



Determination of the Sense of Entrepreneurship for Students in Terms of Entrepreneurship Education: Example of Kafkas University

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Authors' contributions

This work was carried out in collaboration between all authors. Author ACG designed the study, wrote the protocol and supervised the work. Authors ACG, CYK and EK carried out all laboratories work and performed the statistical analysis. Authors ACG and EK managed the analyses of the study. Authors ACG and CYK wrote the first draft of the manuscript. Authors ACG and EK managed the literature searches and edited the manuscript. All authors read and approved the final manuscript.

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Case Study

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ABSTRACT

This study aims to determine the sense of entrepreneurship for students in terms of entrepreneurship education. For this purpose, a study has been carried out on the 4th year students who received the entrepreneurship education and 1st year students who have just started to receive this education of Kafkas University, Faculty of Economics and Administrative Sciences. The survey method is employed in collecting data to be used in the study. Questionnaires including the required explanation were distributed to students and the obtained data were analyzed using independent sample t test, one-way analysis of variance and regression methods. Findings revealed differences in terms of some variables such as age groups, occupation sector of father and being a year 1 or 4 student. Furthermore, sense of internal control, desire of freedom and tendency to risk taking were determined to have an effect on the entrepreneurship potential.

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1. INTRODUCTION

Having been defined in different ways and by different disciplines since the Middle Age, the entrepreneurship, is the basis of settlement for underdeveloped economies, of the development for emerging economies, of the creation of welfare and richness in advanced economies. In this context, the entrepreneurship is an important issue in developed or undeveloped societies.

Entrepreneurship is an activity starting with the opportunity recognition and revealing innovative approaches. It includes the elements such as setting up and developing a new business, seeking an opportunity, creating an opportunity, being creative, making innovation, creating value [1]. It may be expressed as a process which includes creating values contributing to the society and the market through means such as change, transformation, the discovery of innovative approaches, planning of activities, organizing the individuals and groups, new products, services, approaches, operations, technologies and so on [2]. This is a process adding dynamism to the economy, contributing to the efficient use of resources, creation of employment and discovery of innovations as a result of innovative ideas.

Since the importance of entrepreneurship activities is understood better each passing day, the number of individuals involved in this activity is attempted to be increased through support and encouragement in various ways. Entrepreneur is defined as the person or legal entity expressed by the words businessman, the one who knows the way, skillful and venturesome, invested his own capital or the capital which he obtains from other individuals/institutions in the production factors, wishing to make profit as well as running the risk of making profit [3]. Entrepreneur defined by different disciplines is the individual "who senses the opportunities and creates an organization to pursue the opportunities" [1]. For an economist, it is possible to define the entrepreneur as an individual putting the resources, workforce, and materials together to create a value higher than their previous values as well as revealing the change, innovation and a new order approach. For a psychologist, the entrepreneur is an individual who has the need and desire to obtain and reach something, to gain experience, to be successful and to avoid the potential authority of others and to have the

authority and who takes the action with these kinds of motives. For a businessman, the entrepreneur may mean a treat risk, a challenging competitor as well as it may be defined as a customer, a collaborator and an individual who works for the welfare and happiness of customers [4].

Desire of entrepreneurship is widespread in lots of countries across the world. Vast majority of people state that they prefer to have an employer or to have their own businesses. More than half of the people in most countries state that they wish to set up their own businesses. Although many people have the entrepreneurial desire, they cannot generally start an entrepreneurial activity due to the lack of entrepreneurial skill, knowledge to recognize opportunity and people, social and financial capitals. These potential entrepreneurs may come short of the skill to define the market, the required financial capital, efficient marketing, compliance with the laws, knowledge of tax law as well as starting a successful business entrepreneurship and their activities [5]. Entrepreneurship education has a big role in the elimination of these deficiencies, developing and increasing the number of intents, senses of entrepreneurship of individuals. Therefore, entrepreneurship education becomes widespread.

This study covers "internal control focus", "sense of tendency to risk-taking", "desire of freedom" and "need for success" as senses of entrepreneurship and investigates the effect of entrepreneurship education on the sense of entrepreneurship.

2. ENTREPRENEURSHIP EDUCATION

Entrepreneurship education has been historically discussed within the framework of various studies covering social sciences, administrative studies, and recently of traits approach, process approach [6], started to find approval and draw interest in higher education institutions [7].

Entrepreneurship education is defined in the broad and strict sense. Entrepreneurship education is considered as the total of formal educations covering opportunity recognition, putting the resources together in a risky environment, attempting a business or setting up a business or informing any individual interested in developing a small business, raising and

developing. In the broad sense, the entrepreneurship education includes the appearance of not only the ownership of entrepreneurship and an entrepreneurial person likely to become self-employed but also a person pursuing innovative and entrepreneurial opportunities or exhibiting entrepreneurial behaviors [8].

Universities generally produce new ideas to create knowledge as a result of study carried out by them and to contribute to the innovation by means of developing the technology. In addition, nowadays, missions of universities go beyond their traditional roles. Entrepreneurship education and innovation should be regarded as the basic step in higher education [9]. It is widely accepted that entrepreneurship process enabling self-employment may be taught [4] and as a result, entrepreneurship education becomes widespread increasingly.

Entrepreneurship education is the process of recognition of commercial opportunities for individual and transferring self-confidence, knowledge and the skill into their activities. Opportunity recognition covers the activities of commercialization of an idea, putting the resources together under risk and starting a new entrepreneurship. Entrepreneurship education should be considered as a formal program mapped out by higher education institutions [10].

3. IMPORTANCE OF ENTREPRENEURSHIP EDUCATION

Necessary training programs should be brought forward to provide the students with the entrepreneurial behavior characterized by the opportunity-seeking behavior resulting from their social and economic roles, determination to make an idea reality and ability to take steps to achieve success of entrepreneurs [10]. In recent years, there has been a big increase in entrepreneurship education and instruction programs across the world. Objective of these programs is to increase the number and improve the quality of businesses [11]. Since the entrepreneurship eliminates the unemployment problem of the graduates, it is essential to look for ways to create new entrepreneurs after even before the graduation. In other words it is necessary to raise more entrepreneurs of university graduate. To do this, higher education in general and private entrepreneurship education may help to develop entrepreneurial activities among the students [10].

Entrepreneurship is commonly seen as an important power for the students without ignoring their traits [8]. Various studies have shown that entrepreneurship education in universities might have a positive effect on the applicability of a new attempt or an activity that have already started, [12] and the entrepreneurial behavior [10], and might contribute to the development of entrepreneurial intent [8].

Entrepreneurship education may strengthen entrepreneurial self-competence in various ways. Firstly, entrepreneurship education gives someone an opportunity to develop a trust in the ability to achieve a task and to perform a task continuously. Secondly, entrepreneurship education ensures that entrepreneurs become the role models thanks to their experience. Thirdly, entrepreneurship education provides a social trust through the feedback from others [13]. Thus, it encourages people to be involved in entrepreneurship.

Entrepreneurship is one of the most important factors effecting the economic dynamics [14] and an alternative to eliminate the unemployment, a way to get rid of poverty [14]. Entrepreneurship is regarded as the basic skill for growth, employment and personal success [9]. So, delivered trainings in this regard is important. The importance of entrepreneurship education have increased due to the need to prepare the students to be successful in the field of work and life [8].

4. SENSES OF ENTREPRENEURSHIP

An entrepreneurial carrier includes the process to discover self-management through uncertain career paths and changing business environment. Entrepreneurial activity depends upon the individual activity, since its realization and development is linked to the ability to recognize the opportunities and to pursue the opportunities [15].

It is assumed that, adaptation of economic systems to changing conditions, new products and services, creation of employment and economic growth are linked to individuals willing and ready to set up their own businesses independently, their traits and efforts toward being successful [16]. Studies on entrepreneurship have historically been centered upon individual or group and this has remained the same, their nature have recently changed towards focusing on entrepreneurial process though [17].

For a long time, studies on the personal characteristics of the entrepreneurs have been carried out [18] and the emphasis has been laid on personality traits, creativity, new attempts, opportunity seeking, internal control focus and resolution [19], risk-taking, innovation, entrepreneurial ability, desire of freedom, being self-employed which are linked with the entrepreneurial success [5]. These traits are the personality traits highlighted by the "individual factors", among the factors determinative of being an entrepreneur individual. These traits are the traits which makes the entrepreneur individual an opposed person, drives him to be involved in writing a success story and lets him be an entrepreneur. "Internal control focus" which we express as the sense of entrepreneurship, "sense of tendency to risk-taking", "desire of freedom", "need for success" are also included among the said traits.

4.1 Sense of Internal Control

Focus of control is one of the key elements of personality [20]. Focus of control expresses the generalized expectation that life events and rewards are formed by person's own activities or external powers [21]. It accounts for individual differences to perceive the state between the activities of individuals and the consequences of the resulting events [22]. In other words, focus of control expresses the perception of the primary source of the life events of an individual [23]. This trait may vary between the two poles relating to the general expectations of the individual with the positive and negative behavioral results [24]. Thus, individuals have internal and external control focuses.

To have a further internal control focus expresses the trust in the own ability towards controlling the own destiny in contrast to being directed by the destiny or other factors [25]. Individuals with the internal control focus believe that life events depend upon their personal skills and efforts and that they can control the results of the events [26]. They believe that their performances and the results relating to the future are determined by their own activities instead of external factors [27].

Individuals with an internal control focus believe that they can affect their life events [28], while the individuals with an external control focus believe that events and their results are determined by external factors such as luck, destiny or uncontrolled powers [29]. Individuals

with an external control focus believe that the events occur out of their control. This belief is effective in the appearance of the entrepreneurship activities [30].

Some studies have revealed that entrepreneurs mostly had the internal control focus [31]. Since the individuals with an internal control focus believe that the results of an event come into existence depending upon their own behaviors and activities, individuals with this belief are more curious about learning something and they tend to be more active in looking for information [32]. It might be said that the individuals with a high internal control focus might be further entrepreneurs [33] than the individuals with an external control focus and they are involved in further successful activities since they have a more powerful success orientation.

4.2 Sense of Tendency to Risk-Taking

Entrepreneurship has historically been associated with risk-bearing. Risk-taking behavior is commonly believed to effect the selection of an entrepreneurial activity [34] and most of the studies on personality traits are associated with risk-taking [35].

Statutes such as likelihood of failure of plans, risk of wrong decision making, making loss or failure to make profit are expressed as risks [36]. Risk is the probability of loss that may arise out of businesses' behaviors of using opportunities to provide a sustainable competitive advantage and to earn income at a desirable level.

Recently, most of the definitions of entrepreneur are represented with the concept of risk-taking. Financial, sociological, psychological risks are the parts of the entrepreneurial process [37]. Knight (1921) lays emphasis on the risk for the entrepreneurial decision in his study. Entrepreneurship inherently contains risk and the ability to take further risks contribute individuals to be further entrepreneurs [38].

Individuals with a high tendency to risk-taking have an innovative sense of freedom to gain further favor from entrepreneurship education and services [39]. These individuals try to be successful by taking measurable and manageable risks.

4.3 Desire of Freedom

It is agreed upon by many researchers that individual's ability to shape the future is an

important entrepreneurship trait. Entrepreneur is the person who thinks that "individual course of action" is the key element leading him to success or downfall. The person obtains this qualification as the result of belief that power to shape his future and to control the future is mainly in his own power [16].

Freedom expresses the ability to realize own potential, to assign and control own limits and targets [10]. Need for freedom is a trait closely associated with the sense of control. Entrepreneur individual is the one with a personality trait which involves carrying out the tasks using his own method and it is difficult for him to work with someone else [19]. An individual taking action with the sense of being free is involved in the entrepreneurship activity to realize his opinions of avoiding the autonomy of others, having autonomy, giving orders, acting independently.

4.4 Need for Success

McClelland (1961) states that need for success guided the human behaviors at the beginning and organized the human behaviors for a long time. It was found from the studies that need for success is one of the major elements with regards to the entrepreneurship. Need for success is stated to be one of the major drives for the individuals to be involved in an entrepreneurial behavior [1].

Need for success is defined as the foundation for the encouraging tendency in the struggle to be successful [27]. It means to overcome obstacles, to accomplish a difficult task, to do something which needs to be done faster or better [3]. Need for success, is the longing for achieving a difficult task and self-induced further desire to struggle for achieving perfection or competitiveness with others [28]. It was conceptualized by personality situations forcing individuals to develop positive emotions when an employee started to work in a difficult job [28], be successful which facilitates learning and supports individuals in their activities and to reveal internalized excellent standards [30].

Target of success of the individuals have overall and significant effects on their behaviors and minds, as a result activation and success take place [9]. Skill and need for success are pre-conditions for a high performance in the most complex professional and non-professional tasks [14].

Individuals with a high need for success are more sensitive to opportunities to do something better and earlier than others and to develop skills. As a result, these sort of individuals prefer objectives hard to achieve minimizing the obstacles since they obtain realistic feedbacks about their performances and skills. Achievement of the targets of success and striving for superiority bring about proud and exciting positive emotions [40]. Individuals with a high need for success like to take steps right away. They investigate the environment and formulate strategies to be successful. They try to be successful in parallel to these strategies in a strong competitive environment.

5. STUDY

5.1 Purpose of the Study

This study aims to determine the senses of entrepreneurship of students who get and don't get entrepreneurship education, expressed as sense of internal control, tendency to risk-taking, desire of freedom, need for success. 1st year and 4th Year students of business administration were compared to reveal this relation. 1st Year students are our students who have just started to the education. 4th Year students of business administration have both got the entrepreneurship education and taken the lessons sufficient to be successful in business administration department.

5.2 Scope and Methods of Study

Universe of this study has been composed of 1st and 4th Year students of business administration studying in Kafkas University, Faculty of Economics and Administrative Sciences. Total number of students who are the 1st year students of this department is 132 and the number of 4th year students of business administration is 130. Sample size to be determined from this universe with the stipulation of a tolerance of 5% within 95% confidence interval has been calculated as 156. In addition, 190 surveys have been distributed to reach a higher level of survey and 183 surveys have been returned due to wrong filling.

Surveys forms have been used as data collection method in the study. The survey consists of two sections. First section contains questions relating to the demographic parameters. The scale translated by Alpan et al. (2002) from Hisrich and Peters (2002) and used by Duran et al. has been utilized in the second part of the survey.

Obtained data were analyzed using independent sample t test, one-way analysis of variance and regression methods. Frequency tables provide information with regard to distribution of the analyzed variable. T test is used to test whether the difference between two unrelated sample means is significant or not. One-way analysis of variance is applied to test whether the difference between two or more unrelated sample means is significantly different from zero or not. Regression analysis provides information with regard to identification of two or more related variables as one dependent variable and independent variables, and also describes the explanation process of the relation between them by means of a mathematical equation [2].

Reliability analyses of the both subscales used in the study have been performed through the calculation of Cronbach Alpha coefficients of internal consistency. As the result of implemented reliability analysis, it was concluded that Sense of Internal Control (0,611) composing of 7 items, desire of freedom (0,604) composing of 5 items and tendency to risk-taking (0,619) composing of 7 items were quite reliable and need for success (entrepreneurship potential) (0,846) composing of 17 items was highly reliable.

5.3 Findings of the Study

5.3.1 Findings relating to the study sample

As seen in Table 1, 57,9% of the participants are male while 42,1% of them are female. 38,3% of participants are under the age of 21 while 57,4% of them are between 21-25 years of age and 4,4% is between 26-30 years of age. As for the marital status, 2,7% of them are married and 97,3% of them are single. 20,8% of the study participants live in the villages while 4,4% of them live in towns, 27,3% of them in countries and 47,5% of them in cities. As for the sector in which the father works, 38,3% of them are out of work, 20,2% are self-employed, 19,1% work in public sector and %22,4 work in private sector. As for the sector in which the mother works, 92,9% of them are out of work, 1,1% are self-employed, 3,3% work in public sector and 2,7% work in private sector. As for the sector demanded for working in, 15,8% wish to work in

any business in private sector, 14,2% wish to work in any business in public sector, 32,2% wish to work in a prestigious business in private sector and 37,7% wish to work in a prestigious business in public sector.

5.3.2 Examination of differences among the demographic parameters

Independent sample t test and one-way analysis of variance have been performed to determine the differences between demographic parameters. The results are given in tables.

Differences by the gender have not been found as the result of performed independent sample t test (see Table 3).

Differences for the tendency to risk-taking and entrepreneurship potential have been found as the result of performed independent sample t test. Accordingly, tendency to risk taking and entrepreneurship potential of people between 21-30 years of age are lower than those for the people under 21 years of age (see Table 4).

No differences by the residency status have been found as the result of performed one-way analysis of variance (see Table 5).

Differences by the residency status have been found as the result of performed one-way analysis of variance. Accordingly, desire of freedom, tendency to risk-taking and entrepreneurship potential of people whose fathers are self-employed are significantly higher (see Table 6).

No differences by the demanded for working in have been found as the result of performed one-way analysis of variance (see Table 7).

Differences in terms of tendency to risk-taking and entrepreneurship potential have been found as the result of performed independent sample t test. Accordingly, tendency to risk taking and entrepreneurship potential of 4th Year students are significantly lower than those for 1st Year students (see Table 8).

Table 1. Demographic distributions (frequency table)

Sex	N	%
Male	106	57,9
Female	77	42,1
Total	183	100
Age	N	%
Less than 21	70	38,3
Between 21-25	105	57,4
Between 26-30	8	4,4
Total	183	100
Marital Status	N	%
Married	5	2,7
Single	178	97,3
Total	183	100
Residency	N	%
Village	38	20,8
Town	8	4,4
District	50	27,3
Province	87	47,5
Total	183	100
Sector of Father's work	N	%
Not working	70	38,3
Own work	37	20,2
Public sector	35	19,1
Private sector	41	22,4
Total	183	100
Sector of Mother's work	N	%
Not working	170	92,9
Own work	2	1,1
Public sector	6	3,3
Private sector	5	2,7
Total	183	100
Demanded Sector to work	N	%
Any work in Private sector	29	15,8
Any work in Public sector	26	14,2
Prestigious work in Private sector	59	32,2
Prestigious work in Public sector	69	37,7
Total	183	100

Table 2. Examination whether there is a difference between females and males (independent sample t test)

	Sex	N	Mean	S.D	t	p
Sense of Internal Control	Male	106	3,19	0,715	1,590	0,114
	Female	77	3,02	0,643		
Desire of Freedom	Male	106	3,40	0,730	-0,162	0,872
	Female	77	3,42	0,753		
Tendency to Risk-Taking	Male	106	3,01	0,745	1,589	0,114
	Female	77	2,84	0,682		
Entrepreneurship Potential	Male	106	3,31	0,753	1,072	0,285
	Female	77	3,19	0,683		

Table 3. Examination of differences by the age groups (independent sample t test)

	Age	N	Mean	S.D	t	p
Sense of Internal Control	Less than 21	70	3,01	0,700	-1,653	0,100
	Between 21-30	113	3,18	0,676		
Desire of Freedom	Less than 21	70	3,28	0,753	-1,818	0,071
	Between 21-30	113	3,48	0,721		
Tendency to Risk-Taking	Less than 21	70	2,72	0,704	-3,283	0,001*
	Between 21-30	113	3,08	0,704		
Entrepreneurship Potential	Less than 21	70	3,03	0,680	-3,398	0,001*
	Between 21-30	113	3,40	0,720		

Table 4. Examination of differences by the residency status (one-way analysis of variance)

	Residency	N	Mean	S.D	F	p
Sense of Internal Control	Village-Town	46	3,04	0,744	1,272	0,283
	District	50	3,03	0,685		
	Province	87	3,20	0,657		
Desire of Freedom	Village-Town	46	3,39	0,846	0,078	0,925
	District	50	3,38	0,742		
	Province	87	3,42	0,681		
Tendency to Risk-Taking	Village-Town	46	2,96	0,765	0,195	0,823
	District	50	2,97	0,735		
	Province	87	2,90	0,698		
Entrepreneurship Potential	Village-Town	46	3,11	0,685	1,361	0,259
	District	50	3,26	0,681		
	Province	87	3,32	0,765		

Table 5. Examination of differences by sector in which the father works (one-way analysis of variance)

	Sector of Father's work	N	Mean	S.D	F	p
Sense of Internal Control	Not working	70	3,09	0,610	1,038	0,377
	Own work	37	3,28	0,701		
	Public sector	35	3,00	0,769		
	Private sector	41	3,12	0,730		
Desire of Freedom	Not working	70	3,23	0,695	4,337	0,006*
	Own work	37	3,76	0,675		
	Public sector	35	3,38	0,706		
	Private sector	41	3,41	0,802		
Tendency to Risk-Taking	Not working	70	2,93	0,703	2,815	0,041*
	Own work	37	3,23	0,880		
	Public sector	35	2,84	0,594		
	Private sector	41	2,80	0,647		
Entrepreneurship Potential	Not working	70	3,14	0,679	4,612	0,004*
	Own work	37	3,61	0,767		
	Public sector	35	3,07	0,734		
	Private sector	41	3,30	0,661		

No differences by the gender have been found for 1st Year students while significant differences in terms of sense of internal control have been found for 4th Year students as the result of

performed independent sample t test. Accordingly, sense of internal control of 4th Year male students are significantly higher (see Table 9).

Table 6. Examination of differences by sector demanded for working (one-way analysis of variance)

	Demanded sector	N	Mean	S.D	F	p
Sense of Internal Control	Any work in Private sector	29	2,95	0,639	0,907	0,439
	Any work in Public sector	26	3,13	0,732		
	Prestigious work in Private sector	59	3,20	0,693		
	Prestigious work in Public sector	69	3,12	0,689		
Desire of Freedom	Any work in Private sector	29	3,21	0,819	0,873	0,456
	Any work in Public sector	26	3,40	0,720		
	Prestigious work in Private sector	59	3,46	0,703		
	Prestigious work in Public sector	69	3,44	0,740		
Tendency to Risk-Taking	Any work in Private sector	29	2,77	0,711	0,624	0,600
	Any work in Public sector	26	2,97	0,717		
	Prestigious work in Private sector	59	2,96	0,811		
	Prestigious work in Public sector	69	2,98	0,651		
Entre preneurship Potential	Any work in Private sector	29	3,14	0,877	0,801	0,495
	Any work in Public sector	26	3,18	0,723		
	Prestigious work in Private sector	59	3,36	0,666		
	Prestigious work in Public sector	69	3,24	0,707		

Table 7. Examination of differences by the class (independent sample t test)

	Sınıf	N	Mean	S.D	T	p
Sense of Internal Control	1. Grade	107	3,05	0,677	-1,717	0,088
	4. Grade	76	3,22	0,696		
Desire of Freedom	1. Grade	107	3,32	0,763	-1,958	0,052
	4. Grade	76	3,53	0,686		
Tendency to Risk-Taking	1. Grade	107	2,82	0,723	-2,659	0,009*
	4. Grade	76	3,11	0,692		
Entre preneurship Potential	1. Grade	107	3,14	0,683	-2,676	0,008*
	4. Grade	76	3,42	0,753		

Table 8. Examination whether there is a difference between females and males by the classes (independent sample t test)

Class	Sex	N	Mean	S.D	T	P	
1. Grade	Sense of Internal Control	Male	60	3,05	0,720	0,120	0,905
		Female	47	3,04	0,626		
	Desire of Freedom	Male	60	3,28	0,771	-0,497	0,620
		Female	47	3,36	0,760		
	Tendency to Risk-Taking	Male	60	2,91	0,754	1,392	0,167
		Female	47	2,71	0,674		
	Entre preneurship Potential	Male	60	3,14	0,720	0,054	0,957
		Female	47	3,13	0,642		
4. Grade	Sense of Internal Control	Male	46	3,36	0,676	2,255	0,027*
		Female	30	3,00	0,680		
	Desire of Freedom	Male	46	3,55	0,652	0,247	0,805
		Female	30	3,51	0,746		
	Tendency to Risk-Taking	Male	46	3,15	0,718	0,651	0,517
		Female	30	3,04	0,656		
	Entre preneurship Potential	Male	46	3,52	0,750	1,390	0,169
		Female	30	3,28	0,745		

No differences by the residency status of both 1st Year and 4th Year students have been found as the result of performed one-way analysis of variance (see Table 10).

No differences among 1st Year students by the entrepreneurship potential have been found while differences among the 4th year students have been found as the result of performed one-way analysis of variance. Accordingly, entrepreneurship potentials of 4th Year students whose fathers are self-employed are significantly higher (see Table 11).

No differences by the sector demanded for working in for 1st Year and 4th Year students have been found as the result of performed one-way analysis of variance (see Table 12).

As a result of the provided regression model, it was found that sense of internal control, desire of freedom and tendency to risk-taking have effects on the entrepreneurship potential. Accordingly, an increase in the sense of internal control by

one unit has caused an increase of 0,390 unit, an increase in desire of freedom by one unit has caused an increase of 0,211 unit and an increase in tendency to risk-taking by one unit has caused an increase of 0,206 unit in entrepreneurship potential (see Table 13).

For the 1st year students, it was found that sense of internal control, desire of freedom have effects on the entrepreneurship potential as a result of the provided regression model. Accordingly, an increase in the sense of internal control by one unit has caused an increase of 0,369 unit, an increase in desire of freedom by one unit has caused an increase of 0,283 unit in entrepreneurship potential.

For the 4th year students, it was found that sense of internal control has effects on the entrepreneurship potential as a result of the provided regression model. Accordingly, an increase in the sense of internal control by one unit has caused an increase of 0,389 unit in entrepreneurship potential.

Table 9. Examination whether there is a difference in terms of residency status by the classes (one-way analysis of variance)

		Residency	N	Mean	S.D	F	p
1. Grade	Sense of Internal Control	Village-Town	27	2,95	0,705	0,954	0,388
		District	29	2,97	0,682		
		Province	51	3,14	0,660		
	Desire of Freedom	Village-Town	27	3,07	0,777	1,955	0,147
		District	29	3,34	0,763		
		Province	51	3,43	0,742		
	Tendency to Risk-Taking	Village-Town	27	2,74	0,700	0,955	0,388
		District	29	2,98	0,761		
		Province	51	2,78	0,714		
	Entrepreneurship Potential	Village-Town	27	2,91	0,654	2,141	0,123
		District	29	3,24	0,682		
		Province	51	3,20	0,684		
4. Grade	Sense of Internal Control	Village-Town	19	3,19	0,794	0,394	0,676
		District	21	3,13	0,695		
		Province	36	3,29	0,652		
	Desire of Freedom	Village-Town	19	3,84	0,744	2,678	0,075
		District	21	3,43	0,727		
		Province	36	3,43	0,594		
	Tendency to Risk-Taking	Village-Town	19	3,29	0,752	1,100	0,338
		District	21	2,97	0,717		
		Province	36	3,09	0,642		
	Entrepreneurship Potential	Village-Town	19	3,41	0,632	0,524	0,595
		District	21	3,30	0,696		
		Province	36	3,51	0,845		

Table 10. Examination whether there is a difference in terms of working status of father by the classes (one-way analysis of variance)

		Working status of Father	N	Mean	S.D	F	p
1. Grade	Sense of Internal Control	Not working	42	3,08	0,593	0,672	0,571
		Own work	19	3,15	0,755		
		Public sector	23	2,88	0,725		
		Private sector	23	3,06	0,721		
	Desire of Freedom	Not working	42	3,16	0,693	2,670	0,051
		Own work	19	3,74	0,803		
		Public sector	23	3,25	0,737		
		Private sector	23	3,31	0,800		
	Tendency to Risk-Taking	Not working	42	2,74	0,638	1,683	0,175
		Own work	19	3,16	0,971		
		Public sector	23	2,75	0,627		
		Private sector	23	2,77	0,693		
Entrepreneurship Potential	Not working	42	3,12	0,684	1,441	0,235	
	Own work	19	3,32	0,727			
	Public sector	23	2,92	0,634			
	Private sector	23	3,23	0,674			
4. Grade	Sense of Internal Control	Not working	28	3,11	0,646	0,689	0,562
		Own work	18	3,41	0,631		
		Public sector	12	3,24	0,827		
		Private sector	18	3,19	0,756		
	Desire of Freedom	Not working	28	3,34	0,697	1,636	0,188
		Own work	18	3,78	0,531		
		Public sector	12	3,62	0,600		
		Private sector	18	3,53	0,810		
	Tendency to Risk-Taking	Not working	28	3,20	0,715	1,742	0,166
		Own work	18	3,30	0,793		
		Public sector	12	3,00	0,510		
		Private sector	18	2,83	0,601		
Entrepreneurship Potential	Not working	28	3,16	0,683	4,164	0,009*	
	Own work	18	3,91	0,704			
	Public sector	12	3,36	0,847			
	Private sector	18	3,39	0,654			

Table 11. Examination whether there is a difference in terms of the sector demanded for working in by the classes (one-way analysis of variance)

		Demanded sector	N	Mean.	S.D	F	p
1. Grade	Sense of Internal Control	Any work in Private sector	22	2,87	0,595	1,520	0,214
		Any work in Public sector	13	3,25	0,759		
		Prestigious work in Private sector	38	3,16	0,721		
		Prestigious work in Public sector	34	2,95	0,627		
	Desire of Freedom	Any work in Private sector	22	3,08	0,802	0,958	0,416
		Any work in Public sector	13	3,42	0,835		
		Prestigious work in Private sector	38	3,41	0,714		
		Prestigious work in Public sector	34	3,32	0,766		
	Tendency to Risk-Taking	Any work in Private sector	22	2,68	0,710	0,471	0,703
		Any work in Public sector	13	2,92	0,805		
		Prestigious work in Private sector	38	2,88	0,825		
		Prestigious work in Public sector	34	2,82	0,582		

		Demanded sector	N	Mean.	S.D	F	p
	Entrepreneurship Potential	Any work in Private sector	22	3,02	0,731	0,910	0,439
		Any work in Public sector	13	3,04	0,736		
		Prestigious work in Private sector	38	3,28	0,646		
		Prestigious work in Public sector	34	3,10	0,676		
4. Grade	Sense of Internal Control	Any work in Private sector	7	3,18	0,764	0,559	0,643
		Any work in Public sector	13	3,00	0,712		
		Prestigious work in Private sector	21	3,28	0,649		
		Prestigious work in Public sector	35	3,28	0,717		
	Desire of Freedom	Any work in Private sector	7	3,60	0,800	0,239	0,869
		Any work in Public sector	13	3,38	0,619		
		Prestigious work in Private sector	21	3,56	0,690		
		Prestigious work in Public sector	35	3,55	0,706		
	Tendency to Risk-Taking	Any work in Private sector	7	3,08	0,669	0,096	0,962
		Any work in Public sector	13	3,02	0,646		
		Prestigious work in Private sector	21	3,11	0,784		
		Prestigious work in Public sector	35	3,14	0,682		
	Entrepreneurship Potential	Any work in Private sector	7	3,50	1,230	0,225	0,879
		Any work in Public sector	13	3,33	0,707		
		Prestigious work in Private sector	21	3,52	0,690		
		Prestigious work in Public sector	35	3,39	0,717		

Table 12. Examination of the effect of sense of internal control, desire of freedom and tendency to risk-taking on the entrepreneurship potential (regression)

R ²	F	P
0,409	41,267	0,000

	B	t	Sig.
Constant	0,717	3,077	0,002
Sense of Internal Control	0,390	5,533	0,000
Desire of Freedom	0,211	2,940	0,004
Tendency to Risk-Taking	0,206	2,978	0,003

Table 13. Examination of the effect of sense of internal control, desire of freedom and tendency to risk-taking on the entrepreneurship potential (regression)

	R ²	F	P
1. Grade	0,714	35,698	0,000
4. Grade	0,514	8,623	0,000

	B	T	Sig.	
1. Grade	Constant	0,649	2,640	0,010*
	Sense of Internal Control	0,369	4,235	0,000*
	Desire of Freedom	0,283	3,259	0,002*
	Tendency to Risk-Taking	0,151	1,824	0,071
4. Grade	Constant	1,041	2,093	0,040*
	Sense of Internal Control	0,389	3,328	0,001*
	Desire of Freedom	0,121	0,979	0,331
	Tendency to Risk-Taking	0,226	1,887	0,063

6. CONCLUSION

Entrepreneurs play an important role for development of a society. Considering this

importance, societies look to various ways to increase the number of entrepreneurs One of those ways might be to improve entrepreneurship education in societies.

Entrepreneurship education aims to make the individuals likely to become entrepreneurs in the future show intention of entrepreneurship and involved in entrepreneurial behaviors. In this study, a research on 1st and 4th Year students of business administration studying in Kafkas University has been carried out to investigate the effects of the entrepreneurship education on the sense of entrepreneurship. Results obtained from the study are as follows:

Majority of study participants is composed of people who are between 21 and 25 years of age and singles. The rate of those whose fathers are out of work is significant and those whose mothers are out of work is very big.

No differences by the gender have been found according to the results of independent sample t test performed regarding the demographic parameters. Difference has been revealed among the age groups. Accordingly, tendency to risk taking and entrepreneurship potentials of individuals between 21-30 years of age have proven to be lower than those for the individuals under 21 years of age. Once again for the difference between 1st and 4th year, tendency to risk taking and entrepreneurship potential of 4th Year students have been found to be significantly lower than those for 1st Year students. For the differences between classes, no differences between females and males have been found for 1st Year students while significant differences have been found among 4th Year students. Accordingly, sense of internal control of 4th Year male students have been found to be significantly higher.

Once again, no difference have been found in terms of residency status, the sector demanded for working in, residency status by the classes, the sector demanded for working in by the classes, according to one-way analysis of variance regarding the demographic parameters. On the other hand, differences by the sector in which father works have been found and desire of freedom, tendency to risk-taking and entrepreneurship potentials of people whose fathers are self-employed have been found to be significantly higher. Such kind of a finding is truly the expected finding because taking risks is essential to be involved in the entrepreneurial activity, entrepreneurial activity is a means of freedom and it is a means to meet the need for success.

Likewise, for the difference of classes, differences by the sector in which father works have been found and entrepreneurship potentials of 4th Year students whose fathers are self-employed have been found to be significantly higher.

According to the results of regression model, it was found that sense of internal control, desire of freedom and tendency to risk-taking have effects on the entrepreneurship potential. Accordingly, entrepreneurship potential is mostly effected by the sense of internal control and subsequently the desire of freedom and minimally the tendency to risk-taking.

It was determined that there have been differences between the 1st and 4th class. For the 1st year students, sense of internal control and the desire of freedom effect the entrepreneurship potential. Focus of internal control further effects the entrepreneurship potential for the students in this class. For the 4th year students, focus of internal control has an effect on the entrepreneurship potential.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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