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From Learners to Entrepreneurs: A Study on Inclination of University Students towards Entrepreneurship as a Career Option and the Role of Education

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This study investigates the inclination of University Malaysia Kelantan (UMK) students towards entrepreneurship. Specifically it aims to examine the relationship between entrepreneurship education and university students' inclination towards entrepreneurship. This study also examines the moderating effects of demographic characteristics and family business background on budding entrepreneurs undergoing entrepreneurship education. The sampling population comprised of 84 students from the final year UMK students pursuing the undergraduate programme in Entrepreneurship. A self administered questionnaire was used in this study to collect data. The questionnaire consisted of 2 parts: the first part dealt with the Demographic characteristics of the respondents with sub-headings – personal information, family information, education and Willingness to become an entrepreneur. The second part was sub-divided into 2 parts - part A and B, whereby 'Part A' covered questions on personality traits (innate talents) of the respondents and 'Part B' comprised of questions on experiential or acquired traits. That is knowledge and skills acquired due to socioeconomic forces. The role of Role models in form educators, books and technology in promoting entrepreneurship was also discussed. After screening a total of 80 questionnaires were deemed completed and usable. This yielded a response rate of 95.2 percent. Descriptive analysis, factor analysis, multiple regression, one-way ANOVA, independent sample t-test were used to test the hypothesized proposition. The results of factor analysis suggested that university students' entrepreneurial inclination was due to their opting to pursue entrepreneurial study programme. Multiple regression was performed to examine the relationship between entrpreneurship education and inclination towards entrepreneurship. The results showed that the role of university in promoting entrepreneurship have statistically significant relationship with student inclination towards entrepreneurship. The hypothesis testing results indicated that in demographic characteristics fathers' occupation and role of university did have an impact on university students' inclination towards entrepreneurship.

Keywords: Entrepreneurship, entrepreneurial university, role of educators, inclination towards Entrepreneur, entrepreneurship education

1. Introduction

Let us first acquaint ourselves with the word "entrepreneur". An entrepreneur is a person who gauges the risks and rewards of a business and works quickly to initiate, organize, and manage a particular opportunity, idea, or concept. The key words are "risk" and "business". The entrepreneur will often risk more, work harder, and demand more of himself or herself than any ordinary business person. The rewards can be immeasurable (William Heinecke, Jonathan Marsh, 2003). Now the latest trend is transition of entrepreneurs to info-preneurs, techno-preneurs, global-preneurs, and many more.

The government of Malaysia recognizes the importance of self-employment and entrepreneurship in employment creation and economic growth. This importance of entrepreneurship has been recognized both politically and academically in Malaysia. Off late one of the major social development problems faced by Malaysian government is graduate unemployment. Graduates preferences on choosing salaried jobs over self-employment is an intriguing question for the authorities (Woon, 2004). The role of universities and current education system have been highlighted by the Malaysian government for bringing in striking changes on this front. The government considers the involvement of university as a possible solution to the problem of graduate unemployment. It is mooted by the economists that entrepreneurship stimulates the generation of employment opportunities and wealth creation (Dana 2001).

Therefore, in Malaysia, the tertiary education system is the focus of attention as it is considered that it can play a leading role in developing and producing more entrepreneurially-inclined

students (Din 1992). Universities, in this regard, have been urged to promote entrepreneurial spirit among students through a series of education programmes inclined to develop entrepreneurial aptitude among students. In fact formal entrepreneurial education has been found to affect attitudes of university students towards entrepreneurship as a career option (Hansemark 1998).

A brief note on University Malaysia Kelantan (UMK) :-

The establishment of University Malaysia Kelantan in 2006 with the motto "Entrepreneurship is Our Thrust" is a major step taken by the Malaysian government to build a world-class human capital. UMK in turn has taken substantial effort to promote entrepreneurial learning in form of CLS (Chairman Lecture Series) and community's life long learning process. The university embarks not only on theoretical learning process but on having the experiential learning or hands-on learning experience from prominent successful figures in Malaysia. In addition UMK pioneered entrepreneurship elements in each of its offered courses. Hence, it is hoped that the ethical and practical approaches being practiced in learning processes can be a steeping stone for those who are willing and keen to be in this field.

1. Purpose of the study

The purpose of this study is to examine on a pilot study basis the effect of entrepreneurship education on UMK students' attitude and inclination towards entrepreneurship as a career option. Hence, the problem to be investigated in this study is: Given that entrepreneurship is linked to job creation, is entrepreneurship education capable of reducing the number of unemployed graduates.

2. Objectives of the study

The main objective of this research is to examine the effect of entrepreneurship education (independent variables) on UMK students' attitude towards entrepreneurship (dependent variable). Particularly, this research attempts to examine the relationship between entrepreneurship education and university students' inclination towards entrepreneurship. The specific objectives of this study are:

- i. Examine the effect of demographic characteristics such as educational background, previous work experience as well as mothers' and fathers' education on university students' inclination towards entrepreneurship.
- ii. Examine the effect of "family business background" and "willingness to become an entrepreneur" on the university students' inclination towards entrepreneurship.
- iii. The basic research question does entrepreneurship education have positive effects on university students attitude towards entrepreneurship as a career option.

3. Review of related Literature

Previous researches suggest that education in entrepreneurship plays a great role in shaping and raising individuals' interest in entrepreneurship (Le 1999; Low 2005; Luthje and Franke 2003). According to Holmgren and From (2005), education that emphasizes entrepreneurship is the precursor to changing students' attitudes in considering entrepreneurship as a viable career option. Volery and Mueller (2006) highlight the possibility of the role of entrepreneurship education in influencing an individual's decision to become an entrepreneur. Gorman et al. (1997) in their seminal work reviewing ten years of literature agree that formal entrepreneurial education programmes influence students' predisposition towards entrepreneurship.

In their study on Australian university students who have attended entrepreneurship programmes, McMullan and Gillin (1998) indicate that students who are in entrepreneurship programmes are more likely to start-up a venture compared to those who are in non-entrepreneurship programmes. They also contend that individuals can be educated to become entrepreneurs even if they had no initial intention of doing so.

2.

Peterman and Kennedy (2003) point out that attendance at an entrepreneurship programme has positive effects on both the desirability and feasibility of students starting up a new venture.

Fayolle and Degeorge (2006) investigated the effects of entrepreneurship education based on three dimensions: learning process, institutional environment and resources.

The present study extends the scope of previous studies to examine the relationship between entrepreneurship education variables, parents education and occupation variables, with the inclination towards entrepreneurship among university students.

4. Research Methodology

The quantitative methods employed in the study to investigate the effect of the entrepreneurship education variables (the role of university in promoting entrepreneurship, role models, willingness to become an entrepreneur, parents education, and parents occupation) on UMK students entrepreneurial inclination and attitude.

Study Design – It is a pilot study based survey method, where respondents complete a self administered questionnaire. The respondents in this research were students undergoing undergraduate degree in entrepreneurial business programme from University Malaysia Kelantan only. UMK is an entrepreneurial university which offers degree programme based on entrepreneurship (refer website - www.umk.edu.my)

Sample size – The sampling population comprised of 84 students from the final year UMK students pursuing the undergraduate programme in Entrepreneurship.

Hypothesis:

- H1: There is a positive relationship between the role of UMK in promoting entrepreneurship and university students' inclination and attitude towards entrepreneurship as a career option. That is the students response on the question Willingness to become an entrepreneur.
- H2: There is a positive role of university in promoting entrepreneurship.
- H3: There is a positive relationship between role models and university students' attitude towards entrepreneurship.
- H4: There is a difference in university students' attitude towards entrepreneurship in the demographic groups defined by following variables
 - i. Educational background,
 - ii. previous work experience
 - iii. fathers' education
 - iv. mother's education

many more can be added in due course of this study.

- H5: There is a difference in university students' attitude towards entrepreneurship as a career option that relate to:
 - i. father's occupation.
 - ii. mother's occupation.

Initial Questionnaire Test - Most of the questions in the study were adapted from previous studies such as Sexton and Browers-Brown (1988) and Auti et al (1997). Prior to this study a test was conducted to ascertain the validity and reliability of the

measures used. The study conducted now is a pilot study because it will be used further to compare results with other universities' students attitude towards entrepreneurship as a career option.

Research Analysis and Findings

4.1(a) Demographic Characteristics –

Section 1 of the questionnaire generated information based on selected demographic characteristics of the respondents. The items selected were students age, education in terms of current university, university type, course pursuing, degree, field of study, marital status, nationality, residing with, currently employed, father's and mother's education, father's and mother's occupation.

Table – 4.1 (a) (Descriptive Characteristics of the respondents)

Variable	Characteristics	No. of	Percentages
v ai iabic	Chai acteristics	respondents N=80	100%
<u>Personal</u>			
Characteristics			
Student's Age	> 20-25 yrs	80	100%
Student's Gender	> Male	36	45%
	> Female	44	55%
Nationality	Malaysian	80	100%
	Non-Malaysian	0	0%
Marital Status	> Single	80	100%
	> Engaged	0	0%
	Married	0	0%
Residing with	> Parents	14	17.5%
	➤ Hostel	66	82.5%
	> Other	0	0%
Currently Employed	> Yes	2	2.5%
	> No	74	92.5%
	(Missing)	04	5%
Education	· · · · · · · · · · · · · · · · · · ·		
Current university	> UMK	80	100%
	Others	0	0%
University type	> Public	80	100%
	Private	0	0%
Course pursuing	Undergraduate	80	100%
	Postgraduate	0	0%
Degree to achieve	> Arts	0	0%
	Science	0	0%
	Business	80	100%
	> Law	0	0%
	Health Sciences	0	0%
	Engineering	0	0%
	> Commerce	0	0%
	> Other		370
Family			

<u>Information</u>			
Family Members	➤ Parents + siblings	80	100%
	Spouse + Children	0	0%
Father's Education	Elementary	26	32.5%
	Secondary	47	58.8%
	University	5	6.3%
	(Missing data)	2	2.5%
Mother's Education	Elementary	42	52.5%
	Secondary	34	42.5%
	University	3	3.8%
	(Missing data)	1	1.3%
Father's Occupation	Entrepreneur	19	23.8%
	Service	33	41.3%
	Unemployed	04	5%
	(Missing data)	23	30%
Mother's Occupation	> Entrepreneur	05	6.3%
	Service	16	20%
	➤ Home makers	32	40%
	(Missing Data)	27	33.8%

- **5. Discussion on demographic characteristics** The vast majority of respondents were in the age group 20-25 years. In this study all the students belong to the same university (UMK) and are pursuing an undergraduate programme Bachelor of Entrepreneurship (Commerce). Most of the students are found to be residing in the hostel about 82.5%. In terms of gender, the respondent's were about 55% female and only 45% male students from UMK. The dominance of female students can be explained by the fact that in Malaysia the university population is mainly female in a ratio of 61:39 (The Ministry of Higher Education, 2006). (We should also note here that the students male/female ratio as on May 2009 is 65% female and 35% male students in Malaysia, source: The Strait Times, June 20, 2009)
- **6.** With regard to nationality, all respondents from UMK were Malaysians irrespective of their ethnicity. In terms of ethnicity they were Malays, Chinese and Indians but in this research study the dimensions which have not been included are ethnicity / religion / birth order / place of origin / and comparison with other universities. Further study can analytically focus on these dimensions as well.
- 7. Parental occupations pertaining to the respondents' parents' occupation status, more father's were employed workers (43%) i.e. 33 out of 80 students. Father's who were entrepreneurs were only 23.8% i.e.19. Incase of mothers' occupation there were only 6.3% i.e. mother's who were entrepreneurs and rest were either working (20%) or homemakers (40%).

3.2 Hypothesis Testing -

a. <u>Hypothesis 1 - Entrepreneurial Inclination or Career Planning</u>

8. Table - 4.2 a (Reasons for Entrepreneurial Inclination / Career Planning)

<u>Table - 4.2 a (Reasons for Entrepreneurial Inclination / Career Planning)</u>					
9. <u>Variable</u>	11. Frequency	13. Percentage (%)			
10. I. Motives – to become an entrepreneur	12. (N=80)				
;-					
 1. Be your own boss 	14. 49	15. 61.25%			
1. Be your own ooss	1	100 01.2070			
2. Do better than others	16. 27	17. 33.75%			
2. Do better than others	10. 27	17. 55.7576			
	18. 11	19. 13.75%			
3. 3. Can see a niche here	10. 11	15.15.7570			
	20. 34	21. 42.5%			
4. 4. I can make more money as an	20.3.	210 12.570			
entrepreneur					
•	22. 17	23. 21.25%			
5. 5. Helping family in Business					
	24.	25.			
6. II. Personality Trait of entrepreneur:-					
	26.	30.			
7. I am willing and able to bear great	27. 9	31. 11.3%			
financial risk	28. 13	32. 16.3%			
	29. 22	33. 27.6%			
8. Always	_,,,				
0 II II					
9. Usually					
10. Do way have a concept on an idea that	34.	39.			
10. Do you have a concept or an idea that	35.	40.			
you are passionate about and wish to execute it	36. 12	41. 15.0%			
execute it	37. 43	42. 53.8%			
11. Always	38. 55	43. 68.8%			
11. Mways					
12. Usually					
	44.	48.			
13. Are you a leader or a self-starter?	45. 12	49. 15.0%			
v	46. 31	50. 38.8%			
14. Always	47. 43	51. 53.8%			
	47. 15	31. 33.070			
15. Usually					
	52.	53.			
16. III. Experiential Traits :-					
4= D 19 10 10 10 10	54.	59.			
17. Do you like exciting experiences even if	55.	60.			
they are frightening at first	56. 23	61. 28.8%			
10 Always	57. 19	62. 23.8			
18. Always	58. 42	63. 52.6%			
10 Henolly					
19. Usually	64.	65.			
20. IV. Willingness to become an	04.	05.			
		1			

21. Have a business idea but no concrete steps towards realization	66. 67. 28 68. 20	70. 71. 35% 72. 25%
22. Have idea and steps towards realization	69. 48	73. 60%
23. So total students willing to become entrepreneur		

74.

75. Discussion on Reasons for students need to become an entrepreneur

76. As inferred from Table 4.2 (a), the Motives of becoming an entrepreneur, about 61.25% (49 out of 80 students) of the students are guided by the thought that they would like "to be their own boss" once they choose entrepreneurship as a career option. The motive to "make more money as an entrepreneur" is is the second very important entrepreneurial venture guiding motive as seen in the table. About 42.5% students wish to become an entrepreneur to make more money. Under the category – personality traits which are important to become an entrepreneur, we see that 27.6 (Always + usually marked) students are ready to bear great financial risk as an entrepreneur. About 68.8% have a concept which they are passionate about and willing to execute it. About 53.8% consider themselves having leadership qualities. In terms of experiential traits we find that about 252.6% students enjoy having exciting experiences even if they are frightening in the beginning. Further Table 4.1 suggests that nearly 48 out of 80 students, that is almost 60% of the students are willing to become an entrepreneur. Out of this 60% only 25% (20 out of 80 students) have a got a business idea and know the steps towards realization.

77. On the whole we can get an idea that nearly 30% (24 out of 80) of the students are willing and have an aptitude to become an entrepreneur. That is one-third of the students will definitely move to take up entrepreneurship as their future career option. Here the hypothesis that students are willing become entrepreneurs, have motives and are guided by their innate talent and experiential learning. So hypothesis-1 is not true that students wish to become entrepreneur "to earn more money" but, it is deduced that more than 60% students have said that the main motive is to be "their own boss".

78.

b. Hypothesis 2 - Role of university in promoting entrepreneurship

79. Table 4.2 (b) – Role of University in promoting entrepreneurship

80. 81. Variable	82. Frequency 83. (N=80)	84. Percentage (%)	
85. 1. Pursuing Higher Education in the field of entrepreneurial studies (formal learning) is useful to become a successful entrepreneur 86. Always 87. Usually	88. 89. 90. 91. 24 92. 26 93. 50	94. 95. 96. 97. 30.0% 98. 32.5% 99. 62.5% 100.	
2. Do like to learn, upgrade and adopt latest technologies and skills in your daily work even if you did not learn it formally? Always Usually	101. 102. 103. 104. 23 105. 25 106. 48	107. 108. 109. 110. 28.8% 111. 31.3% 112. 60.1%	
3. Do you give importance to self development, personal growth and income and believe that an	113. 114.	119. 120.	

achiever can contribute to society more than	115.	121.
others.	116. 21	122. 26.3%
Always	117. 38	123. 47.5%
Usually	118. 59	124. 73.8%
4. From the following list, in which subjects	125.	132.
you strongly need assistance from external	126.	133.
source. (This will show importance of role	127.	134.
model (teacher) and formal education) to learn	128. 46	135. 57.5%
and then apply knowledge.	129. 24	136. 30.0%
Operations Mgmt	130. 70	137. 87.5%
Business Law	131.	

138.

139. <u>Discussion on role of university in promoting entrepreneurship</u>

140.

141. The above table illustrates that students feel that formal education is a must to become entrepreneurs in future. About 62.5% (50 out of 80 students) students feel that their higher education in the field of entrepreneurship studies will help them in "becoming successful entrepreneurs". Even incase of subjects they do find some subjects very tough and formal coaching is regarding important by more than 87.5% students (70 out of 80 students). These instances make it very clear that university does play a very important role in promoting entrepreneurship. So hypothesis-2 is proved right.

c. Hypothesis 3 - Role model: Impact of role model on the student

143. Table 4.2 (c) – Impact of role models on the student

144. Variable	145. Frequency	147. Percentage	
		(%)	
	146. (N=80)		
148. Do you feel the need or are you able to	152. 26	156. 32.5%	
consult and take advice from successful people	153. 34	157. 42.5%	
easily.	154	158	
149. Always	155. 60	159. 75.0%	
150. Usually			
151.			
160. I wish to involve my peer group, family	163.	168.	
and community in my entrepreneurial activities	164.	169.	
and convince them about my future objectives	165. 21	170. 26.3%	
and plans.	166. 30	171. 37.5%	
161. Always	167. 51	172. 63.8%	
162. Usually			
1021	173.	178.	
24. Consulting and getting approval from	174.	179.	
family, friends and relatives is important	175. 17	180. 21.3%	
before starting something new. If they	176. 35	181. 43.8%	
object one should listen to them.	177. 52	182. 65. 1%	
25. Always			
26. Usually			
	183.	188.	
27. Do you depend on others experiences	184.	189.	
also to take the best decision for your self	185. 13	190. 16.3%	
in a particular situation.	186. 30	191. 37.5%	
	187. 43	192. 53.8%	

28. Always	193.
29. Usually	

194. <u>Discussion on impact of role models on the student</u>:-

31.

- 195. In the Table 4.2(c), we find that the 63.8% students wish to involve family, peer group and friends in their entrepreneurial activities. About 65.1% students also feel that consulting and getting approval from family is also very important. About 53.8% students also depend on other's advises and experiences to take the best decision in their business venture as an entrepreneur.
 - 196. Hence we deduce that impact if role model is above 60% on an average. Hence Hypothesis-3 has been proved true as well.
- **30. d.** Hypothesis 4 University students' attitude towards entrepreneurship (based on self and parents education, and own work experience)

197. Table 4.2 (d) – Attitude of university students towards entrepreneurship

197.	100 100					
	198.	200.	Frequency		Percentage	
199. Variable		201. (N=80)			(%)	
204 0 1 1 1 1 1				203		
204.	4. Students educational background)5.	209.		
•	University – Public University (UMK)	206		210.	100%	
•	Degree – Under Graduate	207		211.	100%	
•	Field of study – Bachelor of Entrepreneurship (Commerce)	208	3. 80	212.	100%	
pre	vious work experience	21	14.	227	7.	
•	having prior work experience prior to	21	15.	228	3.	
	starting my own venture is a must for	21	16.	229	€.	
	becoming a successful entrepreneur	21	17.	230).	
	Always	218	3. 18	231.	22.5%	
	Usually	219	9. 33	232.	41.3%	
_	Do you fall heak on your experiences for	220). 51	233.	63.8%	
_	Do you fall back on your experiences for reaching a solution.	22	21.	234	1 .	
	Always	22	22.	235	5.	
	Usually	22	23.	230	5.	
	County	22	4. 6	237.	07.5%	
213.		225	5. 25	238.	31.3%	
		220	5. 31	239.	38.8%	
	fathers' education					
	Elementary		26	32	2.5%	
	Secondary		47	58	3.8%	
	University		5	6.	.3%	
_	Missing	24	0. 2	244.	2.5%	
_	mother's education	24	41.	245	5.	
	Elementary Secondary	24	12.	240	5.	
	University Missing		05		.3%	
			16		0%	
	1/11001119		32		0%	
		243	3. 27	247.	33.8%	

249. Discussion on attitude of university students towards entrepreneurship:-

- **250.** All the Students (respondents) are currently pursuing the 2nd year of the undergraduate business program on entrepreneurship in commerce. The have enrolled in a public university in Kelantan. About 63.8% students feel that having prior work experience is a must before starting their own business venture. About 38.8% students do fall back on their experiences for reaching a solution.
 - 251. As far as impact of parents education on the students decision is concerned, we find that about 58.8% students father's were having secondary education and only 6.3% had university education. Regarding mother's education About 40% student's mothers' had pursued university education and only 20% were having secondary education. We find a vast difference in the university education status of father's and mother's. A further correlation test will infer whether parent's education has any impact on students decision to become an entrepreneur.

252.

253. e. <u>Hypothesis 5 - University students' attitude towards entrepreneurship as a career option based on parents occupation.</u>

254. Table 4.2(e) – Impact of parent's occupation on university students career option

255. Variable	256. Frequency	258. Percentage	
	257. (N=80)	(%)	
32. Father's occupation.			
33. Entrepreneur	19 33	23.8% 41.3%	
34. Service	04 260. 23	5% 262. 30%	
35. Unemployed (passed away / any other)	05	6.3% 20% 40%	
36. Missing Data 259.	16 32		
37. Mother's occupation.	261. 27	263. 33.8%	
38. Entrepreneur			
39. Service			
 Home Maker 			
Missing data			

265. <u>Discussion on of parent's occupation on university students career option</u>

- **266.** In Table 4.2 (e), we find that about 23.8% students have are coming from house of entrepreneurs as their father happens to be an entrepreneur. Only 6.3% mother's are entrepreneurs. About 41.3% students fathers and 20% students mother's are from the service class.
 - **267.** The instance of mother's being home-makers is a big number -40%, and only 5% father's are not working.
 - 268. Here we can add that most of the students are having service family background rather than entrepreneurial family background. The impact can be inferred by the following factor analytical study.
- **4.3** <u>Multiple Regression</u> Multiple regression was employed to test the hypothesized relationships between father's education, mother's education, father's occupation and mother's occupation and the students' attitude ie opines that pursuing a programme in entrepreneurship in his/her university education is useful to opt for an entrepreneurial career.

Table 4.3 (a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.379(a)	.144	.068	.97466

Predictors: (Constant),
 mother's education,
 mother's occupation,

father's education, father's occupation

- b) Dependent Variable: Pursuing Higher Education in entrepreneurship is useful.
- **269.** Four independent variables explain 68% of the variance (R Square) of positive attitude of the students towards higher university education in entrepreneurship being useful in entrepreneurial career option, it is quite significant.

Table 4.3 (b) ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regressio n	7.171	4	1.793	1.887	.129(a)
	Residual	42.749	45	.950		
	Total	49.920	49			

- a Predictors: (Constant):- mother's education, mother's occupation, father's education, father's occupation
- b Dependent Variable:- Pursuing Higher Education in entrepreneurship is useful.

F-value of 1.887 in the above table shows that the relationship is not highly significant. F (4,45) = 1.887, p>0.001. In a sample of 80 respondents, we have got R values as low as .379 shows that R is not that significant in this case.

Table 4.3 (c) Coefficients(a)

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	2.586	1.038		2.492	.016

father's occupation	739	.313	386	-2.363	.023
mother's occupation	.022	.233	.014	.095	.925
father's education	.311	.252	.190	1.233	.224
mother's education	.090	.237	.055	.380	.706

a Dependent Variable: Acquired Experiential Traits - Pursuing Higher Education in entrep is useful

270.

- **271.** A closer look at the t-values indicates that out of four independent variables, only one variable i.e. Father's occupation contributes to the prediction that respondent's find that pursuing a higher education in entrepreneurship is useful for their future entrepreneurial career option. From the above coefficients table we can create regression equation of this survey.
 - **272.** Hghr_edu_entrepr_useful = 2.586 + (-.739)X fthr_occ + .022X mthr_occ + .311X fthr_edu + .090X mthr_edu.
 - **273.** If we know the values of the four independent variables, we can use the regression equation to predict the attitude of student's towards higher education being useful for entrepreneurial career.

Table 4.3 (d)

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.1240	2.8046	2.0400	.38257	50
Std. Predicted Value	-2.394	1.999	.000	1.000	50
Standard Error of Predicted Value	.21824	.44018	.30062	.06869	50
Adjusted Predicted Value	1.1453	2.7014	2.0403	.38548	50
Residual	-1.4038	2.1954	.0000	.93403	50
Std. Residual	-1.440	2.252	.000	.958	50
Stud. Residual	-1.557	2.490	.000	1.021	50
Deleted Residual	-1.7010	2.6832	0003	1.06152	50
Stud. Deleted Residual	-1.583	2.652	.006	1.042	50
Mahal. Distance	1.477	9.014	3.920	2.241	50
Cook's Distance	.000	.276	.028	.056	50
Centered Leverage Value	.030	.184	.080	.046	50

a Dependent Variable: Acquired Experiential Traits - Pursuing Higher Education in entrepreneur is useful

274. A one-way ANOVA test was also conducted to examine the significant relationship between student's fathers occupations and inclination towards entrepreneurship as a career after pursuing higher education in entrepreneurship.

Table 4.3 (e) Descriptive

Acquired Experiential Traits - Pursuing Higher Education in entrepreneurship is useful

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Entrepreneur	19	2.2632	1.19453	.27404	1.6874	2.8389	1.00	5.00
Service	33	1.9091	.84275	.14670	1.6103	2.2079	1.00	3.00
Unemployed	4	2.0000	1.15470	.57735	.1626	3.8374	1.00	3.00
Total	56	2.0357	.99021	.13232	1.7705	2.3009	1.00	5.00

The descriptive table shows (above) the mean that student's whose fathers' are entrepreneurs feel that pursuing higher education in entrepreneurship is useful. A closer look at the mean shows that student's whose father's are entrepreneurs are having a mean of 2.2632 i.e. they have an attitude to study entrepreneurship. The rest are lesser.

Table 4.3 (f) Test of Homogeneity of Variances

Acquired Experiential Traits - Pursuing Higher Education in entrepreneur is useful

Levine Statistic	df1	df2	Sig.
.851	2	53	.433

On looking at the homogeneity assumption based on Laverne's test of homogeneity of variances. As with t-test, the probability of the test value must be more than 0.05. In our case the significance of the test is .433., more than 0.05. Therefore we are confident that the population variances for each group are approximately equal.

Table 4.3 (g) ANOVA

Acquired Experiential Traits - Pursuing Higher Education in entrap is useful

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.517	2	.759	.767	.469
Within Groups	52.411	53	.989		
Total	53.929	55			

275. Looking at the significant level of the ANOVA table which is .469 which is > 0.05 we can reject the null hypothesis and accept the alternative hypothesis, which states that the student's whose father's are entrepreneurs do not always find higher education in entrepreneurship useful F(2, 53) = .767, p>0.05.

276. 4.4 Multiple Regression on Formal Education in entrepreneurship and inclination of university students towards entrepreneurship

.a <u>Discussion on impact of formal education in entrepreneurship on university students career option</u>

Model Summary

Table 4.4 (a)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.484(a)	.235	.180	.85690

- a Predictors: (Constant) Formal learning
 - Do you wish to invest in good books and reading material in order to update your knowledge,
 - Do you like to learn, adopt latest tech and skills,
 - In which subjects you strongly require assistance, Acquired Experiential Traits like all aspects of running a business,
 - Acquired Experiential Traits do you give imp to self-dev, personal growth, income

b Dependent Variable:

5.1 Pursuing Higher Education in entrepreneur is useful

Table 4.4 (b) ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.759	5	3.152	4.292	.002(a)
	Residual	51.399	70	.734		
	Total	67.158	75			

a Predictors: (Constant),

Do you wish to invest in good books and reading material in order to update your knowledge,

Do you like to learn, adopt latest tech and skills, In which subjects you strongly require assistance,

Do you like all aspects of running a business,

Do you give imp to self-dev, personal growth, income

b Dependent Variable: Pursuing Higher Education in entrepreneur is useful

Table 4.4 (c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant) Acquired Experiential Traits - do you like to learn, adopt	.887	.527		1.684	.097
	latest technical and skills	.310	.118	.307	2.615	.011
	Acquired Experiential Traits - do you give imp to self-dev, personal growth, income	.345	.167	.266	2.066	.043
	Acquired Experiential Traits - in which subjects you strongly require assistance	.005	.021	.026	.244	.808
	Acquired Experiential Traits - like all aspects of running a business	256	.165	188	-1.548	.126
	Personal Characteristics - Do you wish to invest in good books and reading material in order to update your knowledge	.154	.147	.116	1.043	.300

a Dependent Variable: Acquired Experiential Traits - Pursuing Higher Education in entrepreneurship is useful

277. From Table 4.4 (a), (b) and (c) we deduce that there was a significant association between university students' formal education in entrepreneurship and inclination towards entrepreneurial career option. In Table 4.4 (c) we find that the students find pursuing higher education in entrepreneurship useful in becoming a successful entrepreneur, the same set of students also wish to learn, adopt, latest technical skills and they give importance to self-development, personal growth and earn a good income. This shows that the focus is on formal learning whereby comes the role of university and higher education.

4.5 Factor Analysis to find out the influence of father's occupation and role of university (formal education) in promoting entrepreneurship

Correlation Matrix

Table 4.5 (a)

Table 4.0 (a)	-		
		Acquired Experiential Traits - do you like to learn, adopt latest tech and skills	Acquired Experiential Traits - do you give imp to self-dev, personal grwth, income
Correlation	Acquired Experiential Traits - do you like to learn, adopt latest tech and skills	1.000	.404
	Acquired Experiential Traits - do you give imp to self-dev, personal grwth, income	.404	1.000

278.

279. Out of the above two factors, see Table 4.5 (a), we find that the both the factors have a factor loading of more than 0.3, in fact one factor has a factor loading of more than 1 (eigenvalue of more than 1), suggesting that it has 40.3% of the variance – Table 4.5 (b). In Table 4.5 (c) KMO is 0.5, and BTS chi-square of 13.467 (p<.001) allowing a factor analysis.

280.

T able 4.5 (b)

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.404	70.209	70.209	.806	40.325	40.325
2	.596	29.791	100.000			

Extraction Method: Principal Axis Factoring.

Table 4.5 (c) KMO and Bartlett's Test

Kaiser-Meyer-Olkin M Adequacy.	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.				
Bartlett's Test of Sphericity	Approx. Chi-Square df Sig.	13.467 1 .000			

4. CONCLUSION

The results of the multiple regression analysis partly supported the hypothesis that university student's who have higher entrepreneurial intentions are having entrepreneurial family background, that is their father owned / owns a business.

The regression analysis also showed that most of the students intended to learn, adopt and use latest technology and skills. This they can acquire only through formal learning and experience. Students who were in favour of learning new skills were also inclined towards entrepreneurial venture. Demography studies show that gender-wise there is a difference in the opinion of male and felmale students win terms of higher education being useful for entrepreneurs.

Table 5.0 (a)

		Acquired Experiential Traits - Pursuing Higher Education in entrepreneur is useful				Total
		always	usually	sometimes	Not Applicable	
Personal Characteristics - Demography- gender	Male	34.3%	40.0%	25.7%		100.0%
9	Female	27.9%	27.9%	39.5%	4.7%	100.0%
Total		30.8%	33.3%	33.3%	2.6%	100.0%

Here we find that 34.3 % male students find higher education always useful in starting entrepreneurial venture, and only 27.9% female students feel the same.

• Willingness to become entrepreneur – gender wise distribution

Table 5.0 (b)

	10 0.0 (b)								
		Willingness to become entrepreneur							
		Never thought of becoming an entrepreneur	Thought about it but have no correct business idea	Have a business idea but no steps towards realization	Have idea and steps towards realization				
gend er	Male	8.3%	36.1%	30.6%	25.0%	100.0%			
	Femal e	2.3%	34.1%	38.6%	25.0%	100.0%			
Total		5.0%	35.0%	35.0%	25.0%	100.0%			

We can see above that the ratio of students (gender-wise) who claim to have an idea about their own entrepreneurial venture and steps towards realization are 25% each. This shows that females and males are equally interested in becoming entrepreneurs irrespective of their gender.

In terms of gender, the current study findings are different from the findings of previous studies (e.g. Ghazali et al. 1995; Kourilsky and Walstad 1998; Phan et al. 2002; Ramayah and Harun 2005) who have consistently reported that male students are more highly inclined or interested in entrepreneurial activity. However in this study we find that both genders are inclined to become entrepreneurs. It also goes against the findings of Seet and Seet's (2006) study, which concludes that male students are not likely to incline towards entrepreneurship.

Factor Analysis proves an important point that more than textual learning, students give importance to learning latest, technological and practical aspects of entrepreneurial business. From our findings we can also infer that if parent's education does not greatly influence the attitude of students towards entrepreneurial venture, then university education (wish to learn) does play a major role in building future entrepreneurs. One way ANOVA analyses indicated that there are significant differences in father's education, mother's education, father's occupation and mother's occupation.

5.1 <u>Limitation of this study and Future scope of this inference</u>:-

This may give us an important clue and their inclination towards entrepreneurship i.e. for further research in this area. Simulation may be an ideal method of teaching students how to operate in a business environment (Anyway this is beyond the scope of this study). This dimension can be covered in another related research later.

- This study is restricted to one set of students belonging to a single university. In making more generalized, reliable and significant conclusion, a longitudinal study employing larger samples from various universities and programmes of study from all parts of the country are needed.
- At the same time a comparison between public and private university students would be useful to examine the rigorousness of the entrepreneurial inclination.
- Given that 60% of the students attack that they were willing to start up a business after graduation, it is desirable in any future research to further investigate the nature or type of business they will be venturing into. International comparison of university students is also desirable here.

6. Recommendations

- Introduce special practical entrepreneurial short courses Based on this study we can recommend that universities must design specific practical entrepreneurial short courses, for all interested students learn latest technologies and skills and self-development. This is important to add value, especially to students, to prepare them for later careers.
- Provide training to faculty members (role models) in using simulation in teaching entrepreneurship studies.
- Establish student business advice and guidance centres within the university.

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