

FACTORS AFFECTING ENTREPRENEURIAL INTENTIONS AMONG MARA PROFESSIONAL COLLEGE STUDENTS

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Abstract

A study was conducted to determine MARA Professional College students' perception on entrepreneurial intention. The study was build on psychological model based on Ajzen's theory of planned behaviour to identify the factors influencing the entrepreneurial intention of these students. The study analyzes the factors contributing towards entrepreneurial intention among Mara Professional College students. Data were collected through questionnaires obtained from 181 students of three different programmes offered in MARA Professional Colleges. The study utilized correlation and regression statistics to analyse the data. The findings showed a significant relationship between attitudinal factor($r=0.5324$), behavioural factor ($r=0.5668$) and educational support($r=0.6241$) towards entrepreneurial intention. Educational support contributed the most (39%), followed by behavioural factor with 32.1% and attitudinal factor contributed 28.3% towards entrepreneurial intention among MARA Professional Colleges. It is suggested that educational support through professional education in these colleges is an efficient way of obtaining necessary knowledge about entrepreneurship. The result of the study has valuable implications for policy makers in Higher Education Division, college administrators and educators.

Keywords: Entrepreneurial Intention; Entrepreneurship, Education; Educational Support

INTRODUCTION

Malaysia has begun to focus on educational practices through educational institutions. These institutions have begun to study factors associated with entrepreneurship (Norasmah et al, 2003). Entrepreneurship has also captured the attention of policy makers in MARA. The main reason for this concern is the growing need for *Bumiputera* entrepreneurs to accelerate the economic development by providing employment opportunity and increasing competitiveness (Salmah, et al 2007). Mara Higher Educational programmes have embraced entrepreneurship in its curriculum in Mara Professional Colleges.. Significant amount of money has been allocated to design and carryout a viable entrepreneurship education for students who enrolled into these colleges. These colleges provide educational and assistance programmes such as the Young Entrepreneur Programme for practicing businesses.

REVIEW OF LITERATURE

Literature review on entrepreneurship education shows that there are two schools of thought regarding the conceptual framework for teaching entrepreneurship. One is the “new venture creation” and the other is known as “innovation” (Saks & Ganglion, 2002). Entrepreneurship education tries to develop in the participants the intention to perform entrepreneurial behaviours, entrepreneurial knowledge and desirability of the entrepreneurial activity (Liñán, 2004). There are various entrepreneurial education scope and structure among higher education in Malaysia.

College students are trained as preparation to enter the business world according to their areas of study. However, whether they would be officers or entrepreneurs after graduation would be determined by their intent. An intention is an anticipated outcome guided by planned actions. The theory of planned behaviour is linked between attitudes and behaviours (Ajzen, 1991). Intentions predict deliberate behaviours because behaviour can be planned. Intention is assumed to take hold of emotional factors that influence behaviour and indicate one’s effort to try to perform intentional behaviour. In the context of entrepreneurship,

intension is identified as the important property for establishing an organisation (Kantz & Gartner, 1988) and as a predictor of new reliable enterprise (Krueger, Michael & Casrud 2000).

Many studies on college students' intention to become entrepreneurs have been conducted. Christian (2000), studied on Batak students' intention to be entrepreneurs and found that 65% of the respondent had intention to be entrepreneurs. Another study on Balinese students' intention showed that out of 105 respondents, 39.5% stated their intent to be an entrepreneur and 35% more stated their desire to be entrepreneurs (Lie, 2004). Study by Christine (2004) on Chinese students' intention to be entrepreneurs found that out of 105 respondents, 33.66% stated their intend to be entrepreneurs and 13.86% desired to be entrepreneurs. Similar study done by Gerald (2006) on Javanese students' intention to be entrepreneurs found that out of 194 respondents, 30.4% stated their intent to be entrepreneurs and 22% stated their desire to be entrepreneurs.

Personality trait is becoming popular as an explanation of entrepreneurial behaviors and intentions. Personality trait is described as constructs to explain regularities in people's behaviour. Contemporary theorist identifies five fundamental personality dimensions which are extroversion, neuroticism, agreeableness, conscientiousness and openness to experience. Traits predicting behaviour include risk taking, achievement motivation and locus of control.

The concept of locus of control refers to a generalized belief that a person can or cannot control his or her own destiny. Those who ascribe control of events to themselves are identified as having an internal locus and those who attribute control to outside forces are categorized as having external locus of control (Spector, 1997). Gifford (2003), in a study theorizes that the influence of locus of control on perceptual alertness is the potential ability to see opportunities in the environment and explains the influence of locus of control on entrepreneurs. He concluded a person who has internal locus of control has greater amounts of perceptual alertness which leads to spontaneous learning.

Curiosity has also been identified as a major motivator of behaviour in domains such as educational, occupational and recreational areas (Reio

& Wiswell, 2000). A study conducted by Kashdan and Roberts (2004) found that highly curious individuals are more motivated to explore new environments to obtain diverse cognitive, perceptual, or sensational information to satisfy their curiosity.

An entrepreneur is a person who creates new business by taking risks and uncertainties in order to gain some benefits and growth in business by identifying the opportunities and combining different resources required to establish the new business (Zimmerer & Scarborough, 2004). Brockhaus (1980) identified that risk to tolerance or ambiguity tolerance does not affect entrepreneurs differently. However, Ghosh and Block (1993) identified that risk and ambiguity have distinguished effects on entrepreneurial behaviour.

High creativity in running enterprise is a need for an entrepreneur. An entrepreneur should be ready to keep thinking and finding new opportunity in coping with problems and expanding the enterprise. Scott (1999) conducted a study on 36 entrepreneurial start-ups addressing specifically to the role of creativity in business start-ups. This study summarized case findings of these thirty-six start-ups and determined that where the fits are strong novelty generating components of creativity. Study by Riyanti (2007) found that an entrepreneur's creativity generally leads to creative innovations.

The study by Autio, Keeley, Klofsten, & Ulfstedt, (1997) that investigated entrepreneurial intention of university students in various cultural contexts indicated that the encouragement from university environment affects the entrepreneurial confidence of university students. Educational support through professional education in universities is an efficient way of obtaining necessary knowledge about entrepreneurship. This is supported by the study done by Wang and Wong (2004) who pointed out that entrepreneurial dreams of many students are hindered by inadequate preparation of the academic institution. The school and education system also play a critical role in identifying and shaping entrepreneurial traits (Ibrahim & Soufani, 2002). Other studies have pointed out that entrepreneurship education, especially education that provides technological training, is crucial to enhance entrepreneurs' innovation skills in an increasingly challenging environment (Galloway & Brown, 2002 ; Garavan & O'Cinneide, 1994).

Therefore, previous studies have shown variables that might affect entrepreneurial intention. The area of this study covers behavioural, attitudinal and educational support factors and how these influence the intentions of students to become entrepreneurs.

PROBLEM STATEMENT

MARA has taken many steps to strengthen its education sector. Entrepreneurial education is primarily the focus of Mara Professional Colleges. Students from various academic programmes are required to take courses in foundations of entrepreneurial knowledge, skills and attitudes. However, it is unknown whether contextual founding conditions or rather personality traits that drove students' intention to self-employment. In order to design an effective programme, policy makers have to know the factors mentioned above that need to be emphasized (Autio et al 1997). Currently, after 3 years of following the business and entrepreneurship based programmes, students' interests in pursuing self-employment seemed to dissipate. Thus, There is a need to conduct a study focusing on students' perception of the entrepreneurial intention and the factors affecting their decisions.

OBJECTIVE

This paper therefore has the following objectives:

1. To examine the relationship between attitudinal factors (personality traits, locus of control, curiosity), behavioural factor (risk taking and creativity) and educational support with intention to be an entrepreneur.
2. To examine the contribution of attitudinal, behavioural and educational support factor towards intention to be an entrepreneur.

RESEARCH CONCEPTUAL FRAMEWORK

The conceptual framework for this study is built based on the Theory of Planned Behaviour by Ajzen (1991) and previously presented model on determinants of entrepreneurial intentions and behaviour by Bird (1988), Krueger and Carsrud (1993) and Shapero and Sokol (1982). This

conceptual framework explains that entrepreneurial intention among students is influenced by three main factor and they are attitudinal factor, educational support and behavioural factors as shown in Figure 1. The dependent variable in this research is intention of entrepreneurship. Intentionality can be defined as a state of mind directing a person’s attention, experience and action towards a specific path to achieve something (Bird, 1988). Therefore, intention is a predictor of planned entrepreneurial behaviour (Kruger & Carsud, 1993). The independent variables employed in this framework are attitudinal factor (personal traits, risk taking and locus of control); behavioural factors (creativity and curiosity) and educational support (syllabus, pedagogy and co-curriculum). The demographic factor is the controlled variables which consist of gender, programme and family background.

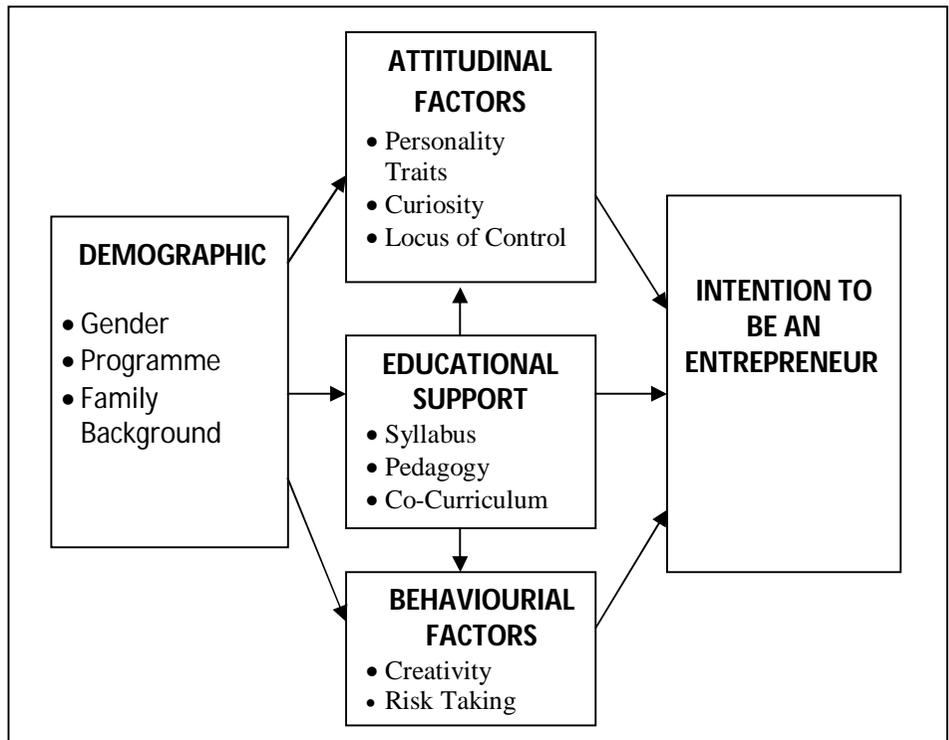


Fig 1 : Research Conceptual Framework
(Adapted from Bird (1988), Krueger and Carsrud (1993) & Shapero and Sokol (1982))

METHODOLOGY

This study was carried out through a survey method, using questionnaires as the main instrument. This sample consists of respondents among students from three programmes (Diploma in Entrepreneurship, Diploma in Business Studies, Diploma in Accountancy and Diploma in Islamic Banking and Finance) in MARA Professional Colleges. A convenience sample was selected to obtain participant from representative in terms of gender and programme. The profile of the respondents is provided in the Table 1 below.

Table 1 Profile of Respondents

Type of Programme	Number of Respondent	
	Male	Female
Diploma in Entrepreneurship	45	43
Diploma in Business Studies	25	58
Diploma in Accountancy	27	69
Total	87	170

INSTRUMENT

The questionnaire consists of 2 sections to measure the studied elements. Section A consists of 3 items on the demography information i.e. gender, programme and family background. Section B contains 70 items firstly, to measure attitudinal factor (personal traits, curiosity and locus of control), behavioural factors (creativity and risk taking) and educational support (syllabus, pedagogy and co-curriculum). In order to examine the personality traits, 9 items from five trait clusters which are extraversion, agreeableness, conscientiousness, emotional stability and openness were used. The items were adapted from the structure of phenotypic personality traits (Goldberg, 1993). and a very brief measure of the Big-five personality domains (Gosling, Rentfrow, & Swann, 2003). 5 items were constructed to look into the internal locus of control and 10 items were to look into levels of curiosity of an individual. These items were adapted from Traits and state curiosity in genesis of intimacy (Kashdan et al 2004). The 10 items on risk taking were adapted from A Domain-specific Risk-attitude scale. (Weber, Blais, & Betz, 2002). No modification was made to measure creativity and innovation which was taken from Entrepreneurial Leadership and New Ventures (Chen, 2007).

The items for educational support were constructed by researchers taking into consideration of the present educational support given by MARA to the MARA Professional Colleges. To measure the entrepreneurial intention among students, 8 items were taken from The Proactive Personality Scale as a predictor of entrepreneurial intention (Crant, 1996). 7-point Likert scale was used where '1' indicates Strongly Disagree and scale '7' indicates Strongly Agree.

A pilot study was carried out using the questionnaire and for analysis of item. The validity and reliability of the questionnaire were measured. Factor analysis was performed to determine the underlying factorial structure of the scale. The result of the analysis revealed three factors (behavioural factor, educational support and attitudinal factor) with Eigen values greater than 1.0. The internal consistencies of scale were assessed through computing Cronbach's alpha. The components of factor affecting entrepreneurial intention show the reliability value between 0.813 to 0.930. Implication from these values indicates that all of the items used for each component in the questionnaire have a high and consistent reliability values.

FINDINGS

In this study, the relationships between attitudinal factors, behavioural factors, educational factors and entrepreneurial intention were examined. Table 2 shows the results of Pearson Correlation Analysis.

Table 2 Analysis of Pearson Correlation– Zero Order

	Attitudinal Factor	Educational Support	Behavioural Support
Entrepreneurial Intention	0.532 (181) p = 0.00	0.624 (181) p = 0.00	0.567 (181) p = 0.00
Attitudinal Factor	1.000 (0) p=.	0.639 (181) p=0.00	0.551 (181) p=0.00
Educational Support	0.639 (181) p=0.00	1.000 (0) p=.	0.759 (181) p=0.00
Behavioural Factor	0.551 (181) p=0.00	0.759 (181) p=0.00	1.000 (0) p=.

*p< 0.05

1. Relationship between attitudinal factors (personality traits, curiosity and locus of control) with intention to be an entrepreneur.

Ho1: There is no significant relationship between attitudinal factors (personality traits, locus of control, risk taking) with intention to become an entrepreneur.

The results showed that the correlation coefficients between attitudinal factors and entrepreneurial intention is $r = 0.53$, $n = 181$, ($p < 0.05$). A significant positive correlation ($p < 0.05$) was found between attitudinal factors and entrepreneurial intention.

2. The relationship between behavioural factor (creativity and risk taking) and the intention to become an entrepreneur.

Ho2: There is no significant relationship between behavioural factors (creativity and risk taking) with intention to become an entrepreneur.

As for the relationship between behavioural factors and entrepreneurial intention the correlation coefficients is at $r = 0.57$, $n = 181$, ($p < 0.05$). This shows a significant positive correlation ($p < 0.05$) between behavioural factors and entrepreneurial intention.

3. Relationship between educational support (syllabus, pedagogy and co-curriculum) with intention to become an entrepreneur.

Ho3: There is no significant relationship between educational support (syllabus, pedagogy and co-curriculum) with intention to become an entrepreneur.

The final relationship is between the educational support and entrepreneurial intention with the correlation coefficients at $r = 0.62$, $n = 181$, ($p < 0.05$). There is a significant relationship between educational support (syllabus, pedagogy and co-curriculum) and entrepreneurial intention.

The correlation coefficient value gained from this analysis shows a strong relationship between the three elements (Davies in Baharom 2004).

Thus, Ho1, Ho2 and Ho3 are rejected. Whereby, this results show that there is a relationship between attitudinal factors, behavioural factors and educational support towards developing entrepreneurial intention among students.

4. Contribution of attitudinal, behavioural and educational support factor towards intention to be an entrepreneur.

The result from the correlation as shown in Table 2 fulfils the required conditions for regression analysis. The correlation analysis shows that the studied dependent variable does not have a high correlation. Tabachnik and Fidell (1996) in Pallant (2001) stated that regression analysis can only be done if the correlation value between the studied enabler is < 0.7 . Thus, the regression analysis can be carried out. Linear regression analysis was used to determine the contribution of the independent variable which is the attitudinal factor, behavioural factor and educational support towards intention to be an entrepreneur among students in MARA Professional College as stated in hypothesis Ho21 below.

Ho4₁: There is no significant contribution from independent variable attitudinal factor towards intention to be an entrepreneur.

Ho4₂ : There is no significant contribution from independent variable behavioural factor towards intention to be an entrepreneur.

Ho4₃ : There is no significant contribution from independent variable educational support towards intention to be an entrepreneur.

Table 3 and 4 show the results of linear regression analysis for the influence of attitudinal factor towards the entrepreneurial intention. The linear regression analysis shows that the independent enabler which is the attitudinal factor is the indicator with correlation ($\beta = 0.532$, $t = 8.461$ and $p = 0.000$) ($p < 0.05$) and the value of R^2 ($R^2 = 0.283$) contributes 28.3 % towards entrepreneurial intention among Mara Professional College students. Thus, Ho21 is rejected. When the score for attitudinal factor goes up a unit, the score for entrepreneurial intention will also increase up to 0.532 units.

Table 3 Analysis of Linear Regression between Attitudinal Factors towards Intention to be Entrepreneur.

Independent Variable	B	Beta (β)	t	Sig. -t	R2	Contribution (%)
Attitudinal Factors	0.590	0.532	8.461	0.000	0.283	28.3
Constant	2.280		5.901	0.000		
R			0.534a			
R squared			0.283			
Adjusted R squared			0.279			
Standard Error			0.853			

Table 4 Analysis of Variance

Source	Sum of Squared	df	Mean Square	F	Sig (p)
Regression	52.140	1	52.140	71.589	0.000a
Residual	131.826	181	0.728		
Total	183.966	182			

The contribution of attitudinal factor towards entrepreneurial intention among Mara Professional College students forms the linear regression is as below :

$$Y = 2.280 + 0.5590 X_1 + 0.853$$

Y = Entrepreneurial Intention

X₁ = Attitudinal Factor

Constant 2.280

Standard Error 0.386

Table 5 and 6 show the results of linear regression analysis for the influence of behavioural factor towards the entrepreneurial intention. The linear regression analysis shows that the independent enabler which is the behavioural factor is the indicator with correlation (β = 0.567, t = 9.257 and p = 0.000) (p < 0.05) and the value of R² (R² = 0.321) contributes 32.1 % towards entrepreneurial intention among Mara Professional College students. Thus, H_{o22} will be rejected. When the score for attitudinal factor goes up a unit, the score for entrepreneurial intention will also increase up to 0.567 units.

Table 5 Analysis of Linear Regression Between Behavioural Factors Towards Intention to be Entrepreneur.

Independent Variable	B	Beta (β)	t	Sig. -t	R2	Contribution (%)
Behavioural Factors	0.746	0.567	9.257	0.000	0.321	32.1
Constant	1.583		3.697	0.000		
R			0.567a			
R squared			0.321			
Adjusted R squared			0.318			
Standard Error			0.831			

Table 6 Analysis of Variance

Source	Sum of Squared	df	Mean Square	F	Sig (p)
Regression	59.108	1	59.108	85.686	0.000a
Residual	124.858	181	0.690		
Total	183.966	182			

The contribution of attitudinal factor towards entrepreneurial intention among Mara Professional College students forms the linear regression as shown below :

$$Y = 1.583 + 0.746 X1 + 0.428$$

Y = Entrepreneurial Intention

X1 = Attitudinal Factor

Constant 1.583

Standard Error 0.428

The regression linear analysis in Table 7 and 8 show that the independent enabler which is the educational support is the indicator which has the correlation of ($\beta = 0.794$, $t=10.747$ and $p=0.000$) ($p<0.05$) and the value of $R^2=0.390$ indicates the contribution of 39% towards the entrepreneurial intention among MARA Professional College students. When the score for educational support goes up a unit, the score for the construction of vision, mission and goal will also increase to 0.794 units. Thus, H_{03} is rejected.

Table 7: Analysis of Linear Regression Between Educational Support towards Intention to be Entrepreneur

Independent Variable	B	Beta (β)	t	Sig. -t	R2	Contribution (%)
Educational Support	0.794	0.624	10.747	0.000	0.390	39.0
Constant	1.358		3.481	0.001		
R		0.624a				
R squared		0.390				
Adjusted R squared		0.386				
Standard Error		0.788				

Table 8 Analysis of Variance

Source	Sum of Squared	df	Mean Square	F	Sig (p)
Regression	71.660	1	71.660	115.493	0.000a
Residual	112.305	181	0.620		
Total	183.966	182			

The contribution of educational support towards the entrepreneurial intention among MARA Professional College forms the linear regression as shown below:

$$Y = 1.358 + 0.794 X1 + 0.390$$

Y = Entrepreneurial Intention
X1 = Educational Support
Constant = 1.358
Standard Error = 0.390

From the linear regression, analysis can be concluded that educational support contributed the most, which is 39%, followed by behavioural factor 32.1% and attitudinal factor contributed 28.3% towards entrepreneurial intention among MARA Professional College.

DISCUSSION

The traditional research stream on entrepreneurial behaviour has emphasized psychological and non-psychological factors to explain why someone starts a new firm. The psychological factors, or traits perspective, addresses several human attributes, such as the need for achievement (McClelland, 1961) desire for independence (Cromie, 1987), internal locus of control (Cromie & Johns, 1983; Cromie, 1987),

and self-efficacy (Bandura, 1997). The non-psychological factors are event based and determine the behaviour of the individual. Individual acts, according to the constraints and possibilities of the situation they found themselves in. The entrepreneurial event approach stresses that intentions are a strong predictor of individual behaviour such as starting a new firm (Ajzen, 1991; Krueger, 1993).

This study shows that purposeful education enhances students' entrepreneurial intention by providing them with attitudes, knowledge and skills to cope with the complexities embedded in entrepreneurial tasks such as opportunity seeking, resource assembling and leading the business to success (Wilson, Kickul & Marlino, 2007). Formal entrepreneurial education provides students experience of mastery, role models, social persuasion and support by involving them in hands-on learning activities, business plan development and running simulated or real small business (Fiet, 2000; Segal, Borgia & Schoenfeld, 2005).

Student's participation in entrepreneurial training programmes has been associated with changes in attitudes and intentions towards entrepreneurship and these trainings need proper teaching strategies compatible with the student-centred approach (Kuratko, 2005). This is because the development of students' entrepreneurial intention will be affected by the entrepreneurial instructions they received such as team oriented method and hands-on activities (Rasmussen & Sorheim, 2006 ; Frank, Leuger & Mugler, 2005). Wood and Bandura (1991) suggested higher education teaching and learning should focus on providing mastery experience or repeated performance accomplishment.

The current study illustrated that proper entrepreneurship education exposure will enable students to have positive attitudes towards choosing entrepreneurship as a career. Entrepreneurship education, needs a different teaching pedagogy in which entrepreneurship education is linked to work-related learning (Dwerryhouse, 2001), experiential learning (Kolb, 1984), action-learning (Smith, 2001) and entrepreneurial training (Gibb, 1999). This is in line with the steps taken by Mara Higher Education Division in offering entrepreneurship courses to all students so as to improve their entrepreneurial intention as suggested by Peterman and Kennedy (2003) and Souitaris, Zerbinati, and Al-Laham (2007) who found that exposure to entrepreneurship education increases

entrepreneurial intention. Emphasize is also given to teaching pedagogy and lecturers are sent for training to equip them with the pedagogical knowledge.

Entrepreneurship education can be offered in many ways. If the objective is to provide understanding of what entrepreneurship is about, the most effective way to achieve this objective is to provide information through public channels such as media, seminars or lectures. These methods are effective to send the relevant information to a broader population. If the objective is to equip individuals with entrepreneurial skills, the best way to deliver the education and training is via industrial training. However, if the objective of education is to prepare individuals to act as entrepreneurs, the most effective technique is to facilitate experiments by trying entrepreneurship out in a controlled environment, such as business simulation or role playing (Hytti & O’Gorman, 2004). This study also found that the industrial training programme made compulsory for all programme and the changes made in the programme by introducing students to business simulation by MARA policy makers concurs with Hytti and O’Gorman (2004).

IMPLICATION AND CONCLUSION

Although there is no consensus on the content and structure of entrepreneurship education, the findings of current study showed that Higher Education Institution should, at least, “encourage the development of creative ideas for being an entrepreneur”, “provide the necessary knowledge about entrepreneurship”, and “develop the entrepreneurial skills” through educational support such as pedagogical, syllabus and co-curricular activities. To develop human resources, education and training are among the most important elements. The previous studies in literature also indicate a link between education and entrepreneurship. It has been found that the probability of entrepreneurial recognizes opportunities to start up, have received specific information, and perceives that their education institutions are giving support to entrepreneurship (Galloway & Brown, 2002; Gorman & Hanlon, 1997; Henderson & Robertson, 2000).

It is suggested that educational system which provides adequate knowledge and inspiration for entrepreneurship develop the students’ intention to perform entrepreneurial behaviours and the possibility of

choosing an entrepreneurial career might increase among young people. This supported Shapero's (1982) findings where it was argued that attitudes toward entrepreneurship should partly derive from prior exposure to entrepreneurial activity and affect intentions through changing attitudes. This study confirms the key role of educational support in the development of entrepreneurial intention. Therefore, the current study shows that entrepreneurship can be fostered through learning process.

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