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Entrepreneurship Intentions of Public Universities in Turkey: Going Beyond Education and Research?

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Abstract

Today, universities play a fundamental role in establishing and developing an entrepreneurship-oriented economy as they represent the main source of new knowledge. Roles of universities in economic growth have evolved in time and grew beyond their traditional teaching and research tasks. Universities are anymore expected to introduce solutions to social and industrial needs by exploiting the knowledge that is created by research. Universities even strategically aim to create wealth by investing in business, by building linkages, partnerships with technological enterprises or by creating new firms through academic entrepreneurship. Evolution of roles of universities in economic growth received close attention of scholars and found place in multiple disciplines like business management and economics literature and research for decades in developed countries. However there is still a significant need for research about the entrepreneurial intentions, activities and contributions of universities to economic growth in developing countries. Findings of this sort of studies can be very helpful to policy makers of these countries in academy, industry and government for utilizing entrepreneurship for economic growth, employment and increasing welfare of their people. In this context, study aims to determine the entrepreneurial intentions of public universities in Turkey by exploring their strategic postures, cultural and organizational units that supplement and support entrepreneurial activities and collaborations. Major characteristics of universities that determine their entrepreneurial intentions are derived from theoretical background. By conducting a qualitative content analysis, these characteristics are searched through Web sites of public universities in Turkey in academic year of 2011-2012. Findings regarding entrepreneurial intentions of universities that are reflected in their strategies, culture, institutional infrastructure, collaborations/partnerships can provide evidence about not only current but also potential entrepreneurial behaviors of public universities in Turkey.

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1. Introduction

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Entrepreneurship is considered to be a core competence for growth, employment and personal fulfillment (EC, 2004, 2006a). Besides governments and industry, higher education institutions play a fundamental role in establishing and developing an entrepreneurship-oriented economy as these institutions represent a main source of new knowledge and hold a constantly regenerating stock of students and scientists (Lautenschläger and Haase, 2011). Roles of universities in economic growth through contributing to creation of entrepreneurship climate in a country have evolved in time and grew beyond being just educators and disseminating the existing knowledge. Universities naturally generate new ideas, to contribute to innovation by creating knowledge and developing technology as an output of their research activities. However, today to overcome the challenges that the financial crisis brought, mission of universities evolved beyond their traditional roles. Teaching entrepreneurship and innovation in higher education should stay as the basic step, but besides for supporting theoretical learning with tailor-made practices, building links, creating projects in collaboration with regional industry would highly serve to creation of required human resources and knowledge for raising regional entrepreneurship capacity (Binks et al., 2006). Besides, universities are anymore expected both to introduce solutions to social and industrial needs and exploit the knowledge that is created by research. This new mission includes improving wealth by investing in business, by building linkages, partnerships with technological enterprises or by establishing new firms through academic entrepreneurship. Evolution of roles of universities in economic growth received close attention of scholars and found place in multiple disciplines like business management and economics literature and research for decades in developed countries. However there is still a significant need for up-to-date and multidimensional research and studies about the entrepreneurial intentions, activities and contributions of universities to economic growth in developing countries. Findings of this sort of studies can be very helpful to policy makers of these countries in academy, industry and government for utilizing entrepreneurship for economic growth, employment and increasing welfare of their people. In this context, study aims to determine the entrepreneurial intentions of public universities in Turkey by exploring their strategic postures, cultural and organizational units that supplement and support entrepreneurial activities and collaborations. These characteristics of the universities are critically important as they provide a knowledge and practice basis for performing and supporting entrepreneurial activities. Major characteristics of universities that determine their entrepreneurial intentions are derived from theoretical background. By conducting a qualitative content analysis, these characteristics are searched through Web sites of public universities in Turkey in academic year of 2010-2011. Findings regarding entrepreneurial intentions of universities that are reflected in their strategies, culture, institutional infrastructure, collaborations/partnerships can provide evidence about not only current but also potential entrepreneurial behaviors of public universities in Turkey.

In the second section theoretical background and literature review of entrepreneurship and dimensions of entrepreneurship intentions of Universities are presented. Third section covers method and research details of the study and then presents the data analysis and hypothesis tests. Finally, results of the analysis and findings are discussed in conclusion section together with recommendations for further studies.

2. Literature Review

2.1. Entrepreneurship

Entrepreneurship is a transforming process from an innovative idea to an enterprise, as well as from an enterprise to creation of value (Kauffman, 2008; Bilic et al., 2011) Entrepreneurship has been discussed as the most effective economical power in the global economics and social history (Kuratko, 2005). It is assumed that the effects of entrepreneurial activities are beneficial in several respects. As Lautenschläger and Haase (2011) summarized by quoting from various researchers;

- New businesses have a strong impact on job creation, which is a fundamental goal of macroeconomic policies, (Autio & Parhankangas, 1998; Fölster, 2000),
- New venture creation ensures the economy's welfare, efficiency and productivity (Baumol, 1990),
- New firms act as a major engine for promoting innovation, realizing business ideas, and changing economic structures (Acs, 1996; Audretsch, et al, 2002, Fritsch, 2008).

As a result, entrepreneurship is accepted as 'an important and relevant field of study (Shane and Venkataraman 2000). Several tributaries of thought propose that entrepreneurship, as the promoter of economic development, is rooted in particular cultural beliefs, and behaviors (Ondracek et al, 2011; Higgins, 1961; EC, 2004, 2006a). The European Community's Lisbon Strategy targeted entrepreneurship and innovation to foster economic dynamism through creating more and better jobs (Kailer, 2009). EU's enterprise policy considers entrepreneurship as a core competence for growth, employment and personal fulfillment (EC, 2004, 2006a).

2.2. Dimensions of Entrepreneurship in Universities

In the medium to long term, sustained competitiveness in the global economy will depend on technological-based strengths. These include the ability to apply new technology, to access successfully new markets, to develop new products, to incorporate best practice in the management of enterprises and to develop skill levels across the full spectrum of the labor force. These are all elements to which the university can make a substantial contribution (Acs, Fitzroy and Smith, 1995 from Klofsten and Johns-Evans, 2000) hence universities are becoming increasingly cooperating and intersecting with industry they are even becoming too much capitalist to stay independent from market dynamics (Slaughter and Leslie 1997; Slaughter and Rhoades 2004). Entrepreneurial activities in universities, including developments in curricula and infrastructure, are increasing at a significant rate (Katz, 2003). Entrepreneurship in academic institutions has conventionally been associated with entrepreneurship education and training in the context of small business start-ups (including academic spinout firms – Shane, 2004) and small business development (Brennan et al., 2007; Carlsson et al., 2009)

2.2.1 Entrepreneurial Universities

Challenged by recent financial crisis, today policymakers and companies began to expect research universities to generate new ideas and to contribute to innovation and economic development (Lacetera, 2009). Clark (1998) introduced the “entrepreneurial university” concept that integrates the functions of university with entrepreneurship and creates a new university type. By this way universities are becoming knowledge centers that support ecosystem of innovation and entrepreneurship within the national innovation system (Youitea and Shapira, 2008). Concepts of “Entrepreneur University” and “Innovative University” that is integrated to national and regional development objectives and requirements play the major role in this process (Leydersdorff, 2000). Hence, universities anymore are not just producers of human capital and industry-ready workers as they pursue academic entrepreneurship to strategically place and position themselves as important engines of sustainable technological development and economic growth, as a source of income and employment and as a contributor to improvement of cultural life (Yusof, 2009, Klofsten and Jones-Evans, 2000; Pilegaard et al., 2010; Schutte, 1999). Universities are forced to structure themselves in a global texture that think globally but act locally as a part of knowledge economy (Cleary, 2002). In this context, universities are no longer considered as an isolated island of knowledge (Klofsten and Jones-Evans, 2000) where liberators and protectors of all knowledge and science, of fact and principle, of inquiry and discovery, of experiment and speculation (Yusof, 2009).

Clark (1998, 2004) defined the characteristics of entrepreneurial university as follows:

- Strengthened steering core: has to fuse traditional academic values with stronger managerial perspectives. There is an effort in all levels of university for developing academic culture.
- The enhanced development periphery must provide the university with a dual centre in which traditional disciplinary based departments are supplemented by centers that manage new interfaces with the external world. Co operations and collaborations create functions like technology and knowledge transfer, industrial linkages, intellectual property rights development, continuous education and fund creating activities.
- A funding base, a prerequisite for adaptability must involve a will to cross subsidize from the departmental/faculty haves to have-nots. Universities should expand their income sources (government, industry etc.).
- Academic heartland must be stimulated in ways which are compatible with disciplinary core. Entrepreneurship should be accepted by all units while protecting academic stimulus.
- An integrated entrepreneurial culture is created through the above mentioned four components. Innovativeness and entrepreneurship spirit can begin in a particular unit, while an entrepreneur institution helps to create a culture that supports institutional alignment.

2.2.2 Entrepreneurial Orientation Factors in Universities

Strategies and organizational structures can provide evidence about the entrepreneurial orientations and intentions of universities:

- a) Strategy: For creating an entrepreneurial university, it is critical for universities whether entrepreneurship fit the university’s vision and strategy and whether links to the community/industry exist (Seelig, 2010). However, the conservatism of the corporate culture and the lack of entrepreneurial talent act as barriers to entrepreneurship

development in universities (Kirby, 2006). Hence, to encourage entrepreneurial behavior in universities, a dynamic entrepreneurial culture must first be established through strategic focus and organizational structuring that is aligned with strategies. Wright et al. (2004) stated that culture in universities is also changing from being quite varied and in some cases openly hostile; there is greater acceptance of and a more positive attitude towards entrepreneurship across science departments in universities. Though entrepreneurial activities conventionally start in localised pockets as a result of personal and often private initiatives (largely ad hoc),, depending on the perception of the leadership and administration, such activities could be increasingly set within an explicit policy frame with carefully designed processes and support mechanisms to help things along (Davies, 2001). It is necessary but not sufficient to have policies and procedures, and to communicate them positively and enthusiastically (Birley, 2002), it is required to define the barriers that are preventing entrepreneurship within the organization and to create an environment supporting entrepreneurship development. Hence the formulation of a high level strategy that demonstrates the university's intent makes it clear that the university encourages entrepreneurship and inform university's staff (Kirby, 2006).

Failure of entrepreneurship in universities and insufficient industry-university collaboration is caused by the fact that the missions of universities and industry are positioned far from each other in the origin. hence these two parties have problems in understanding each other and their relations are challenged by long, expensive, exhausting and impractical negotiation processes during the realization of collaborations and partnerships (Hızıröğlü, 2011). Universities that can effectively manage industry collaborations and entrepreneurial activities generally have detailed technology transfer policies that minimize negotiation and bureaucratic processes while maintaining transparency. Covering entrepreneurship and industry collaboration in the mission of universities can be a good starting point for removing the barriers on academic entrepreneurship and collaboration with industry. As Kirby (2006) also quoted from intrapreneurship theory of Pinchot (1985) suggests that "Senior Management Commitment to Entrepreneurship" and "The development of an Intrapreneurial Culture" should be in the agenda of universities to support and promote entrepreneurship in an organization. The sort of actions and related activities involved in such a strategy mainly are (together with encouragement, support, recognition and reward) (Kirby, 2006):

- Endorsement: At the highest level. Senior staff act as role models
 - Incorporation: Into University, Faculty/Departmental and personal plans
 - Implementation: Setting targets that are monitored
 - Communication: Publication & dissemination of the strategy and consultation on it
- b) Organization and units: Adaptive universities form new "knowledge coalitions" with other centers of knowledge in society, entrepreneurial universities moreover structure themselves to enhance research achievement (Clark, 2001). Entrepreneurial culture relates to the nature and rate of expansion of entrepreneurial activity (continuing education, R and D, technology transfer, consultancy, etc.), therefore logically, the larger the volume of such work, the greater the likelihood of a general shift in culture (Davies, 2001). Hence, organizational units that are structured by the aim of doing entrepreneurial activities can give idea about the entrepreneurial intentions and cultural shift to entrepreneurial culture. Launching or enhancing university-based entrepreneurship centers can have a tremendous positive impact on individual students, the university environment, and the regional economy (Seelig, 2010, Bowers et al., 2006). Kirby (2006) also emphasized "multi-disciplinary Entrepreneurship Centre" as a required action to be involved in strategies for promoting entrepreneurship in universities. Some basic infrastructural reforms and institutional structures that promote a culture of entrepreneurship within the university are science parks and technopoles (Klofsten and Jones-Evans, 2000; Malecki, 1991; Segal, 1985). On the other hand, universities have to build partnerships and collaborate with industry, other academic institutions and other related parties like NGOs (Cleary, 2002). Industry-university collaboration centers and productivity of technology transfer offices can improve the flow of trade between university research and industry by patenting and marketing university research results and fostering startups using university technologies (Graff et al., 2002; Pilegaard et al., 2010; Rothaermel et al., 2007, Twaalfhofen, 2007) and industrial liaison offices support linkages between academia and industry (Siegel et al., 2007, Klofsten and Jones-Evans, 2000; Stimsson et al., 2009; Bercovitz ve Feldman, 2006). These structures can give idea about the entrepreneurial intentions and competencies of a university as they link industry and academia and act as a "business learning area" that enable transferring information from previous experience to a current entrepreneurial opportunity (Shane and Venkataraman, 2000; D'este et al., 2010), provide better engagement of academics in knowledge transfer activities (Grimaldi, and Grandi 2005), recognition of commercial opportunities of research activities, networking and partnerships with industry and other universities, educational partnerships (Kirby, 2006; Kuratko, 2005) and outreach activities.

Based on the literature research, the topics that can be utilized as factors of entrepreneurial intent in universities were defined in Table 1 as a check-list to be used in evaluate the public universities in Turkey.

Table 1. Primary Topics of Entrepreneurial Intentions of Universities

Topic	Action	Reference
Strategy:	1) Emphasizing entrepreneurship in vision and strategy 2) Communicating strategy Policies/procedures	Pinchot, 1985; Kirby, 2006, Hızıroğlu, 2011; Davies, 2001.
Culture	3) Emphasizing entrepreneurship in norms/values/ philosophy	Pinchot, 1985; Kirby, 2006,
Collaboration	4) Emphasizing collaboration with industry in vision and strategy 5) Identification of internal and external cooperation partners, networking and cooperation policy; Networking and partnerships with businesses and other universities 6) Outreach activities	Easterby-Smith/Tanton, 1998, Cleary, 2002, Clark, 2001, Clark (1998, 2004), Klofsten and Jones-Evans , 2000; Grimaldi et al., 2011), (Twaalfhofen, 2007
Organization	7) Entrepreneurship Centers 8) Industry-university collaboration centers and productivity of technology transfer offices	Clark (1998, 2004) ; Kirby, 2006; Seelig, 2011, Davies, 2001 Klofsten and Jones-Evans, 2000; Malecki, 1991; Segal, 1985, Siegel et al., 2007, D'este et al., 2010; Pilegaard et al., 2010; Rothaermel et al., 2007; Grandi and Grimaldi, 2005, Clark, 2001

2.2.3. Entrepreneurial Activities of Turkish Universities

In the 2011-2013 strategic plan of Supreme Council for Science and Technology (SCST/BTYK) decision with nr [2011/104], the development of policy tools for triggering innovativeness and entrepreneurship in universities is strongly emphasized (BTYK, 2011). In this decision and the Action Plan for Science, Technology Human Resources (2011-2016) that is approved in 22th meeting of SCST supporting technology transfer offices and incubation centers in universities, establishing entrepreneur and innovative university indexes and redesigning the academic upgrading criteria in a way to encourage entrepreneurship and innovativeness (BTYK, 2011). However, despite they have an advanced knowledge and technical potential, Turkish universities are not still able to fully use these in university-industry collaboration and intellectual property strategies. Hence (Hızıroğlu, 2011). Autonomous management of financial, human and knowledge resources of university is the major requirement for negotiating with industry and other shareholders, building appropriate linkages and networks that are alligned with the expectations of the region, society and economy. Many governments in the world begun to back away from top-down close surveillance as it does not work very well around universities due to unanticipated and undesired effects, ant they have even encouraged universities to adopt somewhat more autonomous postures (Clark, 2001). However, in Turkey, lack of autonomy in universities is still a major obstacle for creating entrepreneurial universities (Özer 2011).

3. Methodology

Major discussion: Study aims to explore determine the entrepreneurial orientations and intentions of public universities in Turkey in terms of their strategic statements (vision, mission, objective, policy), cultural statements (philosophy/values/norms), entrepreneurship centers, entrepreneurship clubs and outreach training activities. In this research, we focus on capturing intentions of public universities to engage entrepreneurship and related attitudes as the first step of understanding entrepreneurial competencies of universities in Turkey. Public universities are reseahed because entrepreneurship is expected to be prioritized by them to response to uncertainties and limitations of state funding that they largely rely on (Slaughter and Leslie 1997; Mars & Rios-Aguilar, 2009).

- Research method: Based on the qualitative content analysis of the related Web sites, entrepreneurial intentions of public universities in Turkey are explored in terms of major topics that that are derived from theoretical background as listed in Table 1.
- Limitations: Study uses the information of the public universities that are published on their web sites in academic year of 2010-2011. Entrepreneurial statements, activities, institutions those information are not available in universities' web sites were not included in this study. Academic entrepreneurship activities and their outcomes in forms are not explored in this study.

4. Research : Analysis of Entrepreneurial Intentions/Orientations of Public Universities in Turkey

In the light of above explained theoretical background on entrepreneurial intentions of universities, following topics in Table 1 can be utilized as the primary research agenda.

Hypotheses related to the factors that define entrepreneurship intentions of universities are derived from literature (and listed in Table 1). 1st, 3rd, 6th and 7th topics of Table 1 are explored in this study and are presented in this section. Other topics are recommended to be explored in further research.

- H1: Entrepreneurship is emphasized and included in strategic statements of public universities in Turkey (as mission, vision, strategic objective, values/philosophy/norms) as a strategic choice.

Table 2. Emphasis on Entrepreneurship in Strategic Statements of Public Universities in Turkey

Emphasis on entrepreneurship in;	Universities that have strategies on Entrepreneurship		Universities that have strategies on Entrepreneurship Education (EE)		Universities that have strategies on Both AE and EE		Universities that have strategies on Total (AE+EE)	
	Nr	%	Nr	%	Nr	%	Nr	%
Vision	5	6%	7	7%	1	1%	12	13%
Mission	3	3%	13	14%	2	2%	16	17%
Strategic Objectives	3	3%	5	5%	2	2%	8	8%
(-) in both mission/ strategic Objectives)	- 2	2%	0	0%	- 1	1	- 2	2%
(-) in both Vision/strategic Objectives)	- 1	1%	0	0%	- 1	1	- 1	1%
Values//norms	4	4%	1	1%	1	1%	5	5%
Total	12	13%	26	27%	4	4%	38	40%

As Table 2 shows, only 13% of public universities in Turkey emphasize entrepreneurship in their strategic statements, hence public universities in Turkey can not be defined as “entrepreneurial universities”. However, universities that emphasize entrepreneurship education in their strategies have a higher rate (26%). Another important fact is that universities that emphasize both entrepreneurship and entrepreneurship education in their strategies are very few (4%).

- H2: Entrepreneurship is emphasized and included in strategic statements (mission, vision, strategic objectives, and values/philosophy/norms) of Academic Units in public universities in Turkey.

Table 3. Distribution of Strategic Intentions of Academic Units of Public Universities in Turkey on entrepreneurship and entrepreneurship education

Emphasis on entrepreneurship in;	Universities with Units that have strategies on Academic Entrepreneurship (AE)		Universities with Units that have strategies on Entrepreneurship Education (EE)		Universities with Units that have strategies on (AE +EE)		Total - Universities with Units that have strategies on (AE+EE)	
	Nr	%	Nr	%	Nr.	%	Nr.	%
Vision	8	8%	10	10	3	3%	18	19%
Mission	7	7%	9	9%	4	4%	16	17%
Strategic Objectives	2	2%	2	2%	1	1%	4	4%
(- in both Vision/Mission/ strategic Objectives)	0	0%	1	1%	0	0%	1	1%

(- in both Vision/Mission)	1		1		0	0%	2	
Values/norms	3	3%	0	0%	3	3%	3	3%
Total	19	20%	19	20%	11	11%	38	40%

As can be seen from Table 3, proportion of academic units that have strategic intentions on entrepreneurship and entrepreneurship education are equal (20%). 11% of universities have units that emphasize both entrepreneurship and entrepreneurship education in their strategic statements. These proportions are higher than the proportions of the universities with strategic intentions on entrepreneurship and entrepreneurship education.

- H3: Entrepreneurship is mostly emphasized and included in strategic statements (mission, vision, strategic objectives, values/philosophy/norms) of Academic Units in public universities that have strategic statements on entrepreneurship
- H4: Entrepreneurship education is mostly emphasized and included in strategic statements (mission, vision, strategic objectives and values/philosophy/norms) of Academic Units in public universities that have strategic statements on entrepreneurship education.

Table 4 shows that the most of the academic units that have strategic statements on entrepreneurship are not in the universities with strategic statements on entrepreneurship. The same finding is valid for universities with strategic intentions entrepreneurship education.

Table 4. Distribution of Academic Units with Strategic Intentions on Entrepreneurship among universities

	In Universities with strategic statements on Entrepreneurship (AE)		Universities with out strategic statements on Entrepreneurship		Universities with strategic statements on Entrepreneurship Education		Universities without strategic statements on Entrepreneurship Education	
	Number	%	Number	%	Number	%	Number	%
Units with strategic statements on AE (Total 19)	7	37%	12	63%	5	26%	14	74%
Units with strategic statements on EE (Total 19)	10	53%	9	47%	5	26%	14	74%
Units with strategic statements on both AE and EE (Total 11)	5	26%	4	21%	3	16%	0	0%
Total	17		21		10		28	

- H5: Universities have entrepreneurship centers to promote entrepreneurship.

As Table 5 shows that almost half of the (44%) public universities have entrepreneurship centers, although only 13% of these universities have strategies on entrepreneurship. Half of the universities that have strategic statements both on entrepreneurship and entrepreneurship education do not have entrepreneurship centers.

Table 5. Distribution of Entrepreneurship Centers in Public Universities of Turkey in terms of the Strategic Intentions on entrepreneurship and entrepreneurship education

Entrepreneurship Centers	Total Nr.	Total %	Universities with strategic statements on Academic Entrepreneurship (AE) (Total 12)		Universities with out strategic statements on Academic Entrepreneurship (AE) (Total 84)		Universities with strategic statements on Entrepreneurship Education (EE) (Total 26)		Universities without strategic statements on Entrepreneurship Education (Total 70)		Universities with strategic statements on Both AE and EE	
			Number	%	Number	%	Number	%	Number	%	Number	%
Universities with Entrepreneurship Centres	44	46%	6	50%	38	45%	12	46%	31	44%	2	50%

Universities without Entrepreneurship Centres	52	54%	6	50%	46	55%	14	54%	39	56%	2	50%
TOTAL	96	100%	12	100%	84	100%	26	100%	70	100%	4	100%

- H6: Universities establish Entrepreneurship Clubs for students and scholars.

As can be seen from Table 6, more than half of the (%56) public universities in Turkey have student entrepreneurship clubs. Half of the universities that have strategic statements on entrepreneurship do not have entrepreneurship clubs, showing that the existence of entrepreneurship clubs is not dependent on the existence of strategic intentions on entrepreneurship in these universities. However, entrepreneurship clubs are more common (18%) in universities that have strategic statements on entrepreneurship education than the universities (8%) without strategic statements on the subject.

Table 6. Distribution of Universities that has Entrepreneurship Clubs for students and scholars in terms of strategic intents of universities on entrepreneurship and entrepreneurship education

Entrepreneurship Clubs	Total Nr.	Total %	Universities with strategic statements on Academic Entrepreneurship (AE) (Total 12)		Universities with out strategic statements on Academic Entrepreneurship (AE) (Total 84)		Universities with strategic statements on Entrepreneurship Education (EE) (Total 26)		Universities without strategic statements on Entrepreneurship Education (Total 70)		Universities with strategic statements on Both AE and EE	
			Number	%	Number	%	Number	%	Number	%	Number	%
Universities with Entrepreneurship Clubs	54	56%	6	50%	48	57%	18	69%	36	51%	3	75%
Universities without Entrepreneurship Clubs	42	44%	6	50%	36	43%	8	31%	34	49%	1	25%
TOTAL	96	100%	12	100%	84	100%	26	100%	70	100%	4	100%

- H7: Universities offer external training and teaching services on entrepreneurship as outreach activities.

Table 7. Distribution of Universities that offer external training and teaching services on entrepreneurship in terms of strategic intents of universities on entrepreneurship and entrepreneurship education

Outreach Training Activities	Total Nr.	Total 1 %		Universities with strategic statements on Entrepreneurship (Total 12)		Universities without strategic statements on Entrepreneurship Total 84)		Universities with strategic statements on Entrepreneurship Education (EE) (Total 26)		Universities without strategic statements on Entrepreneurship Education (Total 70)		Universities with strategic statements on Both E and EE	
				Number	%	Number	%	Number	%	Number	%	Nr.	%
Universities with any kind of outreach training activities	91	95%		11	92%	80	95%	23	88%	68	97%	3	75%
Universities without any kind of outreach training activities	5	5%	% of total outreach training activities	1	8%	4	5%	3	12%	2	3%	1	25%
Universities with outreach training activities on entrepreneurship	57	59%	63%	8	67%	49	58%	23	88%	41	59%	3	75%
Universities without outreach training activities on entrepreneurship	39	41%	37%	4	33%	35	42%	3	12%	29	41%	1	25%
TOTAL	96	100%	100%	12	100%	84	100%	26	100%	70	100%	4	100%

Table 7 presents that the majority (95%) of public universities in Turkey have outreach training activities and established Continuing education/Life Long Learning Centers. 63% of these universities that have education centers offer trainings and programs on entrepreneurship. Most of the universities (67%) that have strategic statements on entrepreneurship and vast majority (88%) of the universities that have strategic statements on entrepreneurship education offer entrepreneurship education in these centers.

5. Conclusion

Strategic intentions of universities on acting as entrepreneurs and teaching entrepreneurship is important for understanding the orientation of universities about expanding their roles in economic growth and development. This study analyzed the strategies and organizations of public universities in Turkey for contributing to the expansion of entrepreneurship in the country.

Study showed that vast majority of the public universities in Turkey does not emphasize entrepreneurship in their strategic statements; hence public universities in Turkey can not be defined as “entrepreneurial universities”. Entrepreneurship education has received higher (but still not sufficient) attention in strategies, hence public universities in Turkey has a higher intention of teaching entrepreneurship rather than acting as entrepreneurs. Another important fact is that universities that emphasize both entrepreneurship and entrepreneurship education in their strategies are very few, although universities that have strategic intention on entrepreneurship are expected to focus on entrepreneurship education naturally. On the other hand, strategic intentions of academic units on entrepreneurship and entrepreneurship education are higher than the universities’. Difference between academic units and universities in terms of strategic intention on entrepreneurship and entrepreneurship education has to be explored for developing a deeper understanding on the difference between the orientation of units and universities that they are a part of. As strategic management process requires the diffusion of broad/organization wide strategies into functional unit strategies and policies, it is expected that the units in universities that have strategic intentions on entrepreneurship or/and entrepreneurship education have higher intentions on entrepreneurship and/or entrepreneurship education. However, most of the academic units that have strategic statements on entrepreneurship and entrepreneurship education are not in the universities with similar strategic intentions. Therefore, strategic management practices in the studied universities needs to be explored for understanding the related obstacles.

Regardless of having strategies on entrepreneurship, significant part of the public universities has entrepreneurship centers. Hence it is concluded that existence of entrepreneurship centers is not dependant on the existence of strategies on entrepreneurship or on entrepreneurship education in these universities. Similarly, more than half of the universities have student entrepreneurship clubs. While entrepreneurship clubs are more common in universities that have strategic statements on entrepreneurship education, existence of these clubs is not dependent on the strategic intentions on entrepreneurship in universities.

Majority of public universities in Turkey offer outreach training activities on entrepreneurship in Continuing education/Life Long Learning Centers. Most of the universities that have strategic statements on entrepreneurship or entrepreneurship education are among these universities. However it is still not possible to conclude that offering outreach training activities on entrepreneurship is dependent on the strategic intentions on entrepreneurship or entrepreneurship education, because majority of universities without such intentions also offer similar trainings.

Expanding this research to cover also private universities in Turkey will be very useful to see the big picture of entrepreneurial intentions of all higher education institutions in Turkey. Besides research on the other topics showing entrepreneurial intentions and also processes and outcomes of entrepreneurial activities (nr. of ventures, patents, licenses, publications etc.) of universities shall clarify whether these intentions can be effectively realized or not.

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