

Personality traits of entrepreneurs among female university students: Evidence from the University of Jijel

Amara Charif

Laboratory of entrepreneurship and innovation Strategies in the financial and business environment, University of Jijel (Algeria)

charif.amara@univ-jijel.dz

Labenni Ahlem

Laboratory of entrepreneurship and innovation Strategies in the financial and business environment, University of Jijel (Algeria)

ahlem.labenni@univ-jijel.dz

Reçu le : 26/09/2024

Accepté le : 09/12/2024

Publié le : 31/12/2024

Abstract:

This research paper seeks to determine the levels of personality traits of entrepreneurs among women at the university, represented in particular by a sample of female students at the University of Jijel, specifically in the Faculty of economics, commercial and management sciences, being the cradle of entrepreneurial education. The research was carried out on a sample of 204 female students belonging to various departments of the Faculty after distributing a questionnaire prepared based on previous studies. The study concluded that there were high levels of entrepreneurial traits among female students, and statistically significant differences were recorded due to the field of study.

Keywords: Entrepreneurship; personality traits; female students; University of Jijel.
Jel Classification Codes : I23 ; L26

ملخص:

تسعى هذه الورقة البحثية إلى تحديد مستويات السمات الشخصية لريادة الأعمال لدى الطالبات الجامعيات، ممثلة بشكل خاص بعينة من الطالبات بجامعة جيجل، وتحديدًا بكلية العلوم الاقتصادية والتجارية وعلوم التسيير، كونها مهدا للتعليم الريادي. وقد تم إجراء البحث على عينة مكونة من 204 طالبة من مختلف أقسام الكلية بعد توزيع استبانة تم إعدادها بناء على دراسات سابقة. وخلصت الدراسة إلى وجود مستويات مرتفعة من السمات الشخصية لريادة الأعمال لدى الطالبات، كما تم تسجيل فروق ذات دلالة إحصائية تعزى إلى مجال الدراسة.

الكلمات المفتاح: ريادة الأعمال؛ السمات الشخصية؛ الطالبات الجامعيات؛ جامعة جيجل

تصنيف JEL: I23 ; L26

I. Introduction:

Governments are actively seeking to advance development, create wealth and jobs by creating entrepreneurial projects in various fields. Hence, the role of entrepreneurship emerges as one of the most important and vital tools for reviving stagnant economies, achieving economic growth and progress. This has been supported by many studies from various countries that verified the presence of an established association between the scope of entrepreneurial activities in the country and economic indices of growth (Awasthi, Kashyap, & Yagnik, 2006). Therefore, the Algerian government has taken steps to encourage the development of entrepreneurship by implementing numerous initiatives and providing support to young individuals in successfully executing their own business ideas, along with the financial support provided by national authorities and agencies to holders of entrepreneurial ventures. This is within the framework of a strategy aimed at creating job opportunities and enhancing the tendency towards entrepreneurship as a means for achieving a sustainable economic revival.

The ability to influence entrepreneurial behavior by identifying the factors that affect it is considered extremely important. In this context, studies related to entrepreneurship and factors influencing entrepreneurial behavior have distinguished between many of them such as: social, environmental, and personal factors, where social factors focus on personal and family background, professional life, early life experiences, environmental development, etc., while environmental factors focus on contextual aspects, such as the worth of wealth, taxes, benefits, the impact of market conditions, supportive economic and social culture, etc. However; The personal aspects, frequently referred to as the trait model, emphasizes on the personal qualities of entrepreneurs, as this paradigm operates under the premise that entrepreneurs possess distinct traits, attitudes, and values that equip them with a certain motivation that set them apart from others (e.g., Koh, 1996; Chaudhary, 2017; Anwar & Saleem, 2019).

The Algerian University has recently witnessed an increase in the number of projects and patents adopted at the level of university incubators; this may serve as an indication of the university's capability in developing potential entrepreneurs. This can be achieved by providing university students with a set of entrepreneurial qualities, which will psychologically and mentally prepare them to start their own ventures, especially after the opening of a range of majors in the field of entrepreneurship and the introduction of a set of courses at various academic levels.

I.1 Problem of the study:

As part of the government's effort to boost the beneficial effects of entrepreneurship and business incubators and make the university an effective partner in achieving development, the problem of our study resides in the fact that the presence of these qualities in students has become a dependable indicator of their propensity towards adopting entrepreneurial ventures. Exploiting the entrepreneurial abilities of the country's youth is crucial for boosting local and national development, and this can be achieved by encouraging the launch of entrepreneurial ventures that generate wealth and job opportunities, instead of relying entirely on the state To serve as the primary stimulus for economic development.

Algerian women are now regarded as important contributors in the sphere of entrepreneurship, which was formerly dominated by men. Particularly following the introduction of entrepreneurial education for women in universities; notably within the Faculty of economics, commerce, and management sciences, which is widely regarded as the starting point of entrepreneurial education at the university. Given the fact that female students constitute the majority of the Faculty and are nearing the graduation of their third year of studies, we may ask the following main question:

What are the levels of personality traits of entrepreneurs among female students at the University of Jijel?

To answer the main question, we asked the following sub-questions:

- What are the levels of personality traits of entrepreneurs among female students at the Faculty of economics, commercial and management sciences at the University of Jijel?
- Are there significant differences in the levels of personality traits of entrepreneurs among female students at the Faculty of economic, commercial and management sciences at the University of Jijel, due to the field of study?

In order to address the primary question of the research and its sub-questions, the following two hypotheses were proposed:

- **The first hypothesis:** “There is a high level of personality traits of entrepreneurs among female students at the Faculty.”
- **The second hypothesis:** “There are no differences that are statistically significant. due to field of study in the level of personality traits of entrepreneurs among female students at the Faculty.”

I.2 The importance of the study:

The current study derives its importance from the fact that it is one of the few studies in Algeria - to the best of the researchers’ knowledge - that has studied the entrepreneurial traits of women, represented by female students at the Algerian university, especially at the Faculty of management.

I.3 The objective of the study:

This study attempts to assess the level of entrepreneurial traits among female students in the University of Jijel. Furthermore, the study sought to establish if there are differences that are significant at the overall level of entrepreneurial qualities among these students depending on their field of study.

II. Literature Review:

II.1 Entrepreneurship

The concept of entrepreneurship has occupied the thinking of researchers in the administrative and economic sciences, and represents the outcomes of complex economic and social factors. Researchers in the field of administrative sciences have focused their attention on studying entrepreneurship, which was a widely discussed concept that has emerged as an important challenge associated with the industrial revolution, and theorists define it according to their research interests. Some view entrepreneurship as taking risks, while some see it as creating new ideas, and others consider it as a journey in search of adventure and excitement (Kaouache, 2019, p. 12). Entrepreneurship is defined as “realizing and creating new economic opportunities, while making the decision to invest resources” (Wenneker & Thurik, 1999, p. 29). The European Union (2003) also defined it as “those ideas and methods that enable the creation of new activities, by combining risk-taking, creativity, and effectiveness in management within a new activity, or as a process of creating value, by investing in opportunities through unique resources” (Gabrel, 2020, p. 17). As for the entrepreneur, he is “that person who can make decisions in circumstances of uncertainty and do things in unusual and perfectly done ways.” (Kaouache, 2019, p. 12).

Therefore, entrepreneurship can be defined as creating new, unusual ideas or exploiting available opportunities in order to create an entrepreneurial project.

II.2 Personality traits of entrepreneurs

Researchers differed in defining the concept of entrepreneurship as well as in their definition of entrepreneurial traits and their enumeration. The question of whether it is possible to rely on certain entrepreneurial qualities and determine their relationship to entrepreneurial actions raised controversy among researchers. Therefore, many studies were conducted on entrepreneurs and owners of successful entrepreneurial projects to identify their personal characteristics that set them apart from others and also to determine the factors contributing to their success in the business field. Eventually, studies have found that the entrepreneur has a set of qualities and characteristics that are not available in the average person, and in order to identify and analyze these characteristics, some researchers have adopted the behavioral approach, while others relied on the personal approach. The first research in this field tried to link entrepreneurship with some entrepreneurial traits, such as risk-taking and self-confidence, while subsequent research did not agree with the first studies and consider it a mistake to define a specific set of qualities that an entrepreneur should have.

So, it can be said that the personality traits of entrepreneurs are a set of personal qualities that must distinguish the entrepreneurial person from the ordinary person, which empowers him to immerse himself in the sphere of entrepreneurship and achieve success within it.

The following is a definition of the most important personality traits of entrepreneurs that will be tested in this study:

- **Locus of Control:** Every entrepreneur must possess unwavering confidence in the future outcomes, and that he is able to control the external factors affecting him (internal control). This characteristic is the opposite of external control, in which the owner is influenced by external factors to the extent that they control his decisions (Al-Omari & Nasser, 2011, p. 148).

-**Self-confidence:** An entrepreneur is a person who is confident in himself and his skills, who has the ability to win over others and manage his activity and team (Ghanama, 2022, p. 16). The term self-confidence also refers to the degree of realism in estimating capabilities and the belief in the actions that enhance environmental responsiveness (Kuip & Verheul, 2003, p. 14).

-**Propensity to Take Risk:** Propensity towards risk means an individual's capacity to tolerate or avoid risks when confronted with risky situations (Anwar & Saleem, 2019).

-**Need for Achievement:** An entrepreneur is a person who seeks to achieve success and excellence, as he has a strong desire to make achievements at the highest levels. This individual is distinguished by his exceptional skills and ability to excel in difficult circumstances, as he carefully chooses environments that give him the opportunity to shine and develop. The entrepreneur has a spirit of exploration and challenge, sets difficult goals to achieve, and always strive to reach high levels of satisfaction and achievement in his work (Al-Omari & Nasser, 2011, p. 148).

-**Tolerance of Ambiguity:** Insufficient project information might lead to an ambiguous situation that is difficult to fully comprehend or predict. Hence, the individual's effort to resolve this ambiguity and achieve a compelling performance demonstrates the owner's capability to endure the uncertainty he has been exposed to (Dinis, do Paco, Ferreira, Raposo, & Gouveia Rodrigues, 2013, p. 6). An entrepreneur is a person who has psychological qualities that enable him to be steadfast and unaffected by chaos and uncertainty. This characteristic is essential for entrepreneurship, given that uncertain and complex circumstances are an integral part of the field of entrepreneurship. The entrepreneur takes calculated risks, faces challenges with confidence, and deals with ambiguity with an exploratory spirit. These qualities enable the entrepreneur to innovate, think outside the box, and make bold decisions when the time is right (Al-Omari & Nasser, 2011, p. 148).

-**Innovativeness:** it refers to thinking outside the box and is an essential key to entrepreneurship, as it allows the individual to create completely new and innovative ideas (Kaouache, 2019). Drucker also explained that innovation, as an important trait of the entrepreneur, will streamline the methodical exploration for the necessary modifications inside the markets to align them with novel concepts and products (Anwar & Saleem, 2019).

III. Study Methodology:

III.1 Data Collection and Sample:

226 questionnaires were distributed, and 204 questionnaires were retrieved based on random sampling stratified by field of study and were valid for analysis and processing from a representative study population of third-year female students at the Faculty of Economics, Commercial and Management Sciences. We distributed the questionnaires across the four departments of the Faculty.

Table 1. Study sample

Departments	Frequency	Percentage
Management	67	32,8
Commerce	54	26,5
Economics	23	11,3
Finance and accounting	60	29,4
Total	204	100

Source: Based on Faculty statistics

It is clear from table no (01) that female students in the department of management sciences represent the largest percentage of female students in the Faculty (32.8%), and this may be mainly due to the fact that this department contains many specialities compared to other departments.

III.2 Study Instrument:

The study questionnaire was constructed and developed based on previous research, which included two main sections: the first section includes the personal data of the students who are mainly represented by field of study, given that the third-year female students fall in the same age group between 18 and 25 years, and the second section includes the personality traits of entrepreneurs that were taken from the study of (Dinis, do Paco, Ferreira, Raposo, & Gouveia Rodrigues, 2013, p. 18), and includes the following traits: locus of control, self-confidence, propensity to take risk, need for achievement, tolerance of ambiguity, and innovativeness. The five-point Likert scale was also used to determine the answers of the study sample members.

III.3 Validity and Reliability of the Measurement Instrument

To assess the instrument's validity, the structural validity test was employed. This involved computing the correlation coefficients between each statement in the questionnaire and the corresponding dimension it belongs to. The reliability coefficient is calculated by determining the Cronbach's alpha reliability coefficient.

Table 2. Reliability and Validity Analysis

Variable	Indicators	Pearson correlation	Cronbach's alpha
Locus of control	LC1	0,819**	0,749
	LC2	0,080	
	LC3	0,669**	
	LC4	0.673**	
	LC5	0.901**	
	LC6	0.879**	
	LC7	-0.256**	
Self-Confidence	SC1	0.242**	0.836
	SC2	0.056-	
	SC3	0.939**	
	SC4	0.887**	
	SC5	0.948**	
	SC6	0.862**	
Propensity to Take Risk	PTK 1	0.509**	0.623
	PTK 2	0.590**	
	PTK 3	0.807**	
	PTK 4	0.755**	
	PTK 5	0.667**	
Need for Achievement	NA1	0.367**	0.666
	NA2	0.554**	
	NA3	0.709**	
	NA4	0.756**	
	NA5	0.783**	
	NA6	0.717**	
Tolerance of Ambiguity	TA1	0.771**	0.627
	TA2	0.300**	
	TA3	0.538**	
	TA4	0.614**	
	TA5	0.795**	
	TA6	0.649**	
Innovativeness	IN1	0.881**	0.695
	IN2	0.600**	
	IN3	0.432**	
	IN4	0.589**	
	IN5	0.842**	

Note: ** Correlation is significant at the 0.01 level

Source: Based on Spss outputs

Based on the provided table, it can be shown that the correlation coefficients have positive values and are statistically significant. Furthermore, the majority of the correlation coefficients exceed 0.35, indicating the validity of the study instrument. Likewise, it is evident that

the results of the Cronbach's alpha reliability coefficient exceed 0.60, which signifies that the reliability of study instrument has been achieved (Pallant, 2005, p. 90).

III.4 Normality test:

To determine the distribution characteristics of the study variables, we utilized the skewness and kurtosis coefficients. The obtained findings are presented in the following table.

Table 3. Normality test results

Variables	Skewness coefficient	Kurtosis coefficient
Locus of control	-1,131	0,202
Self-Confidence	1,781	1,761
Propensity to Take Risk	0,064	-1,142
Need for Achievement	0,454	-0,836
Tolerance of Ambiguity	0,215	-0,626
Innovativeness	1,481	0,670
Personality traits of entrepreneurs	0,480	-0,583

Source: Based on Spss outputs

Upon analyzing the data, we observe that the skewness coefficients have values below 2, and the kurtosis coefficients have values below 4. Based on this, we can infer that the variables in the current study follow a normal distribution (Mishra, Pandey, Singh, Gupta, Sahu, & Keshri, 2019, p. 71).

IV. Results and Discussion:

IV.1 Descriptive Statistics:

The results regarding the levels of personality traits of entrepreneurs among the female students were as follows:

Table 4. Descriptive results

Variables	Mean	SD
Locus of control	3,37	0,67
Self-Confidence	3,08	0,73
Propensity to Take Risk	3,98	0,60
Need for Achievement	3,59	0,68
Tolerance of Ambiguity	3,69	0,70
Innovativeness	3,67	0,61
Personality traits of entrepreneurs	3,56	0,35

Source: Based on Spss outputs

Based on the provided table, it is apparent that the questioned students exhibit high levels of entrepreneurial qualities for more than four characteristics at the micro level. Conversely, two

qualities exhibited a moderate level, namely locus of control and self-confidence. However, it is evident that the study sample has a high level of overall entrepreneurial traits.

IV.2 Hypothesis testing:

To prove or deny the validity of the first hypothesis, a one-sample T test was used with a presumed mean of (3.40) and a significance level of (0.05), and the findings are indicated as follow:

Table 5. One-Sample T test results

Variables	T value	Sig
Locus of control	-0,659	0,511
Self-Confidence	-6,35	0,000*
Propensity to Take Risk	13,61	0,000*
Need for Achievement	4,09	0,000*
Tolerance of Ambiguity	5,83	0,000*
Innovativeness	6,35	0,000*
Personality traits of entrepreneurs	6,55	0,000*

Note: * T value is significant at the 0.05 level

Source: Based on Spss outputs

The results presented in the above table demonstrate that the means of the propensity to take risk, the need for achievement, and tolerance of ambiguity and innovativeness fall between 3.40 and 4.20, and the calculated (T) values have significance levels (Sig) that are less than 0.05, indicating statistical significance. As for the two means for self-control and self-confidence, despite the significance of the two calculated (T) values corresponding to them, their means were less than the presumed mean estimated at (3.40), meaning that they fall into the medium level. Since the overall mean for the availability of these traits fall between 3.40 and 4.20, and the significance level (Sig) of the corresponding calculated (T) value is less than (0.05), which means that the qualities of entrepreneurs are highly available among female students in the studied Faculty. Hence, the first hypothesis of the study is accepted.

These findings align with the research conducted by Anwar and Saleem (2019), (Chaudhary, 2017), (Arasteh, Taraneh, Farshideh, & Atefeh, 2012), as well as (Koh, 1996), all of whom found high levels of entrepreneurial traits. However, there are variations in these sub-results about the level of certain characteristics. These traits are found to be high in one study and medium or low in another. The researchers were particularly interested in the high level of tendency toward risk and tolerance of ambiguity exhibited by female students, especially when examining the results at a micro level. Surprisingly, our study's findings contradict other research studies on the subject of female tendencies towards risk and ambiguity, such as the one conducted by Arasteh, Taraneh, Farshideh, and Atefeh in 2012, suggest that females have a tendency to avoid taking risks and instead select projects that offer guaranteed outcomes, as compared to males. Also, a study conducted by (Sukardi, Burhanuddin, & Hamidsyukrie, 2021) suggests that male students exhibit more proficiency in embracing risk and fostering innovation.

The results mentioned earlier can be attributed to the phenomenon that female students in their third year of study at the Faculty exhibit an increased openness towards the field of entrepreneurship. This shift in attitude has led to a transformation in their beliefs, thinking habits, and general predispositions, particularly in terms of their inclination towards risk-taking and tolerance for ambiguity. It can also be explained by the influence of successful female entrepreneurial role models from other universities on the Faculty's female students, as well as the contribution of the relentless efforts of incubators, entrepreneurship centers, and intensive entrepreneurial education in its diverse forms. In addition, the increase in positive role models within the family or among female students' relationships has motivated them to gradually cultivate their entrepreneurial abilities. It should be noted that the entrepreneurial path is still in

its early stages at the Faculty, which may be due to a moderate level of control and self-confidence traits.

To test the second hypothesis, a one-way ANOVA test was conducted for the field of study variable, and the results of the study were as follows:

Table 6. One-Way ANOVA test results

Variable	Df	F value	Sig
Field of study	203	5,82	0.001

Source: Based on Spss outputs

The table above demonstrates that there are significant differences, at $\alpha \leq 0.05$, in the level of entrepreneurial traits among third-year female students in the Faculty, attributed to variations in their field of study. The statistical significance values for all of these traits were below 0.05. Therefore, the study's second hypothesis is rejected.

In order to identify the origin of these differences, post-hoc comparisons were performed using the Tukey HSD test. Table 07 displays the outcomes of this test.

Table 7. Tukey HSD test results

Field of study(I)	N. of female students	Mean	Field of study(J)	Mean Difference(I-J)	Sig
Economics	23	3.78	Management	0,213	0,051
			Commerce	0,184	0,138
			Finance and accounting	0,339*	0,000
Finance and accounting	60	3.44	Management	-0,126	0,165
			Commerce	-0,155	0,076
			Economics	-0,339*	0,000

Note: * Mean difference is significant at the 0.05 level

Source: Based on Spss outputs

The results of table (07) Indicate that the variation in the level of entrepreneurial traits among the female students, based on their field of study, can be attributed to the differences between the female students of economics and finance and accounting. It was clear from the means that this difference was in favor of the students of economics with a high mean score of 3.78.

This result partially aligns with the findings of Chaudhary's (2017) study, which suggests that students' area of specialty influences their entrepreneurial tendencies. It also supports the findings of Arasteh, Taraneh, Farshideh, and Atefeh's (2012) study, which indicates that there are differences, in the level of entrepreneurial traits, attributed to the Faculty.

The findings can be attributed to the variations in the field or specialty, as well as the students' understanding of global economic trends and their impact on entrepreneurship and overall development at local, national, and global levels. The differences can also be explained by the limited job opportunities for students pursuing economics, who are limited to one single major, namely monetary and banking economics. As a result, female students may choose to develop their entrepreneurial skills in the business field to increase their chances of finding future opportunities and to be prepared for the challenges that come with this approach.

Based on a study conducted by Anwar and Saleem in 2019, it was shown that students with entrepreneurial tendencies exhibit a greater propensity towards risk-taking, innovation, need for achievement, and tolerance for ambiguity.

V. CONCLUSION:

The results of this study may have several practical applications for all active parties in supporting entrepreneurial activity at the university. These key findings can be summarized as follows:

- Third-year female students at the Faculty have a significant level of entrepreneurial traits. The mean value was 3.56;

- When examining the traits of entrepreneurs at the individual level, most of them exhibited high levels of various characteristics. However, the traits of need for achievement and locus of control were found to be at moderate levels;

- The study's findings revealed statistically significant differences in the level of entrepreneurial traits among the female students examined, primarily attributable to their particular fields of study. The differences between the field of Finance and Accounting and Economics were in favor of female economics students, with a high mean score of 3.78.

Based on the results, we propose the following recommendations:

- We can take advantage of the findings of the study that revealed a significant presence of entrepreneurial traits among these students, by actively involving female students in all entrepreneurial activities, both within the university and its surroundings;

- The Faculty and the economic environment benefit from the high levels of risk-taking and tolerance of ambiguity exhibited by female students. This is particularly valuable when creating development plans and training programs that involve more female entrepreneurs in the development process. Contrary to commonly held beliefs, women in the field of entrepreneurship are not averse to taking risks and embracing ambiguity, which puts them on the same level with males.

- Incubators and entrepreneurship centers develop customized training programs in the field of successful entrepreneurship that cater to the specific interests of female students and the overall female population. Special attention is given to enhancing the traits of locus of control and self-confidence, which were identified as the two weakest attributes. Efforts have to be made to improve these qualities specifically among female students, in comparison to other characteristics.

- Female students in the field of economic sciences can benefit from the results by actively promoting their participation in entrepreneurial projects. This can be achieved through awareness campaigns and training sessions that aim to increase their confidence and encourage them to present their ideas to business incubators and entrepreneurial centers. However, it is recommended that female students in this field engage with female students in other fields to foster reciprocal impact and challenge beliefs and assumptions. This can be achieved by establishing shared spaces for students to discuss ideas and experiences in the realm of entrepreneurship.

Referrals and references:

1. -Al-Omari, G., & Nasser, M. J. (2011). Measuring the characteristics of entrepreneurship among postgraduate students in business administration and their impact on entrepreneurial actions. *Damascus University Journal of Economic and Legal Sciences*, 27(4), 139-168.
2. -Anwar, I., & Saleem, I. (2019). Exploring entrepreneurial characteristics among university students: an evidence from India. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(3), 282-295.
4. -Arasteh, H., Taraneh, E., Farshideh, Z., & Atefeh, K. (2012). Entrepreneurial Personality Characteristics of University Students: A Case Study. *4th WORLD CONFERENCE ON EDUCATIONAL SCIENCES*. 46, pp. 5736-5740. Barcelona, Spain: ELSEVIER.
5. -Awasthi, D., Kashyap, S., & Yagnik, J. (2006). *Entrepreneurial manifestations: present trend and changing landscape in an inter-regional context*. New Delhi.: Ministry of Micro, Small and Medium Enterprises, Government of India.
6. -Chaudhary, R. (2017). Demographic factors, personality and entrepreneurial inclination. *Education + Training*, 59(2), 171-187.
7. -Dinis, A., do Paco, A., Ferreira, J., Raposo, M., & Gouveia Rodrigues, R. (2013). Psychological characteristics and entrepreneurial intentions among secondary students. *Education+ Training*, 55(819), 763-780.
8. -Gabrel, M. W. (2020). The level of availability of entrepreneurship among students of the Faculty of Economics at Omar Al-Mukhtar University in Libya. *Journal of In-depth Economic Studies*, 5(1), 13-29.
9. -Ghanama, F. F. (2022). The level of availability of entrepreneurial characteristics among preparatory year students at the University of Hail to create their entrepreneurial projects and the challenges they face. *Al-Quds Open University Journal of Educational and Psychological Research and Studies*, 13(39), 14-27.
10. -Kaouache, D. E. (2019). The effect of entrepreneurial characteristics on the intention to establish entrepreneurial institutions among third-year students at the Faculty of Economic, Commercial and Management Sciences at the University of Jijel. *Milaf Journal of Research and Studies*, 5(1), 6-37.
11. -Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics A study of Hong Kong MBA students. *Journal of Managerial Psychology*, 11(3), 12-25.
12. -Kuip, I. v., & Verheul, I. (2003). *Early development of entrepreneurial qualities: the role of initial education*. Zoetermeer: Scientific Analysis of Entrepreneurship and SMEs.
13. -Mishra, P., Pandey, C., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Ann Card Anaesth*, 2(1), 67-72.
14. -Pallant, J. F. (2005). *SPSS Survival Manual (2 ed)*. Sydney: Allen & Unwin.
15. Sukardi, Burhanuddin, & Hamidsyukrie . (2021). University Students' Entrepreneurial Characteristics from Various Variables. *Journal of Entrepreneurship Education* , 24(5).
16. -Wenneker, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics* , 13, 27–56 .