Entrepreneurial Intention Determinants of University Students
« Faculty of Economic, Commerce & Management Sciences Students / Chlef University » Case Study

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Introduction

Many academics ask themselves, implicitly or explicitly, why should we study entrepreneurship? There are many ways to answer this question, but in synthesis, according to different literature reviews we can group the different theories that are being developed in the field of entrepreneurship research into different approaches, we can mention for instance three approaches or theoretical perspectives: economic, sociological and psychological.

Entrepreneurship is an important and relevant field of research. It is particularly significant for prosperity and well-being on many levels: individual, family, community, national and international, and therefore its study is essential. As Hisrich et al., (2007) stated that a review of the literature has led the researchers in the field of entrepreneurship to the conclusion that many of the studies on entrepreneurship have been carried out from the perspective of economics, strategic management, or sociology and not so much from that of psychology (1). There are thus gaps in the literature that need to be filled from this point of view. In this study, the field of entrepreneurship would be located and discussed from a psychological perspective because of the limits which are imposed by the scope of it.

References

Research Problematic and Questions:

The consideration of entrepreneurship as a result of a cognitive process is widely shared today. Several researchers have pointed out that the decision to become an entrepreneur is a complex one, and it is the result of intricate mental processes (2). Where the decision to become an entrepreneur may be reasonably considered as voluntary, intentional, and conscious, it seems it is reasonable to analyze how that decision is taken. Entrepreneurship is a rigorous process that occurs over time. In this sense, entrepreneurial intentions would be the first step to understand the evolving nature and sometimes long-term process of venture creation (3). The intentions are born from the term intentionality, where the entrepreneurial behaviours and intentions to start up, would be helpful and determinant element towards performing entrepreneurial behaviours (4). This study positions and tests in an Algerian context the question: Do Algerian university students have the entrepreneurial intention to be self-employed? (Case of Faculty of Economic, Commerce & Management Sciences Master Students / Chlef University)

Our study addresses three research questions:
- What are the determinants of the entrepreneurial intention in an Algerian context?
- What are the main antecedents which facilitate or inhibit Algerian university students to behave entrepreneurially?
- Why do university students seek self-employment over employment?

Research Importance:

There is a shortage of research on the entrepreneurial issues in Algeria, especially on the entrepreneurial intention studies. What have been done in the overwhelming majority of studies tried to treat and explore the management aspects and the institutional conditions of SMEs such as support services and SMEs policies. The importance of this study steams from the facts that:
- The study tries to identify the entrepreneurial intention among Algerian university students (Faculty of Economic, Commerce & Management Sciences Master Students / Chlef University).
- This study provides the determinants of entrepreneurial intention from an Algerian context (view).
- Therefore, this study can serve as an empirical tool in aiding the decision makers (both of the political and the educational decision-makers) to find ways and set programmes that can increase the student intentionality of business creation.

Research Objectives:

This research and its results will hopefully shed some light on a number of issues, its main objectives are:
- To highlight a briefly review of the principal theories and models of the entrepreneurial intention.
- To find out the main antecedents which facilitate or inhibit Algerian students to behave entrepreneurially.

Research Organisation:

The current study is organised as follows: including this general introduction which presents an overview of entrepreneurship as a field of research as well as its problematic and questions, objectives and importance. Section one represents an access to the concept of entrepreneurship phenomenon which initially provides an outline of the study in terms of its terminologies definitions. Section two provides a presentation of the principal theories and models of Entrepreneurial intention, which will guide our theoretical and empirical research. The third section discusses briefly the methodology of research and its main results, and then it ends up with a summarization of the study and its main conclusions and recommendations as well.
Section One: Theoretical Background:

The purpose of this section is to provide a focus on the study, by giving a wide understanding to the concepts: entrepreneurship and entrepreneur as well as entrepreneurial intention and education.

Entrepreneurship:

There are numerous definitions of entrepreneurship. Stevenson et al., (1999) state that entrepreneurship is: “the process of creating value by bringing together a unique package of resources to exploit an opportunity.” They also offer four main components to support this definition of entrepreneurship. First, entrepreneurship involves a process that is manageable, can be broken down into steps or stages, is ongoing, and can be applied in any organizational context. Second, entrepreneurship / entrepreneurs create value where there was none before. Third, entrepreneurship combines unique resources and transforms these resources into innovative, valuable, and synergistic operational combinations, which include but are not limited to financial capital, human resources, materials, operational facilities, marketing and distribution, and corporate intelligence. Fourth, entrepreneurship is concerned with the harvesting of operational opportunities without regard to current resources being controlled by the organization (5).

The vision of entrepreneurship as a process is important because it allows research in entrepreneurship to go ahead of a dual conception of entrepreneurship: On one side is the functional approach of economists where the entrepreneur is described as an innovator, an organizer and a risk-taker. On the other is the psychological approach where the entrepreneur is defined by his or her personality, motivations and behaviours, looking for an entrepreneurial personality type (6). Tounès (2003) suggests a representation of the entrepreneurial process in five stages (7). (See figure 1). Our choice and focus is to explore the second stage of this process prior to the decision of setting up (running the business).

Figure (01): Representation of the entrepreneurial process (Tounès, 2003)

Entrepreneurship is the behaviour of a person who displays the traits (need for achievement, need for power, risk-taking tendency and competitiveness) necessary to obtain or attain something in life, to research and become self-sufficient.” (8).

Although each of these definitions considers entrepreneurship from slightly different viewpoints, each contains similar concepts. Entrepreneurship is more than the mere creation of business. We define it according to many literature reviews in the contexture of our study as: “Entrepreneurship is a dynamic process that can be summarised in three phases: thinking, change, and creation. The first one identified as the phase of the intention born. It requires after that the second phase which is the application of energy and passion towards the creation and implementation of new ideas and creative solutions. The third one is identified as the phase of bringing together creative and innovative ideas and coupling these with management and organisational skills in order to combine the factors of production which include land, labour, and capital, so as to provide a product or service to meet an identified need and create wealth.
Entrepreneur:

The “entrepreneur” can be defined as an agent who unites all means of production and who finds in the value of the products, the reestablishment of the entire capital he employs, and the value of wages, the interest and rent which he pays, as well as projects belonging to himself\(^9\).

Achintya Kr. gave some characteristics which are close to those mentioned above, according to him an entrepreneur\(^{10}\):
- He is a person who develops and owns his own enterprise;
- He is a moderate risk taker and works under uncertainty for achieving the goal;
- He is innovative;
- Reflects strong urge to be independent;
- Prepared to withstand the hard life;
- Exhibits sense of leadership;
- Takes personal responsibility;
- Converts a situation into opportunity.

Entrepreneurial Intention:

The entrepreneurial intention has been considered as the key element to understand the new-firm creation process. Furthermore, entrepreneurial intention is said to be a reliable predictor or measure of entrepreneurial behavior and entrepreneurial activity\(^{11}\). Entrepreneurial intentions are a state of mind, which directs and guides the actions of the individual toward the development and the implementation of new business concepts. It can be viewed as the intention of a person to perform new venture creation behavior or action\(^{12}\). However, as we stated before that entrepreneurship is a process of various elements “phases”. “Entrepreneurial Intention” is a crucial element in this process which forms the first action of the behavior of venture creation, it’s considered as a best predictor to that behavior. We define then “Entrepreneurial Intention” as a person’s “student’s” attention after a formation of certain beliefs and attitudes to become self-employed “entrepreneur”.

Entrepreneurship In Algeria:

Entrepreneurship has long been considered as a significant factor for socioeconomic growth and development of any country because it provides millions of job opportunities and decreases unemployment, offers a variety of consumer goods and services, and generally increases national prosperity and competitiveness. Algeria for instance suffered from high rate of unemployment of 11.2% in September 2015 which represents 1.337.000 active population unemployed (ONS, 2016). Graduate unemployment is particularly high. According to ONS (2016) there are too many unemployed graduates for few graduate jobs with a rate of 14.1% in the same period. Business graduate students for instance suffer from unemployment and the lack of job opportunities because of many reasons; we mention for example the high rate of business graduate students in comparison to the low rate of job creation each year\(^{13}\).

Data from the Ministry of Industry, SMEs and investment promotion (2001-2010), the Department of Business Intelligence, Economic Studies and Statistics convey clearly the role small businesses (SMEs) play in the Algerian economy:

Since the passage of Algeria to the market economy, creating company has experienced an upward movement. Indeed, as we shall see in what follows, 60% of existing SMEs in 2000 were established after the country's commitment in the way of capitalism.

At the end of the first half of 2009, declared private SMEs, are a population of firms whose number amounted to 335 486 SMEs. While their number at the end of 1999 was 159 507 companies treated as SMEs, almost ten years the population has doubled with a growth rate of over 110%, or 11.61% annually.
These 335,486 private SMEs plus more than 126,887 artisans (handcrafts) and 72,669 liberal functions are more than 99% of the total SMEs population, whereas the public sector represent only a small part with only 598 SMEs.

At the end of 2010 the number of SMEs declared is 619,072 which represent 60% of moral persons and 40% of natural persons. These SMEs employ more than 1,625,686 workers in various sectors such as: industry, services, agriculture and construction.

The annual evolution (2009/2010) of SMEs number is 5.38% of all sectors, which represent 31,612 new SMEs, where the number of employees has increased by 5.11% between 2009 and 2010.

**Higher Education in Algeria:**

The higher education has –without a doubt- an important role in the self construction and in the development of the human resources. It is considered as one of the basic pillars which lead to the prosperity of a country in several domains.

Algeria along with so many other countries has noticed the problems of the increasing number of students in universities, the lack of supervision and the lack of creativity and innovation. It has started the look for new educational systems which go hand in hand with the provision of an appropriate climate. Algeria has realised that the higher education is certainly the strategic balance of the overall development, thus, its institutions which symbolise the main stream of human resources skills and competencies must take the lion share of care and prosperity.

One example of these institutions which are regarded as a key element to a golden Algerian future is Chlef University (Faculty of Economic, Commercial & Management sciences) which offers the students some special programmes to enlarge their scope of knowledge in various disciplines such as economy, management, finance and marketing. It is expected to make students aware enough of their field of entrepreneurship as it is also supposed to increase their intentions towards starting up their own businesses.

**Section Two: Research Hypothesis and Model:**

This section provides a theoretical background of the cognition-based theories and models which are used in this study to provide a theoretical and empirical support for the used model.

Shapero’s Entrepreneurial Event (SEE) (Shapero and Sokol, 1982) and The Theory of Planned Behaviour (TPB) (Ajzen, 1991) are discussed in turn in this section.

In the psychology literature, intention is proved to be the best predictor of planned behavior, particularly when that behavior is rare, hard to observe, or involves unpredictable time lags, entrepreneurship is a typical example of such planned, intentional behavior.

1- **The Entrepreneurial Event Model of Shapero and Sokol (EEM):**

The entrepreneurial event model considers firm creation as the result of the interaction among contextual factors, which would act through their influence on the individual’s perceptions. The consideration of the entrepreneurial option would take place as a consequence of some external change “precipitating event”. People’s answers to that external event will depend on their perceptions about the available alternatives.
1-1- Displacement:

In Shapero and Sokol’s model (figure 1) displacement is the catalyst for a change in behaviour and the individual then makes a decision to act based on perceptions of desirability and feasibility. This model suggests that human behaviour is in a state of inertia until an event creates displacement resulting in behaviour change (17). Displacement comes in either a negative or positive form described by Gilad and Levine (1986) as the ‘push’ theory and the ‘pull’ theory. The negative displacement of, for example, losing a job pushes an individual into self-employment. On the other hand, the positive displacement of, for example, financial assistance pulls an individual into self-employment.

1-2- Perceptions of desirability:

According to Shapero and Sokol (1982) the entrepreneurial event is a product of an individual’s perceptions of desirability of entrepreneurship affected by their own personal attitudes, values and feelings, which are a result of their unique social environments (e.g. family, peer groups, educational and professional influences). In other words, an individual needs to see first the act of self-employment as desirable before it is likely self-employment intentions will be formed (18).

1-3- Perceptions of feasibility:

According to Shapero’s Entrepreneurial Event (1982), an individual’s perception of feasibility of entrepreneurship is related to an individual’s perception of available resources (e.g. knowledge, financial support, and partners). Furthermore perceived feasibility is defined as the degree to which people consider themselves personally able to carry out certain behaviour. The presence of role models, mentors or partners would be a decisive element in establishing the individual's entrepreneurial feasibility level (19).

Shapero and Sokol (1982), make the point that both perceptions and feasibility and desirability necessarily interact. That is, if an individual sees the formation of a new business as unfeasible they may conclude it as undesirable and vice versa. It is therefore possible that students’ attitude toward self-employment may be positively impacted by participation in entrepreneurship education; however, in the absence of perceptions of feasibility (belief in one’s ability to self-employed, and or the ability to acquire necessary resources) self-employment intentions may not eventuate.

2- The Theory of Planned Behavior of Ajzen (TPB):

Along the same line, but much more detailed, Ajzen (1991) develops a psychological model of “planned behaviour”. It is a theory that may be applied to nearly all voluntary behaviours and it provides quite good results in very diverse fields, including the choice of professional career.
According to it, a narrow relationship would exist between the intention to be an entrepreneur, and its effective performance. Intention becomes the fundamental element towards explaining behaviour. It indicates the effort that the person will make to carry out that entrepreneurial behaviour. And so, it captures the three motivational factors that influence behaviour, which are the following (Ajzen, 1991):

**Figure (03): The Theory of Planned Behaviour of Ajzen (1991)**

![Diagram of the Theory of Planned Behaviour]

2-1- **Attitude towards the behaviour:**

Refers to the degree to which the individual holds a positive or negative personal valuation about being an entrepreneur.

Kim and Hunter (1993) conducted meta-analyses of 93 independent behavioural intentions studies concluding by confirming strong empirical support for the attitude-intentions relationship. In their study, behaviours were divided into nineteen different topics; examples include intention to vote, intention to have a child, intention to donate blood, and intention to cheat or copy another’s work. As expected, the relationship between attitude and behavioural intention was stronger than that between behavioural intention and ultimate behaviour, due in part to the effect of external factors as noted by Ajzen (1991).

2-2- **Perceived social norms:**

It would measure the perceived social pressure from one’s peers and ‘significant others’ impacting one’s intention to carry out—or not to carry out—that entrepreneurial behaviour.

Exposure to entrepreneurship is likely to have a positive bearing on an individual’s decision to venture into business. While prior exposure to entrepreneurship is important, the breadth and quality of such exposure is most effective when one actually owns a business or is involved in a business owned by a parent, relative, friend, neighbour as such businesses provide opportunities for one to be intimately involved with all operations.

2-3- **Perceived behavioural control:**

It would be defined as the perception of the easiness or difficulty in the fulfilment of the behaviour of interest (becoming an entrepreneur).

Chen et al. (1998) define entrepreneurial self-efficacy (ESE) as the “strength of a person’s belief that he or she is capable of successfully performing the various tasks and roles of entrepreneurs”.

In the same way, it is also very similar to Shapero & Sokol (1982)’s vision about perceived feasibility. In all three instances, the important thing is the sense of capacity regarding the fulfilment of firm creation behaviours.

Both the TPB and SEE models provide comparable interpretations of entrepreneurial intentions. Krueger et al. (2000) demonstrated that attitudes and subjective norms in the TPB...
model are conceptually related to perceived desirability in EEM; while perceived behavioural control in TPB corresponds to perceived feasibility in the EEM model. Essentially, perceived desirability and perceived feasibility are fundamental elements of intentional behavior (25).

3- Entrepreneurial Intention Model:

The first point of this section dealt with and outlined the associated foundation theories which are the cognition-based theories of our study as we mentioned before.

This point provides a literature review of the extant entrepreneurial intention literature. It presents the main antecedents which are a set of variables that would exert their influence on intention of would be self-employed, and gives the research hypotheses and model built upon those antecedents which will be tested in the empirical part of this research.

3-1- Positive Attitudes:

Mary Co. and Bruce M., (2010) found that positive attitudes of respect and admiration towards trading encourage individuals to become entrepreneurs. Being encouraged to aspire to be rich and famous also generates a more positive view of entrepreneurial propensities. If people are encouraged to aspire to be rich, some will try to become rich by starting their own businesses. Being socialised to respect elders’ wisdom also tends to generate a positive entrepreneurial environment (26). With these prior arguments, we suggest that:

H1: A positive attitude towards creating an enterprise will lead to an intention to do it.

3-2- Subjective Norms:

According to Ajzen (1991), subjective norms should be approached through an aggregate measure of the kind “what do important others think?” the individual’s personal estimate of the social pressure to act according to or against the rigors of entrepreneurial behaviour. This pressure can become a trigger or a barrier to the development of an entrepreneurial career, depending on the social environment and its influence on people’s beliefs (27).

3-2-1- Role model:

Previous research on business ownership suggests that having not only a family member or close relative who is or was a business owner but even person’s set of close friends and contacts increase the likelihood of self-employment because these individuals can serve as role models. Access to role models should therefore have a positive influence on an individual’s entrepreneurial intentions by helping to overcome fear, lack of experience, and various practical hurdles (typical start-up issues like developing market and supply contacts, planning facilities, working with government and regulators, finding partners and employees, or securing financing). Exposure to entrepreneurs provides a person not only with familiarity, but with an experienced network that can provide advice, insight, and encouragement (28). With these prior empirical insights, we suggest:

H2a: Role model has a positive impact on the entrepreneurial intention.

3-2-2- Family background:

Previous research shows that individuals with an entrepreneurial family are more likely to establish their own businesses. Mario F. et al. (2010) mentioned that several scholars have shown the influence of parents’ professional activities on children’s career decisions, as they often prefer to work in the same field as their parents (29). Based on these arguments, we hypothesise that:

H2b: Family background has a positive impact on the entrepreneurial intention.

3-3- Perceived Behavioural Control:

Beyond positive attitudes and subjective norms, a myriad of other factors are likely to predict entrepreneurial intentions. Support factors have been shown to relate to the career choice of
entrepreneurs such as access to capital (finance needs), work experience (ex-contacts with the world of work and entrepreneurship) and quality of social support (social services, network ties and the availability of information).

3-3-1- Access to capital:

Maas and Herrington (2006) indicate that lack of financial support is the second major contributor to the low total entrepreneurial activity (TEA) rate in South Africa. The need for capital is common to everyone who is self-employed, they use the Resource Based Theory to demonstrate the financing needs of an entrepreneur. They argue that entrepreneurs need resources such as fixed assets and working capital to be able to achieve a competitive advantage in the market. Based on that we suggest:

H3a: Access to capital positively affects entrepreneurial intention.

3-3-2- Work experience:

It refers to the work and educational experiences that people have. Henderson and Robertson (1999) found that the informal support of students’ own experiences along with the views of their families played a larger role in their vocational choice than did the formal support of teachers and career counsellors.

Drennan, Kennedy, and Renfrow (2005) found that other childhood experiences that involved facing adversity or frequent relocation also had a positive effect on individuals’ perceived autonomy and attitude toward self-employment. This leads to our hypothesis as follows:

H3b: Work experience positively affects entrepreneurial intention.

3-3-3- Quality of social support:

It refers to the social relationships that people have. The characteristics and the intensity of these relationships can determine people’s intention towards creating an enterprise.

Liñán et al. (2005) mentioned that a wide range of start-up support agencies have been created recently at the national, regional and local level. Individuals approaching these agencies would be showing an explicit interest in starting a venture and, therefore, could be considered as potential entrepreneurs. In short, for our research contexts, we hypothesize the following:

H3c: Quality of social support positively affects entrepreneurial intention.

Figure (04): The Entrepreneurial Intention Model

Source: Done by the researcher, 2016.
This study tests the Entrepreneurial Intention Model which is adapted from the cognition-based theories and models: The Theory of Planned Behavior (TPB), The Model of Entrepreneurial Event (EEM), on a sample of business graduate students (Master 2) of the faculty of Economic, Commerce & Management Sciences (Chlef University).

1-2- Research Approach:

Considering the nature of the above research questions, a quantitative approach was used to address these questions, by using a descriptive and analytical research method. Descriptive research method is used to identify and obtain information on the characteristics of a particular problem or issue. The analytical techniques to test the hypotheses in this study were performed using SPSS.

1-3- Research Sample:

Research participants are business graduate students (Master 2) from the faculty of Economic, Commerce & Management Sciences (Chlef University). They are the students of various branches and majors (11 specialisations), participating in subjects included in general: economy, management, finance, accounting, marketing, and statistics...etc.

“Graduates” can be described as students who are in their final year of study in universities and constitute a potential source of would-be entrepreneurs because of the high unemployment caused by limited opportunities in government and private firms in Algeria.

Precisely business students not any other students are selected because:

- They know what business really means?
- How it is started?
- How it would be managed?
- What factors contribute towards the success or failure of the business?
- What environmental perquisites are necessary for starting up a new business venture?

Table (01): Presentation of Economic, Commerce & Management Sciences total number of Master Students (Chlef University 2016/2017)

<table>
<thead>
<tr>
<th>Branch</th>
<th>Specialization (Major)</th>
<th>Population</th>
<th>Total</th>
<th>Sample</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td>Economic Sciences</td>
<td>Accounting, Audit &amp; Control</td>
<td>41</td>
<td>27</td>
<td>68</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Insurances &amp; Banking</td>
<td>38</td>
<td>9</td>
<td>47</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Accounting &amp; Taxation</td>
<td>26</td>
<td>29</td>
<td>55</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Applied Economics &amp; Statistics</td>
<td>39</td>
<td>14</td>
<td>53</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Finance &amp; Accounting</td>
<td>50</td>
<td>14</td>
<td>64</td>
<td>15</td>
</tr>
<tr>
<td>Commercial Sciences</td>
<td>Marketing</td>
<td>25</td>
<td>19</td>
<td>44</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>47</td>
<td>17</td>
<td>64</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Finance of Enterprise &amp; Markets</td>
<td>31</td>
<td>25</td>
<td>56</td>
<td>9</td>
</tr>
<tr>
<td>Management Sciences</td>
<td>Human Resources Management</td>
<td>36</td>
<td>17</td>
<td>53</td>
<td>11</td>
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<td></td>
<td>Financial Management</td>
<td>47</td>
<td>21</td>
<td>68</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Finance &amp; Banking</td>
<td>47</td>
<td>12</td>
<td>59</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>427</td>
<td>204</td>
<td>631</td>
<td>128</td>
</tr>
</tbody>
</table>

Source: Faculty Student Affairs Department, 2016/2017.
The total number of business graduate students (Master 2) of the faculty of Economic, Commerce & Management Sciences (Chlef University 2016/2017) is 631. We took a simple random sample of 30% of them which represents a number of 189 students between male and female. We selected respondents by listing the sample members and assigned a number of each of them, then use the table of random numbers to select each member; number selected is shown in table above.

1-4- **Research Questionnaire:**

A questionnaire was used for that purpose of this research. It is based on the existent theoretical and empirical literature about the application of the two theories which is mentioned before to entrepreneurship. It is aimed to measure the entrepreneurial intention and its antecedents and determinates through a likert-type scale of items developed for that purpose (measuring the entrepreneurial intention). The questionnaires were personally distributed by us. It was possible to distribute and collect questionnaires from students because all of them were on the same faculty and within the same scheduled lecture periods in study’s weeks.

1-5- **Research Procedure:**

The first step in the process of collecting data was to acquire a schedule of lectures of students of various majors and groups. Second step was the distribution of the questionnaires which was delivered personally by us. Third step was the collection of the questionnaires in the same day of the distribution or after days.

In summary 189 questionnaires were distributed to students, only 180 were collected. 9 questionnaires could not be collected, either because the students were not present during the time collection or they wouldn’t answer on it.

2- **Results & Discussion:**

This point reports the results from the analysis of econometric tests performed to test hypotheses by giving the regression analysis of each independent variable in relation to the dependent one, as well as the multiple regression analysis of the model.

2-1- **Test of Reliability (Cronbach Alpha):**

Our overall Cronbach alpha suggests a strong relationship amongst the 50 items of the questionnaire where the study’s Cronbach alpha reliability coefficient = 0.863 which was over the acceptable cut-off level for 0.7, means that the internal consistency of the items on the scale of the model is high, and the tool measurement of this study is acceptable and practical tool.

For Cronbach alpha of Entrepreneurial Intention items-scale = 0.926 and for other variables, Cronbach alpha for Access to Capital, Work Experience, Role Model, Positive Attitudes, Family Background and Quality of Social Support were 0.875, 0.774, 0.756, 0.736, 0.732 and 0.726 respectively. All the Cronbach alphas indicate a strong relationship and a high consistency between the items of each variable.

2-2- **Multiple Regression Analysis:**

A linear regression model was developed and tested to explain the relationship between the six independent variables of the model and the dependent one which is entrepreneurial intention. The regression model below was applied to establish the relationship between the study variables:

\[ Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \alpha_5 X_5 + \alpha_6 X_6 + e \]

Where the Dependent Variable (Y) is: entrepreneurial intention.

\( \alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6 \) are coefficients.

The Independent Variables are: \( X_1 \): Positive Attitudes, \( X_2 \): Role Model, \( X_3 \): Family Background, \( X_4 \): Access to Capital, \( X_5 \): Work Experience, \( X_6 \): Quality of Social Support.
Table (02) below show the multiple linear regression model, with five explanatory variables, it indicates that the coefficient of determination $R = 70.6\%$ which represent a good correlation between independent variables (positive attitudes, family background, access to capital, work experience and quality of social support). It shows the $R$ square value of 0.499 means that 49.9 $\%$ of the variation in entrepreneurial intention can be explained by this model (the five explanatory variables).

Table below shows the One Way Anova analysis of the model, which reveals the value of $F$ calculated = (83.12) which is significant at 0.05 confidence level which means that our model has a good quality in all.

According to the results, we were found a significant relationship between two independent variables, where we found a correlation of ($r = 0.536, p < 0.01$) between role model and family background which is big than the $R$ square of the model which was 0.499. We can assess the impact of the correlation on the regression results by leaving one of the two variables. Multiple linear regression results after the application of the appropriate method of selection (step by step method) found that role model is not significant at the level of 0.05, this finding is confirmed by the simple regression results which was done and found that the $t$ value was = 1.570, this showed the sig < 0.05 which means that the null hypothesis is accepted, this implies that entrepreneurial intention of graduate students is not significantly affected by their role model who they have. The rest of the five hypotheses are accepted since all the coefficients of the model are significant at the level of Sig. < 0.05 (these results are confirmed also by the simple regression test of each variable where each $t$-value of them was significant and a $p$-value < 0.05), except the constant coefficient with a value of (-0.370) was not significant.

The final form of our multiple linear regression model is presented in table (02) below.

**Table (02): Multiple regression of entrepreneurial intention model in relation to all the independent variables of the model**

<table>
<thead>
<tr>
<th>Model Summary</th>
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<td>Model</td>
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<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig</th>
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<tbody>
<tr>
<td>(Constant)</td>
<td>-0.370</td>
<td>0.256</td>
<td>-1.446</td>
<td>0.149</td>
</tr>
<tr>
<td>Positive Attitudes</td>
<td>1.042</td>
<td>0.072</td>
<td>0.623</td>
<td>14.456</td>
</tr>
<tr>
<td>Family Background</td>
<td>0.341</td>
<td>0.045</td>
<td>0.323</td>
<td>7.637</td>
</tr>
<tr>
<td>Access to Capital</td>
<td>0.324</td>
<td>0.041</td>
<td>0.351</td>
<td>7.894</td>
</tr>
<tr>
<td>Work Experience</td>
<td>0.355</td>
<td>0.070</td>
<td>0.228</td>
<td>5.062</td>
</tr>
<tr>
<td>Quality of social Support</td>
<td>0.104</td>
<td>0.059</td>
<td>0.089</td>
<td>1.768</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anova One Way</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of squares (SS)</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Source:** Survey data, SPSS 22.0 output, 2016.
Looking at the results above our statistical model will be written as followed:

\[ Y = -0.370 + 1.042X_1 + 0.341X_3 + 0.324X_4 + 0.355X_5 + 0.104X_6 + e \]

Values of these coefficients have a meaning of their effect on the model; each coefficient represents the change in the dependent variable (entrepreneurial intention) when it’s happened a one unit change in the explanatory (independent) variable while the other explanatory variables are kept constants.

Results of coefficients above indicate that positive attitudes is the best explainer variable of entrepreneurial intention among the other ones, where the B value = 1.042, its meaning is that a one unit change in the positive attitudes variable results in a 1.042 change in the dependent variable entrepreneurial intention. It is followed by work experience, family background and access to capital variables with an overall contribution in the explanation of the model of (0.355), (0.341) and (0.324) respectively. It is ending by quality of social support variable with an explanation contribution of (0.104).

Conclusion

The primary purpose of this study was to answer the question of whether Algerian university students (graduate students of Economic, Commerce & Management Sciences Faculty / Chlef University) have an entrepreneurial intention to be self-employed or not and understand more about their entrepreneurial intentions, thereby developing a model that linked entrepreneurial intention, amongst other factors, to the formation of such behavioural intentions.

In summary, the findings of this study imply that graduate students of Economic, Commerce & Management Sciences Faculty (Chlef University) have an entrepreneurial intention to be self-employed in general, both descriptive and hypothesis tests showed that the general orientation to those students is seeking self-employment over employment. The study general results are satisfactory, since most hypotheses have been confirmed and supported. In particular, five of the sex original core-model relationships were significant. The positive attitudes found to be from the main antecedents of the graduate students entrepreneurial intention, family background of the student has a positive significant relationship with his or her intention to start a new business; the student’s access to capital, work experience and his or her good quality of social support exert a positive impact on a students’ intention to be self-employed. In the research model, the formations of self-employment intentions are positively associated with the preference for a career in self-employment based on both a student’s positive attitudes of self-employment and social environment. This graduate student’s preferences of seeking self-employment over employment have been shown to be affected by a student’s previous family business experience, work experience, and accumulation of knowledge from their business studies.

Similar to prior research that investigated entrepreneurial intentions in a general sense (35), the findings of this research support the positive associations between entrepreneurial intentions and positive attitudes, subjective norms and perceived behavioural control towards self-employment in line with more recent research.

Research Recommendations:

The findings of this research suggest that positive attitudes, family background and perceived behavioural control (access to capital, work experience and quality of social support) are useful for research into entrepreneurial intentions.

Results of this research may imply the following recommendations:

Understanding how self-employment intentions are formed may provide opportunities to stimulate growth in the economy through new business creation initiatives. A significant implication of this study is that by knowing how self-employment intentions are formed among students it may be possible to influence the process to encourage entrepreneurial behaviour.

Results of this study may also provide additional insight into the benefits of offering and including entrepreneurship education programmes into the Economic, Commerce & Management Sciences Faculty (Chlef University) curriculum to encourage and increase both
positive attitudes and perceived behavioural control towards self-employment. Understanding more about the student’s needs of such programmes provides the opportunity to set and enhance programmes to suit the specific needs of them. Therefore it is recommended to promote entrepreneurship and awareness of entrepreneurial opportunities among students by conducting conferences, workshops and seminars. For example some programs are primarily aimed at teaching students the basics of launching a business or business planning, whilst others have the broader aim of teaching the essence of entrepreneurship. Whatever the program objectives, setting up these programmes and assessing their impact on students’ career intentions is additionally important to higher education policy makers (educators).

In addition, the current study provided empirical support for the relationship between access to capital and the quality of social support as triggers or boundaries for graduate students in start-ups and the entrepreneurial intention of them to be self-employed. Given that, the results of this study suggest that the boundaries which inhibit graduate students to enter the world of entrepreneurship can be omitted through: a) the establishment of mentor programs with successful entrepreneurs; b) increased availability of information and advice needed in the start-up process; and c) facilitating the access to bank loans and financial resources.

Limitations and Future Researches:

Similar to previous studies, the present study is not an exception and has some noticeable limitations.

First limitation of this study is that the sample size which was limited and taken from just the graduate students of Economic, Commerce & Management Sciences Faculty (Chlef University). The larger sample size will be more appropriate to reach to more generalize outcome of the study.

Secondly, this study has focussed on the impact of the cognitive approach on the entrepreneurial intention of graduate students, where the impact can be researched larger than that. Future research is recommended to fully detect and evaluate the other different approaches such us the economic, managerial and sociological effect on the formation of the student’s entrepreneurial intention. The evaluation of such impacts is important to the widespread development of entrepreneurship across institutions and universities and to the development of entrepreneurship in society.

Thirdly, another limitation of the study is that young graduate students are not involved in the business activity practically but it is their intention to join entrepreneurship in future. In other words, this study has focussed only on the prediction of entrepreneurial intentions, not realisation of these intentions. The graduate students may be enthusiastic about intention to create new venture because their options are limited. Further investigation is needed to examine whether their intention will remain the same level when wide options will be opened in front of them.

Finally, given the potential to explain future entrepreneurial behaviour through behavioural intentions models (Ajzen, 1991; Shapero and Sokol, 1982), understanding the impact of social environment and students’ attitudes towards self-employment is of importance to educators, and public policy makers. It is felt that some antecedents of a great entrepreneurial intention can be have more impact than other antecedents have in an Algerian context, this thesis provides the basis for further studies to understand more about the affects of these antecedents on students’ entrepreneurial intentions.
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Mr. Rachid Bouhedjir + Pr. Youcef Boumediene


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