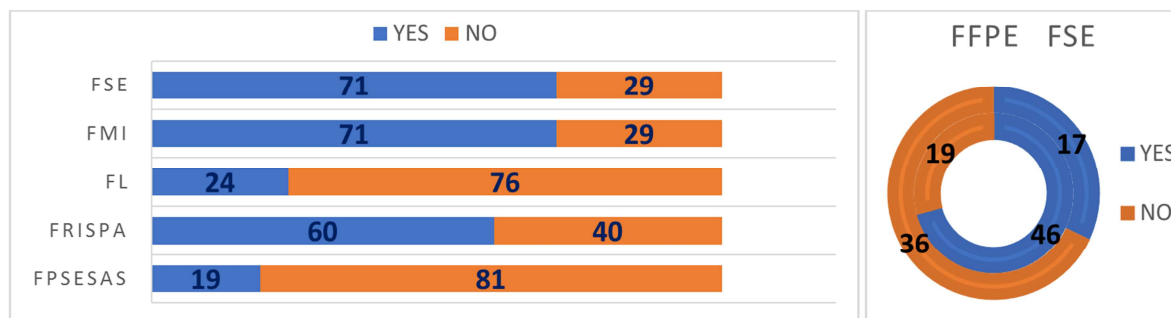


Figure 7. Distribution of respondents depending on the knowledge of existence in other institutions of business incubators or university incubators, %/respondents.

The respondents (teaching staff) who gave a positive answer took the attached question "Which specific business incubators or university incubators do you know?", mentioned the name of the educational institution, obtaining the following results:

- 1) at the Faculty of Mathematics and Computer Science, Faculty of International Relations, Political and Administrative Sciences: The Technical University of Moldova, The Academy of Economic Studies of Moldova;
- 2) at the Faculty of Letters: The State University of Moldova, The Academy of Economic Studies of Moldova;
- 3) at the Faculty of Psychology, Educational Sciences, Sociology and Social Assistance: The State University of Moldova, The Academy of Economic Studies of Moldova, The Technical University of Moldova;
- 4) at the Faculty of Economic Sciences: The State University of Moldova, The Academy of Economic Studies of Moldova, The State University of Comrat and ODA.

Given the results, we can emphasize that the most recognized innovation incubators in the university environment by the teaching staff are the incubators within the SUM, TUM and AESM.

According to ANCD data and its management, there are currently eight active innovation incubators, that have been created at the proposals of the scientific and technological and scientific and educational clusters, with different

specializations, as follows: II "Politehnica" created in 2011, within the TUM; II "Innocenter" created in 2012, within the USC; II "Inventica-USM" created in 2012, within the SUM; II "Innovative Entrepreneur" created in 2013, within the "Selectia" Field Crops Research Institute; "Media Garage" a Moldavian-Lithuanian II created in 2014; II "IT4BA", created in 2015, within the AESM. [1]

#### 4.4. The Attractiveness of University Incubators for Teaching Staff

To the question "Who do you think has the right to participate in the creation of university incubators?" Figure 8 shows that higher education institutions with a share of 59.6% are on the first place or actually those institutions that have initiated the formation of incubators and currently monitor their maintenance regardless of persisting impediments, competition and obstacles. State institutions holding 49.6% are placed second. They are important for the legislative base development and implementation and for their activity evaluation when financed from the state budget. Individuals (students and teachers) and Student Associations obtained 39.8% and 39% respectively, being the ones boosting the innovation incubators activity. Under teacher's perception, the business environment (legal entities) participates less in innovation incubators creation, holding only 26.2%, despite the fact that increased attention is currently paid to the connection and collaboration of the business environment with the academic (university) environment.

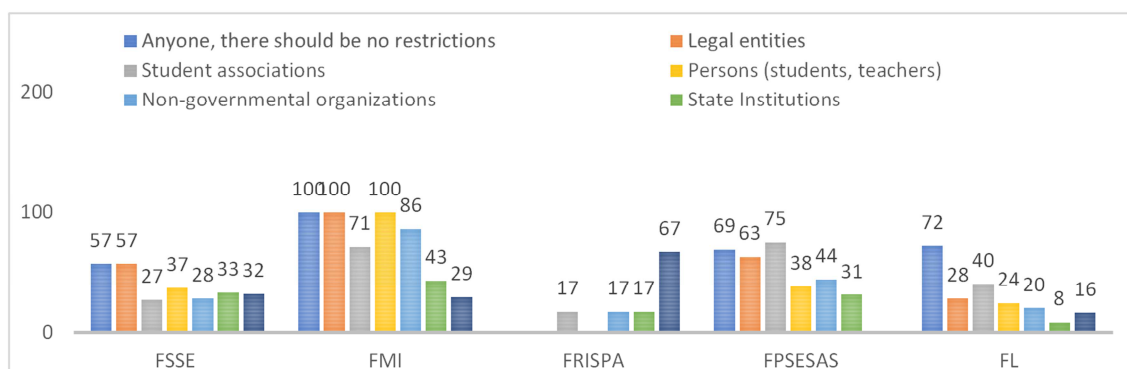


Figure 8. Distribution of respondents depending on who has the right to participate to the creation of university incubators, %.

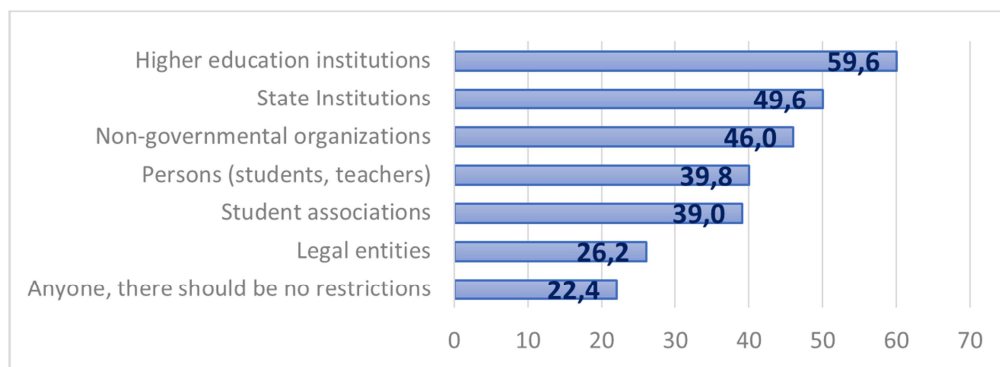


Figure 9. Distribution of respondents depending on who has the right to participate in the creation of university incubators, % (of total).

To the question: "Are you aware of the legislation on creation and development of university incubators?", 100% of respondents from faculties with no economic profile do not know the legislative framework regulating the university incubators functioning. Moreover, we emphasize that the majority of teaching staff (72%) within FSE are also unaware of the legislation on innovation incubators establishment and functioning.

Still, the frequent changes, instability, internal and external factors worsening and preventing the activity and collaboration between state institutions significantly influence the academic environment and the university environment distorting some of their activities.

To be mentioned that the legislative framework, oriented

towards research and innovation, contains a considerable number of documents and still remains fragmentary. The revision of the existing legislative framework is required to make it unified, accessible and lucrative, oriented towards the regulation of university and business incubators, operating on the territory of the Republic of Moldova. The formation of partnership relations between state institutions, universities and the private sector is also required. [3]

To the question "Would you like to learn more on university incubator functioning?", the majority of respondents (81.8% of the total) stated that, in general, they have the desire to be informed or obtain detailed information on the incubators functioning within the university environment.

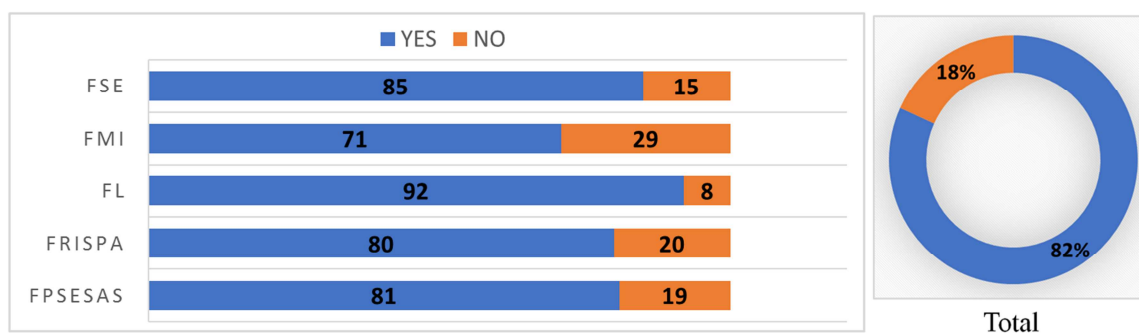


Figure 10. Distribution of respondents depending on the desire to know how operates a university incubator, %.

To the question "Would you attend online/offline trainings on university incubators creation and development?" the graphic representation shows that 51% of all respondents are interested in the offer (idea) of participating in trainings on university incubators creation and development. At the same time, we can confirm that 25% gave a strong positive answer to the question above and only 25% of the total respondents answered negatively.

The "Business Incubator versus Innovation Incubator" ("Business Incubators Operation") module (course) development within the continuous training program will certainly enable teachers to learn and get aware with both the concepts of "business incubator" and "innovation incubator" and their functionality and the teaching staff involvement via various offers (focused on the respondents and not only) through the Continuing Education Resource Center (CRFC) within the SUM.

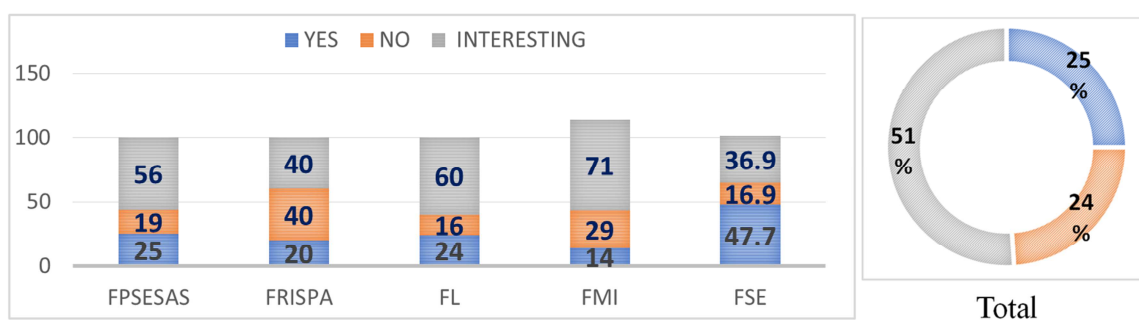


Figure 11. Distribution of respondents depending on the attractiveness of courses to be informed about the creation and development of university incubators, %.

To the survey question "Are you aware of the university incubators creation practices from other countries?" the chart displays that 68.4% of all respondents mentioned they are not aware of the university incubators creation practices from other countries. We stress that 74.5% of respondents are from faculties with no economic profile. At the same time, 23.2% of respondents would find this information interesting. [2]

#### 4.5. The Services Offered by the University Incubator for Teaching Staff-Entrepreneurs

To the question "What services should a university incubator offer?" we note that entrepreneurial trainings (accounting, human resources, financial, fiscal, marketing) are on the first place, holding an 84.6% share. In fact, this is



an opportunity for academic staff to be involved in trainings for both students and teaching staff from faculties with no economic profile and for people attracted from outside requiring knowledge in the field. The legal training is placed second with a 64.2% share of responses. This kind of training is important for sharing the components (decisions, laws, resolutions, legislative amendments) of the legislative framework to incipient start-ups already carrying out operations and encountering some impediments. However, the laboratories available to the universities have accumulated 46.8% as, according to the teaching staff

perception, they are a possibility to practice, experiment, implement due to the easily obtained attractive ideas. Respondents' preferences for services directed towards the offer of rented space services and secretarial services (telephone, internet, printer, mail) accumulated 39.6% and 36.6%, respectively. 15.2% of respondents answered regarding other types of services that can be offered by university incubators, out of which 6.2% do not know what services can be offered by such a structure located within the university environment.

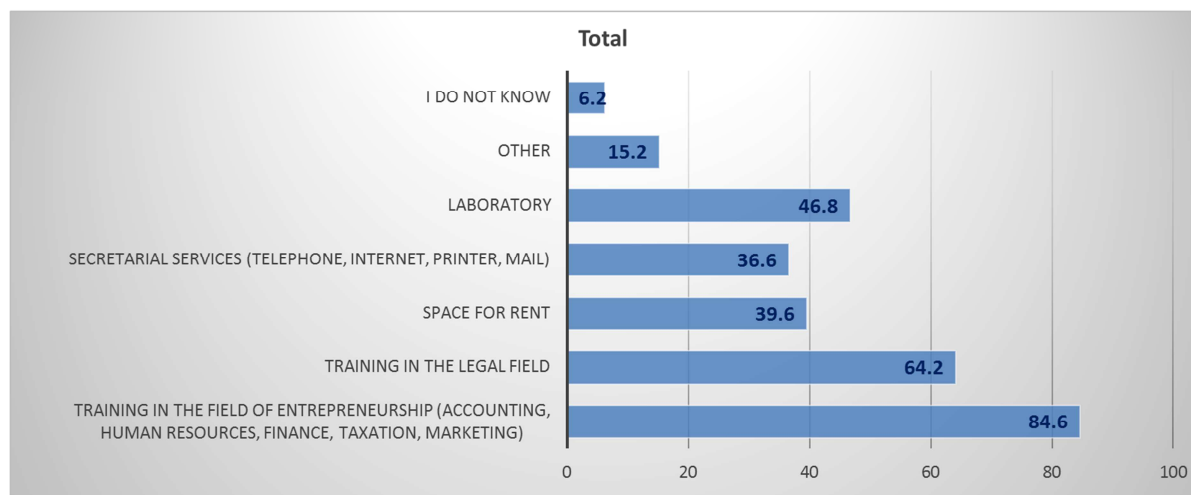


Figure 12. Distribution of the services that a university incubator should offer in the opinion of the respondents, %.

The skills and competences acquired during the university career allowed the respondents to answer positively (55%) to the question "Would you like to get involved as a mentor/teacher in a university incubator?" The analysis by faculties reveals the following results: at the Faculty of Economic Sciences - 41% of respondents answered positively and 15% would not like to be mentors; at the Faculty of Psychology, Educational Sciences, Sociology and

Social Work - 25% of respondents would agree compared to 19% of respondents who would not; At the Faculty of Letters, 24% of respondents agree and 16% disagree. We emphasize that a large part of the respondents from the Faculty of International Relations, Political and Administrative Sciences (33%) and from the Faculty of Mathematics and Informatics (29%) do not have the desire to be a mentor/teacher at the incubator located in the university environment.

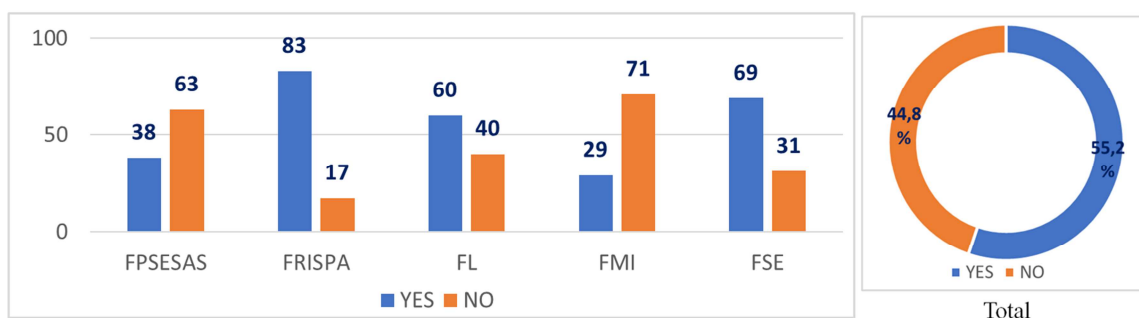


Figure 13. Distribution of respondents depending on the desire to be involved in quality by mentor/teacher in a university incubator %.

#### 4.6. The Influence of University Business Incubators on the Development of Entrepreneurship

Under national legislation, the National Qualifications Framework is defined by a series of concepts: qualification, knowledge, skills, competences, abilities, study objectives. The competence represents a confirmed ability to use

knowledge and personal, social and/or methodological skills in work or study situations and in professional and/or personal development. Therefore, the existence of business incubators in a higher institution will also contribute to the creation of entrepreneurial skills of students. Respectively, to the question: *do you think that all students from any faculty should have economic subjects?* 54 respondents (45.76%) from the Faculty

of Economic Sciences agreed or totally agreed and 7 respondents from The Faculty of Letters disagreed or totally disagreed. This shows that the subject is not of interest to the Faculties of Humanities. Moreover, 11 respondents are

disinterested in economic disciplines. We have a similar result to the question: *do you think it is important for a student to know the basics of entrepreneurship?* where 92 of the questioned persons (77.97%) answered affirmatively.

**Table 2.** The vision of university teaching staff oriented towards university incubators.

Indicatori	FL	FMI	FRISPA	FPSESAS	FSE
The Importance of students studying "Entrepreneurial Education"	3,4	4,0	3,4	3,9	4,3
The utility for the student to know details about creating a business in university incubators	3,6	3,7	3,6	3,9	4,2
The development by teachers of entrepreneurial skills for any student, regardless of the faculty attended	3,4	2,7	2,6	3,2	3,7
The possibility for teachers to be residents in a university incubator alongside students	3,6	3,9	3,6	3,6	3,9
Small businesses created in university incubators could survive in the competitive market	3,6	3,6	3,0	4,0	4,0
University incubators should only be intended for students from economic faculties	2,6	1,9	1,6	2,6	2,4
The development of university incubators would influence the academic situation of students	3,5	3,4	3,4	2,6	3,7

Note: scale used: 1 = strongly disagree; 2 = disagree; 3 = indifferent; 4 = agree; 5 = total agreement

The answers above are confirmed by the analyzed results to another question: *whether teachers should develop entrepreneurial competence for any student, regardless of the faculty attended*, where we see that 10 teaching staff consider students unprepared to start a business, of which 5 teaching staff are from the Faculty of Economic Sciences; 33 teaching staff (27.97%) out of a total of 118 respondents showed disinterest in this competence of students, and 65 teaching staff (55.08%) agree or totally agree. We mention that a desire for education in the Republic of Moldova involves the development of human potential to ensure the quality of life, the sustainable growth of the economy and the well-being of people. Hence, this study reveals that the importance of entrepreneurial knowledge for students from all faculties of the higher institution is considered irrelevant by more than 25% of the investigated teaching staff. However, to the question of *whether a university should draw attention to the applicability of the knowledge delivered to students*, 102 respondents agreed with this aspect, which implies that the university environment must be responsive to the fluctuations of the labor market. At the same time, we received surprising answers to the question: *do you think that the small businesses created within the university incubators could survive on the market under competitive conditions?* where 33 respondents are skeptical or even indifferent about the goals of some projects started within the university incubators, among which 12 skeptical respondents (12, 17%) are from the Faculty of Economic Sciences.

The skepticism of the teaching staff regarding the businesses initiated within the university also arises from the analysis of the answers to the question: *do you think that students have integrative knowledge to start a business?* where 32 respondents (27.12%) disagree or totally disagree with this statement, which implies that students in the opinion of teachers are not ready to launch businesses on their own, even if they are psycho-emotionally ready. 53 respondents (44.92%) have confidence or total confidence in the integrative knowledge of students to launch a business and 33 teachers (27.97%) are indifferent to this detail.

## 5. Discussion

It is important for members of the academic environment to

cooperate, support and activate in innovation incubators, as both students and teachers in non-financial specialties are prone to start their own business. Therefore, the service provided by academic business incubators established by universities can be an attractive and decisive factor for young people to study at a certain university, not limited to the possibility to implement the business idea and to accumulate entrepreneurial skills and abilities.

We would like to mention that of all the surveyed teaching staff, the majority are experienced teachers, but who have not taught or do not teach economics subjects. At the same time over 50% of teachers stated that they know entrepreneurship to some extent due to some family members involved in entrepreneurship. According to the conducted research, only the professors from the Faculty of Economic Sciences are aware of an incubator's existence within the university. They represent a 70% share of the total respondents. Meanwhile, at other faculties the figures vary from 19% to 60%. At the same time, university professors believe that higher education institutions are entitled to develop such entities alongside state institutions and non-governmental institutions. It is curious that the business environment is left in last place, only 26% of the respondents would involve in the university incubators creation. Teachers outside the economic profile do not know the legislation related to business incubators, and the majority, over 70%, are interested in learning more details about their specifics and an incubator's operation. In this research, we were also interested in the opinion of the academic environment regarding the services that a business incubator should offer. More than 80% of respondents stated that an incubator should offer entrepreneurial training and more than 60% believe that it should offer legal training. At the same time, this research highlighted another curious phenomenon, that only 16-2% of the respondents would like to get involved, mentor or train young people within a university incubator.

At the same time, the Innovation Incubator (entrepreneurial HUBs) located in the university environment must allow the mobilization of a network of skills, to concretely guide the owners of the selected projects, with human resources, material and financial means. It is a network of academic activities to encourage and support the financial, technical and managerial plans, the employees and students of the

University, in creating their own productive structures, using all forms of support, guidance and consultancy (making maximum use of human capital, which in the current conditions represents an indisputable value and in fact the engine of a university environment) - for the purpose of the commercial exploitation of an innovative idea or an invention of a product, service or technology, mechanism, indicators developed within the framework of university research activity or research institutions, collaborators. [18]

## 6. Conclusions

Startups created in the university environment are an important pillar in the economy based on knowledge, research, exploration and using innovative technologies. These, in turn, represent economic entities that are looking for an efficient business model and immune to barriers and challenges both at legislative and competitive levels, which in fact defines start-ups as creative enterprises to produce a new good or service under extreme uncertainty.

We conclude that teaching staff from higher institutions are receptive to the existence of university incubators within higher institutions, considering that all students must participate in these projects, regardless of the graduated faculty, at the same time, entrepreneurial knowledge is not considered mandatory, it is not desirable by all students.

We also stress that teaching staff welcome the involvement and support of university business incubators, but they do not agree to get involved financially in various projects initiated by students within the incubator. Another aspect revealed is the openness to universality, the adoption of good practices is considered a useful approach, and the application to various international projects is considered beneficial for both incubators and incubated companies. Business incubators, as mentioned in the research, are a space for meeting, exchanging ideas and good practices for companies at their initial development stage. The incubator offers companies logistical support for the transfer of technology and know-how and the opportunity to develop joint activities through co-working and networking.

The teaching staff can be actively involved in this value chain by offering training, volunteering to incubates in various areas of knowledge: marketing, IT, human resources, financial management, accounting, audit, psychological, legal, etc. The academic environment could represent a support system for incubated businesses by taking on the roles of mentors and volunteers in supporting young entrepreneurs. Academic volunteering in the incubators would represent the implemented elements of the information delivered during the courses.

Therefore, a business incubator increases the visibility and notoriety of the educational institution, teachers can implement the theoretical information taught during courses within the newly created companies by students. They could also be co-financiers in various investment projects within the university incubator. The business incubator within a university must be managed as a profit center for the

educational institution, strive to capitalize on all resources and apply the win-win principle for all stakeholders. This is how the continuous development of entrepreneurship in the university and academic environment can be insured.

Business incubators are generators of ideas, multipliers of value, beneficial environments for teaching potential exploitation and acquiring, in a limited time, a series of legal, accounting, financial, fiscal knowledge. It is also an environment for the development of effective communication, negotiation, persuasion skills aimed at training entrepreneurs with integrity for the continuity of businesses initiated within university.

## Note

*The article is part of the Research Project 20.80009.0807.38 Multidimensional evaluation and development of the entrepreneurial ecosystem at the national and regional level in order to boost the SME sector in the Republic of Moldova.*

## Disclosure Statement

No potential conflict of interest was reported by the authors.

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