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**Effect of entrepreneurship education on student
attitudes**

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Effect of entrepreneurship education on student attitudes

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Abstract

Entrepreneurship and new business operations are potentials of economic development and growth in the modern society. The high quality of education in innovative fields provides a great opportunity for the establishment of new entrepreneurship. Through entrepreneurship education, young people, learn organizational skills, including time management, leadership development and interpersonal skills. Often the young entrepreneur faces barrier that influence and prevent the completion of the implementation. The current paper concerns the study of students' entrepreneurship activity and how this affected by various barriers and success factors. The survey was conducted among 169 students of University of Thessaly that attended entrepreneurship education program. The questionnaire that was used was based on the adapted instrument of Karhunen, Ledyeva, Gustafsson-Pesonen, Mochnikova, and Vasilenko (2008). The questionnaire consisted of four groups of questions. All questions were answered with the use of a 5 point Likert type scale. Paired samples tests indicated significant differences before and after attending entrepreneurship class in both extrinsic and intrinsic barriers and also in success factors rates and future carrier plans. Despite these obstacles, however, encouraging students can be a way to overcome these obstacles and get into the business in the path of growth and innovation.

Keywords: Entrepreneurship, Education, Barriers, Start ups

JEL: I20, I23, I25

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Introduction

Entrepreneurship has been identified as a key factor for economic growth and social transformation, but at the same time as a weak spot in modern, western, economies (GEM, 2012). Hence, there has been increasing emphasis on policy aims and initiatives with the aim of raising both the awareness and the capacity of entrepreneurship.

The interest of university graduates in entrepreneurship has traditionally been low (Tonttila, 2001). The challenge of how to encourage young people to launch knowledge-intensive enterprises confronts academics and policy makers. In recent years, however, change appears to take place in new and youth entrepreneurial activity. A large part of this has been traced to the information and communications technology sector, which provides business opportunities for small innovative enterprises (Karhunen, Ledyeva, Gustafsson-Pesonen, Mochnikova, & Vasilenko, 2008).

At the same time, training programs in entrepreneurship have been developed for university students and graduates. These programs have proved successful as means to promote knowledge-based entrepreneurship and improve the survival rates of new start-ups (Karhunen et al. 2008).

Such training programs may be successfully developed and adopted by various higher education institutions, as far as they are adapted to local conditions (business environment, academic tradition and students' attitudes and knowledge). The objective of the study presented here is to examine the impact of such an entrepreneurship course on the attitudes of Greek university students towards the barriers and factors of success of entrepreneurship. First, we present a short review of relevant literature on the factors influencing attitudes towards entrepreneurship. Then we present the results of the case study and finally we discuss their significance.

1. Background

2.1 *Factors affecting entrepreneurship*

Entrepreneurship is a multifaceted endeavor that is affected by a variety of social, cultural, environmental, demographic and economic factors. The factors influencing entrepreneurship have been the object of study and analysis by many scholars Six (6) sets of factors are considered to lead to the successful pursuit of entrepreneurship (Gaddam, 2007):

1. Economic Factors

Economic factors are crucial for the effective exercise of entrepreneurial activity, as entrepreneurship is based most on the economic theory of supply and demand for goods and services. In particular, the economic factors that act as catalysts for entrepreneurship are the policies and especially monetary policies of nations, trade policies, and interventions of governments, taxation and income (Huisman, 1985).

2. Psychological Factors

Psychological factors refer to the personal characteristics of the entrepreneur. Among Kuratko and Hodgetts's (1995) 17 psychological characteristics most commonly associated with entrepreneurs, five relate to motivation:

commitment, perseverance, achievement, drive, and opportunity orientation. Herron, and Robinson (1993) found that the behavior and skills of the entrepreneur have a significant impact on performance. Carter, Gartner, and Reynolds (1996) have indicated that personality also has a considerable impact on the startup decision and on behavior, as some individuals are relatively passive and engage more in talk than action.

3. Social Factors

The sociological factors refer to those components affecting people's lifestyle: consumer habits, standards of entertainment and fun, the way that people work or the city where they work, etc (Weber, 1948).

4. Environmental Factors

Environmental factors are divided into intrinsic and extrinsic and perceived at various levels. Access to resources depends on the natural and socio-economic environment, and the number of new firms entering an industry is affected by the number of incumbents in the industry. The economic environment affects the number of firms will enter the industry, the business transformation or even the termination of a business (Singh, 1990).

5. Demographic Factors

Demographic trends include population size, the age of people, population structure, geographic distribution, ethnicity, education, etc. As far as entrepreneurial activity is considered, the most significant demographic variables are age, experience and educational level (Gaddam, 2007).

6. Cultural factors

Culture is defined as a set of common values, beliefs and expected behaviors. According to Weber (1948), shared values, beliefs and behaviors of individuals and organizations, significantly affect entrepreneurship (Huisman, 1985). Significant attention is paid at organizational culture and its influence on entrepreneurship.

Financing is far from sufficient condition for successful entrepreneurial endeavors. Other very important factors associated with people have been identified as critical for success (Ioannou, 2001):

- The qualifications of the new entrepreneur, so that the object of her endeavor would be related to the subject of studies or work experience
- The motive of creation: the new entrepreneur should have real and genuine desire for the project.
- Skills and personal characteristics: the new entrepreneur should have a motive of self-improvement, in order to improve the business through constant learning.

Innovation, creativity, ability to work and motivation in creating new and good partnerships and pleasant working environment are factors critical to the success of any new entrepreneurial venture and, at the same time, attractive to creative people contemplating career options. On the other hand, there are significant hurdles that repel young people from committing themselves to entrepreneurial ventures. These include perceptions about entrepreneurship, lack of competences, experience or elementary knowledge about business and so on (Immink & O'Kane, 2001):

- Most young people believe that to be successful entrepreneurs should be engaged with an innovative business plan. However, according to research within the five hundred (500) fastest growing businesses in the U.S are

entrepreneurs who have not been into any innovative activity, the difference being that followed better and faster procedures (Immink & O'Kane, 2001).

- The lack of a good business plan is a barrier on startup a business. A good business plan defines the outcome of the project over time.
- Knowledge, skills and experience play an important role in entrepreneurship. But as a young person remains in employee status, it becomes increasingly harder to commit to a project that will lead her in establishing her own business.
- Perhaps the greatest fear of young aspiring entrepreneurs is the immense risk of entrepreneurship. However the role of the entrepreneur is not risking as much as to overturn her personal life.

A key objective of entrepreneurship policy is to motivate and support the undertaking entrepreneurial initiatives by well qualified individuals and teams. The factors that affect a person's decision to become an entrepreneur are divided into three (3) categories (Brockhaus, 1982): the psychological effects that the person has been subjected to, the results of his/her experiences (mainly from previous work) and his/her personal characteristics.

These effects are characterized as incentives for entrepreneurial action and may be divided into two (2) types: positive incentives (pull motives) or pull factors that attract the person in taking entrepreneurial action, and negative incentives (push motives) or "pushers" driving or forcing the person to move away from other options and start his/her own business. The most important among "positive incentives" are: making profit, the pursuit of independence, the pursuit of social status and desire for achievement. The psychological "component" that strengthens the incentives of individuals has been analyzed by Rotter (1971), and attributed to the term 'internal locus of beliefs'. It refers to the perception of future entrepreneurs of their ability to succeed based on their own actions. The stronger the confidence a person has, the greater the tendency to engage in business

On the other hand, negative incentives may put someone off from other options and lead him to establish his/her own company they may, sometimes, prove more decisive the positive incentives. Negative incentives may be: forced migration, dismissal from work or unemployment, frictions with the supervisor, monotony at work, divorce. (Brockhaus, 1982; Rotter, 1971).

One more incentive that compels individuals to pursue an entrepreneurial career is the lack of prospect for progress in other occupations. The failure in some carrier efforts drives the individual to turn to the establishment of an enterprise. Furthermore, there are other situations, for example 'luck' (e.g. random acquaintance, etc.), and environmental influences (e.g. existence of family business, studies, etc.), that function as dynamic as other positive or negative incentives.

2.2 Barriers to Entrepreneurship

Studies that examine young entrepreneurs' failures and barriers distinguish between endogenous (in the entrepreneur's control) and exogenous (beyond the entrepreneur's control) factors that affect their performance. Endogenous factors include personal characteristics and weaknesses in financial and operational management. Personal skills too, such as creativity, the ability to take appropriate risks and effective time management tend to affect the success or the failure of a business (Ibrahim & Goodwin, 1986; Sexton & Bowman, 1983). Khan and Rocha (1982) also mentioned

the significance of technical aspects and divided them into for major factors (marketing, accounting, inventory control and cash flow management). Several researchers argue that endogenous factors are often the main cause of business failures (Theng & Boon, 1996; Peterson, Kozmetsky & Ridgway, 1983). Dandridge and Sewall (1978), however, found that most problems occur due to exogenous factors. Exogenous factors include environmental characteristics such as, high interest rates, taxes and government regulations (Theng & Boon, 1996).

Barriers to entrepreneurship may be divided into three categories:

I. Individual entrepreneurship barriers encompass the following aspects (Kirkwood, 2009):

1. Family: may play an important role in developing confidence, creating new ideas in the family and determining children's career path.
2. Education: experienced and well-trained entrepreneurs are believed to lead the most profitable business.

II. Organizational barriers include the following types:

1. Financing: attracting and providing funds to start up a small business is a crucial hurdle for the majority of new entrepreneurs.
2. Physical resources: tangible assets necessary for production of products and provision of services.
3. Marketing: new companies face the setback of lack of customers².

III. Environmental barriers include the following types:

1. Socio-cultural factors: attitudes, values and norms shape the culture that governs conduct and development, progress and innovation.
2. Rules and regulations: some tenors of Labor law and current national regulations may create a couple of barriers on the development of entrepreneurship.

Van Auken (1999) suggested that direct assistance and support programs not only minimize the effect of those factors but create better economic opportunities to individuals, and also support local economic development.

3. Method

The survey was conducted among students of University of Thessaly that attended its entrepreneurship education program. Data collection was implemented from 2010-2012 academic years. Survey sampling was administered by the University's Unit of Entrepreneurship and Innovation, which collected student responses in questionnaires.

3.1 The Entrepreneurship Program

The program consists of two courses running consecutively during the two semesters of each academic year, offered to the students of 12 departments of the University of Thessaly (from the School of Engineering, the School of Agricultural Sciences, the School of Humanities and Social Sciences and the Departments of Biochemistry and Biotechnology and of Physical Education and Sport Science). The Program was funded by the Operational Program for Education and Lifelong Learning, as part of

² According to Analoui, Moghimi and Khanifar, (2009) the causes of bankruptcy are lack of sufficient number of customers (80%), lack of quality customers (10%) and lack of suitable goods and products (10%).

the European Union Structural Funds for Greece. The courses are divided into two semesters. The objective of the first course (during the winter semester) is to familiarize students with basic entrepreneurial knowledge and culture. The course focuses on strategic entrepreneurship rather than operational or financial aspects, giving emphasis on the resource-based view perspective. Emphasis is given to market positioning the establishment of competitive rather than comparative advantage and competitive analysis. The aim of the course is for students to develop and present an entrepreneurial idea from conception to business model. In order to do that, they must comprehend social needs and dynamics and explore user needs, as well as technological trends. Then they must come up with an entry strategy and explore a viable business model. The objective of the second course (during the spring semester) the focus shifts to more operational concerns: enterprise, foundation and organization of an enterprise, obligations of the enterprise, financing and economic management, co-operatives and their problems, marketing planning, operations and logistics strategy, product and service development, human resources management. Students' aim is to develop a complete business plans. In this process they get familiar with financing of start-ups (venture capital, business angels etc.), the use of terms and tools, and the development of the relevant reports, development of business collaborations, IPR management, and brand management. The objective of the Innovation and Entrepreneurship Program is to develop the entrepreneurial and innovation skills of the students and to encourage them to view the creation of businesses as a livelihood option, while developing their perception of the various obstacles. A mixture of different educational tools is used: team working, speeches by invited - mainly young - entrepreneurs and work with experienced mentors, site visits to innovative businesses, support of student teams through specialized guides and tools and team coaching and hosting of events and competitions. During the program students are expected to organize themselves in teams (simulating a real start-up endeavor) and present their ideas and plans in writing as well as to defend them orally.

3.2 Instrument

The questionnaire that was used is based on the adapted instrument of Karhunen, Ledyeva, Gustafsson-Pesonen, Mochnikova, and Vasilenko (2008) that has been used at the HSE Small Business Center among Russian students. The questionnaire consisted of four groups of questions. The first group of questions covered demographic variables such as age, gender as well as questions determining whether there are entrepreneurs among the students' family or close environment. The respondents were asked about their future career expectations in order to appreciate how they perceive entrepreneurship as an option. The second group consisted of items addressing the respondents' perceptions of constraints associated with entrepreneurship. These covered both personal and environmental factors. Finally, a group of questions, regarding the perception of factors that affect the success of a business has been added. All questions were answered with the use of a 5 point Likert type scale.

The questionnaire was translated into Greek by using a back translation technique (Vallerand, 1989). Two bilingual sport scientists translated the English version into Greek. At the end, a qualified Greek teacher reviewed the instrument to ensure appropriate language and comprehensiveness before its administration.

3.3 Procedure

The same questionnaire distributed at the beginning of each academic year and at the end of it. The questionnaires were completed by students themselves during the entrepreneurship classes. The process of data collection took place during the first and the last class of the module.

To examine the differences between perceptions of constraints and general views of entrepreneurship, at the beginning and at the end of academic year, paired samples t-test, has been applied.

3.4 Participants

The sample consisted of 169 students that attended both courses of the entrepreneurship program. 124 students (73.4%) were male and 45 (26.6%) female. The vast majority of students were computer and electrical engineering students (M=153). With regard to family involvement with entrepreneurship, the majority students' families were not involved in any entrepreneurship activity (M=90). Finally, regarding the future expectations of the students before the beginning of the module, 146 stated that they aspired to be employed by a company, 47 expected to be employed in the public sector and 17 were considering to start their own business in the future.

4. Results

A paired-samples t-test was conducted to compare students' perceptions in intrinsic and extrinsic constraints and factors of entrepreneurship success. All comparisons conducted for values before and after attending the entrepreneurship program.

In terms of internal consistency of the observed dimensions with the exception of dimension 'Factors of entrepreneurship success - before classes' ($\alpha = .67$) all reliability estimates (Cronbach's alpha) were greater than .70 (Table1). All were perceived as acceptable (Tabachnick & Fidell, 2001).

In terms of constraints for entrepreneurship, most of the students scored lower perception rates after attending the module, in both intrinsic and extrinsic barriers. On the other hand, the perception scores of factors that lead to successful business have been increased (Table 1). We could deduce from this that while students became more aware of the risks and challenges associated with entrepreneurship they also felt more prepared to take them on.

Table 1. Means and Cronbach's alpha values before and after attending Entrepreneurship Program

Dimension	Before		After	
	M	Cronbach's alpha	M	Cronbach's alpha
Constraints for Entrepreneurship (intrinsic)	3,06	,80	2,74	,73
Constraints for Entrepreneurship (extrinsic)	3,93	,94	2,88	,85
Factors of entrepreneurship success	3,09	,67	3,92	,80

Regarding future plans upon graduation before and after attending entrepreneurship class, students changed their attitude towards creating their own business at the end of the program. More specific, 29 students answered positively while 16 answered negatively at the end of the academic year (Table 2). However, waged employment aspirations in both the private and public domains also increased at the end of the year (Table 2). This probably shows higher anxiety as entry to the labour market approaches, and probably higher self-confidence which may attributed to the specific program discussed here, but also to the fact that as students near the completion of their studies they become more aware of their discipline.

Table 2. Paired Samples Statistics
Future plans upon graduation before and after attending Entrepreneurship class

Item	Yes	No
Private sector employed before	146	17
Private sector employed after	160	8
Public sector employed before	51	115
Public sector employed after	23	146
Own business before	17	23
Own business after	29	16

A more detailed look at the variables making up intrinsic Constraints for Entrepreneurship (Table 3 and Table 4) shows that: there was a significant change in the scores of 'Unwillingness or incompetence to market one's personal skills and competence' before ($M=2.8$, $SD=1.10$) and after ($M=2.4$, $SD=1.19$) attending the module; $t(168) = 4.30$, $p < .001$. Furthermore there has been a noteworthy change in the score of 'Entrepreneurship does not suit my character'; $t(168) = 3.18$, $p < .001$; before ($M=2.3$, $SD=1.05$), after ($M=2.1$, $SD=1.08$). Substantial change also occurred in 'General lack of appreciation of entrepreneurship'; $t(168) = 4.20$, $p < .001$; before ($M=2.0$, $SD=.89$), after ($M=1.6$, $SD=1.08$). Finally, statistically significant changes also occurred in: 'Insecure income' $t(161) = 2.77$, $p < .01$; 'Fear of losing one's property' $t(168) = 3.18$, $p < .005$; 'Society provides no safety net for entrepreneurs' $t(168) = 2.73$, $p < .01$ and 'My personal competence is difficult to commercialize' $t(166) = -3.40$, $p < .005$. The above show a significant rise in self-confidence, in particular with respect to barriers specific to entrepreneurship.

On the other hand, it should be noted that the appreciation of personal "cost" also rises 'Lack of free time'. More important is the higher appreciation of subjective attributes, especially 'Lack of business idea'. Although in both occasions there were no significant differences, the values difference shows that there is also self-confidence appears to rise, this does not take place on the basis of ignorance of risk; rather, it shows that students have become more aware of the requirements for entrepreneurial success and that knowledge and realization has not lead to disappointment, since they feel better prepared to rise to the challenge. However, both conclusions need further research.

**Table 3. Paired Samples Statistics
Constraints for Entrepreneurship (intrinsic)**

Item	Before		After	
	M	SD	M	SD
Insecure income	3,8	1,19	3,6	,98
Fear of loan	3,9	1,15	3,6	1,10
Entrepreneurship is excessively binding and time-consuming	2,8	1,20	2,9	1,172
Fear of tough competition	2,7	1,24	2,8	1,05
Fear of losing one's property	3,4	1,35	3,0	1,18
My current life situation	3,4	1,39	3,1	1,21
Loss of free time	3,1	1,20	2,6	1,22
Entrepreneurs are excessively at the mercy of their investors	3,0	1,07	3,1	1,04
Society provides no safety net for entrepreneurs	3,6	,98	3,3	1,00
Unwillingness or incompetence to market one's personal skills and competence	2,8	1,11	2,4	1,19
Lack of business idea	2,5	1,09	3,6	,98
Adverse effect on social relations	2,2	1,24	2,2	1,15
My personal competence is difficult to commercialize	2,5	1,05	2,7	1,09
Entrepreneurship does not suit my character	2,3	1,05	2,1	1,08
Excessively irregular working hours	2,3	1,10	2,4	1,14
Lack of personal skills and competence	2,5	,97	2,1	1,18
Lack of experience	3,2	1,24	3,0	1,14
Fear of debt	2,5	1,23	2,4	1,18
General lack of appreciation of entrepreneurship	2,0	,89	1,6	1,08

**Table 4. Paired Samples Test
Constraints for Entrepreneurship (intrinsic)**

Item	t	df	Sig. (2-tailed)
Insecure income	2,769	161	,006
Fear of loan	,000	160	1,000
Entrepreneurship is excessively binding and time-consuming	-1,052	44	,299
Fear of tough competition	-1,385	168	,168
Fear of losing one's property	3,184	168	,002
My current life situation	,450	168	,653
Loss of free time	,877	165	,382
Entrepreneurs are excessively at the mercy of their investors	-,902	165	,368
Society provides no safety net for entrepreneurs	2,736	168	,007
Unwillingness or incompetence to market one's personal skills and competence	4,335	168	,000
Lack of business idea	,183	147	,855
Adverse effect on social relations	2,988	168	,978
My personal competence is difficult to commercialize	-3,390	166	,001
Entrepreneurship does not suit my character	11,087	168	,000
Excessively irregular working hours	,358	168	,721
Lack of personal skills and competence	-1,824	168	,070
Lack of experience	1,992	168	,048
Fear of debt	,821	168	,413
General lack of appreciation of entrepreneurship	4,196	168	,000

In terms of extrinsic barriers to entrepreneurship, significant change; $t(166) = -4.03$, $p < .001$, only in 'Frequently changing or unclear legislation'; before ($M = 2.8$, $SD = 1.14$) and after attending module ($M = 3.2$, $SD = 1.05$). This probably shows that students actually realized the significance of this fact as they engaged with the reality of economic activity, instead of merely reiterating what is so often used as an excuse for the lack of investment activity. The statistically non-significant rise of the perception of 'Difficulties in getting external financing' and 'Difficulties in finding customers' is expected in the context of current crisis. What could be seen as unanticipated is the small statistically non-significant rise of 'Difficulties in hiring labor', which actually shows that there may have been a realization that labor is a value-adding resource and not a cost factor, especially in genuinely entrepreneurial attempts. However, both results need to be further examined.

**Table 5. Paired Samples Statistics
Constraints for Entrepreneurship (extrinsic)**

Item	Before		After	
	M	SD	M	SD
Tough competition	2,9	1,22	2,9	1,21
Procedure of registration of the company	3,0	1,20	3,2	1,05
Bureaucracy (e.g. difficulties to obtain licenses and certificates)	3,5	1,24	3,4	1,08
Difficulties in hiring labor	2,4	1,07	2,5	1,12
Frequently changing or unclear legislation	2,8	1,14	3,2	1,05
Lack of own financial resources	3,3	1,19	3,3	1,27
Difficulties in finding customers	2,8	1,01	2,9	1,03
Difficulties in getting external financing	3,2	,99	3,4	1,07
Corruption	3,4	1,30	3,2	1,14
Crime	2,4	1,13	2,5	1,23
Greek taxation	3,5	1,05	3,4	1,15
Local infrastructure (e.g. availability of business premises)	2,9	1,16	2,9	1,10

**Table 6. Paired Samples Test
Constraints for Entrepreneurship (extrinsic)**

Item	t	df	Sig. (2-tailed)
Tough competition	,178	162	,859
Procedure of registration of the company	-1,389	166	,167
Bureaucracy (e.g. difficulties to obtain licenses and certificates)	,509	166	,611
Difficulties in hiring labor	-,832	166	,407
Frequently changing or unclear legislation	-4,039	166	,000
Lack of own financial resources	-,285	160	,776
Difficulties in finding customers	-,107	163	,915
Difficulties in getting external financing	-1,621	148	,107
Corruption	1,462	158	,146
Crime	-,993	164	,322
Greek taxation	,946	164	,346
Local infrastructure (e.g. availability of business premises)	-,234	164	,815

Finally, the paired samples T test for Factors of entrepreneurship success shows significant changes for 'Public Relations' ($t(153) = 2.70, p < .01$) before ($M=4.3, SD=.07$) and after classes ($M=4.1, SD=.97$). Significant changes also appear for 'Marketing-Promotion' ($t(153) = 2.78, p < .01$, before ($M=4.4, SD=.68$) and after ($M=4.2, SD=.68$). Finally perceptions for the role of the 'Idea' also changed before ($M=4.5, SD=.74$) and after classes ($M=4.3, SD=.80$); $t(150) = 2.73, p < .01$. We may say that the perception about the importance of isolated (commonly cited in casual discourse) factors has decreased, while other more systemic or essential factors, such as 'Financing' 'Management', 'Product', 'Research and Development', 'Team's devotion' remained as of high importance with a tendency to rise.

**Table 7. Paired Samples Statistics
Factors of entrepreneurship success**

Item	Before		After	
	M	SD	M	SD
Network/Contacts	4,3	,81	4,2	,94
Environment	3,9	,62	4,0	,72
Product	4,0	,83	4,1	,89
Management	4,3	,765	4,3	,67
Financing	3,8	,88	3,6	,79
Research and Development	3,9	,89	4,0	1,03
Public Relations	4,3	,70	4,1	,97
Management core team	3,9	,85	4,0	,98
Team's devotion	4,1	,73	4,2	1,02
Confidence, clearness and quality of corporation between team members	4,3	,77	4,3	,84
Marketing-Promotion	4,4	,68	4,2	,68
Distribution	3,9	,78	4,0	,73
Pricing	3,6	,86	3,7	,93
National funding	3,0	1,05	3,1	1,08
Experience and abilities of the team	4,2	,77	4,0	,87
Strategy	4,3	,67	4,1	,80
Idea	4,5	,74	4,3	,80

**Table 8. Paired Samples Tests
Factors of entrepreneurship success**

Item	t	df	Sig. (2-tailed)
Network/Contacts	1,356	156	,177
Environment	-,710	153	,479
Product	-,861	159	,391
Management	,332	159	,740
Financing	1,624	156	,106
Research and Development	-,151	156	,880
Public Relations	2,706	153	,008
Management core team	-,702	150	,484
Team's devotion	-1,142	153	,255
Confidence, clearness and quality of corporation between team members	,176	153	,860
Marketing-Promotion	2,776	153	,006
Distribution	-1,026	153	,307
Pricing	-,990	153	,324
National funding	-1,528	153	,129
Experience and abilities of the team	2,103	153	,037
Strategy	1,514	153	,132
Idea	2,734	150	,007

5. Discussion

The aim of this survey has been to determine the impact of the Entrepreneurship Program implemented at the University of Thessaly. Data were collected from students at the start and at the end of the two course program. The paired sampled analysis showed that there has been significant impact on specific aspects of student perceptions as recorded in the questionnaire used.

First it has been noted the change in students' perception of entrepreneurship, in terms of appreciation as well as a real and welcome option for their future. At the same time their perception of the barriers and factors for success appears to have matured in many ways. Reservations with regards to personal traits and preferences ('Unwillingness or incompetence to market one's personal skills and competence', 'Entrepreneurship does not suit my character') have receded, while students appear more alert to the demands of the real economy (e.g. 'My personal competence is difficult to commercialize').

Finally, it may be argued that there is strong evidence of maturation in students' perceptions. For example an apparent contradiction that actually is such a sign of maturity is the fact that students appear to realize that it is hard to come up with a good business idea, but still having one is not such a decisive factor for success as before attending the program. On the other hand there appears to be a rise in the perceived importance of critical factors such as 'Management core team' and 'Team's devotion', in line with real attitudes in the new entrepreneurship community.

Concluding it may be argued that the Entrepreneurship Program implemented at the University of Thessaly has made significant impact on student's attitudes, especially with respect to critical aims such as students' perception of entrepreneurship, their self-confidence to pursue it and their perception of the external environment. Furthermore, there is evidence that there is a more strategic attitude, paying more attention to team building and competences, as well to the value proposition as expressed by the product offered.

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