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Assessment of the Students' Attitude toward Business with Regard to Higher Education Curriculum: Case Study of Esfarayen University

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Abstract

Unemployment of university graduates is one of the critical problems of the society. The unemployed university graduate does not have the opportunity to use what they have learned and have no way to enter the work market. This indicates necessity of more coordination between higher education system and the industry and between the graduate's capabilities and the industries' need for work force. Through this, the limited resources available to higher education system is utilized in a more optimal manner. The present study is an attempt to assess the student's attitude toward entrepreneurship in light of higher education curriculum. To this end, Esfarayen University of technology was studied as case study. Data gathering tool was attitude toward entrepreneurship questionnaire. As revealed by the results, the students tended to have neutral attitude toward business and there was no significant difference between students of different fields in this regard. However, boys and girls had significant difference as to their attitude toward business. With these results, the targets of the 20 years outlook to support entrepreneurship in higher education are not going to be met. To make the higher education curriculum more responsive to variety of challenges and needs it is notable that entrepreneurship training and empowerment through the curriculum must be taken as a new necessity by curriculum planners of Iran's higher education system.

Keywords: Entrepreneurship, unemployment, higher education, curriculum

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Introduction

Iran work market is challenged by new phenomenon called "unemployed university graduates." After many years of studying and spending considerable amount of money, university graduates enter the market just to find out that there is no room for them. Many of these graduate decide to migrate to other countries. On the other hand, with development of technology and knowledge, the country no longer can follow realization of economic development program without well-educated population (Nafisi, 2001).

Taking into account importance and necessity of entrepreneurship, no one denies that preparing and training entrepreneur individuals is not possible in vacuum. This goal is achievable through a purposefully designed curriculum and recognition of this responsibility by higher education system and pertinent bodies. Gibb (2000) believed that students' entrepreneurship capabilities must be nourished through the educational program.

Baldeston (2000) argued that higher education system is the main player in preparing expert work force and ground for permanent development in light of globalization.

Higher education curriculum is one of the key factors in realization of higher education goals (Norouzzadeh et al., 2006). In this regard, as the centerpiece of higher education institutes, it represents the roles and goals of higher education (Altbach, 1988). In this regard, curriculums undergo a continuous course of revision and modification (Bridges, 2000). Otherwise, curriculums and university program lose their effectiveness, which leads to a phenomenon known as useless curriculum (Fathi et al., 2010).

Higher education curriculum has long been considered as a different ways of organizing the materials based on what was needed by the students. However, the required skills of life in future and keep learning through one's life are of more critical importance. In light of this, curriculum no longer is merely of academic nature and curriculum planner nowadays have encountered with the challenge of integrating technical traditional content with more general skills (Walkington, 2000). In other words, academic education's goals have changed in the modern age; it is expected to train individuals who, rather than memorizing information, are capable of classifying, analyzing, and combining information, solving problem, communicating, negotiating, discussing, managing, and working with technology. These individuals are expected to coordinate fast with technological, industrial, and social changes (Miiguel et al., 2004).

The general policies of the 20 years national outlook[1] puts emphasis on promoting knowledge-based business culture, entrepreneurship culture, and improvement of scientific and technological capabilities of individuals based on the needs of society and creating readiness to take new professional responsibility. Taking into account the role of universities in creating positive attitudes among students, the present study is aimed at assessing the students' attitude toward entrepreneurship in Esfarayen University of technology. To this end, following questions were proposed:

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[1] Iran's 20-year vision plan Available in: www.dolat.ir/PDF/20years.pdf

1. What is the general status of entrepreneurship capabilities of students of the institute?

2. Is there a significant difference among the students of different fields as to entrepreneurship capabilities?

3. Is there a significant difference among the boy and girl students as to entrepreneurship capabilities?

4. Is there significant difference among the associates and bachelors' students as to entrepreneurship Capabilities?

5. Does the current higher education curriculum supports entrepreneurship attitudes?

Indices of attitudes toward business are summarized in the conceptual model (Fig. 1). These indices are classified as individual's background, general variables, and background variables, which in general indicate attitude toward entrepreneurship. Individual's background refers to demographical information such as age, education, gender, and experience. General attitude toward competitiveness, general attitude toward money, and general attitude toward change constitute the general variables. Additionally, environmental support, environmental barriers, and university environment are in background variable group. These variables were measured by attitude toward entrepreneurship questionnaire.
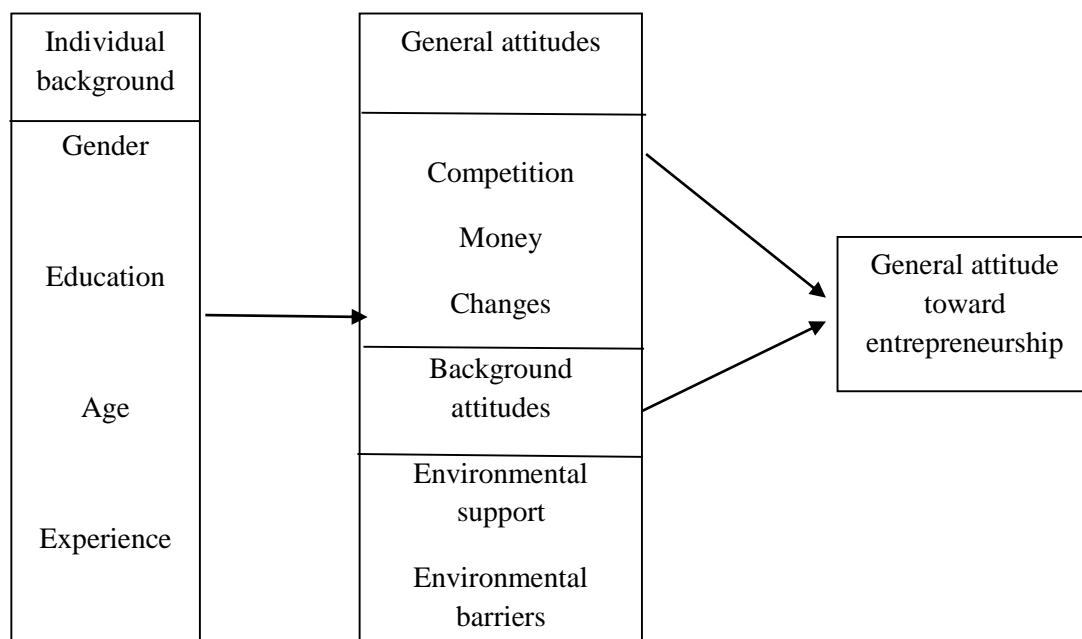

Figure 1: Attitude toward entrepreneurship model based on Davidson's model
(Davidson, 1995)

Rogers and Shoemaker (2000) argued that attitude is a sustainable set of beliefs that an individual holds about a thing so that they make the individual to show specific behaviors. Attitude means mental and psychological readiness based on organized

experiences, which has dynamic and purposeful effects on people's reaction toward things and situations.

With this definition, one may express that attitude is one of the main aspects of man's behavior and it even overshadows cognitive and psychological-motor aspects. When an individual possesses negative attitudes toward a phenomenon, they will never show tendency to direct their knowledge and skills toward that action.

It is admitted that attitudes change over time and as a result of interacting with others; however, under modern human resources (HR) development management, gradual and natural changes are not satisfactory and the trend of changes should be directed and accelerated with educational tools.

In short, the student's attitude toward entrepreneurship can act as a key factor in improvement of educational performance and increase of chance of grabbing better jobs in the pertinent field. The attitude is subject to variety of economic-social and educational factors and needs to be taken into account by the authority and planners (Shafiei et al., 2007).

Studies on entrepreneurship fields have approached to potential entrepreneur from three aspects; 1- characteristics that make an entrepreneur and non-entrepreneur distinguishable; 2- demographical features such as age, education, family background and so on; 3- environmental factors (specially individual factors such as attitude toward entrepreneurship) that influence one's decision to run an entrepreneurial profession (Guerrero et al., 2008). These studies have shown that decision or tendency to run an entrepreneurial business is prerequisite of showing entrepreneurial behavior (Fayolle et al., 2006); as entrepreneurial behaviors appear through following steps; 1- Intention to run a business or to show entrepreneurial behavior; 2- Acquisition of knowledge in the entrepreneurial field and business; 3- Doing studies to spot possible opportunities (Heinonen et al., 2005).

Methodology

Study population was comprised of all students of Esfarayen university of technology (n = 613) and based on Morgan's table, 340 students were selected. To glean the data, semi-structured interview and standard questionnaire of students' attitude toward entrepreneurship (Ation, Keeley, Klofsten, 1997) were used. Data analyses were performed using t-test and variance in SPSS.

Hypothesis one: What is the general status of entrepreneurship capabilities of students of the institute?

Table 1: General status of entrepreneurial capabilities

Index	N	Mean	SD
Entrepreneurial intention	342	2.9462	0.901
University environment	342	2.0833	0.721
Environmental barriers	342	2.0507	0.739
Attitude toward entrepreneurship	342	3.4091	1.109
Attitude toward changes	342	2.9152	0.941
Attitude toward competitiveness	342	3.1842	0.973
Attitude toward money	342	3.5234	1.091
Environmental support	342	2.9462	0.803
Attitude toward business	342	53.46	7.605

To measure entrepreneurship capability of the students, eight indices (Table 1) were taken into account. As listed in the table above, mean and standard deviation show that attitude toward money has the highest mean point and total point of attitude toward business is equal with 53.46; which indicates general attitude to business is neutral in the study group.

*Hypothesis two***:** there is a significant difference among the students of different fields as to entrepreneurship capabilities.

Table 2: Mean and standard deviation of the elements of business attitudes based on field of study

Field	Statistics	Entrepreneurial intention	University environment	Environmental support	Environmental barriers	Attitude toward competitiveness	Attitudes toward money	Attitude toward changes	Attitude toward entrepreneurship	Attitude to business
Associate of mechanics	Mean	2.968	2.131	1.975	2.047	3.095	3.404	2.968	3.642	53.682
	SD	1.0406	0.862	0.836	0.7811	0.964	1.194	0.777	1.149	8.878
Bachelor of mechanics	Mean	3.034	1.855	1.855	1.974	3.051	3.435	2.859	3.378	51.859
	SD	0.801	0.620	0.620	0.683	0.910	0.988	0.844	1.114	6.706
Associate of metallurgy	Mean	2.687	2.2	2.2	1.866	3.25	3.366	2.933	3.465	51.069
	SD	1.041	0.794	0.794	0.714	1.006	1.346	1.317	1.179	9.059
Bachelor of metallurgy	Mean	3.028	2.182	2.182	2.148	2.233	3.587	2.831	3.445	52.638
	SD	0.9201	0.717	0.717	0.678	0.925	1.004	0.900	0.952	6.435

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Computer	Mean	3.02	1.974	1.974	2.069	3.310	3.741	2.862	3.362	53.586
	SD	0.750	0.556	0.556	0.703	0.929	0.969	0.971	0.924	4.902
Electricity	Mean	2.948	2.066	2.066	2.111	3.311	3.777	2.977	3.488	54.377
	SD	1.149	0.711	0.711	0.964	0.961	0.956	1.04	1.231	7.358
Industries	Mean	2.787	2.284	2.284	2.075	3.811	3.386	3.102	3.090	53.454
	SD	0.750	0.736	0.736	0.685	1.191	1.315	0.918	1.235	7.605

As listed in Table 2, total point of attitude toward business is maximum in electricity engineering field and minimum in metallurgy engineering. Table 3 lists the summary of variance analysis as to entrepreneurial capability of students based on field of study.

Table 3 variance analysis of the elements of attitude toward business based of field of study

Variable	Total squares	df	Mean squares	f	Sig
Entrepreneurial intention	4.401	6	0.734	0.902	0.493
University environment	7.401	6	1.243	2.426	0.26
Environmental support	2.029	6	0.338	0.520	0.793
Environmental barriers	2.383	6	0.397	0.722	0.632
Attitude toward competitiveness	3.138	6	0.523	0.548	0.772
Attitudes toward money	7.349	6	1.225	1.028	0.407
Attitude toward changes	2.585	6	0.431	0.481	0.822
Attitude toward entrepreneurship	7.368	6	1.228	0.997	0.427
Entrepreneurship	7.613	6	0.761	0.830	0.127

As indicated in Table 3, difference between the elements of attitudes toward business is not significant; although mean points are different. Taking into account sig. of 5%, no significant difference is concluded.

*Hypothesis three***:** there is significant difference among the boy and girl students as to entrepreneurship capabilities.

Table 4 lists the mean and standard deviation of the indices of attitude toward business of boy and girl students. To compare the indices and check difference between the two groups, t-test was performed on the results (Table 5).

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Table 4 Mean and standard deviation of indices of attitudes toward business among boy and girl students

Variable	Statistics	Entrepreneurial intention	University environment	Environmental support	Environmental barriers	Attitude toward competitiveness	Attitudes toward money	Attitude toward changes	Attitude toward entrepreneurshi	Attitude to business
Boy	N	258	258	258	258	258	258	258	258	258
	Mean	3.024	2.094	1.9609	2.059	3.170	3.564	2.854	3.915	53.866
	SD	0.927	0.737	0.797	0.771	3.170	1.052	0.929	1.089	7.486
Girl	N	84	84	84	84	84	84	84	84	84
	Mean	2.706	2.050	2.172	2.023	3.226	3.398	3.101	3.071	52.180
	SD	0.788	0.6730	0.804	0.635	0.983	1.201	0.962	1.108	7.868

Table 5 t-test results for indices of attitude toward business for girl and boy groups

Variable	T	Df	Sig.
Entrepreneurial intention	2.811	339	0.074
University environment	0.727	340	0.378
Environmental support	-1.957	338	0.951
Environmental barriers	0.546	340	0.053
Attitude toward competitiveness	-0.480	340	0.936
Attitudes toward money	1.265	340	0.073
Attitude toward changes	-1.955	340	0.609
Attitude toward entrepreneurship	3.222	339	0.013
Entrepreneurship	1.780	341	0.021

As listed in Table 5, there is a significant difference between boys and girls as to total point of attitude toward business. Regarding attitude toward entrepreneurship, the results show significant difference between the two groups, which is not the case as to other indices.

Hypothesis four: there is significant difference among the associates and bachelors' students as to entrepreneurship capabilities.

Table 6 lists mean and standard deviation of attitudes toward business among students of associates and bachelors' program.

Table 6 Mean and standard deviation of the indices of attitudes toward business of associates and bachelors' programs

variable	Statistics	Entrepreneurial intention	University environment	Environmental support	Environmental barriers	Attitude toward competitiveness	Attitudes toward money	Attitude toward changes	Attitude toward entrepreneurship	Attitude to business
Associates	N	71	71	71	71	71	71	71	71	71
	Mean	2.840	2.165	1.978	1.976	3.162	3.422	2.957	3.592	53.652
	SD	1.049	0.834	0.874	0.758	0.984	1.214	1.009	1.149	8.757
bachelors' students	N	271	271	271	271	271	271	271	271	271
	Mean	2.974	2.061	2.022	2.070	3.190	3.549	2.904	3.361	53.420
	SD	0.857	0.689	0.785	0.735	0.971	1.057	0.924	1.096	7.298

To measure difference between the two groups (Table 6), regarding their attitudes toward business, eight indices were examined. As showed by the mean points, comparing with bachelors' program students, students of associates' program had higher points regarding university environment and attitude toward change. Total point of attitude toward business of the associates' program students is higher than that of bachelors' program student.

Table 7 t-test results for indices of attitude toward business based on educational programs

Variable	df	T	Sig.
Entrepreneurial intention	-1.113	339	0.080
University environment	340	1.077	0.110
Environmental support	338	-0.405	0.144
Environmental barriers	340	-0.949	0.438
Attitude toward competitiveness	340	-0.216	0.482
Attitudes toward money	340	-0.874	0.052
Attitude toward changes	340	0.427	0.757
Attitude toward entrepreneurship	339	1.557	0.956
Entrepreneurship	340	0.658	0.765

The results showed that the difference between students of associates and bachelors' degree are significantly difference regarding business attitude.

Conclusion

Analysis and assessment of entrepreneurship capabilities and success of formal / pre-intended curriculum as to preparing the ground for development of entrepreneurship

capability gave clear and documented image of realities and challenges ahead of Iran's higher education system in the specific field under study. The results enable us to detect shortcomings and weaknesses of the adopted policies and the measures to be taken to solve and improve the current situation (Amini et al., 2013). This study put emphasis on the role of higher education on improvement of entrepreneurship capabilities of the students. Total point of attitude toward business was 53, which indicate a neutral attitude. No significant difference was found between students of different majors. The results are consistent with Feizi and Safaei (2009) and Sharifzade (2003). In fact, it is notable that students, regardless of their major, need opportunity of gaining experience and trainings designed to introduce aspects of entrepreneurship. Through this, the students are expected to develop capabilities and abilities to start new businesses and creating job (Amini et al., 2013).

Moreover, the results showed that there was significant difference between boy and girl students regarding total point of entrepreneurship and creativity and risk taking indices. The results are consistent with Rezaei et al. (2009). In fact, due specific social and environmental norms and wider range of unofficial trainings, boys had far more entrepreneurship performance. It is notable that entrepreneurship capabilities is a general phenomenon that can be realized through proper education. As recommended by studies there are considerable common features between entrepreneurs, which make them distinguishable from others (Ahmadi et al., 2010).

Answers to the question four showed that there is no significant difference between students of associates and bachelors' programs. This result is consistent with that of Badri et al. (2005), which indicates that higher education curriculum has failed to developed entrepreneurship capabilities of the students.

Results of interviews with the students, authorities and heads of departments regarding the eight elements of attitudes toward business, concerns, and recommendations for future job showed that majority of the students had positive attitude toward self-employment; still they found it beyond their.

Regarding the indices "entrepreneurship intention" and "attitude toward entrepreneurship," lack of financial support and no specific framework to be followed by banks to finance startups, lack of experiences, negligence of applicable aspects of education by universities, poor environmental support, and no one to consult with make the student to prefer finding a life-time state job and then run a half time small business.

As to the index "university environment," majority of the students argued that after graduation they still need learning new skills as their practical courses were not enough not to mention poorly equipped workshops and labs. The question to be asked is that why bother to enter the university when it does not train even a single profession? Most of the respondents answered that it is because the society admires those having university degree regardless of quality of the education and that without a degree you cannot apply for a job.

Despite the students, educational authorities believed that the problem lies in the culture and how people think. They believed that education system and professors first

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need to change before we focus on the students. Even with the best equipment and laboratory, no good results will be obtained unless we change people's way of thinking. They argued that theoretical and practical courses have equal importance and the students need to develop in the both areas. That is, there is a mutual interaction between ideas and equipment and they develop along each other.

Regarding environmental supports and barriers, all the participants believed there is no support. Heads of departments believed that even if there is a financial support by the banks, it is not enough even to run a small store; so that the only reliable source of financial support is the family.

As to attitude toward money, virtually all the participants were interested in creating money. It is notable that the majority of the respondents preferred money with social prestige and few believed that money brings prestige.

Concerning attitudes toward change, about 60% of the students preferred works where they are assigned with variety of tasks or experience difference environment. About 40% of the participants preferred working in predictable situation doing routine jobs to avoid stress of ambiguity and insecurity.

Main recommendations by the students was that the university should be more concerned about future job of the graduates and make serious revisions in the curriculum or design courses more coordinated with possible future works. The courses should be more skill oriented. The government on the other hand should offer more support for the youth. They believed that the entrepreneurs are usually the retired or those who have more than one job. That is, there is no room for fresh out of college students, while the back and financial institute refuse to support them.

Our results showed that there is a wide gap between ideal curriculum and status quo. Necessity to revise the curriculum to be more entrepreneurial oriented is undeniable. It is highlighted in Iran's 20 years outlook that universities should put more emphasis on entrepreneurship. Unfortunately, our results showed the opposite and that the current curriculum is not entrepreneurship oriented.

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