

# Entrepreneurship Education and Disciplinary Differences of University Students in Regard to Their Tendency to Become an Entrepreneur

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**Abstract**—In this paper, it is aimed to contrast entrepreneurial intent of university students within a Turkish context in regard to their; Family Related Factors, Work and Apprenticeship Experiences, Demographics, Attitudes toward success, Attitudes toward difficulties within a framework of academic disciplinary resemblance and differences. Entrepreneurship concept will be discussed through the “entrepreneur” and entrepreneurial tendency and detailed with empirical results for a subsequent discussion about the implications for entrepreneurship education at university level.

**Index Terms**—entrepreneurship, entrepreneurial intentions, university students, Turkey

## I. INTRODUCTION

Entrepreneurship, as old as economic activity, is still at its infancy when it comes to academic formation and education. Considering the major influences of entrepreneurship education both at academic and industrial world, at large, universities and their students are the shaping elements of the field.

Economic downturns and crises also bring the concept in the limelight in a way that; rather than taking a pie out of the industry cake, university students are taking their chances to make their own cake through new start-ups. Leaders accommodated best practices and success related seminars, entrepreneurship idea based competitions and courses for entrepreneurship accelerates more and more each year.

This situation is no different in Turkey, For instance according to the draft report of Turkish Entrepreneurship Strategy and Action Plan published by National Entrepreneurships Platform of Turkey indicates that 57 out of 177 universities have already adopted entrepreneurship into their curriculum [1]. From 2012 and on, the higher education council of Turkey declares a list of “entrepreneurship index” of top 50 universities for

each year, which placed the concept more and more on the ground of strategic importance for universities in the eye of potential university candidates.

These efforts and nations’ economic downturns brings entrepreneurship concept as a panacea for university students and therefore it becomes crucial to understand the role of family related factors, work and apprenticeship experiences, demographics, attitudes toward success, attitudes toward difficulties, attitudes toward risk taking and attitudes toward managerial tasks to explain their intent to become entrepreneur.

For the stated purpose, this paper investigates the entrepreneurial intent of university students from an interdisciplinary perspective with reference to entrepreneurship literature. It specifically focuses on “entrepreneur” for a better understanding to shape and customize the entrepreneurship education in an effort to explain who entrepreneur is with reference to specific sample of Turkish university students. After the literature review, the research questions, methodology and analysis will be depicted and concluded with discussion and implications for further researches.

## II. LITERATURE REVIEW

Entrepreneurship literature defines the concept as having roots in medieval ages in the form of production management and resource allocation [2]-[5]. After the 17th century, the term has been scrutinized through the people and the term “entrepreneur” has started to be associated with risk bearing qualities. Richard Cantillon officially described the term and added “uncertainty” dimension into the concept about 1725s from a functional perspective rather than the entrepreneurial qualities. The next addition came from Joseph Schumpeter with “innovativeness” to the complete picture of who the entrepreneur is at 1934 with a tendency to see the concept both from process and people perspective [6]. So far, according to Hebert *et al* there are twelve subject matters and definitions surfaced distinctively in the literature and accordingly the entrepreneur is “1...the person who

assumes the risk associated with uncertainty. 2...is the person who supplies financial capital. 3...is an innovator. 4...is a decision maker. 5...is an industrial leader. 6... is a manager or superintendent. 7...is an organizer and coordinator of economic resources. 8...is the owner of an enterprise. 9...is an employer of factors of production. 10...is a contractor. 11...is an arbitrageur. 12...is an allocator of resources among alternative uses.” [7]

Research domains of entrepreneurship literature clustered through the definition of entrepreneurs, their traits and qualities, interrelated variables and success factors in a pursuit of a systematic and holistic view of the concept. For that purpose different set of variables and different model theories were proposed. At the bottom line as Low and MacMillan (1988) stated "being innovators and idiosyncratic, entrepreneurs tend to defy aggregation. They tend to reside at the tails of population distributions, and though they may be expected to differ from the mean, the natures of these differences are not predictable. It seems that any attempt to profile the typical entrepreneur is inherently futile.” [8]

To compensate these pitfalls and lack of universally accepted entrepreneurial characteristics, researchers moved from individual domains (past experiences, qualities, traits, motivation, and demographics) or contextual domains (social, political, cultural, economics.) to more systematic view. After 1990s, “entrepreneurial intent” became the variable of interest to explain the process and interdisciplinary logic of the phenomena [9]-[15]. For that reason, models with psychology roots such as the Ajzen’s (1991) theory of planned behaviour or Shapero’s (1982) model of entrepreneurial event offer a rational are grounded further researches regarding entrepreneurial intentions. [16]

#### A. Family Background

The questions of whether entrepreneurs are born or made also raise the questions about the family background of entrepreneurs. In their book “The Anatomy of an Entrepreneur: Family Background and Motivation”, Wadwha *et al* (2009) say that “Understanding how entrepreneurs develop, the circumstances that can foster or induce entrepreneurship, and the mindset and beliefs of entrepreneurs could prove helpful both in supporting the existing class of entrepreneurs and in augmenting the ranks of entrepreneurs” [17].

Similarly Aldrich *et al* (2003) say “The family embeddedness perspective on entrepreneurship implies that researchers need to include family dimensions in their conceptualizing and modeling, their sampling and analyzing, and their interpretations and implications” [18] In the literature there are findings supporting entrepreneurs don't always come from entrepreneur parents [19]-[21]. For instance, Wadwha *et al.* (2009) says that “slightly more than half of our sample was the first in their families to launch businesses. On average, entrepreneur tends to be the middle child in a three-child household” [22].

Controversially and extensively there are findings saying that many successful entrepreneurs have entrepreneurial recognition from their parents or kins [23] [24]. For instance, in their research of Japanese entrepreneurs Ohe *et al* say that “As expected, parents' occupations have a great influence on Japanese entrepreneurs, half of whom had parents who were also entrepreneurs” Similarly Kalyani *et al* (2002) in their research of women entrepreneurs, find that “A majority (78.70 per cent) of the women entrepreneurs parents were engaged in other occupations or business activities” [25]. Therefore in this paper it is hypothesized as follow:

H<sub>1</sub>: University students whose parents have their own job are more intent to become entrepreneur than the ones whose parents work as employees

#### B. Work and Apprenticeship Experiences

Occupational interests and previous work experiences - in a form of apprenticeship, part time work, summer works...etc- are considered important variables for predicting later entrepreneurial intentions [26] [27]. Success stories of business people as well as entrepreneurs such as Steve Jobs, Bill Gates, Mark Zuckerberg -to name the most popular ones- mention their work attempts and works before they finally came up with today's exemplary start-ups. The academic support for this argument comes from with the belief that companies started by entrepreneurs with business familiarity can benefit from the owner's knowledge, attitude, earned skills and networking abilities [28]-[33]. Therefore;

H<sub>2</sub>: University Students who has work experience have more intention to become an entrepreneur than the ones with no experience

#### C. Demographics

Demographic factors such as age, gender and marital status and their effect on entrepreneurial intent are also considered to explain the relationship specifically in the stage of start-up formation. Literature reveals that, gender of university students can be an important factor for predicting the possible intent to start-up a new business in favor of male [34]-[36]. Also for the age related factors, there is a tendency to welcome the process in later ages in the form of actual activities, but when it comes to intention, the age factor reverses. [37]-[39]

H<sub>3</sub>: Demographic factors have an impact on university students' intention to become an entrepreneur.

#### D. Individual Attitudes

Buang *et al* (2006) frame the individual related variables positioned in the literature as “....characteristics of a successful entrepreneur are: know their role, very capable, motivated, willing to change, work hard, objective oriented, innovative, knowledgeable, committed and willful, willing to be responsible, craving for opportunities, willing to take uncalculated risk, confident,

creative and flexible, desire for quick feedback, highly energetic, motivation to achieve excellence, future oriented, willing to learn from mistakes and able to lead, setting the standard for success, concentrate on the future, do not rely on luck, responsible, self-reliance, self-confidence, vision, creative and innovative, open for feedbacks, eager for success, team work, opportunity oriented, can be trusted and honest, satisfactory physical ability, persistent in embracing uncertainties and failures” [40].

For instance risk taking attitude of entrepreneurs is one of the mostly referred variables in entrepreneurship literature with early examples from Cantillon (1755), Mill (1848), Marshall (1890) and Knight (1921). According to Knight (1921), “The profit of the entrepreneur is the compensation for bearing uncertainty” [41]. Also as Palmer (1971) stated “psychological testing of entrepreneurs be directed most toward the measurement of an individual's perception and handling of a risk” (p. 3). Also according to Liles (1974) “more risk tolerant people are assumed to be more inclined to become an entrepreneur where risk is significant not only in business decisions but also in security and career path, financial well being, family relations and physical well being as suggested” [42]. Accordingly:

H<sub>4</sub>: University students who are risk-taker have more intention to become an entrepreneur than the ones who are risk-averse

On the other hand, V. Gupta *et al* stated that “The concept of entrepreneurial leadership involves fusing the concepts of ‘entrepreneurship’ (Schumpeter, 1934), ‘entrepreneurial orientation’ (Miller, 1983; Covin and Slevin, 1988), and ‘entrepreneurial management’ (Stevenson, 1983) with leadership. It emphasizes taking a strategic approach to entrepreneurship, so that the entrepreneurial initiatives can support development of enhanced capabilities for continuously creating and appropriating value in the firm” [43]. Within the same context, creativity and entrepreneurship are considered as grafted in different range of studies from developmental studies to economic, psychometric, cognitive and system theories [44]-[48]. Therefore;

H<sub>5</sub>: University students who put them in leading position have more intention to become an entrepreneur than the ones who are not.

H<sub>6</sub>: University students possessing creativity related characteristics (like risk taking) have more intention to become an entrepreneur than the ones who are not.

### III. METHOD AND ANALYSIS

#### A. Sample

The sample of the study was collected from the 2012-2013 entrepreneurship class of Okan University - situated in Istanbul, Turkey- which is a compulsory course for all faculties and departments third and fourth year students

in majority-. Our participants were 340 students aging between 21 and 41. The students were comprised of the students of Economics and Administrative Sciences Faculty that are having their educations in Business Administration, Economics, Political Science, and International Logistics Departments; as well as students from other faculties like Arts and Sciences, Education, Fine Arts, Law, Vocational Studies and Engineering and Architecture. The demographic characteristics of the students were presented in Table I.

TABLE I. DEMOGRAPHIC CHARACTERISTICS OF SAMPLE

Age	21-30	31-40	41-50	Older than 50
No intention	116	1	0	1
Have intention	219	2	1	0
Education Level	Secondary School	High School	University	Master
No intention	1	38	79	0
Have intention	3	80	138	1
Gender	Female	Male		
No intention	57	61		
Have intention	101	121		

#### B. Variables and Measurement

Questionnaire used is the one that applies entrepreneurship qualities as well as demographics and biographical data through 25 questions scale developed by KOSGEB (Small and Medium Scaled Industry Development Support) which was tested in various branches across Turkey and officially published online in 2000s. Their inclination to entrepreneurship skills is contrasted in regard to their; Family Related Factors, Work and Apprenticeship Experiences, Demographics and Individual attitudes. This questionnaire was not a one-dimensional scale that was measuring only one construct or the dimensions of this construct. The questionnaire was consisting of items measuring family related background and general life preferences related with entrepreneurship. Almost all of the questions were related with categorical answers so most of the data derived from the questionnaire is a nominal type of data.

However the developers of the questionnaire, KOSGEB, argues that the questions in the questionnaire are related with entrepreneurship and can be graded according to the previous entrepreneurship studies, and the participants who get higher points from the questionnaire are more likely to become entrepreneurs. In addition we asked a question about the participants' actual intention to set up a business. We are trying to make a connection between KOSGEB's questionnaire and participants actual intentions.

### C. Procedure and Data Analysis

The surveys were distributed to the students as a part of the course and they completed the questionnaires during the course. The data were analyzed by Using SPSS 20 program; since the scales of the data were nominal in general Cross Tabulation analyses were conducted to compare the participants that have intentions to set up their own business to the ones that have no such an intention.

### D. Results

To test H1 cross tabs was conducted with the intention to set up a business and parents work condition. However as it can be seen in Table II we cannot derive a conclusion that is supporting our hypothesis. There seems to be no difference between the students that had chosen to set up their own business compared to others in terms of their parents' choice of work situation.

For previous job experiences of the students two cross tabulations were conducted for two questions measuring doing their own business before age 20, and type of the previous employers' business (corporation, SMEs and start-ups). In terms of previous work for doing own business, it seems that there is no noteworthy difference between the students that have entrepreneurial intentions and others. On the other hand when the comparison is made for the employer types it seems that the students that had previous work experience in start-up businesses are more inclined to become entrepreneur.

In terms of demographic variables, gender and marital status did not create differences on students' intentions to become entrepreneurs. Since majority of the participants have similar ages no analysis was conducted for age. However the birth order of the participants made a difference, for the middle children, the students that have entrepreneurial intentions are three times the students that have no such intentions.

For H5 we could not find a relationship or difference between the leadership type of behaviors and students intention to become entrepreneurs. On the other hand for H6, for the questions measuring risk taking tendency it seems that the numbers of the students that are willing to set up their businesses selected the options in the questionnaire that are riskier. The cross tabulation results are presented in Table II.

TABLE II. ENTREPRENEURIAL INTENTION AND QUESTIONNAIRE DIMENSIONS

Experience of doing own business before age 20	None		Few		Quite a few	
No intention	51		42		25	
Has intention	104		85		35	
Birth Order	Youngest		Others		Middle	Oldest
No intention	40		11		8	59
Has intention	75		16		23	108

Parents work condition	One had done own business only for a short time	One had done own business once	Both of them done their own business once	Done their own businesses
No intention	10	59	3	13
Has intention	30	104	10	24
The relationship with the bread maker of the family	No Relations	Good relations	Tense	Competitive
No intention	11	3	16	88
Has intention	16	4	228	174
Motivator to become an entrepreneur	Earning money	Extra effort spending	Reputation	Working autonomously
No intention	82	5	5	26
Has intention	141	11	13	55
Type of partner wanted	Conforming my ideas		Have different ideas	Challenging ideas
No intention	9		9	100
Has intention	23		29	170
In a competitive game which one is more vital to you?	None	How well I played	The Result	Both process and the result
No intention	2	21	26	69
Has intention	6	29	43	144
Which one do you prefer?	Winning probability 1/3		Problem solving probability	
No intention	34		84	
Has intention	90		128	
The required input for setting up a business	Money	An idea of a business or a product	Motivation and hard work	Customer
No intention	19	69	20	10
Has intention	42	133	34	13

## IV. DISCUSSION AND CONCLUSION

Although the data derived from KOSGEB's questionnaire is nominal, the cross tabulations shed light

on some of the findings related with the tendency to become entrepreneurs and some of these findings are in congruence with the previous literature on the characteristics of entrepreneurs.

For instance, as it can be seen in Table II the majority of the students that had previous experience with the start-up employers have more tendency to become entrepreneurs, they reported more intention to become entrepreneurs compared to the students that had previous experience in big corporations and SMEs. That finding is also congruent with Bandura's Theory of Social Cognitive Motivation theory. [49] These students who had previous experience in startups might have tendencies to take their previous employers as role models. By observing their previous employers they might have learnt how to set up and manage new business. In addition to that Bandura defined role models that have similar qualifications with the people are one of the main sources for increasing self efficacy of the people.

The finding related with the birth order also seems to be congruent with the previous findings. The middle children seem to have more intention to become entrepreneurs as stated by Wadwha *et al.* [17]

The finding related with the relationship with the head of the family is interesting. The students that have tense or rival relationships with their family heads were more likely to have entrepreneurial intentions. Maybe because of that rival relationship those students learned to live autonomously, and stand on their own feet earlier than the ones that have good relations with their patriarchs.

In addition to that, according to some results it can be derived that students that have entrepreneurial intentions are result oriented, like challenge and do not hesitate to take risks and these findings are also compatible with previous research. As it can be seen in Table II in terms of questions measuring risk taking, the number of the students that have intention to become entrepreneurs are higher than the number of students that have no intention for the students that selected riskier options. It seems that the students that are more inclined to become entrepreneurs might prefer partners that can challenge and criticize their ideas and that have different points of views on solving problems.

Apart from the cross-tabulation independent samples t-test ran showed that, for the selected sample, only significant factor affecting the entrepreneurial intent of university students is their risk attitude toward financial planning. Students who are willing to take financial risks above all are more prone to be an entrepreneur. On the other hand, among the sample, students who intent to become an entrepreneur are by and large from Faculty of Engineering and Architecture, Vocational School, Faculty of Law, Faculty of Economic and Administrative Sciences respectively that can be used for further researches.

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