

# Determinants of Entrepreneurial Intention among University Students: The Impact of Entrepreneurship Education on Entrepreneurial Intention at Greek Universities Students and their Contribution to the Development of Students' Entrepreneurial Mindset

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**Abstract:** *The importance of entrepreneurial activity for the economic and social development of countries is now well established. The literature shows significant and positive relationships between higher education, venture creation and entrepreneurial performance, as well as a strong relationship between entrepreneurial education and entrepreneurial intention. The primary purpose of this paper is to provide some insights about entrepreneurship education mainly and of other most related factors founded by literature, secondly. The meaning of entrepreneurship education is explained through a literature review, and the need for the development and re-structure of these educational programs that focus on entrepreneurship is also highlighted. The research was conducted on 84 business administration students from two Greek universities through an online survey. The results showed that family environment and especially father's occupation has a strong impact on entrepreneurial mindset and intention of students as so as their social environment and the support they receive from it. Also, it was observed that there is a difference on the level of entrepreneurial intentions based on gender and entrepreneurship education. This study recommends some ways to enhance the entrepreneurial culture among university students.*

**Keywords/key phrases:** entrepreneurship education, higher education, entrepreneurial intention, university students

**JEL classification:** M00 M1

## 1. Introduction

Entrepreneurship as a career option has great importance in increasing the economic performance of national economies and in boosting employment (Carree and Thurik, 2010; Hope, 2016). Therefore, the promotion of entrepreneurship is important and it has been the main attention of governments. Further, some studies show that entrepreneurship education is one of the factors that affect entrepreneurial intention (Fayolle & Gailly, 2015; Peterman & Kennedy, 2003; Zhang et al., 2014). Education in general equips people with knowledge, skills, attitudes and values in order to achieve a well living in society. Many researchers such as Sultan, Maqsood and Shrif (2016) aimed to answer the fundamental question of the reasons why an individual prefers to be an entrepreneur and what factors motivates his/her intentions. So, "intention" is the key to explaining human behaviors (Sheeran, 2002) and entrepreneurial intention as so as its determinants have been found on a plethora of studies in order to examine the variables that boost a person's willingness to start a new venture. As Sanchez, et al., (2019) state, there was an increased interest in research in this field of entrepreneurship education and its

impact on entrepreneurial intention, proven by a significant increase in the number of articles and citations recently.

The objective of the current research is to provide some insights about entrepreneurship education mainly and of other most related factors related to the entrepreneurial intention, secondly. Specifically, we focus on entrepreneurship education variables, such as teaching methods, the material used, and tutors' enthusiasm about entrepreneurship from students' point of view, in order to evaluate the effectiveness of entrepreneurship programs in Greek Universities and further investigate the factors that make these programs desirable and inspiring for university students. In addition, other determinants such as gender, and family's occupation and environment are also survived concerning their influence on entrepreneurial intention of university students. The study examines the impact of Entrepreneurship Education (EE) on the intention to start a business among university students of the Business Administration Department of two Greek universities. For the data collection students were asked to participate in the current research by filling an online questionnaire. The current research provides an understanding of university students' entrepreneurial intentions, which could be a

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prediction of whether they will take a real action to put their ideas of a new business into realization. Furthermore, the contribution of this study lies in that we use more sub-factors concerning the entrepreneurship education including teaching methods of entrepreneurship courses, the peers' influence and the tutors' impact on the entrepreneurial intention of students. The research questions are:

- 1) How entrepreneurial education affects entrepreneurial intention?
- 2) How peers and social environment of students impact on entrepreneurial intention?
- 3) How students' families and father's occupation with entrepreneurial back round affect entrepreneurial intention?

## 2. Literature Review and Hypotheses Development

### 2.1. Entrepreneurial intention (EI)

Thompson (2009:676) defines entrepreneurial intention (EI) as "self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future". Other researchers such as Choo and Wong (2009) view EI as "the search and exploration of information that can be used to help accomplish the goal of venture creation" (Brownhilder Ngek Neneh, 2014). The intention to choose an entrepreneurial career before actually starting the business is the focus of entrepreneurship because of its importance as a starting point of new venture creation. In order to enhance this intention and make people think to start their own business instead of private or public sector choice, the literature and research provides some factors or "motivators" such as individual factors that encourage and motivate a person's decision to become an entrepreneur including attitudes, values and psychological factors (Ashley-Cotleur et al., 2009), demographic factors such as gender, education and family background, while a significant number of researchers such as Lee, Chang and Lim (2005), Turke and Sulcek (2009:143), Wilson, Kickul and Marlino (2007), Souitaris, Zerbini and Al-Laham (2007) etc, stated that education is one of the most important factors that may foster the entrepreneurial intention as individuals with higher formal education are more likely to pursue entrepreneurial opportunities (Neneh, 2014). Intention as an antecedent of behavior follows constant and rational behavior-relevant information which can be strengthened by rewards (Barringer, 2015). Entrepreneurial intention is one of the rapidly evolving sub-fields within the broader field of entrepreneurship research (Linan and Fayolle, 2015). Entrepreneurial intention (EI) can be defined as "individuals' inclination for accomplishment entrepreneurial behavior, to found new business or to be self-employed" (Dohse & Walter, 2010). Accordingly, individuals may be potential to become entrepreneurs; but it does not lead them to entrepreneurial behavior without having such intention (Kautonen, Van Gelderen & Tornikoski, 2013). Since entrepreneurial intention helps to explain the reason why some individuals choose to start a business, it is thus considered as a significant factor in explaining entrepreneurship and generating new business (Krueger, Reilly & Carsrud, 2000). The literature on EI has been

increased exponentially, which reflects the interest that EI has generated in the research community worldwide (Soria-Barreto et al, 2017). There are several factors discussed in the literature concerning their impact on EI. Firstly, Mahlberg (1996) supports that schools and universities play a vital role in promoting entrepreneurship since educational institutions are ideally considered the place in shaping entrepreneurial cultures and aspirations (Autio, Keeley et al., 1997; Landstrom, 2005). Furthermore, family environment and mainly the father's occupation affects this entrepreneurship mindset. Sachinidis et al. (2014) write that children's lives and that these decisions to start a new venture are strongly connected with father's employment, either self-employed fathers, or small business owners. According to Boy and Vozikis (1994) the intentions for someone to become an entrepreneur are stronger as well as the final decision to create a business more probable when there exist social support considering of special importance the role of the family whether it has a business or not. In general, literature shows that parent organization often plays a critical role in the development of spin-offs (Autio et.al, 1997). Another determinant is the social environment of students which also has a positive effect in EI as those who have had a previous experience in self-employment directly impact on individuals when considering starting a new business or not (Nanda and Sorensen, 2006). It is furthermore observed that some people would like not to depend on others to support their living and this way of thinking drives them into finding their own resources and become independent. According to Maslow (1943) and his demand theory individuals will shift to a higher level of demand only when their low-level needs are met. From that point of view Self-actualization or Self-fulfillment is considered as the greatest satisfaction of an entrepreneur in the process of achieving a goal (Dong, Pang & Fu, 2019).

### 2.2 Entrepreneurship education (EE)

Literature suggests that the most suitable indicator to evaluate the results of entrepreneurship education is the rate of new business creation (Raposo & Do Paço, 2011). However, some studies indicate that there are other factors too which need to be searched in order to predict entrepreneurial intention and effectiveness. Many researchers make an attempt to understand the precursors of venture creation, concluding that is necessary to carry out longitudinal studies. Entrepreneurship education is an important demographic factor which studied from the literature which consists of any pedagogical (program) or process of education for entrepreneurial attitudes and skills (Patricia & Silangen, 2016). The role of education in entrepreneurship consists mainly in building a business culture among students and in subsequently improving their career choices towards entrepreneurship (Deakins et al., 2005). This view is commonly accepted by a lot of researchers (Bae et al., 2014; Fayolle & Gailly, 2009; Oosterbeek, van Praag, & Ijsselstein, 2010) who state that an entrepreneurship education program aims to increase students' awareness towards entrepreneurship, to allow students to further develop their entrepreneurial skills, to teach them the ways to put theory into practice, and highlight the entrepreneurial path as a career option (Patricia & Silangen, 2016). Schoof (2006) suggested that

entrepreneurship education is vital in helping young people develop business characteristics and attitudes, and to understand entrepreneurship as a career choice. Many experts of the field believe that business education and education in general should start as soon as possible, for two main reasons: first, because it forms a key ingredient in the preparation of potential young entrepreneurs, and makes them capable to run a business on their own. The second reason is that it instills business habits in the mind as well as work skills that can contribute to the emergence of young talented people who want to start their own business, in the context of a globalized, post-industrial economy. Entrepreneurship education has gradually expanded in recent years. The European Commission in 2004 proposed that all EU Member States should include entrepreneurship education in their national curriculum and in all educational institutions. Entrepreneurial education so refers to both training and motivating activities in an educational system that offers students with entrepreneurial skills, inspiration, and knowledge to pursue entrepreneurial business (Ekpoh & Edet, 2011).

Entrepreneurship education as a determinant of entrepreneurial intention has been studied in different countries and for different sciences. The significance of entrepreneurial education is now becoming a vital part of different countries as it is playing an important role in accelerating countries economic growth. For instance, Lundström (2005) confirmed that there has been a rapid growth in entrepreneurship education in the Nordic countries (Denmark, Sweden, Norway, Finland and Iceland) over the last decade. In Greece, entrepreneurship courses at higher education are usually taught as an optional subject whereas it is compulsory course in a few departments of economic studies (Papagiannis, G.D, 2018). Mainly, in departments of business and economic studies, students can be taught the concept of entrepreneurship in various courses and acquire the necessary knowledge for establishing and managing an enterprise. However, there is a lack in non-economic studies departments, where entrepreneurship is taught within the context of selected courses. Among different countries there are different pedagogical levels of entrepreneurship education, hence different outcomes from this education (Haase & Lautenschläger, 2011). Küttima et al. (2014) also showed that students participating in EE in 17 European countries had the intention to engage in entrepreneurship.

Participation in entrepreneurship education enhanced by social network and coaching activities was found to exert positive impact on entrepreneurial intentions (Küttim et al, 2014). This finding adds the element of “educational component” which is a very important factor for the effectiveness of an entrepreneurship educational course. At this point, it is very crucial to provide students with useful knowledge and develop the needed skills for being the future entrepreneurs. Despite the popularity of entrepreneurship education, generally accepted teaching contents and methods are still lacking (Matlay, 2005). Asghar, Hakkarainen and Nada (2016) made a research on the combination of components of entrepreneurship education and antecedents of entrepreneurial intentions and they found that course activities and the way they were

designed enhanced the students’ confidence, as so as the discussion of success stories of entrepreneurs, the role playing activities, and the interaction with other participants and the further discussion and presentation of different ideas have played an important role to boost confidence and increase their intention to be entrepreneurs (Asghar, Hakkarainen & Nada, 2016). The study of Puni, Anlesinya and Korsorku (2017) also reveals that entrepreneurship knowledge acquisition and opportunity recognition as dimensions of entrepreneurship education positively affect entrepreneurial intention and self-efficacy. The findings of Ojogbo, Idemob and Ngige (2016) suggest a positive relationship between entrepreneurship education and intentions and perceived desirability while no relation existed with perceived feasibility or self-efficacy. According to the same researchers it is desirable to reform the educational system to encourage creativity and innovativeness of students. It is observed that the skills traditionally taught in business schools are essential but not sufficient to make a successful entrepreneur (Rae, 1997). These results point the need for a fundamental change in teaching methods and educational content in line with adjusting them with entrepreneurship requirements and development of entrepreneurship capability of students are the most important priorities considered by Iran's Higher Education (Amini et al, 2018, 149). Marire, Mafini and Dhurup (2017) observe that higher education institutions have not yet prepared students for self-employment as a career option, resulting in the loss of many potential entrepreneurs (Matsheke et al., 2015). As a result of this, many higher education institutions are offering courses related to entrepreneurship and small business through business schools and short learning programs. Similarly, results of Küttim et al (2014) discuss that what is offered is not necessarily the most demanded in entrepreneurship education as lectures and seminars are provided more, but networking and coaching activities are those expected more by the students. Taking into consideration these findings, we can suggest the following hypothesis:

**H1: Entrepreneurial education has a positive impact on entrepreneurial intention.**

### 2.3 Higher education and entrepreneurial intention (EI)

Entrepreneurship and its relationship with education and specifically higher education is a very interesting research subject (Gubik & Farkas, 2019). Westhead and Solesvik (2016) describe Entrepreneurship Education (EE) as “the main driver of entrepreneurial performance”. In addition, many studies reveal that entrepreneurial studies through different teaching methods and courses have important impacts on student's intentions and their perceived planned behavior to become entrepreneurs. Sultan et al (2016) showed that the entrepreneurial education has a positive effect on students entrepreneurial intentions and suggest that the universities and other Business Schools must offer such kind of Entrepreneurial education courses in order to motivate to bring new ideas of earning in the society as entrepreneurship education emphasis increasing antecedents of intentions and planned behavior. Patricia and Silangen (2016) also aimed to find the way or the ways that entrepreneurship education affects the Entrepreneurial

Intention in Indonesia. They also tried to investigate the effect of the teachers and instructors' enthusiasm (Frenzel et al., 2009), pre-educational entrepreneurship intention (Bae et al., 2014), gender (Verheul et al., 2012), as well as the moderating effect of peers in the classroom (Falck et al., 2012). Their findings revealed that entrepreneurship education does shape entrepreneurial intention, confirming the aforementioned findings. According to the same researchers, students with pre-educational entrepreneurial intention would be more likely to have higher entrepreneurial intention (Patricia and Silangen, 2016). The same findings showed that there is a strong relationship between social influence of classmates and entrepreneurial intention and that there is a difference between male and female students about entrepreneurship education that affected their entrepreneurial intention. Iakovleva, & Solesvik (2014) found that investment in entrepreneurship education at university could facilitate the total of human capital assets required to discover and/or create new business opportunities. Empirically, research shows that EE can influence the development of EI (Pedrini et al., 2017). Wu and Wu (2008) further observe that there is an indirect effect of educational background on the entrepreneurial intentions. Students who had got entrepreneurship education exhibited higher intention in starting a new venture or start up. Moreover, the study of Passoni and Glavam (2018) showed that EE has a positive effect on EI among undergraduate management and engineering students. Otache's research (2019) indicated a significant positive correlation between EE and EI students. Similarly, Sun, et al., (2017) found that entrepreneurship education had an effect on attitudes, social norms, self-efficacy and entrepreneurial intentions. The same conclusion comes from Dickson et al. (2008) who found that entrepreneurship education had a positive impact on individual perceptions about their ability to start new businesses. Students that participating in entrepreneurship education programs show an increase in attitudes and perceived behavioral control according to Rauch and Hulsink (2015) and as they state, the students have higher entrepreneurial intentions at the end of these programs. The positive reaction of students was also confirmed in Aladejebi's (2018) research which showed that the behavioral component of the students' attitude toward entrepreneurship education was positive. Finally, entrepreneurial intentions mediate the effect of entrepreneurship education on subsequent behavior associated with the creation of new business ventures. These results suggest that entrepreneurship education emphasizes increasing antecedents of intentions and behavior. Lavelle (2019) showed also significant positive relationships between personal attitude, perceived behavioral control, and EE with EI. In general, the positive relationship between EE and EI is supported by a lot of researchers (such as Ndala, 2018; Joensuu et al., 2013; Díaz-García, Sáez-Martínez and Jiménez-Moreno, 2015; Maresch, Harms, Kailer and Wimmer-Wurm, 2016; De Jorge-Moreno; Nian et al., 2014; Hattab, 2014; Facey-Shaw et al., 2017; Abun et al., 2017). As stated before the effect of EE on EI is also studied for many scientific fields. Castillo and Triguero (2012) showed that the student's entrepreneurial intention decreases in the business students when they progress in their studies and they are closer in contact with the business reality, while the student's entrepreneurial intention increases in the case of

business students when they choose a future work option different to work in public administration. Similarly, the study of Barba-Sánchez and Atienza-Sahuquillo (2018) focused on engineering students, state that by exposing them to entrepreneurial education this has a positive influence of their intention towards entrepreneurship. McDonald (2019) at engineering and computing showed that students appear to have limited exposure to entrepreneurial education which can affect their entrepreneurial intentions and reduce their inclination to start their own business. Entrepreneurship as a subject of higher education has now expanded to a variety of sciences (Xanthopoulou & Kefis, 2015). Results of Maresch et al (2016) indicated that that EE is generally effective for business students and for science and engineering students too. Adelaja and Minai (2018) examined the effectiveness of students' exposure to entrepreneurial education and its effects in enhancing students' entrepreneurial intention using an experimental design approach. Their research indicated insignificant differences in the student's entrepreneurial intention before and after the exposure to the entrepreneurial education. This important parameter of time implies that the present entrepreneurial education in Nigeria cannot be proven as an effective tool to enhance the student's entrepreneurial intention (Adelaja and Minai, 2018). Similarly, scholars such as Karlsson and Moberg (2013); Sánchez (2013); DeTienne and Chandler (2004) observe similar changes in students' entrepreneurial intention before and after their exposure to entrepreneurial courses.

On the other hand, there are researchers such as Maina (2011) who argues entrepreneurial education has no influence on students' entrepreneurial intention. The same author further argues that those students with higher intention after entrepreneurial education class are those with prior entrepreneurship knowledge. Similarly, Olomi and Sinyamule (2009) argue that "there is no concrete evidence linking entrepreneurial education to intention towards entrepreneurship". Whereas, a research by Gürol and Atsan (2006) argues that only the 18% of samples examined is willing to become entrepreneurs after exposure to entrepreneurial education. Moreover, Bae et al. (2014) found that although entrepreneurship education has a positive effect on Entrepreneurship intention the effect is weak or small. Even Fayolle and Gailly (2015) found the impact of entrepreneurship education on entrepreneurial intentions was negatively affected by previous student experience about entrepreneurship and that the effectiveness of education may not be that strong. Martin, MacNally, and Kay (2012) similarly write that EEP (entrepreneurial education program) can have a negative impact on EI. Finally, a series of studies found that EEP has no impact on EI (Do Paço et al., 2015).

### 2.3.1 The role of educators and person entrepreneurial intention

Entrepreneurship as a subject includes a variety of soft skills (creativity, collaboration, opportunity recognition, and innovative ways of thinking) which makes it an educational object that needs beyond the knowledge of scientific fields, new ways of thinking, and new kinds of skills and new modes of behavior. This is a very important starting point in entrepreneurship educational courses if we think that the

university teaching of entrepreneurship is based on theoretical and practical knowledge. Consequently, the active role of tutors and students in the learning process is very much important (Ilozor et al, 2006). They pointed that there is a need for a shift from teaching to learning. When students attend a lecture, they not only acquire knowledge and cognitive skills but they also interact and develop emotions about the learning process. In his article, Filion (1994) underlined that the main concern about entrepreneurial education is not about what is taught but how it is taught. Tutors should focus on learning instead of typical teaching and on the creation of positive feelings. The main aim of teaching should be to enhance students' pleasant achievement emotions (Frenzel, et al., 2009). Many researchers propose teaching methods and techniques that increase students' participation and motivation. For example, Fellnhöfer (2015) observes that although the use of games for educational purposes is still early stage, this work supports both researchers as well as lecturers from a pedagogical perspective to enhance their effectiveness for entrepreneurship education (EE). The same findings revealed that games dedicated to EE can be an effective tool to be used in teaching entrepreneurship resulting in a significant difference between players and non-players enhancing education. Developing future entrepreneurs means primarily working on attitudes, not to mention the way teachers delivered the materials and motivated students to become entrepreneurs.

Regarding the Falck, Heblich, & Luedemann (2012) peers with entrepreneurial intentions will also play an important role on the development of likelihood that an individual will also have entrepreneurial intentions. Li & Wu (2019) aimed to provide a better understanding of the reasons and the ways that entrepreneurial education increases the entrepreneurial intention. The same study investigates the moderating role of team cooperation on the effect of entrepreneurial education on entrepreneurial self-efficacy and entrepreneurial passion. Their results showed that entrepreneurial education positively affected the entrepreneurial self-efficacy and entrepreneurial passion of individuals while team cooperation significantly moderated the relationship between entrepreneurial education and entrepreneurial self-efficacy and the relationship between entrepreneurial education and entrepreneurial passion. They founded that when students perceive a high level of team cooperation, they are more likely to strengthen their entrepreneurial passion, confirming the aforementioned research and findings on the significant influence of peers. Entrepreneurial education positively affected the entrepreneurial self-efficacy and entrepreneurial passion of individuals. In particular, according to Li & Wu (2019), when students perceive a high level of team cooperation, they are more likely to strengthen the effect of entrepreneurial education on entrepreneurial self-efficacy and entrepreneurial passion. Therefore, we can suggest the following hypotheses:

**H2. Peers and social environment of students have a positive impact on entrepreneurial intention**

## 2.4 Other demographic and social determinants

### 2.4.1 Family environment

Another demographic parameter is the social environment of people. In general, a supporting social environment (family, friends, etc.) shapes entrepreneurial attitudes and is nourishing for entrepreneurial intentions (social norm). Thus, the more positively the individuals' environment reacts to their entrepreneurial intentions, the more likely they will intend to start up their own businesses. Moreover, there is a strong influence from the family environment, conformed by many studies such as that of Gubik and Farkas (2019) who found that students' family business background and education also determine their entrepreneurial visions. Other researchers such as Fitzsimmons & Douglas (2011) pointed that in an entrepreneurial situational opportunity, people must as well decide whether they believe that they own the necessary skills and abilities required to be successful or not (feasibility). Previous studies have shown that individuals with entrepreneurial family background will be more exposed to entrepreneurship or self-employment. Parents as business owners or entrepreneurs motivate their children's entrepreneurial intention by serving as role models (Bae et al., 2014; Fayolle & Gailly, 2013; Verheul et al., 2012). Additionally, children who were raised up in a family business environment are exposed to entrepreneurial atmosphere by seeing, listening, feeling, knowing, and understanding real entrepreneurial facts.

**H3: Students' families with entrepreneurial back round are positively related to entrepreneurial intention**

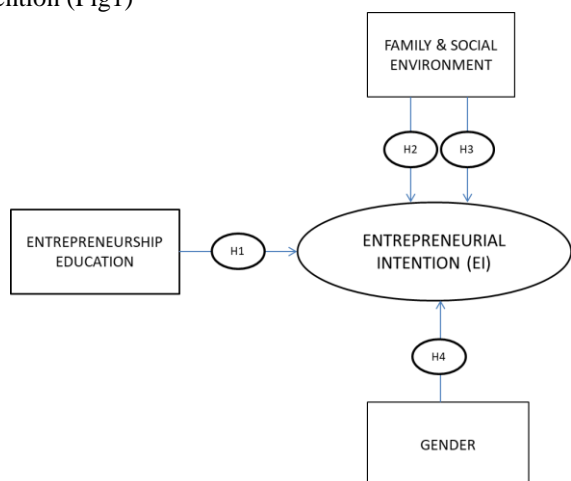
### 2.4.2 Gender

Brockhaus (1980) suggested that age, gender, and level of education could affect an individual's entrepreneurial intention. It was observed that male and female students differ in terms of entrepreneurial attitudes, social norms and entrepreneurial intentions even they experienced the same entrepreneurial education. For example as Verheul, Thurik, and Grilo, (2006) found several factors that influence the participation of male and female entrepreneurs, including financial support, risk-taking propensity, alertness to existing opportunities (Langowitz and Minniti, 2007), and internal control (Wilson, Kickul, and Marilino, 2007). Many researchers believed that the distinction between men and women is determined by their gender stereotypes which impact people's cognition and behavior (Gupta et al., 2005). According to others (such as Johnson, Stone, and Philips, 2008; Langowitz and Minniti, 2007; Petridou, Sarri, and Kyrgidou, 2009), entrepreneurship is traditionally considered masculine, so men tend to have higher intention to pursue an entrepreneurial career. However, the moderating role of gender does not seem to have a particular effect on predicting entrepreneurial intentions (Ruiz-Alba, Vallespín, Martín, & Rodríguez-Molina, 2014). The same view share other researchers (f.e. Krueger, Reilly and Carlsrud, 2000; Gird and Bagraim, 2008; Engle, Dimitriadi, Gavidia, Schlaegel, Delanoe, Alvarado, He, Baume, and Wolff, 2010) who mention that although many studies have addressed the effect of gender on entrepreneurial intention many of them found no statistically significant relationships between the two variables (Sahinidis, Giovanis & Sdrolias,

2012). Some studies showed that women have a lower preference for self-employment compared to men because women are less risk seeking than men (Díaz-García & Jiménez-Moreno, 2010; Verheul et al., 2012). So, there is an effort to find ways on how to increase female entrepreneurship through entrepreneurship education (Lo, Sun and Law, 2012). Zhang et al., 2014 showed that women may feel as capable to perform entrepreneurial tasks as men do, women may perceive the environment as more difficult and less rewarding. This may lead to lower self-employment preferences and activity rates for women. Bae et al. (2014) inferred that it is possible the entrepreneurship education to be more helpful for women to strengthen their skills and increase their entrepreneurial intentions comparing with men. Furthermore, the literature is not conclusive on the impact of gender on the association between entrepreneurship education and the willingness to engage in starting a new venture. Based on these, we can conclude to the following hypotheses:

**H4. Males have higher entrepreneurship intention than females**

In sum, we developed a framework to address the impact of the above demographic determinants on entrepreneurial intention (Fig1)



**3. Methodology**

This section provides an analysis of all questions by using both descriptive and inferential statistics. The tool of online questionnaire was used at students of Business Administration Departments of two Greek Universities. The total number of answers was 84. The SPSS analysis includes descriptive statistical tables by providing measures of central tendency and measures of dispersion. All descriptive statistics tables regardless of other factors (gender, father’s employment status and level of studies) are presented in the text below. Moreover, inferential statistics were used in the mean values for each question in order to determine the boundaries of the mean responses through the use of 95% confidence intervals. The same approach was applied for each question based on the three factors (gender, father’s employment type and bachelor or master level of studies) in order to identify similarities and differences in mean scores by each specific group. Additionally, there are frequency distribution tables for the demographic questions including the absolute, relative and cumulative frequencies. Finally, in

the analysis that follows in questions 1-20 all mean values greater than ‘3’ pertaining to entrepreneurship, including the lower limit of the 95% confidence intervals, were assessed to state agreement on each question regarding entrepreneurial factors, influences, attitudes and behaviours, while mean values equal or lesser than ‘3’ fell under the disagreement area.

**4. Results**

The first four questions measure participants’ general attitudes towards entrepreneurship.

**Statistics**

		1. Being an entrepreneur entails more advantages than disadvantages	2. A career as an entrepreneur is highly desirable to me	3. Being an entrepreneur is highly gratifying for me	4. Among other types of employment I prefer having my own business
N	Valid	82	82	82	82
	Missing	0	0	0	0
	Mean	3,90	3,83	4,12	3,68
	Std. Error of Mean	,117	,136	,128	,146
	Mode	5	5	5	5
	Std. Deviation	1,061	1,235	1,159	1,323

In the table above one may see that people agree mostly that the advantages outweigh the disadvantages for starting a business venture with an average value of 3.90 well above the neutral area of ‘3’. The second response shows the level of desirability in terms of establishing your own business. The results indicate with an arithmetic mean of 3.83 that having their own business is highly desirable to them. In addition, the majority of participants seemed to also agree on the feelings of satisfaction they derive for being entrepreneurs with an average score of 4.20. Finally, respondents appear to prefer having their own business than other forms of employment with an average score of 3.68.

When the same questions were analysed by gender, males seemed to agree more than females in all four questions with the highest difference being in question four for having their own business. This may be explained by past studies which have revealed that males possess a higher level of business risk propensity or appetite.

However, the general picture of the outcomes indicates a higher level of agreement of those having fathers working either as freelancers or entrepreneurs compared to those working for others or other forms of employment. The question that seems to support the view that having entrepreneurial activities by the father may have a greater influence on the attitude of individuals regarding entrepreneurship appears in question 2 on the desirability of becoming an entrepreneur with second being the self-employed father’s background. In questions 3 and 4 the entrepreneurial work status was second behind the self-employed/freelancing participants for agreeing on their level of satisfaction for having their own business and preference to have their own business. Thus, it seems that family background has a higher influence for people with their father being working on his own either as a freelancer or an entrepreneur.

The same questions were analysed based on the type of studies they were at the time of the data collected

comprising two groups those during their bachelor studies and master studies. The results indicated differences in all four questions between the two student groups. Particularly, in all questions students trying to achieve a bachelor degree tended to agree more than their master counterparts regarding the attractiveness and desirability of entrepreneurship. Nevertheless, in the last two questions (3 and 4) the lower limit average scores for students in the master studies reached values below '3' displaying a negative attitude towards entrepreneurship. This may be attributed possible to the younger of their age which makes them riskier and more enthusiastic towards starting a business of their own.

The following set of questions examine students' perception regarding the support they get from family, friends or other people in their environment regarding having their own business.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
5. My friends agree with my decision to start up my own business	82	1	5	3,78	1,207
6. My family agree with my decision to start up my own business	82	1	5	3,80	1,444
7. People highly important to me agree with my decision to start up my own business	82	1	5	4,05	1,276
8. My family appreciates entrepreneurship as a career path compared to other options	82	1	5	3,07	1,322
9. My friends appreciate entrepreneurship as a career path compared to other options	82	1	5	3,24	1,253
10. People highly important to me appreciate entrepreneurship as a career path compared to other options	82	1	5	3,54	1,219
Valid N (listwise)	82				

The above table indicates that in all questions, participants agreed that their friends and family members support them in the idea of starting a business or engaging generally with entrepreneurial actions and decisions. The highest level of agreement seemed to come from people that students feel they are highly important to them. Surprisingly, the lowest score of agreement was from family members. However, the lower limits of the average values in questions 8 and 9 are below '3' exhibiting that participants are not inspired adequately supported to follow an entrepreneurial path by family members and friends.

The same questions were examined in order to detect differences between the two genders. The questions in which there was a significant difference between males and females were in questions 7 and 10. The males agreed with a mean score of 4.71 while female students with 3.70 indicating probably a higher level of influence from people they feel are highly important to them and secondly with average score of 4.00 and 3.30 for males and females respectively for questions 7 and 10. Additionally, the lower limits of the mean scores by gender indicated that in questions 8 and 9 both male and female students reached a score below '3' showing an weak influence from both family and friends regarding entrepreneurship. Besides in question 10 females reached lower bound mean limits below '3' showing that even highly important people to them do not constitute a supporting feature for choosing an entrepreneurial path.

When the analysis conducted based on the father's employment status in all 5 questions the highest level of agreement came from students having a father with employment status as a freelancer or an entrepreneur with average scores well above 3.0. While those being employed by others indicated lower scores and lower limit scores below '3'. Such results indicate the influence of the father figure when having an entrepreneurial background from the father in the family.

Finally, based on the type of studies participants major differences were traced in all questions wherein students in the bachelor studies indicated a higher level of agreement regarding getting support for entrepreneurship. It's worth noting that in all questions master students displayed lower limit scores below the value of three which is an indication that they are much more cautious of entrepreneurial behaviour. Most likely, their view is more pessimistic based on their age, life and work experiences, understanding of the business environment and due to the current shock of COVID-19 which has negatively affected all entrepreneurs globally.

The following questions attempt to measure the level of confidence participants have when it comes to skills, abilities, knowledge, and optimism for succeeding on establishing a venture of their own.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
11. If I were to start a new business I believe that I have all the necessary skills and credential for it	82	1	5	3,83	1,040
12. If I were to start a new business I believe I would be capable of managing the whole start up process for its establishment	82	1	5	4,10	,826
13. If I were to start a new business I believe the possibility of succeeding would be very high	82	1	5	3,73	,917
14. I have knowledge of all necessary practical details required for the creation of new business	82	1	5	3,37	1,252
15. It is easy for me to start up a new business which is going to be successful	82	1	5	3,02	1,247
Valid N (listwise)	82				

Questions 11-14 indicated that people are confident when it comes to opening a new venture since all average values are above the neutral area of '3'. However, in questions 14 and 15, when establishing a 95% confidence interval for the arithmetic mean, the lower bound mean values were below '3' showing the inclination of the respondents to feel less confident for entrepreneurial action.

When the responses are examined by gender one may discern a significant difference in gender regarding the knowledge level required for all necessary practical matters for a start up in question 14 with males to prevail over females with means of 3.79 and 3.15 respectively. Also, in the same question (14) the lower average limit for female students was below '3'. In questions 11-13 no significant differences were observed on the confidence or readiness levels between sexes. Finally, in question 15 none of the genders felt comfortable with the ease of a business start-up

as for both sexes the lower limits are well below '3'. Nevertheless, in questions 11-14 the average scores are higher in males than females showing a higher level of confidence for starting a new business.

The impact of the father's work background in reference to entrepreneurship seems to reach the highest mean values for freelancers and entrepreneurs in questions 11-14. Nevertheless, in question 15 where participants are asked if it is easy for them to make a new business of their own successful those having a father with his own business entrepreneurial were observed with the highest mean score of 3.56, while the rest subgroups were either to the near left or right are of '3'. Most likely this happens since this subgroup has a higher level of confidence regarding making a venture successful either because of actual successful business from the family business and also probably since they feel that they will get support from the father once they open up their own operation.

The analysis of the outcomes in the same set of questions based on the level of the studies they currently attend exhibited very closely related values in the responses of the participants. In questions 11-13 all mean values and lower limits were above '3', however, in question 14 (possessing the necessary practical entrepreneurial details) master students recorded lower a limit value below '3'. Finally, in question 15 both education groups reported means scores well below '3' denoting that they do not believe that starting a business is an easy task. Thus, one may conclude that master students are possibly more thoughtful with new ventures due to a better awareness of the business environment from their own work experiences.

The last questions refer to people's perception on their focus and intention to have their own business establishment in the future.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
16. Starting up new businesses constitutes my main professional goal	82	1	5	3,32	1,578
17. I try to do my best in creating and managing my own businesses	82	1	5	3,27	1,508
18. I am determined to start up my own business in the near future	82	1	5	3,56	1,441
19. I am thinking very seriously starting up my own business	82	1	5	3,56	1,508
20. I have the intention of starting up a new business in the future	82	1	5	3,85	1,306
Valid N (listwise)	82				

Looking at the above table we see that the average values are above three, which is in the agreement area, displaying that in general terms, regardless of other factors, such as gender, father's work status and level of higher education, students appear to agree that they are focused on their intention to become entrepreneurs. However, it is worth noting that in the first two questions (16 and 17) when conducting 95% confidence intervals for the mean responses, the lower bound value reached levels below '3'. Analysing the same set of question by gender it has been observed that there is a significant difference between males and females in questions 16, 17 and 18 (entrepreneurship as a main professional goal, working towards a business start-

up and being determined to begin their own business respectively) where the lower bound mean values for women fell below '3'. Additionally, in all five questions males have indicated higher average scores than female respondents showing that gender has an influence on entrepreneurial behavior which seems to be clearly higher in males.

When the analysis is conducted based on the father's employment status the highest scores above '3' were observed in questions 16-19 for those having a father either working as a freelancer or an entrepreneur. For the rest types of the father's employment status (working for others or other types) the lower limits of the means scores reached values below '3'. In question 20 where it is examined the general intention towards the creation of a new business, no major difference was identified among the father's employment status and for all of them the lower limit mean scores were clearly in the agreement area above three.

Finally, the analysis of findings based on subjects' level of studies exhibited the same type of differences for all questions. Particularly, in all questions students in their bachelor studies indicated that they have a clear intention towards entrepreneurship where in all cases the lower limit of the mean responses was above '3'. On the contrary, master students displayed lower bound average values that were clearly in values below '3' in all five questions. Maybe this can be linked to the younger age of participants in the bachelor studies that seem to be either more optimistic or not having a solid awareness of the business environment when it comes to starting a business venture. Furthermore, such a difference attitude could be also attributed to that master students have a better level of understanding of the business environment due to their higher work experience as they evaluate entrepreneurship with much more caution.

21. Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	28	34,1	34,1	34,1
	Female	54	65,9	65,9	100,0
	Total	82	100,0	100,0	

The majority of participants are females at a rate of 66% and males at 28%

22. Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 yrs	42	51,2	51,2	51,2
	25-34 yrs	22	26,8	26,8	78,0
	35-44 yrs	12	14,6	14,6	92,7
	45-54 yrs	4	4,9	4,9	97,6
	55+ yrs	2	2,4	2,4	100,0
	Total	82	100,0	100,0	

Most of the students are between the ages of 18-24 (51.2%) followed by 25-35 years old (26.8%) and then by the rest age classifications as indicated by the table above.

23. Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor studies	62	75,6	75,6	75,6
	Master studies	20	24,4	24,4	100,0
	Total	82	100,0	100,0	

The overwhelming majority at 75.6% are during their bachelor programme studies and the remaining are attending post-graduate studies.



24.Number of successful entrepreneurs in my family (grand parents, siblings, cousins,aunts)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	14	17,1	17,1	17,1
1	12	14,6	14,6	31,7
2	20	24,4	24,4	56,1
3	8	9,8	9,8	65,9
4	6	7,3	7,3	73,2
5	8	9,8	9,8	82,9
6	8	9,8	9,8	92,7
8	1	1,2	1,2	93,9
9	1	1,2	1,2	95,1
10	4	4,9	4,9	100,0
Total	82	100,0	100,0	

Only fourteen participants declared no evidence of entrepreneurial success stories from family members while the rest identified success stories within the family ranging from 1 to 20 successful cases.

25.Number of successful entrepreneurs from friends and acquaintances

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	11	13,4	13,4	13,4
1	7	8,5	8,5	22,0
2	16	19,5	19,5	41,5
3	6	7,3	7,3	48,8
4	4	4,9	4,9	53,7
5	6	7,3	7,3	61,0
6	4	4,9	4,9	65,9
7	8	9,8	9,8	75,6
8	2	2,4	2,4	78,0
10	8	9,8	9,8	87,8
12	6	7,3	7,3	95,1
15	4	4,9	4,9	100,0
Total	82	100,0	100,0	

When it comes to successful businesses and friends from other acquaintances the results are similar with only eleven responses stated no success business stories and the remaining answered that had evidence of successful businesses ranges from 1 to 16 counts.

26.Father's work status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Unemployed	2	2,4	2,4	2,4
Employed by others	32	39,0	39,0	41,5
Self-employed/freelancer	20	24,4	24,4	65,9
Entrepreneur	18	22,0	22,0	87,8
Other	10	12,2	12,2	100,0
Total	82	100,0	100,0	

The last question indicates the respondents' answers on the type of employment their father has had. The majority stated that their father works for other employers at 39%, followed by those who are freelancers 24.4%, then the entrepreneurs at 22% and finally, at 12.2% those who had a different employment status.

Table: Results of variables than explain the entrepreneurial intention

Hypothesis	Relationship	Findings
H1	Entrepreneurial education → entrepreneurial intention	confirmed
H2	Peers and social environment of students →entrepreneurial intention	confirmed
H3	Students' families with entrepreneurial	confirmed

	back round → entrepreneurial intention	
H4	Males > females → entrepreneurial intention	confirmed

### 5. Discussion on Results

The rise in unemployment due to global financial crises especially in developing countries with combination with the population growth and job vacancies remains a serious problem. University graduates mainly focus their preferences on working at formal sectors (public and public ones) than to become an entrepreneurs or self-employed (Darmanto & Lestari, 2014). Therefore, entrepreneurship development may be one solution to decrease unemployment. The majority of research shows concludes that the entrepreneurial courses in universities may enlighten university students to pursue entrepreneur careers. Entrepreneurship education is central to student entrepreneurship and thus universities are able to support entrepreneurship in many ways, however it is important to measure students' perception of the support that they receive in order to understand the extent of such support and its impact on students (Saeed et al, 2013). The significance of measuring the students' perceptions was also underlined by of Facey-Shaw et al (2019) whose research looks at student perceptions of entrepreneurship education among undergraduate computing and engineering students as a first step in fostering entrepreneurial intentions. Another important factor that remains an under-researched phenomenon is "inspiration", which was defined by (Souitaris et al., 2007: 573) as "a change of hearts (emotion) and minds (motivation) evoked by events or inputs from the programme and directed towards considering becoming an entrepreneur". Thus, we understand that inspiration is of central importance as both an impact and as a predictor of other impact measures (. Indeed, Souitaris et al. (2007: 587) conclude: "Universities that want to assess the effectiveness of their programs should capture not only how much their students learn about entrepreneurship or whether they are satisfied with the courses, but also whether they are inspired from the programme." (Nabiet al, 2017)The sector of higher education can play an important role in bridging the gap between the theoretical and practical aspects of entrepreneurship (Bhasin & Gupta, 2017). It has been observed that the entrepreneurial intentions among through entrepreneurship related courses and that it motivates the students to enter the field of entrepreneurship and become successful. Higher education should make the students to be aware about the opportunities in entrepreneurship and also help them to get an insight by regular interactions with already successful entrepreneurs. The study of Bhasin & Gupta (2017) aimed at studying the relationship between entrepreneur specific education and the entrepreneurial intentions at the higher education level. They conclude in the important role and impact of Higher Education to youth entrepreneurship, as the enhancement of the entrepreneurial intention "will significantly increase the frequency of young minds shifting intentions of the students be developed and groomed, in a way that a holistic benefit for the individual, society, nation and world could be achieved" (Bhasin & Gupta, 2017, p9). However, there have been certain hindrances and obstacles in providing entrepreneurship as core education (Bhasin & Gupta, 2017). Here, Shanker

(2012) as cited in Basu (2014) identified six factors which have been posing as problems in teaching entrepreneurship education in India. These obstacles include the lack of institutionalization, the paucity of indigenous experience along with dearth of trained teachers who can actually act as mentors, the focus on the short term results, also the fact that is not considering entrepreneurship teaching as a core subject. To encounter such problems, Basu (2014) suggests that it is very important to take and consider entrepreneurship as a basic course. 1.

Regarding the findings, the general perception for entrepreneurial behaviour appears that it as embraced by the majority of participants when no other factors are considered. Gender seems to have a greater influence on males' perception when they are considering of having their own business compared to females. Father's employment type is also a determinant for entrepreneurial orientation when a father has his own business or work as a freelancer. When it comes to level of educational studies bachelor students tend to display higher levels of supporting entrepreneurial action than those observed by master students.

Factors such as when family members, friends and other people support respondents' idea of becoming entrepreneurs and highly important people to the participants appreciating entrepreneurial behavior seem to be possible influences for becoming an entrepreneur. However, the fact that family and friends appreciate entrepreneurship does not seem to receive sufficient acceptance. Gender as a factor indicated the same outcomes but males seemed to exhibit higher level of acceptance than females. Additionally, having a father working on his own indicated higher scores than those fathers not working self-employed. Lastly, students at the bachelor level tend to agree more than the master students. People in general seemed to be confident in regard to their skills to manage successfully a new business but they did not feel confident in terms of having sufficient practical knowledge for running a new venture or believing that it is easy to manage it successfully. The only significant difference between gender was on that males seemed to be much more confident that females in reference to having the required practical knowledge for a new venture. The father's employment status or type indicated significantly higher scores for those having fathers self-employed or entrepreneurs in all five questions. The level of studies indicated higher scores for bachelor students in all questions, also master students showed low level of confidence in terms of their practical knowledge for running a new business and comfort of making a new business successful.

Overall, participants showed to have a future intention of becoming entrepreneurs, but they indicated low focus on having it as their main professional goal or working currently towards this direction. In all 5 questions males reported higher intention for entrepreneurship than females. Besides females reported low scores below '3' in how they feel about their own business, working towards creating a new venture and being determined to begin a business of their own. Father's employment types of being self-employed or entrepreneur constitute a factor for making people being more focused for starting a new venture, while

in other types of the father's employment results were below '3' indicating a low level of entrepreneurial intention. Finally, students at their bachelor studies indicated a clear intention and focus to entrepreneurship with scores above '3' in all cases. On the contrary, master students showed a low inclination to entrepreneurial intention by reporting in all questions mean scores below '3'.

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