The Influence of Personal Characteristics on Entrepreneurial Intention

among Women Students in Algeria

Kaouache Djamel Eddine^{1,*}, Kaouache Raouf² djamel.ed1985@gmail.com ^{1,2}University of Mohamed Seddik Benyahia, Jijel, (ALGERIA)

Receipt date: 08/10/2018; Acceptance Date: 27/11/2018; Publishing Date: 28/02/2019

Abstract: This study deals with the effect of personal characteristics on Entrepreneurial intention for Algerian women students. A quantitative method is adopted to collect information from 226 bachelor students of management randomly selected from Economics, Business and Management Sciences faculty of Jijel University. Anabela et al and Liñán and Chen models is used in the research questionnaire to collect data about personal characteristics and Entrepreneurial intention respectively. Data are analyzed with SPSS (version 18). The results show a significant influence of creativity and need for autonomy factors on the women students to start a new business. Meanwhile, locus of control, self-confidence, need for achievement and risk-taking are not predictable factors of the student's entrepreneurial intention.

Key Words: Personality, Psychological characteristics, Entrepreneurial Intention.

Résumé: Cette étude traite de l'effet des caractéristiques personnelles sur l'intention entrepreneuriale des étudiantes algériennes. Une méthode quantitative est adoptée pour collecter des informations auprès de 226 étudiants en gestion sélectionnés au hasard au niveau de la facultés de sciences économiques, commerciales et de gestion. Les modèles Anabela et al et Liñan et Chen ont été utilisés dans le questionnaire de recherche pour collecter des données sur les caractéristiques personnelles et l'intention entrepreneuriale respectivement. Les données sont analysées avec SPSS (version 18). Les résultats montrent une influence significative de la créativité et du besoin d'autonomie sur les étudiantes pour créer une nouvelle entreprise. Entretemps, le lieu de contrôle, la confiance en soi, le besoin d'accomplissement et la prise de risque ne sont pas des facteurs prévisibles de l'intention entrepreneuriale des étudiantes.

Mots Clés: Personnalité, Caractéristiques Psychologiques, Intention Entrepreneuriale.

^{*} Corresponding author

1- Introduction:

Modern developments in the business world insist on adopting a global vision to raise the enterprises' efficiency. A new approach which gives importance for women to start a new business as a way to down unemployment rates, and raise their contribution on the country production. Meanwhile, different economic, cultural, social and psychological challenges have been confronted this new vision, and impact their incentives to participate in this new type of work.

From a psychological perspective, Hulya et al (2018) reported that the women entrepreneurs' attitudes, subjective norms and perceived behaviors are positively correlated to their entrepreneurial intention. In the same line of thought, Anabela et al (2013) also revealed that self-confidence and the need for achievement among secondary students in Portugal have a positive impact on their entrepreneurial intention. In addition, Soomra and Yuan show that starting a new business among the university students in china is positively correlated with their level of innovativeness, locus of control, risk-taking, self-confidence and tolerance to ambiguity. In Arab context, Khalid et al study (2012) revealed that the motivation for achievement and self-efficiency are strong predictable psychological factors that push women to be entrepreneur. In the current research, our interest is to examine the impact of personal characteristics: locus of control, self-confidence, need for achievement, need for autonomy, risk-taking and creativity on the women students intention to create a new enterprise in Algeria.

1-1-Research goals: The current paper looks to empirically investigate a set of objectives in line with the research questions:

- 1- Identify the students' personal characteristics and entrepreneurial intention levels.
- 2- Ascertain the influence of personal characteristics on the entrepreneurial intention among students.
- 3- Assess the influence of locus of control on the entrepreneurial intention among students.
- 4- Measure the influence of self-confidence on the entrepreneurial intention among students.
- 5- Evaluate the influence of need for achievement on the entrepreneurial intention among students.
- 6- Ascertain the influence of need for autonomy on the entrepreneurial intention among students.
- 7- Measure the influence of risk-taking on the entrepreneurial intention among students
- 8- Identify the influence of Creativity on the entrepreneurial intention among students.

1-2-Research hypotheses: To investigate the research objectives, eight hypotheses are adopted in line with the research model as it is presented:

- 1- Students have a high level for personal characteristics and entrepreneurial intention.
- 2- There is a positive influence of locus of control on the entrepreneurial intention among students.

- 3- There is a positive influence of self-confidence on the entrepreneurial intention among students.
- 4- There is a positive influence of need for achievement on the entrepreneurial intention among students.
- 5- There is a positive influence of need for autonomy on the entrepreneurial intention among students.
- 6- There is a positive influence of risk-taking on the entrepreneurial intention among students.
- 7- There is a positive influence of creativity on the entrepreneurial intention among students.

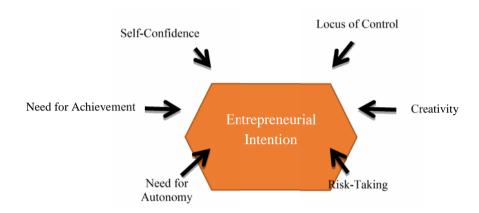
1-3- Literature and Background: Several approaches have been adopted to understand entrepreneurial intention of women from a psychological perspective. The personality trait is the earliest model on the topic, which interest on the influence of psychological characteristics on entrepreneurship(Levent et al, 2012). In addition, recent studies consolidate the importance of holding a set of personality traits on achieving a high level of intention to start new business. Bird (1988) looks to personality characteristics as factors that incentive entrepreneurs to start their business. In addition, Spenilli and Adams define more than twenty personal characteristics that may distinguish entrepreneurs from others (Spenilli& Adams, 2012). These personal traits have a profound influence on an individual's intentions to start a new business (Levent et al, 2012), as it is presented in table 1:

Table 1: Characteristics of Entrepreneur

Table 1. Characteristics of Entrepreneur							
Characteristics	Authors	Date					
Risk bearing	Mill	1848					
Sources of formal authority	Weber	1917					
Innovation; initiative	Schumpeter	1934					
Desire for responsibility	Sutton	1954					
Source of formal authority	Hartman	1959					
Risk taking; need for achievement	McClelland	1961					
Ambition; desire for independence; responsibility; self-confidence	Davids	1963					
Drive/mental; human relation; communication ability; technical knowledge	Pickle	1964					
Risk measurement	Palmer	1971					
Need for achievement; autonomy; aggression; power; recognition; innovative/independent	Hornaday and Aboud	1971					
Need for power	Winter	1973					
Internal locus of power	Borland	1974					
Risk; innovation; power; authority	Casson	1982					
Change and ambiguity	Gartner	1985					
Risk taking; tolerance of ambiguity	Begley and Boyd	1987					
Drive	Caird	1988					
Power and authority	Roper	1998					
Risk; power; internal locus of control; innovation	Thomas and Muller	2000					
Internal locus of control	Lee and Tsang	2001					

Source: (Stephen Spinelli ;& Robert J. Adams, 2012)

In addition, Anabela et al study consider locus of control, risk-taking, self-confidence, need for achievement, tolerance to ambiguity, and innovativeness as a good predictors for entrepreneurial Intention (Anabela et al, 2013). In reference to the precedent literature on entrepreneurial intention, Anabela and colleagues is the chosen research model in order to diagnose the personal factors level and measure its impact on the women students intention to create a new business (see figure 1).



The conceptual model consists of six parts and reflects a group of personal characteristics as it is explained.

1-3-1- Locus of Control:

Entrepreneur's locus of control means their beliefs on the ability to control the enterprise environment (Sari, 2017), and that outcomes are mainly depending to their actions (Aidin, 2014). This factor is relied to the entrepreneurs thinking about their competence to dominate the environment and master the enterprise internal operations to achieve predictable outcomes.

1-3-2- Self-confidence:

Numerous researches revealed that self-confidence is one of the most important psychological characteristics that explains entrepreneurs intention (Robinson et al, 1991) and on relationship with locus of control and risk- taking at work (Anabella et al, 2013), as well as an essential factor to take risk of creating a new business.

1-3-3- Need for Achievement:

Being an internal motivated entrepreneur is one of the most important predictors to succeed in business world according to McClelland's theory for achievement. As a consequence, intrinsic leaders are the high probably persons who may succeed in their work, and achieve the enterprise goals on the basis of their allocated time and efforts to develop their job, and make it innovative for a better performance.

1-3-4- Need for Autonomy:

Working independently is the core of the need for autonomy characteristic. Entrepreneurs with tendency to manage their own business are related to different entrepreneurial attributes as determination, self-reliance, inter control, risk-taking, innovation and decision-making (Sally, 1991).

1-3-5- Risk-Taking:

The ability of setting goals and making decisions with a lack of information is a required skill for entrepreneurs (Sally, 1991). Being efficient within an ambiguity environment permits entrepreneurs to react quickly with the business new realities, and gain new market shares in comparison to the concurrent.

1-3-6- Creativity:

A lot of studies look to creativity as an important factor to innovate new ideas, as well as working efficiently with the market conditions (Marian Holienka et al, 2015). Holding imagination and flexibility competences in management should permits entrepreneurs to get numerous and qualitative ideas which leads to decide and make creative solutions in their work.

1-3-7-Entrepreneurial intention:

Various definition have been allocated to entrepreneurial intention, Bird looks to it is as "entrepreneurs state of mind that direct attention, experience and action toward a business concept (Bird, 1988). Also, Ajzen view intention as the most important direct predictor of rare, hard and unpredictable behaviors (Ajzen, 1991). Furthermore, it is the best predictable factor of entrepreneurial behaviors (Krueger & Carsrud, 1993). In the current research, we consider entrepreneurial intention as the students state of mind toward starting a new business after their university graduation.

2- Method and Tools:

- **2-1-Sample:** 631 third year bachelor students of Mohammed Seddik-Benyahia University participated in the research, and 36% of questionnaires are retrieved. A randomly selection of students is done with 37.60% students of management, 19% students of commerce, 25.70% students of finance and accounting and 17.70 % students of economics. All participants are females, aged between 19 and 22 years old.
- **2-2- Instrument:** A Survey questionnaire has been applied in this research. The personal characteristics constitute the first part, and it is measured with Anabela et al model which contains six variables and 41 items. Variables of this part are ranked as locus of control, self-confidence, need for achievement, need for autonomy, risk-taking and creativity respectively. Students are asked to rate the items on five points likert scale as 1=strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree. The second part of the survey is about entrepreneurial intention. Linan and Chen model is applied, and respondents are opined on a five points likerts scale ranging from 1= strongly disagree to 5= strongly agree. Analysis of the personal characteristics and the student's entrepreneurial intention is made with means, t-test and regression linear multiple in order to measure the impact of locus of control, self-confidence, need for achievement, need for autonomy, risk-taking and creativity on entrepreneurial intention.

Anabela et al and Linan and Chen models are tested and validated in precedent studies. In addition the fiability results demonstrate an excellent average for all personal characteristics and entrepreneurial intention items, as it is presented in table 2.

Table 2: Reliability of Psychological Characteristics and Entrepreneurial Intention.

Scale	Items	Cronbach's alpha (r)	Interpretation
Psychological characteristics	41	.852	Excellent
Entrepreneurial intention	06	.874	Excellent

Source: the authors

3- Results and discussion:

3-1- Personal characteristics and entrepreneurial intention levels:

Results about means of all the questionnaire parts range on section four of Likert's scale (from 3.4 to 4.2), standard deviations are less than 0.90 for all variables and t-test results significance is approved (see table 3). These findings indicate that women students have a high level for both personal characteristics and entrepreneurial intention.

Table 3: Mean, Standard deviation and t-test of Personal Characteristics and Entrepreneurial Intention

Variables	Means	SD	T	Sig	Interpretation
Locus of control	3.85	0.59	98.556	.000	High
Self-confidence	3.81	0.56	102.244	.000	High
Need for achievement	3.82	0.58	99.796	.000	High
Need for autonomy	3.58	0.64	84.436	.000	High
Risk-taking	3.59	0.64	84.330	.000	High
Creativity	3.75	0.58	96.197	.000	High
Psychological characteristics	3.73	0.41	135.885	.000	High
Entrepreneurial intention	3.78	0.87	65.312	.000	High

Source: the authors

Findings indicate that students possess a high level for locus of control, self-confidence, need for achievement, need for autonomy, risk-taking and creativity. As a consequence, a high level of personal characteristics is registered. Similarly, a high level score of entrepreneurial intention is registered, a result that reflect the students background on entrepreneurial intention and management, as well as their ambitions to create their own enterprise.

3-2- The influence of personal characteristics and entrepreneurial intention:

The regression variance results demonstrate a significant influence of personal characteristics dimensions on the students entrepreneurial intention (R = .550, $R^2 = .302$,

.05). These statistics means that the six dimensions push 30.20% of women students to start a new business (F= 15.794, .05) and prove that the model is statistically significant (see the table 4). This result is supported by Anabela et al and Altinay et al findings.

Table 4: Variance in Regression of Psychological Characteristics and Entrepreneurial Intention.

	Model	Sum of Squares	ddl	Mean Square	F	Sig	R	\mathbb{R}^2
1	Regression	51409	6					
	Residual	118807	219	8.568	15.794	.000	.550	.302
	total	170216	225	.542				

Source: the authors

In line with table 4 results, we interest on the influence of the personal characteristics dimensions on entrepreneurial intention among female students using regression linear multiple test (see table 5).

Table 5: Regression Linear Multiple on the Influence of Personal Characteristics on Entrepreneurial Intention.

Model		Unstandardized Coefficients		Standardized Coefficients	Т	Sig
			Std.Error	Beta		- B
1	Constant	188	.461		408	.684
	Locus of control	.089	.100	.060	.887	.376
	Self-confidence	.035	.104	.022	.335	.738
	Need for achievement	.202	.118	.134	1.705	.090
	Need for autonomy	.291	.086	.213	3.370	.001
	Risk-taking	127	.103	094	-1.233	.219
	Creativity	.570	.106	.384	5.395	.000

Source: the authors

Results revealed that creativity (T=5.395, .05) and need for autonomy (T=3.370, .05) variables have a moderate impact on the female students entrepreneurial intention. This means that creativity level among students consolidate their ability to invent new ideas and make them able to create a new enterprise. Similarly, holding a high level for the need for autonomy pushes them to leads their own business. These results are supported by koh (1996), Levent et al (2012), and Soomro& Yuan (2015)findings.

In constant, our finding did not show a significant impact on the students high levels of locus of control, self-confidence, need for achievement, and risk-taking with their entrepreneurial intentions. These results are not similar with literature (Anabela et al 2013, Robinson et al; 1991, Khalid et al; 2012, Soomro& Yuan; 2015), which considers these characteristics as entrepreneurial intention predictors.

4- Conclusion:

The purpose of this paper is to identify the women students' personal characteristics levels, and measure its impact on their entrepreneurial intention. A quantitative method have been applied with 265 students affiliated to University Mohammed Seddik Benyahia, Jijel, Algeria. A survey questionnaire is the main instrument to collect data. Findings show that a high level of locus of control, self-confidence, need for achievement, need for autonomy, risk-taking and creativity among students is registered. In addition, a moderate impact of personal characteristics and entrepreneurial intention is approached. Meanwhile, little differences are associated with the current case. Even though creativity and need for autonomy are predictable that push women to start a new business, the rest of personal characteristics are not influential factors on the students' entrepreneurial intention.

References:

- **1-** Aidin Salam zadeh; Ali Akbar Farjadian; & Mahdi Amirabadi .(2014). Entrepreneurial Characteristics: Insights from Undergraduate Students in Iran, *International Journal of Entrepreneurship and Small Business*, 21(2), 165-182.
- **2-** Anabela Dinis; Arminda do Paco; João Ferreira; Mário Raposo; & Ricardo Gouveia Rodrigues .(2013). Psychological Characteristics and Entrepreneurial Intentions Among Secondary Students, *Education and Training review*, 55(8/9), 763-780.
- **3-** Barbara Bird (1988), Implementing Entrepreneurial Ideas: The Case for Intention, *Academy of Management Review*, 13(3), 442-453.
- **4-** Edmund R. Thompson (2009), Individual Entrepreneurial Intent: Construct Clarification and Development of an Internationally Reliable Metric, *Entrepreneurship Theory and Practice*, 33(3), 669-694.
- 5- Étienne St-Jean; Aziz Nafa; Maripier Tremblay; Frank Janssen; & Jacques Baronet .(2014). Entrepreneurial intentions of university students: an international comparison between African, European and Canadian students, *International Journal Entrepreneurship and Innovation Management*, 18(2/3), 95-114.
- **6-** Francisco Liñán& Yi-Wen Chen .(2007). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions, *paper presented in a seminar at the European Doctoral Programme in Entrepreneurship and Small Business Management*, Universitat Autonoma de Barcelona, Barcelona.
- **7-** Hian ChyeKoh. (1996). Testing hypotheses of entrepreneurial characteristics a study of Hong Kong MBA Students. *Journal of Managerial Psychology*, 11(3), 12-25.

- **8-** Hülya EN; Veysel YILMAZ & ErkanARI .(2018). Factors Affecting the Entrepreneurial Intentions of Women Entrepreneur Candidates: A Structural Equation Model, *Journal of Business Research Turk*, 10(1), 275-293.
- **9-** IcekAjzen .(1991). The Theory of Planned Behavior, Organizational *Behavior and Human Decision Processes*, 50, 179-211.
- **10-** Khalid Ismail; Abdul Rahman Ahmad; Kamisan Gadar1; & NKY Yunus .(2012). Stimulating factors on women entrepreneurial intention, *Business Management Dynamics*, 2(6), 20-28.
- **11-** Levent Altinay; Melih Madanoglu; Roberto Daniele; & Conrad Lashley .(2012). The Influence of Family Tradition and Psychological Traits on Entrepreneurial Intention, *International Journal of Hospitality Management*, 31, 489-499.
- **12-** Marian Holienka; Jana Holien ková; & Peter Gál.(2015). Entrepreneurial Characteristics of Students in Different Fields of Study: a View from Entrepreneurship Education Perspective, Acta Universitis Agriculturaeet Silvi culturae Mendelianae Brunensis, 63(6), 1879–1889.
- **13-** Mohammad Ismail; Shaiful Annuar Khalid; Mahmod Othman; &Kamaru zaman Jusoff. (2009). Entrepreneurial Intention among Malaysian Undergraduates, *International Journal of Business and Management*, 4(10), 54-60.
- **14-** Norris F. Krueger & Alan L. Carsrud (1993), Entrepreneurial- Intentions: Applying the Theory of Planned Behavior, *Entrepreneurship and Regional Development*, 5, 315-330.
- **15-** Peter B. Robinson; David V. Stimpson; Jonathan C. Huefner; & H. Keith Hunt (1991), Entrepreneurial research on student subjects does not generalize to real world entrepreneurs, *Journal of Small Business Management*, 29(2), 13-31.
- **16-** Rozita Binti Mokhtar; & Yuserrie Bin Zainuddin .(2016). Psychological Characteristics and Entrepreneurial Intention: A Theory of Planned Behavior Approach, *Journal of Social Sciences and Humanities*, 1(1), 1-13.
- **17-** Sally Caird .(1991). Testing Enterprising Tendency In Occupational Groups, *British Journal of Management*, 2, 177-186.
- **18-** Sari Pekkala Kerr; William R. Kerr; & Tina Xu .(2017). Personality Traits of Entrepreneurs: A Review of Recent Literature, Working Paper 18-047, Harvard Business School.
- **19-** Soomro Raheem Bux; & Yuan Honglin .(2015). Analyzing the Impact of The Psychological Characteristics on Entrepreneurial Intentions Among University Students, *Advances in Economics and Business*, 3(6), 215-224.
- **20-** Stephen Spinelli; & Robert J. Adams. (2012). New Venture Creation: Entrepreneurship for the 21st Century, Ninth edition, McGraw-Hill, Irwin.