

THE EFFECTS OF BUSSINESS EDUCATION ON ENTREPRENEURSHIP CHARACTERISTICS: AN EMPIRICAL STUDY*

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—Abstract —

The aim of this study is to examine the effects of business education on students' entrepreneurial characteristics. Therefore, this study was conducted on a sample of undergraduate students in department of business administration from two state universities, Bilecik University and Dumlupinar University, in Turkey. We applied the survey to these student groups four years ago and this year. The results of this study show that there are no significantly the effects of business education on students' entrepreneurial characteristics the end of four years period in these universities.

Key Words: *Entrepreneurship, Education, Entrepreneurship Characteristics*

JEL Classification: M00

1. INTRODUCTION

Since the drivers of growth in modern economies are not large industrial companies, but rather, new and small businesses which are established by entrepreneurs (Hebert and Link 1988; Drucker, 1995:19; Churchill and Myzyka, 1994), entrepreneurship is one of the main forces in economic growth and job

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creation. According to the 2006 results of Global Entrepreneurship Monitor-GEM there is a systematic relation between the development level and the entrepreneurship type and level of country (Bosma and Harding, 2007). Thus, entrepreneurship is supported and motivated and entrepreneurs are educated by governors. The impact of entrepreneurship education has been recognized as one of the crucial factors that help youths to foster an entrepreneurial attitude (Gorman et al., 1997; Kourilsky and Walstad, 1998). Their attitude and knowledge of entrepreneurship are likely to shape their inclination to start their own businesses in the future. In USA, there are 1600 different universities, taught 2200 entrepreneurship courses and a center, supported over 100 funds (Kuratko, 2003:22). One of the main purposes of business school is to train entrepreneurial candidates. Thus, the aim of this study is to examine the effects of business education on students' entrepreneurial characteristics. This study was conducted on a sample of undergraduate students in department of business administration from two state universities, Bilecik University and Dumlupinar University, in Turkey.

2. LITERATURE REVIEW AND HYPOTHESES

Nowadays, entrepreneurship is identified to begin and open new business. However, Drucker (1985) underlines that each new business is not identifying entrepreneurship. According to Drucker (1985), entrepreneurs create new and dissimilar things. They change or transform values. An entrepreneur has some characteristics and properties as ambition, creativity, dedication, initiative, innovation, management capabilities, risk-taking propensity, positive state of mind and vision (Morrison et al., 1999). Scholars are still discussing whether such characteristics and properties come from the birth or can be taught? Majority of the early studies about becoming an entrepreneur cannot give the exact answer. According to these early studies the reason can be found in both genetic and subsequent factors. The most popular and possible subsequent factor seems like education (Ipcioglu and Taser, 2009a). It is obvious that some genetic forces can be used to become an entrepreneur but skills come from individual background of birth still need to be developed by education. For the others, who really do not have any individual or genetic supports to become an entrepreneur; can have a good and specified education to catch the others on the target (Douglas and Shepherd, 2000).

Stewart et al. (1998) have identified need for achievement, risk taking propensity, and innovation as determinants for distinguish entrepreneurs. In addition, Entrialgo et al. (2000) have regarded locus of control, need for achievement and tolerance for ambiguity as the determinants of the tendency for entrepreneurship.

In this study six personality characteristics are used to define the entrepreneurial profile of students. These are need for achievement, locus of control, risk taking propensity, tolerance for ambiguity, innovativeness and self-confidence. These characteristics were considered as capable of representing the entrepreneurial behavior of individuals and used at different studies (Ipcioglu and Taser, 2009a; 2009b). Entrepreneurial motivations such as achievement, independence, and locus of control have been widely investigated with regard to their influence on business start-up (Brockhaus and Horwitz 1986). McClelland's (1987) early work suggested that need for achievement should be higher in people who start a business. A similar result appears for locus of control (Rotter, 1966). Business owners have a slightly higher internal locus of control than other populations (Rotter, 1966). Other studies have found a high degree of innovativeness, competitive aggressiveness, and autonomy (Utsch et al. 1999) or risk taking (Ipcioglu and Taser, 2009a).

2.1. Entrepreneurship Characteristics

Locus of control (LC): An attribute indicating the sense of control that a person has over life (Hisrich, et.al, 2004). Individuals vary in terms of how much personal responsibility they perceive and accept for their behavior and its consequences (Rotter, 1996). Individuals with an internal feeling of locus of control believe they personally control events and consequences in their lives (Koh, 1996). Luck, fate or other people effect can not have a sanction on individual's actions and success. By saying this it is accepted that entrepreneurs have an internal feeling of locus of control. Entrepreneurs prefer to make decisions about their life and take risks to be successful without feeling and external pressure. That is why most of the individuals take the control of their life and protect it.

Need for achievement (NA): An individual's need to be recognized, named as need for achievement (Hisrich et.al, 2004). The higher need for achievement brings the stronger desire to be successful which also forces to behave more entrepreneurially (Koh, 1996). Above the all other entrepreneur characteristics,

need for achievement has the longest history as it was accepted and related with entrepreneurship long time ago.

Risk taking propensity (PR): The main difference between an entrepreneur and a manager is the uncertainty and risk taking (Entrialgo et al., 2000). The main approach in risk taking is individually accepting all risks for profit or loss. Most of the people do not have the propensity to uncertainty and risk of loss; on the other hand entrepreneurs prefer to take risks if somehow a profit can be the result. Taking very high risks also are not accepted by entrepreneurs as the feeling of need for achievement bars them.

Tolerance of ambiguity (TA): When there is not enough information about the situation, ambiguity exist (Koh, 1996). Most of the entrepreneur individuals like to take control of ambiguous situation and manage them. The appearance of these individual entrepreneurs at large ascended at ambiguous eras. According to the studies entrepreneurs has more tolerance of ambiguity than non-entrepreneurs (Stevenson, et. al., 1994; Sexton and Bowman, 1985).

Self confidence (SC): The belief of being capable to achieve the goals that are set to gain profit named as self confidence. Entrepreneur individuals has self confidence as a distinctive characteristics even some scholars noted it is not just a characteristic but an outcome (Cromie, 2000). Many studies have found that entrepreneurs have higher degree of self-confidence than non-entrepreneurs (Koh, 1996).

Innovativeness (IN): Creating new methods of production, getting in to a new market, producing new quality or creating something new to be successful inclined as innovativeness. Innovativeness is the second factor to understand an individual's propensity of entrepreneurship and also may be the most distinctive characteristic. Seeing the opportunities and taking risks succeeding can not be detached by innovativeness. All new creations mentioned below will support by other characteristics. On the other hand innovative individuals also usually have the other entrepreneur characteristics (Koh, 1996; Hisrich et.al., 2004).

After discussing, the following six main characteristics' hypotheses are tested:

- *H1: After business education senior students remain the same level of locus of control as freshmen.*
- *H2: After business education senior students remain the same level of need for achievement as freshmen.*

- *H3: After business education senior students remain the same propensity to take risk as freshmen.*
- *H4: After business education senior students the same level of tolerance to ambiguity as freshmen.*
- *H5: After business education senior students the same level of self-confidence as freshmen.*
- *H6: After business education senior students the same level of innovativeness as freshmen.*

3. METHODOLOGY

This study was conducted on a sample of undergraduate students in department of business administration from two state universities, Bilecik University and Dumlupinar University, in Turkey. We applied the survey to these student groups four years ago and this year. Department of business administration is considered an interesting and appropriate place to conduct entrepreneurship studies because such departments supposed to train potential entrepreneurs. A survey was applied to 236 out of 250 students four years ago. This year we applied the same survey to same sample but this time 139 out of 250 turned back. The questionnaire includes variables to measure characteristics of entrepreneurship that contained 36 items were adopted from Koh (1996). There are seven items for locus of control, eight items for need for achievement, eight items for risk taking propensity, eight items for tolerance of ambiguity, eight items for self confidence and five items for innovativeness. A likert scale with five-point response format was used for total 36 items to measure the participants' agreements with the regarding items.

4. THE DATA ANALYSIS AND RESULTS

Reliability of the instrument was evaluated using Cronbach's Alpha. The values of each term were above 0.70, exceeding the common threshold value (0.60). Together with alpha and correlation coefficients, entrepreneurship characteristics scale has internal reliability.

Table 1 demonstrates mean, standard deviation according to the analyses. Self confidence (SC) characteristic and locus of control (LC) characteristic in four years ago possessed the best mean values (3.708 and 3.703) and need of achievement in this year possessed the best mean value (3.544) among six variables. Before checking the differences between means, we noted that all characteristics' means are very close or just over 3. These results show that

students having education for four years at business schools are not highly entrepreneurially inclined. According to the differences of variables' means locus of control (LC), self confidence (SC) and innovativeness (IN) characteristics dropped in four year education period. Other three characteristics propensity to take risks (PR), need of achievement (NA) and tolerance of ambiguity (TA) seems increased slightly in four year period. These changes must be analyzed between confidence intervals.

Table 1: Means and Standard Deviations

	Class	N	Mean	Std. Deviation
Locus of control (LC)	1th	231	3.703	0.5177
	4th	133	3.224	0.3994
Need for achievement (NA)	1th	227	3.352	0.4686
	4th	119	3.544	0.3957
Propensity to take risk (PR)	1th	228	2.944	0.5739
	4th	129	3.031	0.4606
Tolerance of ambiguity (TA)	1th	236	2.197	0.4808
	4th	133	3.456	0.4811
Self confidence (SC)	1th	222	3.708	0.5480
	4th	119	2.928	0.4825
Innovativeness (IN)	1th	224	3.641	0.5270
	4th	121	3.252	0.3442

According to Table 2, there is a statistical significance difference after business education between senior students and freshmen at most of the characteristic. With the guidance of this data we accept the H3 hypothesis. At Table 1, there are differences between variables' means grouped by class year; significant differences can be seen. Thus, all other hypotheses H1, H2, H4, H5 and H6 are rejected.

Table 2: T-Test Results

	t	p
Locus of control (LC)	0.986	0.001
Need for achievement (NA)	0.382	0.001
Propensity to take risk (PR)	0.146	0.122
Tolerance of ambiguity (TA)	2.415	0.001
Self confidence (SC)	1.354	0.001
Innovativeness (IN)	0.824	0.001

Significant at the 0.05 level

5. CONCLUSION

This study used to trait the entrepreneur characteristics of business school students changed after four year education. Entrepreneurial characteristics, namely locus of control, need for achievement, risk taking propensity, tolerance of ambiguity, self-confidence and innovativeness are usually seen in entrepreneur individuals as noted by the literature. On the other hand, business schools' role to train individuals to be entrepreneur is also mentioned in the literature (Klein and Bullock, 2006).

In the previous researches, it is seen that entrepreneurially educated individuals are more innovative, have more incentives for success, more tendency to take risks, have more inner control, self confidence in comparison with those who are not entrepreneurially inclined (Gürol and Atsan, 2006). These findings are also in parallel to the findings of previous researches on the theory of entrepreneurial characteristics (Ipcioglu and Taser, 2009a).

According to the results, it has been seen that business students developed more than average to become an entrepreneur for most entrepreneur characteristics. As mentioned before, this study is the continuity of another study, published four years ago. By checking the differences of first and last studies mean values we could also draw a picture of success of the curriculum given at business school.

In characteristics named locus of control, freshmen seemed more control oriented in early stage of their life. This could be understandable as the motivation of attending to a university will support this characteristic. As the graduation day comes closer every individual's dream "The Perfect Job" may pumper the need for achievement with the support of education as the results showed that this

cause increased statistically. According to the new study, students' characteristic to take risks is slightly differed and increased. This increase could be understandable as many students need a job after graduation. However, finding a good job is not so easy, so students will accept risks to find a job although this did not result as significantly different. The increase at tolerance of ambiguity can be caused by the fear of facing the real life after graduation. Students know that after graduation, the new life contains many unknowns which they should tolerate. Self confidence decreased after four years. The mean might still be around average but this will not be enough to say that education worked well on after four years. With the pushing force of education, students could have new and innovative ideas to carry on to professional life, but senior students may prefer to keep these new ideas to them selves till they have the opportunity.

According to the results, we scope that the two state universities' business school's aim and curriculum could managed to change most of the entrepreneurial characteristics. Of course the affected characteristic must still be studied and analyzed to guide other characteristics. As a suggestion, in the future studies these characteristic could be studied alone. By focusing on each characteristic, the development and the reasons could be analyzed deeply.

BIBLIOGRAPHY

Bosma, N., and Harding, R. (2006). *GEM 2006 Summary Result*, Bason College, USA, London Busines School, UK.

Brockhaus, R. H. & Horwitz, P. S. (1986). *The psychology of the entrepreneur: The Art and Science of Entrepreneurship*. Ballinger: Cambridge.

Churchill, N. C. & Myzyka, D. F. (1994). Defining and Conceptualizing entrepreneurship: A Process Approach, pp. 11-23 in: Gerald E. Hills (1994). *Marketing and Entrepreneurship. Research Ideas and Opportunities*. London. Quorum Books.

Cromie, S., (2000). Assessing Entrepreneurial Inclinations: Some Approaches Empirical Evidence, *European Journal of Work and Organizational Psychology*, 9(1): 13-30.

Douglas, E. & Shepherd, D., (2000). Entrepreneurship as a Utility-Maximizing Response, *Journal of Business Venturing*, 15, 231-251.

- Drucker, Peter F. (1985). *Innovation and Entrepreneurship. Practice and Principles*, Haper & Row Publishers, New York.
- Drucker, Peter F. (1995). *Innovation and Entrepreneurship*. London: Butterworth Heinemann.
- Entreialgo, M., Fernandez, E. & Vazquez, C., (2000). Characteristics of Managers as Determinants of Entrepreneurial Orientation: Some Spanish Evidence. *Enterprise and Innovation Management Studies*, 1(2): 29-32.
- 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.
- Gurol Y., Atsan N., (2006). Entrepreneurial characteristics amongst university students, *Education & Training*, 48: 25-38.
- Hébert, Robert F. and Albert N. Link (1988). *The Entrepreneur: Mainstream views and radical critiques*. 2nd Edition. New York: Praeger.
- Hisrich, R. D., Peters M., (1998), *Entrepreneurship*, Irwin McGrawhill.
- Ipcioglu, I. and Taser, A., (2009a). İşletme Bölümlerinde Verilen Eğitimin Girişimci Adayı Öğrenciler Üzerindeki Etkileri, *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 2 (10): 13-25 (in Turkish).
- Ipcioglu, I. and Taser, A., (2009b). The Effects of Gender Differences on Entrepreneurship: An Empirical Study, *Marketing and Entrepreneurship, Ankara University International Conference*, AUMEC.
- Klein G. and Bullock J., (2006). Can Entrepreneurship Be Taught?, *Journal of Agricultural and Applied Economic* 16.Feb.2006 :2-20.
- Koh, H. C., (1996). Testing hypotheses of entrepreneurial characteristics. *Journal of Managerial Psychology*, (11)3:12-25.
- Kourilsky, M. L. and Walstad, W.B. (1998). Entrepreneurship and Female Youth: Knowledge, Attitudes, Gender Differences, and Educational Practices, *Journal of Business Venturing*, 13 (1): 77-88.
- Kuratko, D. F. (1966). *Entrepreneurship Education: Emerging Trends and Challenges for the 21 st Century*, White Paper, U.S. Association of Small Business Education.

McClelland, D. C. (1987). Characteristics of successful entrepreneurs." *Journal of Creative Behavior*, 21(3): 219-233.

Morrison, A., Rimmington, M., and Williams, C., (1999). *Entrepreneurship in the Hospitality, Tourism and Leisure Industries*, Butterworth-Heinemann, Oxford.

Rotter, J. B., (1966). Generalized Expectancies for Internal Versus External Locus of Control of Reinforcement , *Psychological Monographs: General and Applied*, (609)80: 1-28.

Sexton, D.L., Bowman, N., (1985). The Entrepreneur: A Capable Executive and More. *Journal of Business Venturing* 1 (3):129–140.

Stevenson, H.H., Hamermesh, R., Marshall, P.W. and Roberts, M.J. (2002). Entrepreneurship: It Can Be Taught, *HBS New Business*.

Stewart, W.H., Watson, W.E., Carland, J.C. and Carland, J.W., (1998). A Proclivity for Entrepreneurship: A Comparison of Entrepreneurs, Small Business Owners, and Corporate Managers, *Journal of Business Venturing*, 14: 189-214.

Utsch, A. and Rauch, A., (2000). Innovativeness and Initiative as Mediators between Achievement Orientation and Venture Performance, *European Journal of Work and Organizational Psychology*, (9):45-62.