

# Entrepreneurship Education and Perception Change: The Preliminary Outcomes of Compulsory Entrepreneurship Course Experience in Turkey

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## ABSTRACT

The importance of entrepreneurship is increasingly emphasized worldwide especially after the decline of centrally planned economic systems. The trends toward reducing the domination of governments in the economy put the entrepreneur, the sole actor who makes the markets work by starting and growing the businesses in any scale, in the center of the economy policies. In this context, the policies toward making entrepreneurship widespread and thereby achieve the aim of economic growth and wealth have been very common in both developed and developing countries for decades with a few exceptions worldwide.

On the other hand, despite the increasing popularity of entrepreneur and entrepreneurship research, the number of entrepreneurs who undertake the risks of starting a business and grow it by innovation and thereby create new jobs is not that much in reality. It is not easy to motivate people to become entrepreneurs in the presence of different employment alternatives. So, the governments that chose free market economy system based upon entrepreneurship have been starting policies toward motivating individuals to choose entrepreneurship as a career alternative. Entrepreneurship education is one of the most common tools in this sense and has been used widely both in schools and out of school education. In this direction, programs supporting the entrepreneurs and people who have intentions to start their own businesses in Turkey is a government policy today.

Aksaray University, a state university in Turkey, started a compulsory four hour Entrepreneurship course covering all undergraduate departments in Aksaray University. The senate of Aksaray University agreed on the compulsory entrepreneurship courses, which will be effective to all departments beginning from September 2012 -only selective for the departments which have curriculums determined centrally by the Ministry of Education or Higher Education Council of Turkey- and there is also an agreement between KOSGEB (Republic of Turkey, Small and Medium Enterprises Development Organization) and Aksaray University to provide students a certificate which gives them the right to apply for certain financial incentives to start their own businesses.

The aim of this research is to find out the perception change of students towards entrepreneur and entrepreneurship. A survey was conducted among 925 students who participated in these courses and who did not in Aksaray University and the results show that the compulsory courses have positive impacts on perceptions toward Entrepreneurship, along with the intention to start their own businesses. We hope that similar studies which will focus on the context of the course, the qualifications of the lecturers, the practices of students after graduation, their innovative behaviours in their business life will contribute to the Entrepreneurship Education field.

**Keywords:** Entrepreneur, Entrepreneurship, Entrepreneurship Education, Entrepreneurship Perception

## Girişimcilik Eğitimi ve Algıda Değişim: Türkiye’de Zorunlu Girişimcilik Dersi Deneyiminin İlk Sonuçları

### ÖZ

Girişimcilik özellikle merkezi planlama sistemlerinin gerilemesinin ardından gelişmiş ve gelişmekte olan ülkelerde önemi vurgulanan bir konu haline gelmiştir. Devletin ekonomideki ağırlığının azaltılmasına dönük artan eğilimler, piyasaların işleyebilmesinin yegâne unsuru olan ve her ölçekte işletmenin kurulması, çalıştırılması ve büyütülmesi hususundaki en kritik faktör olan girişimcileri ekonomi politikalarının da merkezine yerleştirmiştir. Bu kapsamda, girişimciliğin yaygınlaştırılması ve buna bağlı olarak ekonomik büyüme ve refah hedeflerine ulaşmaya dönük politikaların gelişmiş ve gelişmekte olan ülkelerde pek az istisnaıyla yaygınlaştığı görülmektedir.

Diğer yandan, girişimcilik ve girişimcilik eğitimi alanındaki araştırmaların popülerliğine karşın, yenilikçilik yapan, iş kuran ve büyüten, böylece yeni iş imkanları yaratan girişimcilerin sayısı gerçekte pek de fazla değildir. İnsanları farklı istihdam alanları arasında girişimcilik seçeneğine yönelmek zannedildiği kadar kolay değildir. Bu sebeple girişimcilik temelli serbest piyasa sistemini benimsemiş ülke hükümet yetkilileri, bireyleri girişimciliği bir kariyer hedefi olarak tercih etme doğrultusunda motive etme hususunda çeşitli politikalar geliştirmektedirler. Bu yönde, Türkiye’de de kendi işini kurmak isteyen ve girişimciliği tercih eden bireyleri destekleyecek çok çeşitli programlar yürürlüktedir.

Bu kapsamda değerlendirilmek üzere, bir devlet üniversitesi olan Aksaray Üniversitesi de, tüm Lisans düzeyindeki eğitim programlarına dört saatlik zorunlu girişimcilik dersi koymuştur. Aksaray Üniversitesi 2012 yılı Eylül ayından geçerli olmak üzere –

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Makalenin Gönderim Tarihi: 28.06.2015; Makalenin Kabul Tarihi: 13.08.2015

sadece Milli Eğitim Bakanlığı ve Yükseköğretim Kurulu Başkanlığınca müfredatı belirlenen okullarda seçmeli olmak üzere- tüm lisans bölümlerine zorunlu girişimcilik dersi koymuş, konuya ilişkin olarak KOSGEB ile de Aksaray Üniversitesi mezunlarına kendi işlerini kurma amaçlı finansal imkanlara başvuru hakkı veren bir sertifika sağlanması yönünde anlaşmaya varılmıştır.

Mevcut çalışmanın amacı söz konusu ders sonucunda, derse katılan öğrencilerde girişimcilik ve girişimciye yönelik bir algı değişiminin olup olmadığının anlaşılmasıdır. Dersi alan ve almayan 925 öğrenci ile yapılan araştırmanın sonuçları, zorunlu derslerin girişimcilik algısı kadar iş kurma niyetleri üzerinde de olumlu etki yaptığını göstermektedir. Zaman içinde benzer konudaki araştırmaların dersin içeriği, dersi veren öğretim elemanlarının beceri ve nitelikleri, öğrencilerin mezun olduktan sonraki uygulamaları, çalışmaya başladıktan sonra iş hayatındaki yenilikçi davranışlarına etkisi gibi konularda çeşitlendirilmesi, böylece araştırmaların Girişimcilik Eğitimi alanına katkı sağlayacağı düşünülmektedir.

**Anahtar kelimeler:** Girişimci, Girişimcilik, Girişimcilik Eğitimi, Girişimcilik Algısı

## 1. Introduction

The importance of entrepreneurship is increasingly emphasized worldwide especially after the decline of centrally planned economic systems. The trends toward reducing the domination of governments in the economy put the entrepreneur, the sole actor who makes the markets work by starting and growing the businesses in any scale, in the center of the economy policies. The word entrepreneur appeared in the works of early economists along with the industrial age. Although there are many definitions for entrepreneur, may be the most comprehensive and simplest one is “*entrepreneur means acting man in regard to the changes occurring in the data of the market*” (Mises, (1949) 1996; 254). The actions of the entrepreneur as an individual make the markets work and “*without entrepreneurship, a complex, dynamic economy cannot allocate resources to their highest value use*” (Klein, 2008; 173). The entrepreneur, in this process, puts new goods and services to the market; sometimes they shape the markets with new organization and production methods. Namely, they seek, find and use new knowledge to satisfy customers and accelerate the economic growth in this manner (Johansson, 2004; 517).

In fact, despite the recent emphasis on the importance of entrepreneurship for growth, the positive impacts of entrepreneurship on employment and growth is a well-known fact since the ancient ages (Bitros & Karayiannis, 2008; Bitros & Karayiannis 2004). A wide variety of research –while pointing out some controversial facts- show the positive relationship among entrepreneurship, growth and employment (e.g., Doepke&Zilibotti, 2013; Acs, 2006; Buttrick & Moran 2005: 364; Thurik, 2003; Wennekers & Thurik,1999).

Despite the increasing popularity of entrepreneur and entrepreneurship research, the number of entrepreneurs who undertake the risks of starting a business and grow it by innovation and thereby create new jobs is not that much in reality. It is not easy to motivate people to become entrepreneurs in the presence of different employment alternatives. So, the governments that chose free market economy system based upon entrepreneurship have been starting policies toward motivating individuals to choose entrepreneurship as a career alternative. Entrepreneurship education is one of the most common tools in this sense and has been used widely both in schools and out of school education.

The senate of a state university in Turkey, Aksaray University, agreed on the compulsory entrepreneurship courses, which will be effective to all departments beginning from September 2012 (only selective for the departments which have curriculums determined centrally by the Ministry of Education or Higher Education Council of Turkey). There is also an agreement between KOSGEB (The government institution for small and medium sized enterprises in Turkey) and Aksaray University to provide students a certificate which gives them the right to apply for certain financial incentives to start their own businesses. So, our study is about the early outcomes of this project. Along with the efforts to direct students toward entrepreneurship for their careers, another aim of these courses is to have an effect upon the perceptions of the students toward entrepreneur and entrepreneurship positively. In this context, the aim of our study is to understand the perception change, if exists, after the first term of the lessons.

## 2. Entrepreneurship Education around the World and Turkey

Entrepreneurship is a mature field today (Katz, 2008; 562) which is developing with its various subdisciplines and Entrepreneurship Education is the one which has been on the radar of researchers in the area of Entrepreneurship for a while. A quite old literature review by Gorman et al. (1997) and some

recent works (e.g. Maritz & Brown, 2013) refer to the proliferation of research in the field of Entrepreneurship Education. From a different viewpoint, Fiet (2000) points out the fact that while in 1971 there were only 16 schools offering entrepreneurship education, this number has increased permanently in consequence of the demand of people who want to start and run their own businesses. Despite the ongoing debates on the issue whether the entrepreneurship can be taught or whether the subject taught is entrepreneurship or small business management (Klein & Bullock, 2006; 430), today more or less it is commonly held that education is essential for entrepreneurship (e.g., Colette et al., 2005; Klein & Bullock, 2006; Klinger & Schündeln, 2007; Vanevenhoven, 2013). As a matter of fact, Kuratko (2005; 591) sees the entrepreneurship education as a critical field that business schools have to head for in the 21<sup>st</sup> century.

Charney & Libecap (2000) compared a group of business school graduates who completed an Entrepreneurship Program to other same business school graduates who were not involved in this program and show that entrepreneurship education enables those students involved in the program have various advantages in business life. In fact, entrepreneurship education is taken into account in the economic and social policies of countries not only at the undergraduate level but also at high schools (Fitzgerald, 1999), or MBA (Rae et al., 2012; 642-43) and PhD (Brush et al., 2003) levels as well. Again, although mostly we see entrepreneurship classes in business schools, entrepreneurship education is also necessary for other departments, as is noted by Colette and Treanor (2012; 495), for example at veterinary schools along with courses like financial management, entrepreneurship lessons are crucial for students to focus on creativity, innovation and business in general. At this stage, apart from the debates, we can accept that entrepreneurship education is a fact and a standart part of most undergraduate education around the world and also is very common for individuals who want to choose self employment for various reasons.

Associated with the growing interest in the field, entrepreneurship education is tackled from different perspectives in the related literature. While Husain et al. (2010; 653-654) assert that entrepreneurship may have a positive impact on growth of minority owned firms, Petridou et al. (2009) who studied entrepreneurship education from gender point of view show that females are more concerned and eager than males in sense of knowledge acquisition, skills development and career competition. Interestingly, a survey conducted in Finland where entrepreneurship is a national policy as in the other EU countries, indicates that selected essays of high school students on entrepreneurship demonstrate an analogy between entrepreneurship and nationalism (Korhonen et al, 2011; 60). Besides, it is mentioned that entrepreneurship education should be designed by taking the features of non-profit organizations into consideration (McCrea, 2010). So, we can assert that entrepreneurship education will stand for research from various aspects in the near future.

*Entrepreneurship Education around the World:* Academic works on entrepreneurship education, case studies and success and failure stories gradually increased along with the emphasis on entrepreneurship heavily in development policies all around the world. Some examples of entrepreneurship education research specific to countries and regions are; Italy (Iacobucci & Micozzi, 2012), Greece (Piperopoulos, 2012), the Balkans (Harmeling & Sarasvathy, 2011) Nordik countries (Chiu, 2012) Finland (Korhonen et al. 2011) Turkey (Gürol & Atsan, 2006; Aşkun & Yıldırım, 2011), United Kingdom (Smith et al., 2006; McKeown et al., 2006; Matlay, 2006), Canada (Ibrahim, 2002), Australia (along with management education) (Hall et al., 2013), Egypt (Kirby & Ibrahim, 2011), Malaysia (Othman et al., 2012), Iran (Farashah, 2013).

The country comparisons are generally made by USA in which entrepreneurship has deep standing roots and long-standing tradition. For example, Wilson (2008; 11-12) compared entrepreneurship education in USA and Europe and find out that despite the numerous entrepreneurship education institutions funded by entrepreneurs who have graduated from these programs in USA, the European education programs which are mostly carried out by universities and funded by governments. As a consequence, the problem with entrepreneurship education in Europe is mainly about sustainability. In the case of entrepreneurship education in Great Britain, Matlay (2006; 712-13) points out the importance of the harmony between public policies and the expectations about the outcomes of entrepreneurship actions.

Likewise, Lütjhe et al. (2002; 9) quotes that universities in the USA are more efficient than in Germany with regard to entrepreneurship education. Iacobucci and Micozzi (2012) state the backward situation of entrepreneurship education (which are mostly concentrated in business departments other than science and engineering faculties) in Italy compared to the USA and other European countries. Carayannis et al (2003) also points out the unfavorable attitude towards entrepreneurship in France in their research comparing the students in the USA and France. In this context, a European Commission report in 2008 suggests interdisciplinary programs taking the different needs of students from varied fields into consideration and entrepreneurship programs should not be special only to business schools. In this report, the lack of expertise and experienced educators were emphasized as well (Final Report, 2008; 7).

On the other hand, a study comparing the USA and Korea points that the entrepreneurship education is more effective in Korea. The writers interpret this as a result of Korea's poor entrepreneurial culture which has not an entrepreneurial focus in the past. Namely, such education programs are supposed to be more effective in countries like Korea than countries which are entrepreneurship oriented and have long-established entrepreneurial cultures (Lee, Chang, 2005; 41). Othman et al. (2012) emphasized that the students in Malaysia have the desire and capability in terms of entrepreneurship, but the education in state universities is insufficient and is needed to be improved. Owualah (1999) remarks the fact of reducing unemployment by promoting entrepreneurship and Piperopoulos (2012; 478) points to the lack of entrepreneurial mentality of faculty members along with the general unfavorable public opinion toward entrepreneurship in Greece.

*Entrepreneurship Education in Turkey:* We can assume that the current situation in Turkey is more or less similar to the Europe in general and to the countries which have low profile entrepreneurial features. In their paper on entrepreneurship education in Turkey, Gürol and Atsan (2006; 34-35) note that there is no significant difference between students who have a tendency toward entrepreneurship and not in the sense of avoiding uncertainty and this fact is interpreted depending on the economic environment of Turkey at that time. According to this survey, the number of students planning to be an entrepreneur is low (p. 34) and it is suggested that entrepreneurship lessons should become widespread in universities provided that the courses must be more practice oriented. Aşkun & Yıldırım (2011; 674) also indicate the lack of entrepreneurship syllabuses in terms of elucidating and improving the entrepreneurial skills of students in Turkish universities. Bozkurt et al. (2013; 22) remark the competence of the educators and suggest that the theoretic and in-class training should be revised through the needs of the students. On the other hand, Halaç & Bulut (2012; 17) state the fact that the agreement of Turkish Higher Education Council and KOSGEB to make entrepreneurship education widespread at undergraduate level is promising in Turkey. We can assert that Aksaray University, which is the subject of this research, is among the pioneers of this project. By the growing number of such cases in Turkey, we hope that further and more comprehensive research will be a matter of interest and the entrepreneurship education will come up to a more efficient level both in sense of course context and of the qualifications of the educators.

### 3. Entrepreneurship Perception and Entrepreneurship Education

Perception toward entrepreneurship and entrepreneurs has been mentioned in various studies. For example, students perceive entrepreneurship as self employment, earning more money by risk taking and status (Ali et al., 2011), produce new things, manage social, psychological and financial risks, have leadership and managerial skills, have the enthusiasm to start a new business and ability to reach the requires assets (Oriarewo et al., 2013) and perceive entrepreneur as the dynamic individual who has the skills of organization, finance and management, is innovative, eager to take risks, has a vision and creativity for business and investments, contributes to the national economy, makes use of money, has positive communication skills with employees, is honest and well behaved, has a notion of social justice (Veciana et al., 2005).

In various researches, the positive impact of entrepreneurship education on the achievements of entrepreneurs (Matlay, 2008; 393), on their managerial knowledge and entrepreneurship skills after starting their own businesses (Hong et al. 2012; 1912-13), achievement motives (Hansemark 1998; 42-43) and proactivity, risk taking and self ownership (Sánchez, 2013; 456). In his recent work, Farashah (2013; 881)

obtained some evidences toward positive effects of entrepreneurship education on various entrepreneurial perceptions in Iran including that the education reduces the fear of failure, increases the perception toward the opportunities in the environment, and eases the entrepreneurship by providing required self-efficacy sense to start a new business.

After all, in the March 2012 report of European Commission, the transformational impact of entrepreneurship education on the minds of youth is stated as follows: “*Entrepreneurship education has a positive impact on the entrepreneurial mindset of young people, their intentions towards entrepreneurship, their employability and finally on their role in society and the economy. These are the major results of this study among alumni of higher education institutions in Europe.*” (Report-Entrepreneurship, 2012; 82). Also Peterman & Kennedy (2003; 141) report the positive impact of entrepreneurship education on the perception of entrepreneurship.

Similar connections are shown at various Turkish universities. For example İbicioğlu et al. (2010, p. 70) finds out business students who take entrepreneurship classes have more entrepreneurial tendencies than students of Letter and Science Faculty who don't take such classes. Patr & Karahan (2010; 37) have findings that entrepreneurship education increases the entrepreneurship skills marks and Balaban and Özdemir (2008; 147) reports the fact that entrepreneurship education makes the students discover their potentials and improve their skills.

#### *Hypothesis*

According to the findings in the recent literature on the impact of entrepreneurship education on perception change, the hypotheses of this study are set as follows:

*Hypothesis 1: Participation in the compulsory entrepreneurship course has a positive effect on the perceptions of students towards the Entrepreneurship*

*Hypothesis 2: Participation in the compulsory entrepreneurship course has a positive effect on intention to start a business.*

## **4. Method**

### **4.1. Research Design and Sampling:**

Entrepreneurship education became effective to all departments beginning from September 2012 (only selective for the departments which have curriculums determined centrally by the Ministry of Education or Higher Education Council of Turkey) in Aksaray University regarding to the agreement between KOSGEB (The government institution for small and medium sized enterprises in Turkey) and Aksaray University to provide students a certificate which gives them the right to apply for certain financial incentives to start their own businesses. So, we decided to see the preliminary outcomes of this compulsory course on students concerning their perceptions toward entrepreneurship and the entrepreneur in general. A survey was conducted on students who participated in courses after the first semester at once, and then at the beginning of the next semester, another group of students who did not take the class were asked to fill in the same questionnaire to compare the show the difference between these two groups.

The sample for students who participated in classes is 425 (61.2 % of total number 694) and the sample for the students who newly start the entrepreneurship lesson is 495 (52.1 % of total number 950). Total sample consists of 920 students, all faculties (excluding Faculty of Education) and vocational schools are involved in the research. The questionnaires were conducted by the lecturers of the classes.

### **4.2. Research Instruments and Procedures**

The questionnaire was based upon the similar survey of Curry (2012; 110) which includes various dimensions of perception of entrepreneurship of which the cronbach's alpha scores of the dimensions range through 0.624 - 0.781 for five scales (Curry, 2012; 35). We used items about entrepreneurship perception in our analysis with regard to the aim of the research. Along with the scale, we asked questions aimed at the get the intentions of the students about becoming and entrepreneur. We used a 5 Level Likert scale in which higher scores refer to an agreement, and valued as 1: Strongly Disagree, 2: Disagree, 3: Neutral, 4: Agree and 5: Strongly Agree. The items were translated into Turkish by the writers with some minor revisions.

There were 19 items to measure the perceptions toward entrepreneur and entrepreneurship, as seen in the Table 2, after the factor analysis we got four dimensions consisting of 13 items, six items for the first dimension, the “entrepreneur perception” (cronbach’s alpha 0.785), and the rest of three dimensions, entrepreneurship as innovation (cronbach’s alpha 0.667), entrepreneurship as quality of life (cronbach’s alpha 0.739) and entrepreneurship as business ownership (cronbach’s alpha 0.701).

**Table 1:** Factor analysis and reliability of scales

Dimensions	Factor Loadings			
	1	2	3	4
<b>Perception of Entrepreneur</b>				
Entrepreneur usually wants to try and learn new things	,716			
Entrepreneur has a strong desire of achievement	,696			
Entrepreneur differs in risk taking from other people	,681			
Entrepreneur has the freedom to accept or reject the interventions about the actions to be held	,652			
Entrepreneur usually makes difference in the world	,647			
Entrepreneur has special features differentiate him from rest of the people	,602			
<b>Perception of Entrepreneurship as Innovation</b>				
Entrepreneurship involves awakening to new products, services or opportunities		,807		
Entrepreneurship is about creating new things and understanding opportunities regarding this process		,775		
Entrepreneurship is about individual features such as creativity, innovation and imagination about business		,615		
<b>Perception of Entrepreneurship as Quality of Life</b>				
Entrepreneurship is a process that improves life quality of the individuals			,850	
Entrepreneurship is a process that enhances the life standards of individuals			,833	
<b>Perception of Entrepreneurship as Business Ownership</b>				
Entrepreneurship means to own a business				,865
Entrepreneurship is about managing a business				,857
<b>Cronbach’s Alpha Scores of the Dimensions</b>	,785	,667	,739	,701
<b>Initial Eigen Values</b>	4,32	1,50	1,13	1,04
<b>Variances Explained %</b>	22,53	14,20	12,30	12,21
<b>Total Variance Explained %</b>	61,240			
<b>Approx. Chi-Square</b>	3034,754 (sig. ,000)			
<b>K-M-O</b>	,847			
<b>Cronbach’s Alpha Score of the Overall Scale</b>	,813			

The four dimensions of Entrepreneurship explain the 61.24 percent of total variances; while the scale as a whole has a cronbach’s alpha score 0.813 and K-M-O score 0.847, which are acceptable values as reliability and validity.

*Data Analysis*

The demographic data is given in Table 2. 43,8 percent of the students are female and 56,2 of them are male. Most of the students who took the entrepreneurship course are senior class vocational school students (N=189, 44,5 percent), while the sample of students who did not attend the course consists students mostly from the faculty of engineering (N=184, 37,2 percent). Since the lesson is taken mostly in the senior year (for some schools in the 3<sup>rd</sup> class), most of the students (88,4 percent) are at second (senior year for vocational schools) and fourth years. Only 11,6 percent of the students attended the course are at the third class. 31,2 percent of the students (N=277) say that they have relatives who are engaged in entrepreneurial activities, and most of the students point out the reality that they get an idea about entrepreneurship in the university (N=490, 56,5 percent). While 81.6 percent of the students have the desire to be their own bosses, while 81,4 percent wants to start their own business after school.

**Table 2:** Socio demographic data of students who were involved in the research regarding to their entrepreneurship course participation

Faculty/School	Yes	No	Total	%
Faculty of Economics & Administrative Sciences	91	78	169	18,4
Faculty of Engineering	41	184	225	24,5
Faculty of Letter & Sciences	77	63	140	15,2
Vocational Schools (Two year)	189	117	306	33,3
College of Health Institutions Management	27	53	80	8,7
	<b>425</b>	<b>495</b>	<b>920</b>	<b>100</b>
<b>Gender</b>				
Female	185	218	403	43,8
Male	240	277	517	56,2
	<b>425</b>	<b>495</b>	<b>920</b>	<b>100</b>
<b>Class</b>				
2nd	159	116	275	29,9
3rd	53	54	107	11,6
4th	213	325	538	58,5
	<b>425</b>	<b>495</b>	<b>920</b>	<b>100</b>
<b>Are there Entrepreneurs in the family</b>				
Yes	132	145	277	30,2
No	293	348	641	69,8
	<b>425</b>	<b>493</b>	<b>918</b>	<b>100</b>
<b>Wants to start his own business after school</b>				
Yes	359	387	746	81,4
No	65	105	170	18,6
	<b>424</b>	<b>492</b>	<b>916</b>	<b>100</b>
<b>First realized the entrepreneurship notion in</b>				
The Family	33	53	86	9,9
The Primary School	29	25	54	6,2
The High School	101	136	237	27,3
The University	237	253	490	56,5
	<b>400</b>	<b>467</b>	<b>867</b>	<b>100</b>
<b>Have the desire of being his/her own boss</b>				
Yes	353	396	749	81,6
No	71	98	169	18,4
	<b>424</b>	<b>494</b>	<b>918</b>	<b>100</b>

The t-test results regarding to the entrepreneur and entrepreneurship perceptions of students participated in Entrepreneurship courses along with arithmetic mean and standard deviation are provided in Table 3. The entrepreneur perceptions of students who attended the classes and who did not are both high, but the arithmetic means of students who participated in the classes ( $M=4.11$ ) are significantly higher than the students who did not take these classes ( $M=4,01$ ). The same is true for entrepreneurship as innovation and entrepreneurship as business ownership. The perception of entrepreneurship in sense of quality of life does not differ between these two groups of students.

**Table 3:** Entrepreneurship perception levels of students participated in entrepreneurship courses

Dimensions	Groups	N	M	SD	t	P
-Perception of the Entrepreneur	Attendent	423	4,11	,632	2,462	,014*
	Not attendent	495	4,01	,640		
-Entrepreneurship as Innovation	Attendent	425	4,38	,665	4,164	,001**
	Not attendent	493	4,20	,651		
-Entrepreneurship as quality of life	Attendent	424	3,98	,926	-1,327	,185
	Not attendent	494	4,06	,782		
-Entrepreneurship as business ownership	Attendent	415	3,73	1,103	3,114	,002**
	Not attendent	469	3,51	1,007		
Entrepreneurship Perception as a whole	Attendent	425	4,03	,582	2,629	,009**
	Not attendent	495	3,93	,555		

\* $p<0.05$ , \*\*  $p<0.01$

We can briefly assert that the entrepreneurship lesson made a significant impact on the students' perceptions of entrepreneurship as a whole ( $t=2,629$ ,  $p<0.01$ ) and of entrepreneur in particular ( $t=2,462$ ,  $p<0.05$ ). In case of the other three subdimensions regarding to entrepreneurship; according to the data, entrepreneurship education has positive effects on the perception of entrepreneurship as innovation ( $t=4,164$ ,  $p<0.01$ ), perception of entrepreneurship as business ownership ( $t=3,114$ ,  $p<0,01$ ) but has no significant effect on perception of entrepreneurship as quality of life ( $t=-1,327$ ,  $p>0,05$ ). Although the difference is not significant, we can conclude that entrepreneurship education reduces the perception of students about the entrepreneurship as quality of life.

So our hypothesis, *Participation in the compulsory entrepreneurship course has a positive effect on the perceptions of students towards the Entrepreneurship*, will be accepted depending on the above data.

The second hypothesis was about the impact of entrepreneurship education on the intent of students to start their own businesses. To test this hypothesis, we conducted a chi square test and the result is provided in Table 4.

**Table 4:** Participation in the entrepreneurship course and the intention to start their own businesses after school

Do you want to start your own business after school	Entrepreneurship Course		Total	Pearson Chi-Square	P
	Attendant	Non Attendant			
Yes	359 (%84,7)	387 (%78,6)	746	5,445	,020
No	65 (%15,3)	105 (%21,4)	170		
Total	424 (%100)	492 (%100)	916		

According to the Table 4, we can assert that entrepreneurship course has -even a little- an effect on the intention of students to start their own businesses. In this context, the second hypothesis will be accepted. We have to note the fact that since we did not ask the choices of the students towards their career in the future, we cannot conclude that most of the students want to be an entrepreneur after school compared to be a public official or work as an employee in private sector. Since some works (e.g Gürol and Atsan, 2006; 34-35) have contradictory conclusions –which seem more realistic- showing low level of entrepreneurship desire of students in Turkey, so our findings may indicate simply the effect of entrepreneurship course on the desire to be an entrepreneur.

## 5. Discussion and Conclusion

The trend toward introducing entrepreneurship courses not only for business and economics departments but for the rest of the students is compatible with the public policies of many countries that devoted to adopting market economy and hence economic growth. The initiative of Higher Education Council of Turkey and KOSGEB (The government institution for small and medium sized enterprises in Turkey) in this direction can be addressed within the mentioned context. As many research figured out, entrepreneurship is not a popular career choice among university students in Turkey, since the government institutions offer lifetime employment opportunity along with a reasonable pay for most of the graduates. Besides, the historical tradition of Turkey is not so entrepreneur friendly in most cases (e.g, Thornburg, 1950; 44-45; Sabahattin, 2002; 29-47; Mithat, 1997; 196-198) and therefore the unfavorable perception toward the entrepreneur and entrepreneurship is prevalent throughout the country. So, along with transferring required information on starting their own businesses, innovation, risk taking and opportunity seeking through entrepreneurship education, another aim of these courses should be a positive change in the mentality of students towards entrepreneurship.

Aksaray University, in which the survey was conducted, introduced four hour compulsory entrepreneurship courses throughout the university both for vocational schools and faculties in 2012. The students who yet completed the course in 2013 and who newly started the courses were compared for their perceptions toward entrepreneurship and intentions toward starting their own businesses after school, our findings figure out the positive change for these criteria. These results are compatible with the findings of Farashah (2013), Matlay (2008), Hong vd. (2012), Hansemark, (1998), Sánchez (2013; 456)



Peterman ve Kennedy (2003) who dealt with the subject somewhat accordingly and with the findings of studies in turkey such as Balaban & Özdemir (2008), Patır & Karahan (2010) as well.

There are parallel studies in progress examining the case of compulsory Entrepreneurship lesson in Aksaray University for example, by taking the impacts of the lessons on different departments into account and conducting pretest and posttest surveys on the students attending to these courses. By the time of progress, we hope that similar studies which will focus on the context of the course, the qualifications of the lecturers, the practices of students after graduation, their innovative behaviours in their business life will contribute to the Entrepreneurship Education field.

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