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Research Article

The Role of University Business Incubators in Fostering an Entrepreneurial Spirit among University Students: A Field Study on a Sample of Students from Tamanrasset University

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Abstract: This study aims to identify the role of the university business incubator in fostering an entrepreneurial spirit among students at the Faculty of Economic, Commercial, and Management Sciences at the University of Tamanrasset, by measuring a set of dimensions: need for achievement, self-confidence, creativity, autonomy and responsibility, risk-taking propensity, and initiative. To achieve the study's objectives, a descriptive-analytical approach was adopted, and a questionnaire was used to collect data from a sample of 110 students—drawn from a study population estimated at 850 students—followed by statistical analysis of the data. The results demonstrated a high degree of reliability for the study instrument, with Cronbach's alpha reaching 0.919 for the entrepreneurial spirit axis and 0.912 for the axis measuring the business incubator's role in fostering entrepreneurial spirit. Descriptive results also revealed low arithmetic means across most dimensions of entrepreneurial spirit, indicating the need to strengthen the university business incubator's role in developing students' entrepreneurial capabilities and skills. The study concludes with the necessity of developing training and practical programs, intensifying mentorship and hands-on training, and encouraging creativity, innovation, and initiative, while expanding student access to incubator services and strengthening cooperation between the university and the local socio-economic environment, thereby contributing to embedding an entrepreneurial culture and motivating students to establish their own ventures.

Keywords: University Business Incubators, Entrepreneurial Spirit, University Students, Entrepreneurship, University of Tamanrasset, Innovation

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INTRODUCTION

In recent years, the economic and social environment has witnessed rapid transformations that have led to growing interest in entrepreneurship as one of the key mechanisms for achieving economic and social development, reducing unemployment, encouraging innovation, and creating job opportunities. The role of the university is no longer limited to delivering academic knowledge; rather, it has become essential for universities to contribute to training students capable of transforming their knowledge and ideas into viable economic and social projects and initiatives.

In this context, university business incubators have emerged as one of the most important mechanisms through which universities can support students with ideas and projects by providing training, mentorship, consulting, and guidance, helping them develop their ideas and transform them into viable ventures. This issue acquires particular importance in Algeria amid the national drive to spread an entrepreneurial culture within universities and encourage students to establish

startups and innovative projects. The university incubator has thus become a vital space for training, mentorship, and linking the university to its economic and social environment.

Within this framework, the University of Tamanrasset holds special significance given the economic and social specificity of the region and its rich potential in desert tourism, traditional crafts, services, the local economy, and other sectors that can offer genuine opportunities for entrepreneurial ventures.

A study addressing entrepreneurship and local development at the University of Tamanrasset confirmed the need to strengthen entrepreneurial thinking among students and graduates, alongside the necessity of coordination between the university and various entrepreneurship support bodies to serve local development.

Accordingly, this study sets out to identify the role that the university business incubator can play in fostering an entrepreneurial spirit among students at the University of Tamanrasset.

Research Problem

Despite the growing interest in entrepreneurship within Algerian universities, the mere existence of a university business incubator does not necessarily guarantee the actual development of an entrepreneurial spirit among all students. The effectiveness of an incubator depends on the reach of its services to students, the quality of the programs offered, the level of mentorship, training, and guidance, as well as the capacity of these services to develop the personal and behavioral traits required for entrepreneurial practice.

Accordingly, the main research problem of the study can be formulated in the following question: What is the role of the university business incubator in fostering an entrepreneurial spirit among university students at the University of Tamanrasset?

Sub-Questions

- What is the level of need for achievement among the students under study
- What is their level of self-confidence
- What is their level of creativity
- What is their level of autonomy and responsibility
- What is their level of risk-taking propensity
- What is the level of initiative among the students
- How do students perceive the role of the university business incubator in fostering their entrepreneurial spirit

Study Hypotheses

Main Hypothesis: The university business incubator contributes to fostering an entrepreneurial spirit among university students at the University of Tamanrasset.

From this main hypothesis, the following sub-hypotheses branch out:

- The university business incubator contributes to fostering the need for achievement
- The university business incubator contributes to fostering self-confidence
- The university business incubator contributes to fostering creativity
- The university business incubator contributes to fostering autonomy and responsibility
- The university business incubator contributes to fostering risk-taking propensity
- The university business incubator contributes to fostering initiative

Significance of the Study

This study contributes to enriching the literature on university business incubators and entrepreneurial spirit, particularly within the Algerian university environment. It also seeks to link the business incubator to a set of personal and behavioral dimensions of entrepreneurial spirit rather than confining the analysis to entrepreneurship in general.

Objectives of the Study

The study aims to:

- Identify the level of entrepreneurial spirit among students
- Measure the dimensions of entrepreneurial spirit among the sample members
- Identify the role played by the university business incubator in supporting students

- Determine the aspects that need strengthening in the incubator's programs
- Provide recommendations to help improve the effectiveness of the university incubator

MATERIALS AND METHODS

Study Methodology

The study adopted the descriptive-analytical approach due to its suitability for the nature and objectives of the topic, and a questionnaire was used as the primary tool for collecting data from the sample members.

Theoretical Framework of the Study

University Business Incubators

Concept of Business Incubators: Business incubators emerged as a mechanism to support startups and emerging enterprises by providing a conducive environment that helps idea holders and entrepreneurs overcome the difficulties encountered in the early stages of their activity. The incubator's role is not limited to providing workspace; it encompasses an integrated suite of services including training, consulting, guidance, mentorship, and connecting project holders with funding sources and economic partners [1].

University business incubators are distinguished by their affiliation with the university, targeting students, researchers, and holders of innovative ideas [2], and seeking to transform knowledge and scientific research into viable projects and enterprises [3].

From this standpoint, a university business incubator can be operationally defined in this study as: A university structure that provides students with ideas and projects a set of training, guidance, consulting, and mentorship services aimed at helping them develop their ideas, transform them into viable projects, and build their entrepreneurial capabilities and skills.

Importance of University Business Incubators

The most important roles of university business incubators include [4]:

- Discovering students with innovative ideas and talents
- Providing training and coaching in enterprise creation
- Helping students develop their ideas and transform them into projects
- Providing administrative, technical, and marketing consultations
- Providing mentorship during the early stages of the project
- Connecting students with economic enterprises and investors
- Encouraging innovation and knowledge transfer from the university to the economic environment
- Contributing to spreading an entrepreneurial culture within the university community
- Supporting projects that respond to the needs of the local environment

These functions gain heightened importance in universities located in regions with economic and spatial specificity, where the incubator can channel student innovation toward leveraging local resources and opportunities.

Objectives of University Business Incubators

The main objectives of university incubators can be summarized as follows [5]:

- Supporting students with ideas and projects
- Developing entrepreneurial capabilities and skills
- Encouraging creativity and innovation
- Reducing the risks of project failure in their early stages
- Providing a suitable environment for project development
- Linking the university with economic enterprises
- Contributing to job creation
- Encouraging students toward self-employment and enterprise creation

The University Business Incubator at the University of Tamanrasset

The business incubator at the University of Tamanrasset represents one of the mechanisms through which entrepreneurial orientation within the university can be supported, by mentoring and guiding students and providing training and coaching opportunities related to project creation [6].

The incubator acquires particular significance given the specificity of the Tamanrasset region, which offers a range of opportunities suitable for student projects—especially in desert tourism, traditional crafts, services, the digital economy, and projects linked to local resources and specificities [7].

Accordingly, the effectiveness of the incubator is measured not only by the number of incubated projects, but also by its ability to shift students' attitudes and foster their entrepreneurial traits.

Entrepreneurship and Entrepreneurial Spirit

Concept of Entrepreneurship: Entrepreneurship is a multidimensional concept, and researchers have differed in establishing a unified definition due to its evolution from focusing on enterprise creation to emphasizing innovation, opportunity discovery, and value creation [8].

Historically, the concept of entrepreneurship is associated with several economic scholars, including Cantillon, who focused on the entrepreneur's role in bearing risk; Schumpeter, who linked the entrepreneur to innovation and inducing economic change; and Kirzner, who focused on opportunity discovery [9].

Through these approaches, entrepreneurship can be viewed as a process involving the discovery and exploitation of opportunities, transforming ideas into projects, taking calculated risks, and creating value through innovation and initiative.

In this study, entrepreneurship is not viewed merely as establishing an enterprise, but rather as a set of traits, behaviors, and attitudes that shape the personality of the entrepreneurial student [10].

Concept of Entrepreneurial Spirit

Entrepreneurial spirit refers to a set of traits, attitudes, and capabilities that make an individual more inclined to take initiative, bear responsibility, seek opportunities, innovate, make decisions, and take calculated risks.

Consequently, a student's possession of an entrepreneurial spirit does not necessarily mean they have already established a company; rather, it means they possess a set of traits that can drive them in the future to launch a project, capitalize on an opportunity, or offer an innovative solution [11].

The current study adopts six core dimensions to measure entrepreneurial spirit among students [12]:

- Need for achievement
- Self-confidence
- Creativity
- Autonomy and responsibility
- Risk-taking propensity
- Initiative

Need for Achievement

The need for achievement represents an individual's desire to accomplish meaningful goals, strive for success and excellence, and persevere in the face of difficulties. It is an important trait of the entrepreneurial personality because establishing a venture requires the ability to set goals, pursue them, and not give up when encountering obstacles. In the university environment, this trait can manifest in a student's desire to achieve distinguished results, set future goals, and strive for self- and skill-development.

Self-Confidence

Self-confidence refers to an individual's belief in their ability to accomplish tasks, handle problems, and make decisions [13]. It holds particular importance in entrepreneurship because the entrepreneur faces uncertain conditions and the need to make decisions without guaranteed outcomes. Accordingly, the university and the incubator can strengthen this dimension through practical training, applied projects, showcasing the experiences of successful entrepreneurs, and encouraging students to present and discuss their ideas.

Creativity

Creativity represents an individual's ability to generate new ideas or offer unconventional solutions to problems [14]. It is one of the most important components of the entrepreneurial personality, as project success is linked not only to possessing resources, but also to the entrepreneur's ability to discover new opportunities and deliver distinct value. Therefore, the university incubator should prioritize workshops that cultivate creative thinking, problem-solving, prototyping, and idea development [15].

Autonomy and Responsibility

Autonomy reflects an individual's ability to make their own decisions and bear their outcomes, whereas responsibility refers to an individual's willingness to accept the consequences of their choices and actions [16]. Entrepreneurship requires a degree of autonomy because the entrepreneur does not always wait for others' instructions, but must take initiative, make decisions, and bear their results.

Risk-Taking Propensity

Entrepreneurial risk-taking does not mean reckless action; rather, it denotes an individual's readiness to make well-considered decisions under conditions of uncertainty [17]. Thus, the incubator's role in this area lies in teaching students how to study risks, analyze the market, and prepare feasibility studies before making decisions.

Initiative

Initiative represents an individual's ability to move from thinking to action, and to seek out and seize opportunities rather than waiting for circumstances or others' directives [18]. Initiative is a core element of entrepreneurship, as possessing a good idea does not lead to creating a venture unless accompanied by a willingness to execute, work, and persevere.

The Theoretical Relationship Between the Business Incubator and Entrepreneurial Spirit

The relationship between the business incubator and entrepreneurial spirit can be explained through the incubator's role in providing an educational and practical environment that helps students develop their knowledge, skills, and attitudes. Training helps acquire knowledge; mentorship helps develop the capacity for application; interaction with entrepreneurs helps build self-confidence; and innovation competitions and applied projects foster creativity and initiative.

Accordingly, the incubator can play a role in moving the student along the following progression:

- Knowledge → Idea → Experience → Initiative → Project

This progression represents the core role expected of the university incubator in fostering an entrepreneurial spirit.

Applied Study

The Business Incubator of the University of Tamanrasset: It is a service operating under the supervision of the university, affiliated with the Ministry of Higher Education and under the tutelage of the Directorate General for Scientific Research and Technological Development (DGRSDT). It is dedicated to supervising and mentoring university students with the aim of transforming them into entrepreneurs possessing distinguished scientific and professional competencies.

The Business Incubator of the University of Tamanrasset works to attract, incubate, and guide holders of creative and innovative ideas in order to transform ideas and innovations into productive economic projects and establish certified startups.

Core Tasks of the Incubator

- Attracting and selecting holders of creative and innovative ideas
- Increasing the survival chances of startups and strengthening the entrepreneurial process
- Training, coaching, and applying the Business Model Canvas (BMC) (business plan)
- Mentoring and incubating holders of creative and innovative ideas
- Providing a dedicated space for mentorship, supervision, coaching, and training
- Conducting the economic study (BMC)
- Providing legal consultations and judicial expertise
- Providing scientific and technical expertise and developing the creative and innovative aspects of preliminary projects
- Providing partnership agreements and making them accessible to holders of innovative projects
- Communicating and establishing links with bodies responsible for startup certification and patents
- Providing financial support and funding for project holders awarded the 'Label'
- Providing operational and working spaces for startups

- Organizing study days, seminars, and training courses related to entrepreneurship and startups (for students and faculty)
- Encouraging faculty members and researchers to engage in helping students establish private enterprises and create job opportunities

Study Population and Research Sample

A random sample was selected, and the questionnaire was distributed to 250 students, of which 110 valid questionnaires were retrieved, representing a response rate of 44% (Table 1and 2).

Questionnaire Reliability

Descriptive Analysis of the Study Dimensions: In this study, the arithmetic mean ($\bar{X}$) and standard deviation (σ) are used to describe the distribution of participants' responses across the study dimensions. To rank the items, we use the coefficient of variation ((Standard Deviation / Arithmetic Mean) × 100), where ranking is based on the lowest value of this coefficient. For further clarity, the relative weight (($\bar{X}$ × 100) / 5) was also calculated.

Descriptive Analysis of the Need for Achievement Dimension

In this study, we analyze the questionnaire items for each of the six dimensions of entrepreneurial spirit separately, accompanied by a brief commentary.

Table 3 shows that the overall arithmetic mean of the sample's responses to the items relating to the need for achievement dimension reached ($\bar{X}$ = 1.84) with a standard deviation of (σ = 0.716). The arithmetic mean for this dimension falls within the 'Disagree' and 'Strongly Disagree' range (from 1.80 to 2.59), and the level of focus on the need for achievement was 39% according to respondents' views, as most of their responses were 'Disagree' and 'Strongly Disagree'.

It also shows that items (01) and (04) recorded a low level, with relative weights of 38 and 37 and arithmetic means of $\bar{X}$ = 1.96 and $\bar{X}$ = 1.91, respectively, while the item 'Others consider me stubborn' recorded a low level with a coefficient of variation of 37%, which explains its first rank.

Table 1: Study Population and Sample

Item	Study Population	Retrieved Questionnaires	Valid Questionnaires for Analysis
Number	250	110	110
Percentage	100%	44%	44%

Source: Prepared by the researcher using SPSS v.24

Table 2: Reliability of Questionnaire Items Using Cronbach's Alpha

Variable	Number of Items	Cronbach's Alpha
Entrepreneurial Spirit	20	0.919
Business Incubators and Entrepreneurial Spirit	14	0.912

Source: Prepared by the researcher using SPSS v.24

Table 3: Need for Achievement Dimension

Items	Mean ($\bar{X}$)	Std. Dev. (σ)	CV	Rank	Relative Weight (%)	Level
I can turn many problems into opportunities for profit.	1.96	0.741	38	1	39.2	Low
I always work on building good relationships with colleagues at work and clients to improve the services provided.	1.74	0.686	39	2	34.8	Very Low
Success is the result of competence and qualifications rather than luck.	1.74	0.725	42	3	34.8	Very Low
Others consider me stubborn.	1.91	0.711	37	4	38.2	Low
Total	1.84	0.716	39	/	/	Low

Source: Prepared by the researcher using SPSS v.24

Table 4: Distribution of Responses on the Self-Confidence Dimension

Items	Mean ($\bar{X}$)	Std. Dev. (σ)	CV	Rank	Relative Weight (%)	Level
I am much less effective in difficult situations.	1.88	0.674	36%	3	37.6%	Low
I rely on myself in my work, and others rely on me.	1.85	0.706	38%	2	37%	Low
I am always ready to make sacrifices for success.	1.77	0.699	39%	1	35.4%	Very Low
Total	1.833	0.693	/	/	36.66%	Low

Source: Prepared by the researcher using SPSS v.24

Descriptive Analysis of the Self-Confidence Dimension Items

The following table presents the distribution of respondents' answers regarding their perception of the self-confidence dimension.

Table 4 shows that the overall arithmetic mean of the sample's responses to the items relating to the self-confidence dimension reached ($\bar{X}$ = 1.833) with a standard deviation of (σ = 0.693). The arithmetic mean for this dimension falls within the 'Strongly Disagree' range (from 1.80 to 2.59), and the level of focus on self-confidence—i.e., its relative weight—reached 36.66% according to respondents' views, as most of their responses were 'Disagree'.

It also shows that items (01) and (02) recorded a low level, with relative weights of 37.6 and 37 and arithmetic means of $\bar{X}$ = 1.88 and $\bar{X}$ = 1.85, respectively, while the item 'I am much less effective in difficult situations' recorded a low level with a coefficient of variation of 36%, which explains its first rank.

Descriptive Analysis of the Creativity Items

The following table shows respondents' answers regarding their perception of the creativity dimension.

Table 5 shows that the overall arithmetic mean of the sample's responses to the items relating to the creativity dimension reached ($\bar{X}$ = 1.68) with a standard deviation of (σ = 0.720). The arithmetic mean for this dimension falls within the 'Strongly Disagree' range (from 1 to 1.79), and the level of focus on creativity—i.e., its relative weight—reached 36.6% according to respondents' views, as most of their responses were 'Strongly Disagree'.

It also shows that item (03) recorded a very low level, with a relative weight of 34 and an arithmetic mean of $\bar{X}$ = 1.70, while the item 'I prefer testing ideas in practice' recorded a low level with a coefficient of variation of 37%, which explains its first rank among the items.

Descriptive Analysis of the Autonomy and Responsibility Dimension Items

The following table shows the distribution of respondents' answers regarding their perception of the autonomy and responsibility dimension.

Table 6 shows that the overall arithmetic mean of the sample's responses to the items relating to the autonomy and responsibility dimension reached ($\bar{X}$ = 1.676) with a standard deviation of (σ = 0.685). The arithmetic mean for this dimension falls within the 'Strongly Disagree' range (from 1 to 1.79), and the level of focus on autonomy and responsibility—i.e., its relative weight—reached 33.53% according to respondents' views, as most of their responses were 'Strongly Disagree'. It also shows that items (01), (02), and (03) were very low, with relative weights of 33.2, 34.2, and 33.2 and arithmetic means of $\bar{X}$ = 1.66, $\bar{X}$ = 1.71, and $\bar{X}$ = 1.66, respectively, while the item 'I lean more toward private investment projects' recorded a very low level with a coefficient of variation of 39%, which explains its first rank.

Descriptive Analysis of the Risk-Taking Propensity Dimension Items

The following table shows the distribution of respondents' answers regarding their perception of the risk-taking propensity dimension.

Table 5: Distribution of Responses on Creativity

No.	Items	Mean ($\bar{X}$)	Std. Dev. (σ)	CV	Rank	Relative Weight (%)	Level
01	I have the ability to find new and innovative solutions to the problems I face.	1.55	0.615	39	2	31	Very Low
02	I consider myself traditionally creative in my work.	1.81	0.697	39	3	36.2	Low
03	I prefer testing ideas in practice.	1.70	0.629	37	1	34	Very Low
04	I prefer to be the decision-maker and have the freedom to take any actions I deem necessary.	1.66	0.941	57	4	33.2	Very Low
Total		1.68	0.720	/	/	33.6	Very Low

Source: Prepared by the researcher using SPSS v.24

Table 6: Autonomy and Responsibility

No.	Items	Mean ($\bar{X}$)	Std. Dev. (σ)	CV	Rank	Relative Weight (%)	Level
01	I prefer to be the decision-maker and have the freedom to take any action I deem necessary.	1.66	0.694	42	1	33.2	Very Low
02	I like working in situations where the rules to be respected are clear.	1.71	0.708	41	3	34.2	Very Low
03	I lean more toward private investment projects.	1.66	0.654	39	2	33.2	Very Low
Total		1.676	0.685	/	/	33.53	Very Low

Source: Prepared by the researcher using SPSS v.24

Table 7: Distribution of Responses on the Risk-Taking Propensity Dimension

No.	Items	Mean ($\bar{X}$)	Std. Dev. (σ)	CV	Rank	Relative Weight (%)	Level
01	I am willing to invest in a clear environment if the expected return is high.	1.81	0.784	43%	3	36.2	Low
02	I am much less effective in difficult situations.	1.88	0.674	36	1	37.6	Low
03	I prefer difficult work that requires a challenge.	1.90	0.754	40%	2	38%	Low
Total		1.863	0.737	/	/	37.26%	Low

Source: Prepared by the researcher using SPSS v.24

Table 8: Distribution of Responses on the Initiative Dimension

No.	Items	Mean ($\bar{X}$)	Std. Dev. (σ)	CV	Rank	Relative Weight (%)	Level
01	Success is the result of competence and qualifications rather than luck.	1.74	0.725	42	2	34.8	Very Low
02	I am always proactive in applying new ideas and methods at work.	1.89	0.746	39	1	37.8	Low
03	I prefer to be the boss at work.	1.84	0.773	42	3	36.8	Low
Total		1.86	0.748	/	/	36.4%	Low

Source: Prepared by the researcher using SPSS v.24

Table 9: Distribution of Responses on the Business Incubator

Items	Mean ($\bar{X}$)	Std. Dev. (σ)	CV	Rank	Relative Weight (%)	Level
The business incubator contributes to developing my abilities to integrate into professional life.	1.70	0.698	41	13	34	Very Low
The business incubator facilitates mastering projects and commercial businesses.	1.89	0.682	36	4	37.8	Low
The business incubator helps me find an initial idea for my investment project.	1.84	0.723	39	8	36.8	Low
Business incubators contribute to developing my personal skills.	1.88	0.660	35	9	37.6	Low
Business incubator activities enabled me to take control of my future decisions.	1.94	0.694	36	14	38.8	Low
I can develop a practical plan for an investment project on my own.	1.83	0.662	36	3	36.6	Low
The business incubator raises students' awareness in investment fields.	1.82	0.652	36	2	36.4	Low
I gained a good understanding of startups through the business incubator.	1.79	0.679	38	11	35.8	Very Low
I can develop a strategic plan to reach my goals.	1.76	0.634	36	1	35.2	Very Low
I have an idea about the business and finance field in Algeria.	1.95	0.689	35	7	39	Low
Through its various activities, the business incubator contributes to raising student awareness.	1.73	0.648	37	6	34.6	Very Low
The business incubator encourages students to invest in their potential.	1.75	0.627	36	5	35	Very Low
The business incubator provides moral and material support to ambitious students.	1.80	0.714	40	12	36	Low
The business incubator seeks to instill an entrepreneurial spirit among students.	1.65	0.656	40	10	33	Very Low
Total	1.81	0.672	37.2	/	/	

Source: Prepared by the researcher using SPSS v.24

Table 7 shows that the overall arithmetic mean of the sample's responses to the items relating to the risk-taking propensity dimension reached ($\bar{X}$ = 1.863) with a standard deviation of (σ = 0.737). The arithmetic mean for this dimension falls within the 'Disagree' range (from 1.80 to 2.59), and the level of focus on risk-taking propensity was 37.26% according to respondents' views, as most of their responses were 'Disagree'.

It also shows that items (01), (02), and (03) were low, with relative weights of 36.2, 37.6, and 38 and arithmetic means of $\bar{X}$ = 1.81, $\bar{X}$ = 1.88, and $\bar{X}$ = 1.90, respectively, while the item 'I am much less effective in difficult situations' recorded a low level with a coefficient of variation of 36%, which explains its first rank.

Descriptive Analysis of the Initiative Items

The following table shows the distribution of respondents' answers regarding their perception of the initiative dimension.

Table 8 shows that the overall arithmetic mean of the sample's responses to the items relating to the initiative dimension reached ($\bar{X}$ = 1.86) with a standard deviation of (σ = 0.748). The arithmetic mean for this dimension falls within the 'Disagree' range (from 1.80 to 2.59), and the level of focus on initiative was 36.4% according to respondents' views, as most of their responses were 'Disagree'.

It also shows that items (02) and (03) were low, with relative weights of 37.8 and 36.8 and arithmetic means of $\bar{X}$ = 1.89 and $\bar{X}$ = 1.84, respectively, while the item 'I am always proactive in applying new ideas and methods at work' recorded a low level with a coefficient of variation of 39%, which explains its first rank.

Descriptive Analysis of the Business Incubators Variable and Its Role in Supporting Entrepreneurial Spirit

We analyze the dimensions of business incubators along with their interpretation.

Table 9 shows that the overall arithmetic mean of the sample's responses to the items relating to business incubators reached ($\bar{X}$ = 1.81) with a standard deviation of (σ = 0.672), falling within the 'Disagree' range (from 1.80 to 2.59). This indicates that the sample members disagree—meaning that, in their view, the business incubator does not foster entrepreneurial spirit—with a relative weight of 37.2%.

Across all the preceding tables, it is evident that among the responses of the 110 surveyed university students, while some responded 'Agree' or 'Strongly Agree' on the questionnaire, the vast majority of responses centered around 'Disagree' and 'Strongly Disagree', indicating a very low level of agreement. This may be attributed to the small sample size relative to the total number of students at the University of Tamanrasset, or to the recency of the incubator—as it is still in its early stages—and the fact that engaging with the incubator is not yet a sufficiently widespread idea at the University of Tamanrasset.

DISCUSSION

Discussion of Results

The low recorded means can be explained in light of several factors:

First, it may be related to the extent of students' awareness of the university business incubator and its services, as the mere existence of an incubator does not necessarily mean that all students benefit from it.

Second, the low scores in certain dimensions may be linked to students' weak practical exposure to enterprises and projects, since fostering an entrepreneurial spirit cannot be achieved through theoretical knowledge alone, but requires practice and hands-on experience.

Third, traditional university education may play a role in this, particularly when it focuses on knowledge acquisition rather than developing skills in initiative, innovation, problem-solving, and decision-making.

Study Recommendations

Based on the results, the study proposes:

- Intensifying media campaigns to introduce the business incubator and its services
- Organizing practical training courses on enterprise creation, market research, and feasibility study preparation
- Establishing specialized programs to foster creativity and innovation
- Adopting individualized mentorship for students with project ideas
- Organizing meetings with business owners and successful entrepreneurs
- Organizing periodic competitions for the best project idea
- Training students in risk analysis and decision-making
- Establishing a cooperation network between the incubator and local economic enterprises
- Linking university projects to the specificities of the Tamanrasset region
- Encouraging projects related to desert tourism, the local economy, traditional crafts, and digital services
- Adopting a periodic system to measure the extent to which students benefit from incubator services
- Integrating applied entrepreneurial activities more extensively into university training

Research Prospects

Future research is proposed to:

- Examine the difference between students who actually benefit from the incubator and those who do not
- Conduct a longitudinal study comparing the level of entrepreneurial spirit before and after benefiting from incubator programs
- Examine the role of entrepreneurship education in enhancing the incubator's effectiveness
- Study the relationship between the incubator and startup creation by students
- Study the specificity of entrepreneurship in desert regions and the opportunities offered by local development in these areas

CONCLUSION

University business incubators have become one of the key mechanisms through which universities can transition from their traditional role of teaching and training to a role more closely tied to economic and social development. The importance of an incubator is not limited to providing a space for incubating projects; rather, it extends to building the student's entrepreneurial personality and developing their capacity for innovation, initiative, responsibility, and decision-making.

The field study at the University of Tamanrasset revealed that the levels of several dimensions of entrepreneurial spirit among the sample members were low, reflecting a need to strengthen training, mentorship, and practical programs directed at students.

Consequently, the challenge lies not merely in establishing a university business incubator, but in transforming it into an actual space for shaping the entrepreneurial student through continuous training, individualized mentorship, practical experience, and linking the university with economic enterprises and the local environment.

This orientation gains heightened importance at the University of Tamanrasset given the region's economic and social potential, which can offer multiple opportunities for youth ventures—particularly in desert tourism, services, traditional crafts, the digital economy, and innovation tied to the local environment.

Accordingly, developing the university business incubator at the University of Tamanrasset should be part of a broader strategy aimed at spreading an entrepreneurial culture within the university and transforming student ideas into productive, sustainable ventures, thereby contributing to local development.

REFERENCES

1. Regional Bureau for Arab States. *Arab Human Development Report 2003*. United Nations Development Programme (UNDP), National Press, 2003. In Arabic.
2. Zaidi, Hakim, and Moufid Abdellaoui. "University Business Incubators as an Effective Tool for Launching Startups in Algeria." *Journal of Management, Organizations and Strategy (JMOS)*, pp. 110. In Arabic.
3. Noureddine, Ahmed Houssam Eddine. "The Reality of Business Incubators in Algeria: Frameworks and Challenges." *Al-Majalla Al-Shamila Lil-Huquq (Comprehensive Journal of Law)*, 2022, pp. 5. In Arabic.
4. Tartar, Ahmed, and Sara Halimi. *International Conference on Entrepreneurship: Training and Business Opportunities*. Faculty of Economic Sciences and Management Sciences, Mohamed Khider University of Biskra, pp. 5. In Arabic.
5. Ayed, Hadda. *The Role of Business Incubators in Supporting and Financing Entrepreneurial Projects*. Master's thesis, Larbi Ben M'hidi University, 2017, pp. 35. In Arabic.
6. Zekri, Asmaa, and Nawel Abdaoui. "Personal Traits of the Entrepreneur as the Most Important Factors Influencing Entrepreneurial Opportunity Discovery." *Journal of Excellence for Economics and Management Research*, vol. 4, no. 1, 2020, pp. 43–60. In Arabic.
7. Khouani, Leila, and Chouaib Baghdad. "The Role of Business Incubators in Supporting Scientific Research." *Dirasat Journal*, no. 1, Jan. 2019, pp. 123. In Arabic.
8. Derradji, Karima. "Business Incubators as a Mechanism for Promoting the Competitiveness of Small and Medium Enterprises." *Journal of Economic, Management and Commercial Sciences*, no. 32, 2015, pp. 180. In Arabic.
9. Khetiri, Wahiba, Karim Kerrouk, and Noura Boualaga. "Leading Global Experiences in Establishing Business Incubators." *Journal of Added Value for Business Economics*, no. 1, 2002, pp. 107. In Arabic.
10. Allache, Linda. "National Higher School of Statistics and Applied Economics (ENSSEA) – Algeria." *Economic Studies*, vol. 17, no. 1, 2023, pp. 937. In Arabic.
11. Sidi Salah, Sabrina, and Ali Lounis. "Entrepreneurship: Concept, Mechanisms, and Decisions Taken by the Algerian State." *El-Saoura Journal for Human and Social Studies*, vol. 8, no. 2, 2022, pp. 555. In Arabic.
12. Ben Cheikh, Boubakeur Seddik. "Determinants of Entrepreneurial Orientation Among University Students: A Field Study on a Sample of Students from Skikda University." *Al-Bahith Al-Iqtisadi Journal (The Economic Researcher)*, vol. 5, no. 8, 2017, pp. 282. In Arabic.
13. Bedraoui, Sofiane. *Entrepreneurial Culture Among Young Algerian Entrepreneurs*. Doctoral dissertation, Abou Bekr Belkaid University, 2015, pp. 69. In Arabic.
14. Aidani, Habiba. "A Proposed Vision for Activating the Role of Business Incubators in Enhancing Strategic Entrepreneurship for Small Projects." *Journal of Scientific Studies and Research*, no. 1, 2020, pp. 4. In Arabic.
15. Sellami, Mounira. *Entrepreneurial Orientation of Women in Algeria*. Unpublished master's thesis, Kasdi Merbah University, 2007, pp. 33–39. In Arabic.
16. Belatrache, Houria. *Entrepreneurship and the Creation of Innovative Enterprises*. Doctoral dissertation, Kasdi Merbah University, June 2021, pp. 200. In Arabic.
17. Rahim, Hocine. "Business Incubator Systems as a Mechanism to Support Technological Renewal of Small and Medium Enterprises in Algeria." *Journal of Economic Sciences and Management Sciences*, no. 2, University of Laghouat, 2013, pp. 169. In Arabic.
18. Al-Shirawi, Atef. *Business Incubators: Preliminary Concepts and Global Experiences*. Islamic Educational, Scientific and Cultural Organization (ISESCO), 2005, pp. 11. In Arabic.