

**PROFILING THE FACTORS AFFECTING THE
ENTREPRENEURIAL INTENTION OF THE EGYPTIAN
UNIVERSITIES STUDENTS**

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ABSTRACT

Students intentions toward being an entrepreneur is considered as a good way for economic growth; this can be done by creating new businesses and new jobs which in turn will solve one major problem in Egypt, which is the unemployment problem. Therefore, it is important to make sure that university students are qualified and have the required and needed skills, characteristics and competencies. These qualifications make them being able to start and manage their own businesses in the future as different studies show the role of entrepreneurship education on increasing the entrepreneurial intention among university students. According to the Egyptian context, the paper aims to provide different propositions about the effect of entrepreneurship education on increasing the intentions of Egyptian universities students, the main psychological characteristics that an entrepreneur must possess, and testing the appropriateness of the theory of planned behavior (Ajzen 1991) in explaining the intention. The paper relies on exploratory methodology to reach testable research propositions through review of relevant literature, analysis of secondary data and qualitative research conducted with concerned parties.

Key words---Entrepreneurship education, entrepreneurial intention, the theory of planned behavior, psychological characteristics.

I. INTRODUCTION

Policy makers in almost all countries believe that entrepreneurship is necessary for economic growth and for innovation by creating new businesses, which in turn will create jobs, intensify competition, and may even increase productivity through technological change. Which explain the great attention devoted for entrepreneurship where entrepreneur are responsible for generating new ideas and converting them into profitable business (Turcker & seluck, 2008).So that entrepreneurship in turn can be viewed as a way to solve unemployment problems, as the rate of unemployment in Egypt is growing from one year to another especially the number of university graduates who are unemployed. The unemployment is one of the major problems that Egypt faces. (Kirby et al., 2010)

In light of the importance of entrepreneurship, many efforts are directed to educate and to qualify entrepreneurs and making sure that university have the required skills, characteristics, and competencies needed to be an entrepreneur and be able to start and manage his own business. So that education is considered as an important and critical factor used to differentiate entrepreneur from non entrepreneur. So that such effort should be devoted to entrepreneurship education in Egypt in order to promote and develop a spirit in students to start and operate their own business. (Kirby et al., 2010)

“Entrepreneurship education is the process of providing individuals with the ability to recognize commercial opportunities and the insight, self-esteem, knowledge and skills to act on them.” (Jones & English, 2004).

Entrepreneurship education receives attention due to the link that exists between entrepreneurship education and being an entrepreneur by having the required skills and competencies needed. Entrepreneurial learning is often described as a continuous process that

facilitates the development of necessary knowledge for being effective in starting up and managing new ventures (Politis, 2005). So that entrepreneurship education is considered as an important factor affecting the intention of university students.

The importance of entrepreneurship education comes from its role in increasing student's ability to respond to societal changes and increasing student's creativity and ability in searching for opportunities and bearing responsibility and risk (Galloway & Brown, 2002).

Engagement in entrepreneurship is not done by accident; there must be an intention, so that entrepreneurial intention can be defined as conscious state of mind that directs personal attention, experience, and behavior toward planned entrepreneurial behavior (Obschonka et al., 2010). Entrepreneurial intentions can be defined as "the motivational factors that influence individuals to pursue entrepreneurial outcomes." (Hirich et al, 2008, page 58). The decision to start a new business must be planned that is why the person should have the intention, this intention may lead to actually starting the business or in some cases may not lead to any formation (Davidsson, 1995). Entrepreneurial intention is very important as it is considered as the step that precedes the actual behavior of starting a new venture or even act as an entrepreneur in others' organization. The intention would be viewed as a predictor of entrepreneurial behavior. (Kreuger, 2000), (Gelderen, et al., 2008)

As the decision to be an entrepreneur is considered as voluntary and based on the person own choice, it is very important to analyze how this decision is taken and what are the factors that may influence or have an effect over the intention (Linan & Chen, 2009). So the main aim of the paper is to identify the factors affecting entrepreneurial intention among university students in Egypt, and stressing on the effect of entrepreneurship education or courses on increasing the intention to be an entrepreneur and develop and manage their own business after graduation.

II. LITERATURE REVIEW

Entrepreneurship has been analyzed from different approaches: psychological, sociologic, anthropology, economic and managerial perspectives. (Willard et al.,1993), (Stevenson et al.,1987), (Mitchell et al., 2002) but as my own unit of analysis is the entrepreneur as an individual (human being), it is very important to find out traits or personal characteristics of entrepreneurs in an attempt to understand and explain entrepreneurship (Kolveried, 1996) and (Chen et al.,1998). The trait approaches is mainly built on that entrepreneurship has a particular personality compared to non entrepreneurs. By researching in psychological entrepreneurial traits and characteristics, it was found many key traits of successful entrepreneurs like: internal locus of control, risk taking propensity, need for power, personal values, dependence (Gartner, 1989), (Carson et al., 1995), (Delmar, 1996) and (Linan et al., 2010). But as found in studies of (Stevenson et al., 1985) and (Stevenson et al., 1987) that those psychological characteristics or traits are not universal but it tend to differ from one person to another, which will lead to dependence on supply-side perspective where the focus is on the availability of suitable individuals to be entrepreneurs, so that this side is much more concerned with identifying those psychological traits and background that differentiate entrepreneur from ordinary mangers. (Stevenson et al., 1985) and (Thoronton, 1999)

Also literature provided in entrepreneurship reveals to the existence of entrepreneurship theories that treat entrepreneurship as a behavioral phenomena, especially the work of (Stevenson & Sahlman, 1987) where they deal with entrepreneurship as a sequence of

behaviors which may change from one time to another, and also they identify six major dimensions used to differentiate between entrepreneur and ordinal managers such as: strategic orientation, concept of management, compensation policy, resource commitment policy, commitment to opportunity and concept of control over resources. Also (Gartner, 1985) and (Gartner et al., 1992), where Gartner was mainly inspired by Schumpeter definition to entrepreneur which is “everyone is an entrepreneur only when he actually “carries out new combinations,” and loses that character as soon as he has built up his business, when he settles down to running it as other people run their business” (Schumpeter, 1934:78). So that entrepreneurship is considered as a behavioral concept which is mainly tied to the creation or the formation of the organization and cease once organization is over or terminated.

As entrepreneurship is mainly based on screening opportunity, so a movement from behavioral theory to cognitive theory is needed in order to understand the essence of entrepreneurship.(Kreuger, page 105) , entrepreneurial cognitions can be defined as "the knowledge structures that people use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation, and growth." (Mitchell et al., 2002). As revealed by (Shane, 2003) that entrepreneur must possess special ability in order to be able to identify opportunities while other people fail to recognize it. So some cognitive variables are suggested in order to distinguish entrepreneurs from non entrepreneurs like opportunity recognition, risk perception and cognitive shortcuts. For the opportunity recognition variable, the entrepreneur should be alert, possesses prior knowledge, and has cognitive mechanism (efficacy, desirability and motivation) as well as the ability in connecting dots. (Hisrich et al., 2007)

In order to identify the main factors or antecedents of entrepreneurial intention, different intentions based models are developed in order to provide a better understanding to the planned behavior which in turn will determine how beliefs, perceptions and motives are grouped into the intent to start a business , from this models and theories there is: *Shappero's entrepreneurial event model (SEE) 1982* where entrepreneurial intention stems from the perception of feasibility (refers to person capability and competence for starting his own business and it is similar to behavioral control used in theory of planned behavior) and perceived desirability of a person (determine his attractiveness to business, it is close to attitude and subjective norm in theory of planned behavior. This is mainly influenced by social background like opinion of family, friends and personal exposure to the event) and his propensity to act (which reflect the person willingness to act on a decision). *Bird (1988) model* of implementing entrepreneurial ideas: this model is mainly based on cognitive psychology to explain human behavior. This model suggests a strong relationship between the intention to perform a behavior and actual performance of that behavior, so that intentions are structured by both rational/analytic thinking (goal directed behavior) and intuitive/holistic thinking (vision). *Boyd and vozikis model, 1994* it is an extension or a modification of Bird model by suggesting that individuals self efficacy (which is defined as the person belief in his own capabilities to perform a task, the ease or difficulty in performing a behavior), the inclusion of self efficacy into bird's model provides added insights into the cognitive process used in developing and carrying out entrepreneurial intentions into specific behavior. *The theory of planned behavior (TPB) by Ajzen 1991*: the theory suggests that attitude toward new venture creation predict intentions which in turn predict the actual behavior. This theory would include three main antecedents to intention and they are: attitude toward the act (where the person favorably or unfavorably evaluate the behavior), perceived behavioral control (similar to perceived self efficacy, and it is mainly based on the person's belief toward the action or behavior itself) and subjective norm (which reflect social pressure to perform or not performing the behavior, this pressure can be exerted by family, friends and peers.) and also

Social cognitive career theory (SCCT): a theory of vocational psychology which is used in order to explain individuals career related decision making behavior. It explains that a career decision and behaviors are made through interplay between three key elements: self efficacy, outcome expectations (refers to expected consequences of a certain behavior) and goals (which represent the main reasons of engagement in a certain behavior).

Different studies in an attempt to study and understand entrepreneurial intention, use different intention based models in order to test the appropriateness of the model used. (Kreuger et al., 2000) where the study provides a comparison between the theory of planned behavior (Ajzen's theory 1991) and Shappero 's entrepreneurial event model (SEE 1982), the study approves the antecedent of SEE model while the subjective norm (one antecedent of Ajzen's theory) not supported as a factor affecting the intention. As well as in the study conducted by (Asghar et al., 2010) where it is based on TPB by taking into consideration perceived behavioral control and attitude toward entrepreneurship (as antecedents of intentions) and ignoring the social norms as it does not have so much impact on individual with high self control. Previous research and studies illustrates that the theory of planned behavior can be used to predict entrepreneur intention (Fayolle & Gailly, 2004), (Gelderen et al., 2008), (Hamidi et al., 2008) and (Linan et al., 2010). That is why in this paper, the TPB is used in order to study how entrepreneurial intention is developed among university students.

The entrepreneurial intentions can be viewed from many different perspectives such as: *individual human capital* (where age, education, gender, prior experience, having a relative who have been self employed) studied by (Kolvereid & Moen, 1997), (Oosterbeek, 2008), (Hamidi et al.,2008), (Turker & selcuk, 2008) and (Ahmed et al.,2010), *individual cognition and motivation* (where the attitude to be an entrepreneur came from the need of individual to have decision making autonomy, perceive risk, hard worker) used in studies of (Davidsson, 1995), (Kirby,2004), *Perceived self efficacy* (where the individual has self confidence in his own ability to achieve a specific task or objective) (Boys & Vozikis,1994), (Douglas & Fitzsimmons, 2005).

Different factors are recognized to have an influence on intentions of universities students; where different studies are conducted to test the effect of those factors on the attitude toward entrepreneurship. (Hamidi et al., 2008) in their own study they found the role of career experience, creativity and exposure to entrepreneurship education on the formation of entrepreneurial intention. (Kolvereid & Moen, 1997) in their developed model where independent variables are: career history, characteristics of current position, education and experience, gender and family status, the results shows the impact of career history, characteristics of current position and the importance of entrepreneurship education and experience and their own effect on increasing entrepreneurial intention. And also reveal that age and family status don't have the intended impact on the formation of entrepreneurial intention. Several studies find a positive relationship between entrepreneurship education and entrepreneurial intention; provide a support for the effect of education on the intention to start their own business (Kolvereid & Moen, 1997), (Hunter et al.,2003), (Fayolle & Gailly, 2004), (Turker & Selcuk, 2008), (Matlay, 2008), (Hamidi et al., 2008) and (Sanchez, 2010). Due to the intended effect of entrepreneurship education on intention, different Studies call for a reform or modification in the existing (traditional) educational system applied, so that the educational system should provide needed skills and competencies needed by university students in order to be an entrepreneur. From those skills are communication skills, creativity skills, problem solving skills and team management skills (Kirby, 2004), (Linan, et al., 2010), (Haase & Lantenschlager, 2010), (Tautila, 2010) and (Kirby & Ibrahim, 2010). As well as studies of (Kirby,2004) and (Tautila,2010) which finds out that an entrepreneur should be

innovative, creative, risk taker, seeks and discovers opportunities and accept change are important to be an entrepreneur. But the question would be how those competencies or skills would be acquired, where the role of entrepreneurship education should take place.

“The psychological factors that will affect the ability of person to identify exploit and pursue venture opportunity which in turn will have an impact over the intention of university students, can be divided into three groups or parts: *motivational factors* where need for achievement, risk taking and desire for independence. *Core self evaluation* which include locus of control and self efficacy and finally *cognitions* where beliefs and attitudes that will affect people thinking and making of their own decision”. As suggested by (Shane, 2003) and approved by (Casson, 2005)

I am actually interested in studying the following factors: need for achievement, risk taking propensity, innovation, and locus of control, independence and proactiveness due to the preliminary findings of the pilot study conducted on students exposed to entrepreneurship education. (Michael, 1996) finds a relationship between proactiveness and entrepreneurial intention, Proactive personality are those people who search for opportunities, work on them, they are initiatives, and take actions. By examining the characteristics that should be possessed by the entrepreneur, it was found that from those characteristics needed there are: *risk taking propensity* (may be defined as the orientation towards taking chances in uncertain decision making context. *Internal locus of control*: where entrepreneur possess internal locus of control (may be defined as the belief that the person is able to control life's events) and *need for achievement* (the person who have need for achievement seek to solve their own problem, set their own target and try to achieve those goals, they are much more innovative to improve the firm performance (Kirby, 2004), (Hunter et al., 2003), (Hansemark, 2003) and (Asghar et al., 2010). (Hunter et al., 2003) and (Ahmed et al., 2010) studied the effect of innovativeness and problem solving capabilities on increasing the entrepreneurial intention, and also they stress that innovation and problem solving capabilities are expected to be the core of the entrepreneurial capability of an entrepreneur as entrepreneur faces many challenges or even problems, so in order to implement new ideas and solve problems, the entrepreneur must be innovative. For independence which can be defined as the person need to make his own decision and they are actually responsible for it. The study of (Shepherd & Douglas) provides support for the relationship between independence and the intention.

ANALYSIS OF SECONDARY DATA – EGYPTIAN EVIDENCE

According to data available in years 2008-2009, the percentage of unemployed persons by educational status (University and above) were 31.8%. Graduates from governmental universities are 317298 where males represent (44.5%) and females represent (55.5%). Graduates from private universities were totaled 6986, where males represent (58.6%) and females represent (41.4%).

	Governmental university graduates	Private university graduates	Unemployed persons with educational status (university and above)		
			Urban areas	Rural areas	Urban and rural areas
Males	141298	4098	223	115	338
Females	176000	2888	230	112	343
Total	317298	6986	453	227	681

Comment: This data analysis indicate the unemployment problem that Egypt faces which in turn will prove the importance of entrepreneurship in order to be able to solve this problem and reduce the percentage or number of unemployment.

According to *the global entrepreneurship monitoring report made on 2008:*

- Egypt was ranked as number eleven compared to other 43 countries (involved in the report of 2008) based on early stage entrepreneurial activities (TEA which represent the percentage of nascent entrepreneur or new firm entrepreneur)
- Egypt falls in the *factor driven economies* (which is defined on the basis of their factors endowments like low wage, unskilled labor and natural resources). By comparing Egypt to other countries involved in the same phase of economic development (like Iran, India, Ecuador, Colombia ...), was ranked as number five out of eight on the basis of early stage entrepreneurial activity rate (TEA rate)
- Results show that higher educated groups in Egypt are more interested in entrepreneurial activities, where entrepreneurial activities rates are higher among adult with post secondary education compared to others with no education (figures are 17.3% and 8.9% respectively)
- Also as indicated in the report that Egyptian population has a relatively positive attitude towards entrepreneurship. It ranks twelfth among the 43 countries in the percentage of the adult population that considers entrepreneurship as a desirable career choice (73%). This reflects a favorable mindset towards entrepreneurship which may lead to ultimate engagement in entrepreneurial activity.
- Finally, the report finds out that Egypt is in last place based on the perceptions of entrepreneurial education and for the adequacy of education and training support for new and growing firms, which is why an attention should be devoted to expose young people and students to entrepreneurship education in order to foster stronger entrepreneurial activities in Egypt. The low level of education in Egypt is considered as a barrier to the development of entrepreneurial population, so a reform in the Egyptian educational system should be made to develop creativity skills and independent thinking and to make sure that entrepreneurship content will be involves into all level of the education system.

III. EXPLORATORY EVIDENCE – QUALITATIVE RESEARCH

Ten in-depth interviews were conducted on university students enrolled in fourth year exposed to entrepreneurship courses. A series of open ended questions is used in order to explore and identify intention of those students toward being an entrepreneur and also to identify major psychological characteristics.

By analyzing data collected from interview, it is agreed among those ten students that they have the intention to be an entrepreneur by revealing that being an entrepreneur will provide more space to implement one own ideas and management style, and also it is considered as a pursuit of creation, wealth and achievement. (Students prefer to be their own boss rather than working in other's firms). For the part related to whether universities are well prepared for entrepreneurial career through courses provided, almost all students think that universities and teaching method applied in Egypt did not permit to develop the needed skills and competencies needed by an entrepreneur so that reforms or changes would be recommended in order to fix the system used in education.

For psychological characteristics possessed by students, students interviewed are low or moderate risk taker, some of them believe that it is difficult to control life events, also students feels that they can search for opportunities but they think that they lack the required skills needed in order to be able to search and reach opportunities before others can. They have eagerness to apply new techniques, ideas and learn from them. Starting their own business after graduation is considered as a new experience for them which will let them to widen their knowledge and helps to learn new skills, that is why they prefer to operate their own business rather than working at others.

THE PROPOSED CONCEPTUAL FRAMEWORK

From literature review, secondary data analysis and results obtained from the in-depth interview conducted with university students exposed to entrepreneurship education, I decided to study those psychological factors such as proactive personality, independence, internal locus of control, need for achievement, problem solving skills, innovation and risk taking propensity but on a larger scale in order to be able to identify reasons behind such characteristic and determine what differentiate entrepreneur from ordinal managers according to Egyptian context. Identifying to what extent being exposed to entrepreneurship education or courses will help in building and increasing intentions of university students in Egypt.

The proposed model is shown in Fig. 1.

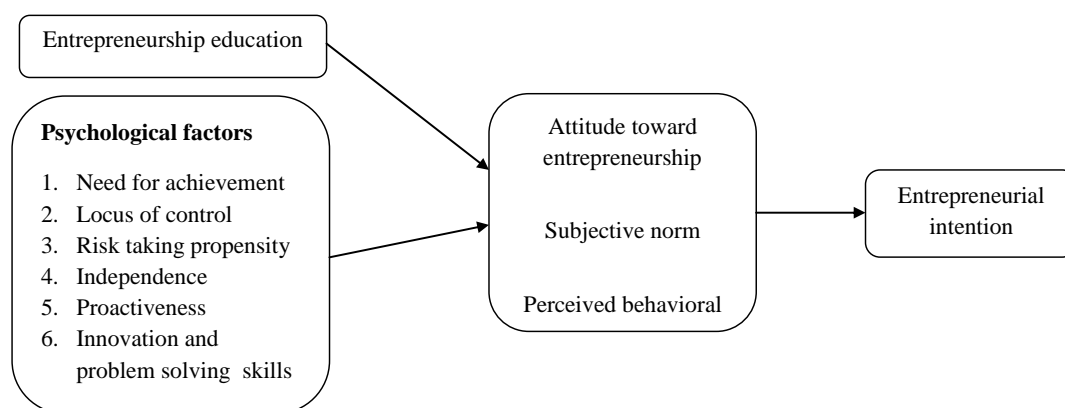


Fig. 1: Proposed model

The following research propositions will be tested empirically using an appropriate large and representative sample of university students and carefully selected inferential statistical analysis of the data collected from the sample selected.

R1: Students who have had prior exposure to entrepreneurship education will have more positive attitudes toward entrepreneurship, stronger subjective norms favoring entrepreneurship, and more perceived behavioral control.

R2: Students with high need for achievement are more likely to have positive attitude toward entrepreneurship, stronger subjective norm, and more perceived behavioral control.

R3: Students with high internal locus of control are more likely to have positive attitude toward entrepreneurship, stronger subjective norm, and more perceived behavioral control.

R4: Students with high risk taking ability are more likely to have positive attitude toward entrepreneurship, stronger subjective norm, and more perceived behavioral control.

R5: The more positive the attitudes towards "high independence" the stronger the attitude toward entrepreneurship, stronger subjective norm, and more perceived behavioral control.

R6: The extent to which people possess a proactive personality will be positively associated with attitude toward entrepreneurship, stronger subjective norm, and more perceived behavioral control.

R7: The higher the innovativeness and problem solving skills of university students, the stronger the attitude toward entrepreneurship, stronger subjective norm and more perceived behavioral control.

R8: Students with more positive attitudes, stronger subjective norms, and more perceived behavioral control with respect to entrepreneurship, will have stronger entrepreneurial intentions.

PLANNED EMPIRICAL TESTING

A well structured questionnaire will be distributed on students exposed to entrepreneurship education (courses) in Egypt in order to be able to test the developed propositions.

The study conducted on private students is used in order to test developed model, where the model test the effect of entrepreneurship education and different psychological factors (need for achievement, internal locus of control, independent, risk taking, proactiveness and innovativeness on the (attitude toward the act, perceived behavioral control and subjective norm) which in turn will affect the intention. Expected findings: From the pilot study conducted on ten students exposed to entrepreneurship courses or education, I expect that the final empirical results will approve the effect of entrepreneurship education on increasing the intention of university students by taking into consideration changes and reform needed in the educational system applied especially the one applied in Egypt, the educational system must

increase the creativity skills, problem solving skills of students and also create an environment which will encourage them to work in teams. And also different studies support the importance psychological characteristics on entrepreneurial intention by revealing that those personal characteristics (like need for achievement, internal locus of control, risk taking) are important in order to develop or even increase the intention of students toward entrepreneurship. And also to test the effectiveness of Ajzen's theory of planned behavior in the Egyptian context.

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