An Investigation of the Relationship between the Two Different Groups of Students' Entrepreneurship Characteristics

M. Dursun KAYA

Atatürk University, Vocational College of Erzurum, Erzurum, Turkey, dursun@atauni.edu.tr

Salih Börteçine AVCI

Atatürk University, Vocational College of Aşkale, Aşkale-Erzurum, Turkey, savci@gyte.edu.tr

Dilşad GÜZEL

Faculty of Economics and Administrative Sciences, Erzurum, Turkey, dguzel@atauni.edu.tr

Betül BÜLADİ ÇUBUKÇU

Atatürk University, Vocational College of Aşkale, Aşkale-Erzurum, Turkey, betulbuladi@hotmail.com

M. Fatih DEMİRTAŞ

Erzincan University, Vocational College of Tercan, Tercan-Erzincan, Turkey, mfatih1981@hotmail.com

Abstract: According to the definition of entrepreneurship and the studies carried out, the feature of the entrepreneurship is accepted unavoidable element for entrepreneurs' attitude. It is known that entrepreneurs have taken more risks or more opportunists and more innovative than he other entrepreneurs. But, these three entrepreneur dimension can change independently from each other in different environment circumstances. The purpose of this study is to evaluate these three factors affecting the entrepreneurship for this reason. A survey developed for such an evaluation was applied by face to face with 190 volunteer students attending to senior classes of three different vocational colleges with economics and administrative sciences faculty of Atatürk University. The data obtained from the research were taken into consideration and the students were classified into groups. While the students in the first group consisted of the students who don't take education or don't have any knowledge, the students in the second group consisted of the students who have some knowledge about entrepreneurship or those who have lived in an entrepreneur environment. While 47.0% of the students have taken the place in the first group, 53.0% of them are in the second group. Students' t test and one-way anova analysis in SPSS were used in the medium to data set obtained. In one-way anova analysis carried out, it was detected that the students who are not from entrepreneur milieu and attending to different academic units had innovative feature. But, in the dimensions of evaluation of opportunity and taking risks, in all comparisons, there was no distraction between both two groups and according to the demographic features.

Introduction

The impact of entrepreneurship education has been recognized as one of the crucial factors that help youths to understand and foster an entrepreneurial attitude (Gorman et al. 1997; Kourilsky & Walstad 1998). Due to the influence that education could have on the attitudes and aspirations of youth, there is a need to understand how to develop and nurture potential entrepreneurs even while they are still students in school. Few empirical studies have examined the entrepreneurial propensity of university students as a source of future entrepreneurs. Their attitude and knowledge of entrepreneurship are likely to shape their inclination to start their own businesses in the future. This type of study will also help universities and other institutions to develop suitable educational programs to promote entrepreneurship. Obviously, findings from such a study will have certain policy implications in inducing more university graduates to start their own businesses (Wang & Wong 2004).

Definition of Entrepreneurship

In literature about entrepreneurship it is difficult to find a common definition of entrepreneur. In total, there are more than 30 definitions of entrepreneur (Manasov 2006). In addition, since the 1960s, scholars with a variety of backgrounds such as; psychology, sociology, anthropology, history and management, have been interested in studying entrepreneurship (Ramachadran & Ray 1998). The concept of entrepreneurship, entrepreneurial and entrepreneurial process is derivatives of the concept of Entreprendre (Arıkan 2002). It was Richard Cantillon, who used the entrepreneur concept the first time in an economic context. He describes the entrepreneur as any individual who operates under conditions where expenditures are known and certain, but incomes are unknown and uncertain. In other words the unique characteristics of Cantillon's entrepreneur are foresight and the confidence to operate under conditions of uncertainty (Irmiş & Selçuk 2002).

The important role of entrepreneur in directing and redirecting resources in a state of perpetual disequilibrium was emphasized by the Austrian schools scholars (Manasov 2006). However, it was Joseph Schumpeter, who made the crucial contribution to definition of concept. Schumpeter's entrepreneur was not clearly a category or a person, but a conceptual abstraction which introduced the Notion of new combinations. The entrepreneur provided a new product or new production process via a different combination of inputs that have not been tried before. In the economic system the entrepreneur is one who innovates, and tries a new organization of inputs for the first time (Shionoya 1995).

The Factors Defining Entrepreneurship

The factors defining entrepreneurship may be studied as regards individual, environmental and institutional dimensions.

Individual Approach: The researchers accepting individual approach try to explain the entrepreneur mostly focusing on the psychological, demographical and personal features. According to this approach the entrepreneurs have unique values, manners and needs. For that reason, the psychological influence, the personal features and the experiments lived influence the position of being entrepreneur.

Environmental Approach: This approach advocates the existence of mutual interaction of environmental features affecting the decision of entrepreneurship and individual features in the basis of being entrepreneur. Entrepreneurship is a reaction to the cultural, social, politics, economic and technological circumstances. Individual past, experiment, personality, capability and skills influence entrepreneur attitude

Company Approach: This approach focuses on the existing facilities in enterprises. In other words, according to this point of view approaching entrepreneurship to the managership, this determines being entrepreneur in the facilities enterprises (Nakdiyok 2004).

The Features of Entrepreneurship

Autonomy (Independency): Independent attitude is accepted behavioral attitude of entrepreneur. The research discovering independent orientation of entrepreneur is limited. There are a lot of successful entrepreneur. Independent entrepreneurs express their creativities and ideas without confirming status quo. The attitude of independent and autonomy is central for the entrepreneur concept. Independency is important for the initial process combining with entrepreneurship. The measurement for autonomy attitudes starts with pursuit in the fields of entrepreneurship. Against independent attitudes, it is necessary to manage itself in the pursuit of opportunity and orientation and capability. Risk, orientation and innovative attitudes are associated with opportunistic attitude (Sollymossy 1998, 56).

Taking Risk: Nominates of entrepreneurship are those who can take risk without gambling and wisely. Taking risk is associated with creativity and being innovative, and it is necessary for realizing the ideas. Taking risk is associated with self-confidence. The more he has self confidence, the more he trusts his decisions and the more he can take risk which others can not. He accepts the risk which includes only profits or equal circumstances or conditions in which there are more profits (Gözek, 2006, 4).

Individual Control: Individual control believes that it is formed as a result of their attitudes rather than the influence of external circumstances. Individual control is accepted as an entrepreneur feature by Rotter. The idea that all events are formed by your attitude and it enables to ignore the impact of the agents of the chance and other

environmental agents on the event. Individual control features gives entrepreneur the facility of detection of their priorities and being independent in his behaviors. This understanding encourages entrepreneur giving his decision by himself and forming his behaviors in this direction (Avşar 2007, 14).

Opportunism: Entrepreneurs are those who create the opportunities which other missed. They create these opportunities by means of syntheziation and obtaining of the knowledge. Because, knowledge provides low and high risk definition and comprehend the opportunity and perception of the limitations of entrepreneurs. Thanks to the knowledge entrepreneurs obtained, they may innovative and creative opportunity, he may occur original and potential market and he can find the sources and without trusting the chance he can show a consciousness and disciplined effort. Successful entrepreneurs focuses on more the opportunity than source, structure and strategy (Nakdiyok 2004, 25).

Innovation: Drucker accepts innovation as concepts strengthen potential of welfare creation. In fact, entrepreneurs are accepted as a great innovative power in economy. For example, a lot of new products developed in all over the world are the result of entrepreneur efforts one of the most important reasons of these is that they have various experiences which hey acquire throughout the facilities of entrepreneurs. These experiences encourage entrepreneur about finding solution to the problems, and they oriented them about innovations (Avsar 2007, 17).

Success: The need of success is a factor oriented entrepreneurial attitudes. Individual having high success need trusted him, and likes to take estimated risks, and enjoys o investigate his environment actively, and he wonders how he does the work better. These kinds of behaviors increase his possibility of being entrepreneurs (Nakdiyok 2004, 24).

Enjoy Him: In special works, it is discussed that enjoying himself is necessary for successful entrepreneur behavior. Enjoying himself, in addition, is for social and special works. The researchers indicate that the levels of enjoying themselves of entrepreneurs are more than those who are not entrepreneurs (Sollymossy 1998, 54).

Characteristics of Entrepreneurial Colleges and Universities

According to "Trachtenberg Educational Institutions" with an entrepreneurial orientation work to create and develop new ideas for generating revenue and programs. In doing so, they foster new attitudes, direct and inspire individuals and develop interpersonal relationships and teams.

The new entrepreneurial university is turning out to be a place that makes money. The new entrepreneurial university is a place where you can legally talk about your students as "customers".... In the new entrepreneurial university, we have finally succeeded in making living contact with the world we purport to be teaching our students about. It is serious business we're in. Universities are critically important to American society. So it is serious business to get along with business leaders and with bureaucrats. It is serious business to listen to our customers and hear what they need and want. (Riggsd 2005) A search for alternative and unique income streams has been a focus of higher education management in creating this entrepreneurial institution. Indeed, Clark one of the most respected and prolific commentators on the rise of entrepreneurship in American colleges and universities, defines "the entrepreneurial institution" in terms of its sources of revenue. Clark explains that there are three basic income streams for institutional resources:

- (1) Governmental allocation based on numbers and statistics about students, faculty and other aspects.
- (2) Funds from government research councils that focus on research groups, departments and professors that compete for research funds and contracts.
- (3) Income from virtually all other sources, such as endowments, student fees, profits on campus operations, monies obtained from industries, and others.

Clark then defines "entrepreneurial university" in terms of the third income stream. He describes entrepreneurial institutions as "significant actors on their own terms seeking third-stream sources of financing and actively reaching out to them" (Clark 1998).

This study used Clark's theoretical framework as a basis for defining and understanding the entrepreneurial university. In particular, the study considered entrepreneurial activities to comprise third-stream income sources that include:

- (1) Innovative and profit-based self-supporting operations that go beyond traditional sources, such as business development activities and innovative retail sales operations,
 - (2) Activities that develop and enhance traditional income streams such as endowment and tuition,
- (3) Activities that involve both traditional and nontraditional aspects, such as distance learning, which uses nontraditional methods of teaching to gain tuition, which is a traditional source of income.

Clark offers a number of important insights into the nature of the entrepreneurial institution of higher education. Principal characteristics that identify the entrepreneurial university are:

- (1) The ability to change its organizational structure,
- (2) Cooperative and unified stakeholders, and
- (3) Developed entrepreneurial attributes that lead to autonomy within the institution.

Clark also points out three critical aspects of the evolutionary process that transform an institution into an entrepreneurial university:

- (1) The institution must have strong leadership, sturdy management and administration to direct the institution into achieving autonomy, self-sufficiency and financial stability through entrepreneurial approaches.
- (2) The institution must expand its development periphery, intentionally working to bring in outside interests to participate in projects that attempt to solve serious practical problems that are critical to economic and social development. In doing so, the institution seeks to acquire greater financial resources, widen the financial base, and diversify income to increase financial resources, provide discretionary money, and reduce governmental dependency.
- (3) The institution must diversify its funding base and balance its funding portfolio. "Entrepreneurial universities learn faster than non-entrepreneurial counterparts that money from many sources enhances the opportunity to make significant moves without waiting for system wide enactments that come slowly" (Clark 1998).

Material and Methods

In order to evaluate entrepreneurship qualities of two groups of student, on empiric study has been designed. Opportunity, taking risk and innovation dimensions were examined between 190 Atatürk University students. The first group consists of students who don't receive any knowledge and training about entrepreneurship. The second group consists of the students expressing that they experienced on entrepreneurship acquiring about entrepreneurship coming from the faculties as gender the same age. All participants are taken from the students of different faculties and vocational colleges of Atatürk University.

The participants were asked to answer the questions according to five-live likert scale from "I don't participate in" towards "I agree to participate in". In order to be able to test our hypothesis, "Entrepreneurship Attitude Orientation" EAO framework and scale designed Simpson and Shanthakumar and developed Robinson were used. EAO is a behavioral management scale formed the evaluation opportunity dimension and selfishness, and innovation and personnel control. But this scale ignores taking risk and vagueness behaviors (see Shanthakumar 1992). In order for the tendency of individual risk taking including perceptive to measure, 3-line scale prepared by Winston was used. In addition to this, in order to evaluate the tendency of risk, two questions used in the evaluation of risk behavior from Covin and Dennis were added to the survey (see Covin & Dennis 1991).

In our study we claim that high success orientation of entrepreneur individuals were completed with *opportunity, innovation* and *risk taking* behaviors. So, three dimensions of all EAO scale were evaluated. For the dimension of taking risk, innovation and opportunity according to the groups who are in the entrepreneur milieu or not, students' t test and variance analysis the evaluation the difference between subjects.

Findings

The data were collected by likert formed scale because of having systematic intervals to measure and compare the students' perceptional importance of tendency. The data were collected from each department's students during the lesson periods including 50 minutes. The purpose of the study before test and secret the situations were told the students before applying by researcher. In this study, 90 students who don't have knowledge about entrepreneur (41 of them female and 49 of them male) and 100 students coming from a entrepreneur milieu (35 of them female and 65 of them male) were included in the study. In both groups, the age of the subjects are between 18 and 25 years, and most of these are under 22 years of age.

	Those who are not entrepreneur milieu		Those who are from entrepreneur milieu	
	N	%	N	%
Gender				
Male	49	54.4	65	65.0
Female	41	45.6	35	35.0
Academic Unit				
Faculty of Economics and Administrative Sciences	17	18.9	12	12.0
Vocational College of Aşkale	9	10.0	11	11.0
Vocational College of Erzurum	56	62.2	61	61.0
Vocational College of Tercan	8	8.9	16	16.0
Type of education				
Normal education	63	70.0	59	59.0
Night education	27	30.0	41	41.0

Table 1: the distribution of the demographic features of the students who are or not from entrepreneur milieu

The classification of the students included in the study is determined by the control questions prepared for the determination of environment features behind survey questions. In the result of the classification carried out while 54.4% those who are not from entrepreneur milieu are male, 65.0% of those who are from entrepreneur milieu are male. When the distribution according to academic unit where the students who are from entrepreneur milieu was examined, 62.2% of them attended to Vocational College of Erzurum, and 18.9% of them to Faculty of Economics and Administrative Sciences, and 10.0% of them to Vocational College of Aşkale, and 8.9% of them Vocational College of Tercan. On the other hand, when the distribution of according to their academic unit of the students who are from entrepreneur milieu was examined, 61.0% of them attended to Vocational College of Erzurum, and 16.0% of them to Vocational College of Tercan, and 12.0% to Faculty of Economics and Administrative Sciences, and 11.0% of them to Vocational College of Aşkale. While of 190 students, 70.0% of those who are not from entrepreneur milieu are those who attend to their normal education 59.0% of them was the students of normal education (Table 2).

In data analysis, risk taking factor was measured by a scale consisting of 5 questions. And, its reliability was found as 0.87. The evaluation of opportunity was measured by scale consisting of 5 questions and, its reliability was found as 0.63. The dimension of innovation was measured by scale consisting of seven questions and its reliability was found as 0.62.

	Those who are not entrepreneur milieu	Those who are from entrepreneur milieu	t test
	Mean ± SD	$Mean \pm SD$	
Innovation	3.90 ± 0.43	3.84 ± 0.39	0.97
Opportunity	3.87 ± 0.74	3.82 ± 0.76	0.44
Taking risk	2.97 ± 1.10	3.14 ± 1.12	-1.04

Table 2: The comparison of those who are or not from entrepreneur milieu as regards high success orientation

There was no statistical distinction as regards innovation between the first groups isn't from entrepreneur milieu (3.90 ± 0.43) and the second group which is from entrepreneur milieu (3.84 ± 0.39) (t=0.97; p>0.05). There was no statistical distinction as regards opportunity success orientation between the first group (3.87 ± 0.74) and the second group (3.82 ± 0.76) (t=0.44; p>0.05). Similarly, in the dimension of taking risk, same features between both groups were oriented (respectively, 2.97 ± 1.10 ; and 3.14 ± 1.12). When it was examined as regards taking risk, score averages of those coming from entrepreneur milieu was 3.14 while score averages of those who are not from entrepreneur milieu was 2.97. This can be interpreted as in both groups can take more risks.

	Innovation				
	Those who are not entrepreneur Those who			o are from	
	milieu		entrepreneur milieu		
	$Mean \pm SD$	F	$Mean \pm SD$	F	
Academic Unit					
Faculty of Economics and Administrative Sciences	3.52 ± 0.57		4.02 ± 0.40		
Vocational College of Aşkale	3.78 ± 0.50	3.37*	3.86 ± 0.34	1.14	
Vocational College of Erzurum	3.89 ± 0.31		3.89 ± 0.46		
Vocational College of Tercan	3.91 ± 0.39		3.69 ± 0.29		
	Opportunity				
Academic Unit					
Faculty of Economics and Administrative Sciences	3.93 ± 0.93		4.02 ± 0.95		
Vocational College of Aşkale	3.96 ± 1.17	0.32	4.04 ± 0.30	1.21	
Vocational College of Erzurum	3.79 ± 0.69		3.75 ± 0.71		
Vocational College of Tercan	3.73 ± 0.57		4.13 ± 0.79		
	Taking risk				
Academic Unit					
Faculty of Economics and Administrative Sciences	3.21 ± 1.25		3.01 ± 1.16		
Vocational College of Aşkale	3.27 ± 1.13	0.31	3.09 ± 1.14	0.71	
Vocational College of Erzurum	3.05 ± 1.14		2.87 ± 1.08		
Vocational College of Tercan	3.31 ± 0.99		3.45 ± 1.15		

Table 3: The comparison of the orientation of innovation, opportunity and taking risk of students who are or not from entrepreneur milieu according to academic units

"Entrepreneurship Attitude Orientation" (EAO) whether there was a distinction according to the students who are from entrepreneur milieu or who are nor from entrepreneur milieu according to academic units between each of factors of taking risk, innovation and opportunity from the EAO scale was tested by variance analysis. In the result of the analysis carried out, there was distinction only in innovation factor of academic units of the students who are not from entrepreneur milieu. There was no statistical distinction about situations on taking risk and opportunity students who are not from entrepreneur milieu and who are from entrepreneur milieu according to different academic units (Table 3).

Discussion

Unlike literature, we couldn't find significant distinction except taking risk attitude between those who are from entrepreneur milieu and those who are not from entrepreneur milieu in our study. Our hypothesis explaining that those who are coming from entrepreneur milieu are more opportunistic and more innovative than those who are not have not been supported in our study. The reason that is not such a distinction is that we haven't still had a clear answer about that some students are more innovation and opportunistic and more taking risk. In fact, we are on the opinion that the idea of entrepreneur should be examined by system of point of view and under the context each environmental factor on entrepreneur is an undeniable reality changing differentiated circumstances. In this respect, our comprehensive study together with other studies including studying with voluntary groups which plan to set up their own business or graduate from the universities has been going on, after other parts had been completed, and required analysis hade been made, we hope that we can reach at more significant results.

References

Arıkan, S. (2002). Girişimcilik Temel Kavramlar Ve Bazı Güncel Konular, Siyasal Kitabevi, Ankara.

Avşar, M. (2007). Yüksek Öğretimde Öğrencilerin Girişimcilik Eğilimlerinin Araştırılması, Çukurova Üniversitesinde Bir Uygulama, Yayımlanmamış Yüksek Lisans Tezi, Adana.

Clark, B. R. (1998). Creating Entrepreneurial Universities: Organizational Pathways of Transformation. Oxford, Uk: Pergamon Press.

^{*:} significant at 0.05

2nd International Symposium on Sustainable Development, June 8-9 2010, Sarajevo

Covin, J.G. & Dennis P. S. (1991). A Conceptual Model of Entrepreneurship as Firm Behavior, Entrepreneurship, Theory and Practice. Fall, pp.7-25.

Gorman, G., Hanlon, D. & King, W. (1997). Some Research Perspectives on Entrepreneurship Education and Education For Small Business Management: A Ten-Year Literature Review. International Small Business Journal 15 (3). 56–77.

Gözek, S. (2006). Girişimci Adayının Özellikleri, Girişimcilik Eğilimleri ve Girişimci Adaylarına Sağlanan Destekler. Basılmamış Yüksek Lisans Tezi. Kahramanmaraş.

İrmis, A. & Selcuk, Ö. (2002), İktisadi Gelismede Girisimcilik: Denizli ve Erzurum Örneği, İstanbul, Beta Yayinevi.

Kourilsky, M.L. & Walstad, W.B. (1998). Entrepreneurship and Female Youth: Knowledge, Attitudes, Gender Differences, and Educational Practices. Journal of Business Venturing 13 (1), 77–88.

Manasov, Z. (2006). The Development and Problems of Agricultural Entrepreneurship in Kyrgyzstan. Kırgızistan-Türkiye Manas Üniversitesi Uluslar Arası Girişimcilik Kongresi.

Naktiyok, A. (2004). İç Girişimcilik, Beta Yayınevi, İstanbul.

Ramanchadran, K. & Ray, S. (1998). A Framework and Entrepreneurship, in Entrepreneurship and Innovation by Rabindra N Kanungo.

Riggsd, R. (2005). Entrepreneurial Activities in Independent College and University presidents: A View from the Top. Submitted to the Graduate Faculty of the School of Education In Partial Fulfillment Of The Requirements For The Degree Of Doctor Of Philosophy. University Of Pittsburgh.

Shanthakumar, D.K. (1992). Attitudinal Characteristics of Male and Female Entrepreneurs in India and a Comparison with American Entrepreneurs. Unpublished Doctoral Dissertation. Brigham Yough University, UT.

Shionoya, Y. (1995). Taking Schumpeter's Methodology Seriously, in Entrepreneurship, Technological, Innovation and Economic Growth. Ed. By Frederic M. Scherer and Mark Perlman. McGraw-Hill Book.

Sollymossy, E. (1998). Entrepreneurial Dimensions: The Relationship of Individual, Venture and Environmental Factors to Success. Case Western Reserve University.

Wang, C.K. & Wong, P. (2004). Entrepreneurial Interest of University Students in Singapore. Technovation 24, 163-172.