

Full Length Research Paper

Impact of some contextual factors on entrepreneurial intention of university students

Parvaneh Gelard* and Korosh Emami Saleh

Islamic Azad University South Tehran Branch, Iran.

Accepted 14 December, 2010

Entrepreneurship has captured the attention of both scholars and policy makers during the last decades. The main reason for this is the growing needs for entrepreneurs who accelerate economic development through generating new ideas and converting them into profitable ventures. Entrepreneurial activities are not only the incubators of technological innovation, but also provide employment opportunities and increase competitiveness. Fostering entrepreneurship needs a two-fold policy that should focus on both the current situation and future prospect of entrepreneurship. As such, it is important to map out the future context of entrepreneurship. The purpose of this paper is to fill this void by analyzing the impact of some contextual factors on the entrepreneurial intention of university students. To fulfill this purpose, we have proposed a model, which shows some contextual factors that affect entrepreneurial intention. In this model, the entrepreneurial intention is taken as a function of structural, educational, formal networks and informal networks support. This model is tested on a sample of 200 university students in Islamic Azad University, South Tehran Branch.

Key words: Entrepreneurial intention, student, university.

INTRODUCTION

In the last decade, there has been growing interest in undertaking and intensifying actions to promote and support the idea of entrepreneurship as an attractive alternative to wage employment among students around the globe. There are several reasons for this tendency. First, well-educated entrepreneurs are expected to create ventures that grow faster than the enterprises of their counterparts. The importance of education for the successful performance of new ventures is well recognized both by management practitioners and by researchers (Kennedy and Drennan, 2001). Secondly, due to the restructuring processes in organizations, following the intensified competition on the market worldwide, previous advantages, such as job security or reward of loyalty, connected with wage employment in established and, mostly, large enterprises currently offer less appeal, thus increasing the desirability of self-employment (Kolvereid, 1996; Franke, 2004). Finally, unemployment among graduates in many countries has been growing during

recent years.

Entrepreneurial intent has proven to be a primary predictor of future entrepreneurial behavior (Katz, 1988; Reynolds, 1995; Krueger et al., 2000). Therefore, investigating what factors determine the entrepreneurial intent is a crucial issue in entrepreneurship research. A common theoretical framework for models explaining pre-start up processes is the theory of planned behavior that views behavioral intent as an immediate determinant of planned behavior (Fishbein and Ajzen, 1975). In previous researches, personal and environment-based determinants of entrepreneurial intent, such as personality traits, attitudes toward entrepreneurship, or social environment were extensively discussed (Begley et al., 1997; Brandstatter, 1997; Davidsson, 1995; Franke, 2004; Robinson, 1991; Segal, 2005). A central question that arose was what factors determined entrepreneurial intent among university students. The objective of this paper is to examine the key factors influencing students' intent to entrepreneurial activity. The previous studies in the literature provided some alternative explanations to this question, and it was observed that some scholars primarily focused on the effect of personality characteristics

*Corresponding author. E-mail: p.gelard2010@gmail.com.

on decision-making process (Bonnett and Furnham, 1991; Brockhaus, 1980; Johnson, 1990). Although the results varied across the studies, they often indicated a link between entrepreneurial intention and some personality factors, such as self-confidence, risk-taking ability, need for achievement, and locus of control. However, an extended range of cultural, social, economical, political, demographical and technological factors surrounds a person. Therefore, personality traits cannot be isolated from these contextual factors. The previous studies in the literature indicated a link between education and entrepreneurship (Galloway and Brown, 2002; Gorman and Hanlon, 1997; Henderson and Robertson, 2000; Kolvereid and Moen, 1997); as such, getting an adequate education may foster the entrepreneurial intention of a person.

According to Garavan and O'Cinneide (1994), there is clearly a major role and need for entrepreneurship education and training. Since the education offered by a university mostly influences the career selection of students, universities can be seen as potential sources of future entrepreneurs. Today, most universities are spending significant amounts of money to design a viable entrepreneurship education for their students. Harrison and Leitch (1994) analyzed the evolution of entrepreneurship education in a three-stage model. According to this model, the first approach to entrepreneurial education is to view it as a sub-set of general management education. As a reaction to this approach, the second view differentiates entrepreneurial education from the managements of large-scale organizations. The last stage provides a basis for the notion of the reintegration of management education and entrepreneurship education (Harrison and Leitch, 1994). Recently, the nature of discussion on entrepreneurial education is shifting towards learning for entrepreneurship and not about entrepreneurship itself (Cooper, 2004). Since it is difficult to find one best model for all cases, the disagreement on the issue might continue in the future as well. However, the concrete progress in entrepreneurial education during the last decades show that these discussions are important for shaping future understandings.

ENTREPRENEURIAL INTENT IN PREVIOUS RESEARCH

Early research on entrepreneurship and factors influencing the decision to start a new venture concentrated on the personality characteristics of individuals such as need for achievement, risk-taking propensity, internal locus of control, and/or innovativeness. A number of personality factors have been recognized as relevant for entrepreneurial intent and success (Brockhaus and Horwitz, 1986). As an alternative to the personality theories, since the 1990s, the attitude approach has become widely used for the prediction of the likelihood to set up an enterprise (Douglas, 1999; Robinson, 1991). This study

continues along these lines.

According to the theory of planned behavior, the individual's attitudes have an impact on behavior via intention. In particular, there are three fundamental attitudinal antecedents of intent: personal attitude toward outcomes of the behavior, perceived social norm, and perceived behavioral control (self-efficacy). They have proven to account for a large part of the variance in intentions (Fishbein and Ajzen, 1975). In general, attitudes can be defined as "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object" (Fishbein and Ajzen, 1975). They are relatively less stable than personality traits and can be changed both across time and across situations in virtue of the individual's interaction with the environment (Robinson et al., 1991). Educators and practitioners may influence entrepreneurial attitudes. In a new venture context, Robinson (1991) emphasized the necessity to distinguish between the general attitudes related to the broad psychological disposition of the individual and the domain attitudes referring to the person's more specific attitude toward entrepreneurship. The application of specific attitudes increases the accuracy of the measurement within the specified domain, thus improving the predictability of the behavioral intent. The importance of attitudes, both in general and toward entrepreneurship, in explaining people's aspirations to create a new venture has been recognized and empirically confirmed in previous studies (Autio et al., 1997; Douglas, 1999; Krueger et al., 2000; Madl, 1997; Robinson, 1991). However, the empirical findings employed to support the direction and significance of the attitude-intent relationship is partly inconsistent. The inconclusive evidence results primarily from a wide variation in the research context and in the measurement of both independent and dependent variables suitable for a university student's context.

Douglas (1999) has investigated the relationship between the intention to start one's own business and the individual's attitudes toward income, independence, risk, and work effort. The results of his empirical study suggest that individuals with a more positive attitude toward independence (autonomy) and risk are characterized by a higher willingness to become entrepreneurs. However, people's attitudes to work efforts correlate negatively with the intent to be self-employed. He also found no significant difference with regard to the attitude towards income (money). Contrary to Douglas's findings, Wang and Wong (2004) reported a non-significant influence of risk-averse attitude on entrepreneurial interest. Autio (1997) have also provided an insight into the role of general attitudes in entrepreneurial career choice. They examine the influence of attitudes toward achievement, autonomy, money, change and competitiveness upon entrepreneurial conviction (the perceived ease of starting and running a new venture) viewed as the primary determinant of entrepreneurial intention. With the exception of competitiveness, they found individuals' general attitudes to have a high moderating influence on entrepreneurial conviction.

Autio (1997) additionally confirmed a positive impact of attitude toward entrepreneurship on entrepreneurial conviction. In a survey of university business students, Krueger (2000) found support for the theory of planned behavior. Personal attitudes toward the act (that is, entrepreneurship) and self-efficacy, in particular, act as significant predictors of entrepreneurial intention. However, they report a non-significant impact of the remaining attitudinal variable (that is, perceived social norm) on entrepreneurial intent. In their analysis of the entrepreneurial aspirations of business students at two universities in German-speaking countries and one of the leading USA academic institutions, Franke (2004) found a strong positive relationship between the attitude toward self-employment and the intention to become an entrepreneur. In a survey of students of technical disciplines at the Massachusetts Institute of Technology, Franke (2003) examined the impact of personal dispositions and determinants of entrepreneurial intention. They reveal that the attitude toward entrepreneurship is the most important of perceived environmental conditions for setting up a new venture on entrepreneurial intention. Another stream of studies in the entrepreneurship discipline focuses on environment conditions as determinants of people's aspiration to start a company. The environment can provide an explanation as to why the relationship between personal-related factors and entrepreneurial intent is not always deterministic in nature (Franke, 2003). Aldrich and Zimmer (1986) have also stressed that individuals cannot be viewed as atomized decision-makers who operate as autonomous entities. Likewise, they have proposed preventive attitudes on entrepreneurship, and if not approached, the entrepreneurs will be isolated (Robinson, 1991). Therefore, it is reasonable to focus on the entrepreneurial process as an embedded process in a social, cultural and economic context. Previous research that recognized the importance of external influence factors for an individual's interest to become an entrepreneur concentrated particularly on a person's social networks, on the image of entrepreneurs in the society, on socio-cultural norms, and on barriers to entrepreneurship (Autio et al., 1997; Begley et al., 1997; Franke, 2003).

However, empirical studies linking the external conditions for entrepreneurship and the Individuals' career choice also provided inconsistent results. Raijman (2001) examined the role of social networks, in which individuals are embedded in predicting entrepreneurial intent. His results confirmed that having close relatives who are entrepreneurs increased the willingness to be self-employed. Begley (1997) analyzed the impact of four socio-cultural conditions of entrepreneurship, that is, importance of work, value of innovation, shame of failure, and status of entrepreneurship in a society, on business students' interest in becoming an entrepreneur in seven different countries. The social status of entrepreneurship emerged as a good predictor of entrepreneurial interest.

Nonetheless, they reported a non significant influence of shame of failure and relevance of work in a society.

Finally, they found a negative relationship between value of innovation and intent, that is, individuals who believed innovation was highly regarded were less likely to want to start a company. Franke (2003) demonstrated that the student's entrepreneurial intent is also directly affected by perceived entrepreneurship related barriers and support factors. Specifically, students perceived support actions are more favorable for entrepreneurship to be the stronger in their entrepreneurial intention. When students realize a hostile environment for business founders (for example, credit conditions) as being too restrictive, they are less likely to become entrepreneurs irrespective of their attitude toward self-employment. In another study, Franke (2004) examined the influence of the university environment on entrepreneurial intent. Results of their study suggest that the lower level of students' founding intention follows from a negative appraisal of the university's activities to provide students with the knowledge required to start a business and to support the process of new venture creation actively. The study of Turker et al. (2005) also considered the impacts of both internal (motivation and self-confidence) and external factors (perceived level of education, opportunities, and support) on entrepreneurial propensity of university students. The study found that two internal factors and perceived level of support were statistically significant factors.

STRUCTURAL MODEL

According to Bird (1988), intentionality can be defined as a state of mind directing a person's attention, experience and action towards a specific goal or a path to achieve something. Therefore, entrepreneurial action can also be classified as an intentional behavior, or intention is a predictor of planned entrepreneurial behavior (Krueger, 1993). Shapero (1982) indicated that the entrepreneurial intention stems from the perception of feasibility and desirability of a person, and this path is affected by the cultural and social context. Therefore, based on previous researches, we proposed a structural model to analyze the entrepreneurial intention of university students which is shown in Figure 1.

The first dimension of the model is educational support. It is obvious that professional education in universities is an efficient way of obtaining necessary knowledge about entrepreneurship. Although, Wang and Wong (2004) in their study said "the entrepreneurial dreams of many students are mainly hindered by inadequate preparation focused on their personality characteristics, they also pointed out the fact that the entrepreneurial dreams of many students are hindered by inadequate preparation;"...their business knowledge is insufficient, and more importantly, they are not prepared to take risk to

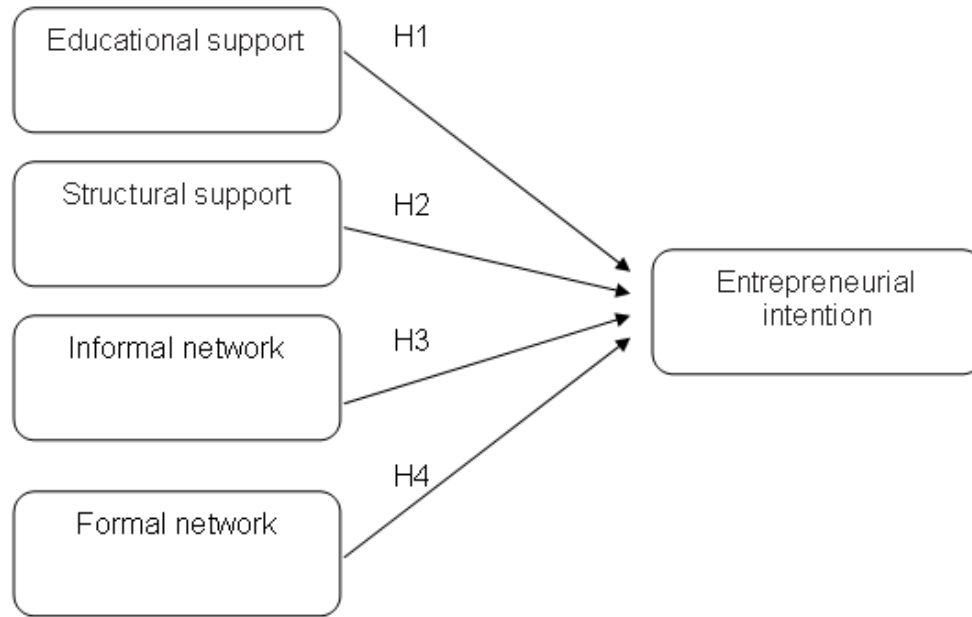


Figure 1. Structural model.

realize their dreams." Therefore, academic institutions might play critical roles in the encouragement of young people to choose an entrepreneurial career. However, they are sometimes accused of being too academic and encouraging entrepreneurship insufficiently (Gibb, 1993, 1996). In order to overcome this insufficiency, most universities have offered entrepreneurship courses or programs at the undergraduate and graduate levels. Some studies analyzed how these entrepreneurial interests of universities affected the entrepreneurial inclination of students. The study of Gorman and Hanlon (1997) showed that entrepreneurial attributes can be positively influenced by educational programs. In their study, Kolvereid and Moen (1997) also indicated a link between education in entrepreneurship and entrepreneurial behavior. Based on the discussion in the foregoing, an hypothesis was developed for this study:

H₁: Entrepreneurial intention of university students relates with perceived educational support.

The second factor in the model is structural support. In this study, we are living in a broader context of social, cultural, economical, political and technological factors. The current context of entrepreneurship is mainly shaped by economical and political mechanisms, which are governed by the actors in the public, private and non-governmental sectors. In such a system, there can be some opportunities or threats for entrepreneurs. For instance, if there are some barriers to entry into the market, people might show a lower tendency for entrepreneurship. However, if they find the given conditions adequate and favorable, it might be expected that they

are more likely to start a business. As the researches show factors such as tax regulation, business regulation, legal system and labor regulation affect entrepreneurial intention (Stephan, 2010; Dreisler, 2003, Storey, 2008). Thus, it is hypothesized that:

H₂: Entrepreneurial intention relates with perceived structural support.

The third and fourth factors in the model are formal and informal network. According to Leonard-Barton (1984), owner-managers acknowledge the significance of networks: 'entrepreneurship is both constrained and facilitated by linkages between the resources and opportunities that are created via the social network of the entrepreneur'. Entrepreneurs build successful business by maximizing the opportunities and social networks that are crucial for business owners (Birley et al., 1990; Lawton-Smith et al., 1991; Rothwell and Dodgson, 1991). Networks can be defined 'as the composite of the relationships in which small firms are embedded, which serve to link or connect small firms to the environments in which they exist and conduct their businesses' (Shaw and Conway, 2000). Our understanding of entrepreneurial behavior has been more influenced by the content of network flows, especially those related to identifying entrepreneurial opportunities. Networks provided a way to link information to entrepreneurial performance, as a critical explanatory variable (Aldrich and Zimmer, 1986). In this way, issues related to the distinction between managerial versus entrepreneurial competence, the reasons why certain ethnic groups engaged in similar businesses, and contradiction of common trait profiles leading to

different outcomes could be better explained (Brockhaus and Horwitz, 1986; Gartner, 1988). In 1986, Aldrich and Zimmer argued that the entrepreneur is embedded in a social network that plays a critical role in the entrepreneurial process. In the broadest terms, social networks are defined by a set of actors (individuals or organizations) and a set of linkages between the actors (Brass, 1992).

Research on the growth of small firms (McGhee et al., 1995) confirms the importance of entrepreneurial teams which 'expand the organization's network of contacts and provide the balance of expertise required to profit from certain types of cooperative activity' (Birley and Stockley, 2000: 289). Entrepreneurs with good cultural and social networks can attract more capital and are more likely to be successful than those with limited networks (Shaw, 1998). Some linkages are planned, some are accidental and others are with organized groups, such as Chambers of Commerce, that help enhance entrepreneurial scope. Johannisson (2000) provides an 'actor-centred' definition:

"Networks are interconnected, dyadic relationships in which various ties can be analyzed in terms of content. First, information ties provide business information; secondly, exchange ties extend access to resources; and thirdly, influence ties legitimate the entrepreneur's activities and create barriers to entry".

According to Curran et al. (1993), networks usually consist of small firms, owner managers, support agencies, voluntary association and other bodies through which participants engage in activities "which bring the networks into existence and sustain it through time". Findings from OECD Issues paper (2000) have highlighted that entrepreneurs have progressively learnt to use different types of networks, which serve different complimentary purposes. The following broad categories of networks have been identified: institutional networks, business networks, informal networks, formal networks, scientific and technical networks, profession networks, user networks, friendship networks, and recreation networks (Conway, 1997).

Networks are based on social relationships, family, friends, neighbors, as well as customers, vendors and creditors. Birley et al. (1990) note: 'entrepreneurs, at an early stage of enterprise development, rely heavily on the informal network of friends, family members and social contacts from the local neighborhood to gather relevant data'. Gradually, entrepreneurs extend their networks to include bankers, accountants, lawyers, suppliers, government agencies, customers and consultants. This extended network is a formal network. Entrepreneur network is a complex relationship that entrepreneurs participate in. This relationship may be obtained through being a member in formal organizations or may be obtained through informal organizations such as parents, family members and friends. In this study, when we refer to formal network, we mean government agencies, bankers, lawyers, consultants and insurance companies; and

when we refer to informal network, we mean family members, friends and parents. We believe that formal and informal networks help entrepreneurs to establish a business, and these networks affect entrepreneurial intention. Thus, we have the following hypotheses:

H₃: Entrepreneurial intention relates with informal network.

H₄: Entrepreneurial intention relates with formal network.

METHODOLOGY

Sample and method

The population of this study comprised students from Islamic Azad University, South Tehran Branch. We chose a sample of 200 students from Accounting-Management College. This university has six colleges. Out of these colleges, we chose Accounting-Management College because students of this college have passed management and entrepreneurship training. The youngest students in the sample are 20 years old and the oldest are about 45 years of age. The students are 27 years old on average. However, the other qualifications are shown in Table 1.

Measurement

In the study we have five variables. We measured all variables on a five point Likert-scale with the levels 1 = "strongly disagree" to 9 = "strongly agree". In previous research, entrepreneurial intention was measured in different ways. An individual's preference for self-employment and a time dimension of his career path has been taken into account (Das and Irene, 2006). In this study, entrepreneurial intention was measured through a statement of "I plan to establish my own business in the foreseeable future after graduation". We measured educational support with three questions (Cronbach's alpha is 0.67), Structural support with four questions (Cronbach's alpha is 0.66), formal network with five questions (Cronbach's alpha is 0.69) and informal network with four questions (Cronbach's alpha is 0.75). All items used in this study are listed in Table 2. It should be noted that we have 17 questions in the questionnaire.

RESULTS AND ANALYSES

The hypotheses were tested by regression analysis. We have two variables in each regression. We ran regression models for each independent variable with dependent variable in each regression. Table 3 summarizes the results of the statistical analysis for correlation. ANOVA and regression coefficients (Tables 4, 5, 6, 7, 8, 9, 10 and 11) show that entrepreneurial intention of university students relates with perceived educational support ($p < 0.01$, Pearson Correlation = 0.195, $y = 0.258x + 6.1$) and perceived structural support ($p < 0.01$, Pearson Correlation = 0.129, $y = 0.229x + 6.241$). More so, we find that entrepreneurial intention relates with formal network ($p < 0.01$, Pearson Correlation = 0.266, $y = 0.45x + 4.287$), but does not have a relation with informal network ($p > 0.01$). The results show that H₁, H₂ and H₄ are in support of the analyses, but H₃ is not.

Table 1. Sample description.

Valid		Frequency	Percent	Valid percent	Cumulative percent	Mean	Minimum	Maximum
Sex	Male	94	47.0	47.0	47.0			
	Female	106	53.0	53.0	100.0			
	Total	200	100.0	100.0	147.0			
Marital status	Single	147	73.5	73.5	73.5	27	20	45
	Married	53	26.5	26.5	100.0			
	Total	200	100.0	100.0	173.5			
Age	Valid	200						
	Missing	0						

Table 2. Study's items.

S/No.	Item	Construct	Cronbach's alpha
1	The education in university encourages me to develop creative ideas for being an entrepreneur	Educational support	0.67
2	My university provides the necessary knowledge about entrepreneurship		
3	My university develops my entrepreneurial skills and abilities		
4	In Iran, the government encourages entrepreneurs to establish a firm	Structural support	0.66
5	State laws (rules and regulations) are adverse to running a business		
6	Tax regulation gives facilities to entrepreneurs		
7	Iran economy provides many opportunities for entrepreneurs		
8	If I decide to become an entrepreneur, my parents will support me	Informal network	0.75
9	If I decide to become an entrepreneur, my family members will support me		
10	If I decide to become an entrepreneur, I will consult my family members		
11	If I decide to become an entrepreneur, my friends will support me		
12	If I decide to become an entrepreneur, my families will give me emotional support		
13	To start entrepreneurship activities, I will get benefit from experience consultant	Formal network	0.69
14	To start entrepreneurship activities, I will get benefit from country entrepreneurs network		
15	To establish business plan, I will get benefit from agencies related to entrepreneurship activities		
16	To start entrepreneurship activities, I will get benefit from customer and supplier network		

Limitations

The current study is subject to some limitations. Firstly, similar to the previous studies in the literature, the study focused on intentionality. It is clear that intentions may not turn into actual behaviors in the future.

Therefore, even if one respondent stated a high entrepreneurial intention in the survey, he/she might choose a completely different career path in the future. In fact, it

has been a common problem for almost all studies in the literature and currently, there is no other accurate way to measure the tendency for entrepreneurship. As such, the statements of respondents about their entrepreneurial intention were taken as a reliable source of information. However, it might be more useful to measure this variable through multiple items in order to reduce measurement error in further studies. The second limitation might appear on a possible difference between "perceptions"

Table3. Summary of results of the statistical analyses for correlation.

		Educational support	Structural support	Informal network	Formal network	Entrepreneurial intention
Educational Support	Pearson correlation	1	0.181*	-0.046	0.240**	0.195**
	Sig. (2-tailed)		0.010	0.522	0.001	0.006
	N	200	200	200	200	200
Structural Support	Pearson correlation	0.181*	1	0.001	0.012	0.129
	Sig. (2-tailed)	0.010		0.993	0.869	0.001
	N	200	200	200	200	200
Informal Network	Pearson correlation	-0.046	0.001	1	0.216**	0.083
	Sig. (2-tailed)	0.522	0.993		0.002	0.240
	N	200	200	200	200	200
Formal Network	Pearson correlation	0.240**	0.012	0.216**	1	0.266**
	Sig. (2-tailed)	0.001	0.869	0.002		0.000
	N	200	200	200	200	200
Entrepreneurial Intention	Pearson correlation	0.195**	0.129	0.083	0.266**	1
	Sig. (2-tailed)	0.006	0.001	0.240	0.000	
	N	200	200	200	200	200

*Correlation is significant at the 0.05 level (2-tailed), **Correlation is significant at the 0.01 level (2-tailed).

Table 4. ANOVA^b

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	30.143	1	30.143	7.809	0.006 ^a
	Residual	764.337	198	3.860		
	Total	794.480	199			

^aPredictors: (Constant), educational support, b. Dependent Variable: entrepreneurial intention

Table 5. Coefficients^a

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.100	0.438		13.934	0.000
	educational support	0.258	0.092	0.195	2.794	0.006

^aDependent variable: entrepreneurial intention.

Table 6. ANOVA^b

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	13.192	1	13.192	3.343	0.001 ^a
	Residual	781.288	198	3.946		
	Total	794.480	199			

^aPredictors: (Constant), structural support, b. Dependent Variable: entrepreneurial intention.

Table 7. Coefficients^a

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.241	0.575		10.857	0.000
	structural support	0.229	0.125	0.129	1.828	0.001

^aDependent variable: entrepreneurial intention.

Table 8. ANOVA^b

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	5.524	1	5.524	1.386	0.240 ^a
	Residual	788.956	198	3.985		
	Total	794.480	199			

a. Predictors: (Constant), informal network, b. Dependent Variable: entrepreneurial intention

Table 9. Coefficients^a

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.424	0.724		8.869	0.000
	informal network	0.122	0.103	0.083	1.177	0.240

^aDependent variable: entrepreneurial intention.

Table 10. ANOVA^b

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	56.340	1	56.340	15.113	0.000 ^a
	Residual	738.140	198	3.728		
	Total	794.480	199			

^aPredictors: (Constant), formal network, b. Dependent Variable: entrepreneurial intention.

Table 11. Coefficients^a

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.287	0.777		5.520	0.000
	formal network	0.450	0.116	0.266	3.887	0.000

^aDependent variable: entrepreneurial intention.

and “reality”. Obviously, there is always a risk that the perceptions of students in the outside world might be different from that of reality. For instance, the studies which aim to show such realities may indicate that the universities which are successful to stimulate entrepreneurship or financial system support entrepreneurs sufficiently. Another limitation is that some factors in the model were broadly defined and measured in the survey. For instance, educational support factor was measured through three broad statements, which assessed the education support for stimulating “creative ideas”, providing “knowledge about entrepreneurship”, and developing “entrepreneurial skills and abilities”. The main reason of such broadness is to increase the generalizability of the model and make it available for the use of new studies in different contexts.

CONCLUSIONS AND SUGGESTIONS

The study shows that if a university provides adequate knowledge and inspiration for entrepreneurship, the possibility of choosing an entrepreneurial career might increase among student. It is obvious that this result confirms the key role of education in the development of entrepreneurial intention. Therefore, in the light of the current study, it might be stated that entrepreneurship can be fostered as a result of a learning process. This result is not only interesting from the theoretical point of view, but it is also a challenge for the educators and policy-makers. Since entrepreneurial activities are becoming vital to the economic development of a country, both of these groups might focus on the design of more effective educational policies. Although there is no consensus on the content and structure of entrepreneurship education, the findings of the current study showed that universities should, at least, “encourage the development of creative ideas for being an entrepreneur”, “provide the necessary knowledge about entrepreneurship”, and “develop the entrepreneurial skills”. The researches have shown that starting entrepreneurship courses in governmental universities in Iran does not have enough effectiveness. So the reason for this dissatisfaction must be understood. The second factor, which also emerged significant in the survey, is structural support. The analysis also showed that structural support might affect entrepreneurial intention of university students. Entrepreneurship researches in many countries show that in the majority of these countries, governments support entrepreneurship in some ways. This entrepreneurship support means that governments design and program those policies, whose aims are to increase the number of entrepreneurs and small businesses, and support them in their activities. According to GEM (2009), Iranian entrepreneurial intention is higher than the average of GEM (21.39%), but the grade of Iran is 25 among 42 countries; although, fear of failure rate as one of the negative factors to

start up a business is high. This also means that Iranian people who have entrepreneurial intention do not start their business because of fear of failure. This could be because of the non-governmental support and uncertainty of the environment. The researches show that because of high inflation inside the country (economic, political and business boycott), there is no suitable environment for entrepreneurial activities. Also, market regulations, employee protection, labor regulations and tax regulations must be viewed by those who are responsible in the field of entrepreneurship accusation. So, to foster a better environment for entrepreneurs in Iran, we suggest:

1. Reduction of state corporate income taxes.
2. Access to micro loans and seed funds.
3. Provision of information about start-up.
4. Highlighting entrepreneurs as role models.
5. Facilitating networking services.
6. Reducing red-tape and paperwork burden.

The third factor of the model is informal support. However, the result of analysis indicated that entrepreneurial intention was not associated with this dimension. In fact, this result is quite surprising because it might be expected that social ties are significant for a person living in a collectivist culture, like Iran. Since people are more integrated into the society, family members, friends and informal network might influence a career selection decision in a young person, but the results of this research show that the students for the entrepreneurial activities do not get support from parents and families.

We find that entrepreneurial intention relates with formal network. The first question that arises in the minds of student entrepreneurs is “which organization will help me to start my business” (the question that many of the university students ask their masters). It means that many university students are trying to find a protective organization to get some informational and financial support. The researches show that entrepreneurship networks play some major roles in entrepreneurial activities. The networks are used as strategic alliances for specific purposes, including: managing business, accessing resources, idea developing, creating motivation in doing entrepreneurial activities and cultivate social support.

This research shows that for students to find entrepreneurial opportunities, they should get benefit from formal networks. These networks include: entrepreneurial consulting agencies, banks, insurance companies and the society of graduated students. Since formal networks have specific roles to play to increase student entrepreneurial intentions, we suggest the following:

1. Create entrepreneurship center in the university.
2. Create web site to access education, consulting and informational services.
3. Connect new entrepreneur students to experienced

entrepreneurs inside and outside the university.

Future research

Future research in this area should focus on these subjects:

1. Assessing the effect of entrepreneurship education programs on individuals (for example, entrepreneurial intentions or record of accomplishment), or venture creation and survival, which is important but challenging. Such studies should address variables such as: the amount of resources utilized by the degree of student involvement (including team composition), the potential scope and impact of the business idea, and the regional context of operation.
2. Determine the key success factors for entrepreneurship educational programs to increase entrepreneurial intentions.
3. Unanswered questions in terms of what factors facilitated the realization of the intention to do business.

REFERENCES

- Aldrich HE, Zimmer C (1986). "Entrepreneurship through social networks", in Aldrich HE (Ed.), *Population Perspectives on Organizations*, Acta Universitatis Upsaliensis, Uppsala, pp. 13-28.
- Autio E, Keeley RH, Klofsten M (1997). "Entrepreneurial intent among students: testing an intent model in Asia, Scandinavia, and USA", *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA.
- Begley TM, Wee-Liang T, Larasati AB, Rab A, Zamora E (1997). "The relationship between socio-cultural dimensions and interest in starting a business – a multi-country study", *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA.
- Brandstaetter H (1997). "Becoming an entrepreneur – a question of personality structure?" *J. Econ. Psychol.*, 18(2): 157-177.
- Bonnett C, Furnham A (1991). "Who wants to be an entrepreneur? A study of adolescents interested in a young enterprise scheme". *J. Econ. Psychol.*, 12: 465-478.
- Brockhaus RH (1980), "Risk-taking propensity of entrepreneurs", *Acad. Manage. J.*, 23(3): 509-520.
- Brockhaus RH, Horwitz PS (1986). "The psychology of the entrepreneur", in Sexton DL, Smilor RE (Eds), *The Art and Science of Entrepreneurship*, Ballinger, Cambridge, MA, pp. 25-48.
- Brass DJ (1992). *Power in organizations: a social network perspective*. *Res. Polit. Soc.*, 4: 295-323.
- Birley S, Stockley S (2000). 'Entrepreneurial Teams and Venture Growth', in D. Sexton and H. Landstrom (eds). *The Blackwell Handbook of Entrepreneurship*, Oxford: Blackwell.
- Conway S (1997). *Informal networks of relationships in successful small firm innovation*, PHD thesis, Aston Business School.
- Cooper S, Bottomley C, Gordon J (2004). "Stepping out of the classroom and up the ladder of learning: an experimental learning approach to entrepreneurship education". *Ind. Higher Learn.*, 18(1): 11-22.
- Davidsson P (1995). "Determinants of entrepreneurial intent", paper presented at the RENT IX Workshop in Entrepreneurship Research, Piacenza.
- Das TK, Irene YH (2006). "Entrepreneurial firms in search of established partners: review and recommendations", *Int. J. Entrep. Behav. Res.*, 12(3): 114-143.
- Douglas EJ (1999). "Entrepreneurship as a career choice: attitudes, entrepreneurial intentions, and utility maximization", *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA.
- Dreisler T (2003). Promoting entrepreneurship changing attitudes or behavior? *J. Bus. Enterp. Dev.* 10(4): 383-392
- Franke N, Lu thje C (2004). "Entrepreneurial intentions of business students: a benchmarking study". *Int. J. Innov. Technol. Manage.*, 1(3): 269-88
- Fishbein M, Ajzen I (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- Galloway L, Brown W (2002). "Entrepreneurship education at university: a driver in the creation of high growth firms". *Educ. Train.*, 44(8/9): 398-405.
- Gorman G, Hanlon D (1997). "Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review". *Int. Small Bus. J.*, 15(3): 56-78.
- Garavan TN, O'Cinneide B (1994). "Entrepreneurship education and training programmes: a review and evaluation – Part 1". *J. Eur. Ind. Train.*, 18(8): 3-12.
- Global Entrepreneurship Monitor (GEM) (2009). Executive report, Global Entrepreneurship Research Association.
- Gibb AA (1993). "The enterprise culture and education: understanding enterprise education and its links with small business, entrepreneurship and wider educational goals". *Int. Small Bus. J.*, 6(3): 11-34.
- Gibb AA (1996). "Entrepreneurship and small business management: can we afford to neglect them in the twenty-first century business school?" *Br. Acad. Manage.*, 7: 309-321.
- Gartner WB (1988). "Who is an 'Entrepreneur?' is the Wrong Question." *Am. J. Small Bus.* 12: 11-32.
- Harrison RT, Leitch CM (1994). "Entrepreneurship and leadership: the implications for education and development". *Entrep. Reg. Dev.*, 6: 111-215.
- Henderson R, Robertson M (2000). "Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career". *Career Dev. Int.*, 5(6): 279-87
- Johnson BR (1990). "Toward a multidimensional model of entrepreneurship: the case of achievement motivation and the entrepreneur". *Entrep. Theory Pract.*, 14 (3): 39-54.
- Kennedy J, Drennan J (2001). "A review of the impact of education and prior experience on new venture performance". *Int. J. Entrep. Innov.*, 2(3): 153-169.
- Kolvereid L (1996). "Prediction of employment status choice intentions", *Entrep. Theo. Pract.*, 20(3): 47-56.
- Katz JA (1988). "Intentions, hurdles, and start-ups: an analysis of entrepreneurial follow-through", *Frontiers of Entrepreneurship Research*, Babson College, Wellesley, MA.
- Krueger NF, Reilly MD, Carsrud A (2000). "Competing models of entrepreneurial intentions". *J. Bus. Vent.*, 15(5-6): 411-432.
- Kolvereid L, Moen (1997). "Entrepreneurship among business graduates: does a major in entrepreneurship make a difference?" *J. Eur. Ind. Train.*, 21(4): 154-160.
- Krueger NF, Reilly MD, Carsrud A (2000). "Competing models of entrepreneurial intentions". *J. Bus. Vent.*, 15(5-6): 411-32.
- Leonard-Barton D (1984). 'Interpersonal Communication Patterns Among Swedish and Boston-Area Entrepreneurs'. *Res. Policy*, 13:2, 101-114.
- Lawton-Smith H, Dickson K, Smith S (1991). 'There are Two Sides to Every Story: Innovation and Collaboration within Networks of Large and Small Firms'. *Res. Pol.*, 20: 457-468.
- Madl P (1997). ABC of Net Assets for ftsgru MEMORANDUM " - "allgemeinversta ARURAL representation of all legal issues related to the Gru "MEMORANDUM one company. Linde, Vienna.
- McGhee JE, Dowling MJ, Meggison WL (1995). 'Co-operative Strategy and New Venture Performance: The Role of Business Strategy and Managerial Experience'. *Strat. Manage. J.*, 16: 563-580.
- Reynolds PD (1995). "Who starts new firms? Linear additive versus interaction based models", paper presented at the Babson-Kauffman Entrepreneurship Research Conference, London.
- Robinson PB, Stimpson DV, Huefner JC, Hunt HK (1991). "An attitude approach in the prediction of entrepreneurship". *Entrep. Theory Pract.*, 15(4): 13-31.
- Robinson PB, Stimpson DV, Huefner JC, Hunt HK (1991). "An attitude approach in the prediction of entrepreneurship", *Entrep. Theo. Pract.*,

- 15(4): 13-31.
- Rajman R (2001). "Determinants of entrepreneurial intentions: Mexican immigrants in Chicago". *J. Socio-Econ.*, 30(5): 393-411.
- Rothwell R, Dodgson M (1991). 'External Linkages and Innovation in Small and Medium-Sized Enterprises'. *R&D Manage.*, 21(2): 125-137.
- Segal G, Borgia D, Schoenfeld J (2005). "The motivation to become an entrepreneur", *Int. J. Entrepreneurial Behav. Res.*, 11 (1): 42-57
- Shapero A (1982). *Social Dimensions of Entrepreneurship*, Prentice-Hall, Englewood Cliffs. NJ.
- Shaw E, Conway S (2000). 'Networks and the Small Firm', in S. Carter and D. Jones-Evans, D., *Enterprise and Small Business: Principles, Practice and Policy*, London, Financial Times.
- Shaw E (1998). 'Social Networks: Their Impact on the Innovative Behaviour of Small Service Firms'. *Int. J. Innov. Manage.*, 2(2): 201-222.
- Stephan GJ, Partridge M, Steven CD, Fleming D (2010). Evaluating U.S. Rural Entrepreneurship Policy, the journal of regional analysis and policy. *JRAP*, 40(1): 20-33.
- Storey DJ (2008). Entrepreneurship and SME policy , Warwick business school, World Entrepreneurship Forum Education, www.world-entrepreneurship-forum.com.
- Turker D, Onvural B, Kursunluoglu E, Pinar C (2005). "Entrepreneurial propensity: a field study on the Turkish university students". *Int. J. Bus. Econ. Manage.*, 1(3): 15-27.
- Turker S (2009). "Which factors affect entrepreneurial intention of university students"? *J. Eur. Ind. Train.*, 33(2): 142-159
- Wang CK, Wong PK (2004). "Entrepreneurial interest of university students in Singapore". *Technovation*, 24(2): 163-172.