

**STUDY OF ENTREPRENEURIAL TENDENCIES IN MANIPAL UNIVERSITY STUDENTS BASED ON GETT**

Voice of Research

H.S.Sethu

Associate Professor

Welcomgroup Graduate School of Hotel Administration
Manipal University

Volume 1 Issue 2

September 2012

ISSN No 2277-7733

Abstract

Do the Indian students have the required traits in expected measures to pursue entrepreneurship as an alternative to their career? Is there any difference in the traits possessed by the students in comparison with the international averages? A Study of students of Manipal University, Karnataka, India was conducted using the General Entrepreneurial Tendency Test (GETT) developed at Durham University by John and Caird to identify the entrepreneurial traits of the students. The purpose of the study is to explore the entrepreneurial traits of Indian University students and compare it with international averages. The study is also made to explore if there are any variation of traits amongst the gender, background or streams which the students are studying in. This paper helps in understanding whether the Indian students possess required traits which are necessary to enable them to consider Entrepreneurship as an option for their future goals. Secondly it helps to understand if the scores of the Indian students are deviating from the average scores in order to draw conclusions based on the same. The findings revealed that the scores for all the traits were below average. However, it also revealed that the female students are scoring higher in many of the traits as compared to male students. Future research using a wider sample is necessary to understand the entrepreneurial traits amongst various groups in order to develop different approaches to teaching entrepreneurship as well as capacity building of entrepreneurial students.

key words : Entrepreneurship Traits, Graduate and undergraduate students.

Do the Indian students have the required traits in expected measures to pursue entrepreneurship as an alternative to their career? Is there any difference in the traits possessed by the students in comparison with the international averages? This study was conducted with an objective of getting an answer to these questions.

Methodology : A Study of 167 students of Manipal University, Karnataka, India was conducted using the General Entrepreneurial Tendency Test (GETT) developed at Durham University by John and Caird (1988) to identify the entrepreneurial traits of the students. 167 students participated in the study. The test was administered to students across the university studying in various streams. It comprised of students pursuing Engineering (22), Hotel Management (29), Hospitality and Tourism Management (4), Management (48), Medicine (17), Masters in Dietetics and Nutrition (13), Pharmacy (34). The result of the study is discussed in this paper.

Review of Literature : There have been many researches to study the entrepreneurship characteristics. Hornaday and Bunker (1970) studied the importance of entrepreneurial characteristics suggested by previous studies by surveying 20 successful entrepreneurs who were in business for at least five years. Their study revealed that they scored high in some characteristics like creativity, energy level etc., their scores in need for achievement was not as high.

The General Entrepreneurial Tendency Test (GETT) which is the basis for this present study, was developed at Durham University by Johnson and Caird (1988). This test helps to assess a person's ability to take risks, creative tendency, need for autonomy, need for achievement and internal locus of control. The test com-

prises 54 items (or statements) that require an "agree" or "disagree" response. Responses must be one or the other. The validity of GETT as a test for scoring the entrepreneurial tendencies has been suggested by Cromie (2000, 22), according to them the Test is useful in measuring the entrepreneurial tendencies "the GET test is comprehensive, accessible, easy to administer and score and, although additional work is needed to verify its psychometric properties, some studies have found that the GET has criterion and convergent validity and good internal consistency".

Cairds (1991) in her study of six different occupational groups consisting of owner managers (73), teachers of enterprise (101), nurses (33), clerical trainees (10), civil servants (20) and lecturers and trainers (25) tested GET scale as a viable measure of enterprising tendency.

Her study revealed that business owner managers have higher average scores than every other occupational group for all measures of enterprising tendency. Her analysis also showed that the mean differences between the groups were significant (Caird) 1991 (pp 177-186). Caird also suggests that there is a trend to determine whether entrepreneurs actually pose a unique psychological profile and whether psychological testing has any real value in entrepreneurial studies.

The GET test was further tested for usefulness as a measure for distinguishing between the entrepreneurial attributes of three different groups of individuals by Cromie and Donaghue (1992). The authors compared Cairds study in which she applied the GET scale to a group of 73 entrepreneurs with the results of their own studies which was based on applying GET to two different groups-194 managers and 661 undergraduates (across a range of faculties). Chromie



and Donaghues paper concludes that there is a good evidence to suggest that the GET scale is valid and further applications should be considered for particularly to test the discriminant and predictive validity of the instrument.

What is Entrepreneurship ?

Though definitive definition of Entrepreneurship is not quite possible Timmons(1989), sums it up saying "Entrepreneurship is the ability to create and build something from practically nothing. It is initiating, doing, achieving, and building an enterprise or organisation, rather than just watching, analysing or describing one. It is the knack for sensing an opportunity where others see chaos, contradiction and confusion...."

It can be understood that entrepreneurial behaviour is the result of a combination of individual characteristics or traits. Timmons et al have suggested the behaviours and attitudes as such total commitment and determination, leadership, opportunity obsession, tolerance of risk, ambiguity and uncertainty, creativity, self reliance, and ability to adapt and motivation to excel which are required by the entrepreneur, depending upon the situation in which he/she is to be found.

General Entrepreneurial tendencies discussion : The GETT is based on entrepreneurial traits or characteristics basically Need for achievement, need for Autonomy/independence, creative tendency, Moderate/calculated risk taking and Drive and determination.

Need for Achievement is the first of the traits tested through the GETT : The first of this trait is Need for Achievement (N Ach). This was first propounded by David McClelland in 1961 in his need based motivational model. He talks about three types of motivational needs in his book The Achieving society.

N-Ach or achievement motivation : According to McClelland achievers will choose situations that are characterised by individual responsibility, moderate (not high) risk-taking, knowledge of results of decisions, novel instrumental activity. A person with this characteristic has a strong need for feedback of progress and has a strong need for accomplishment ... it is the prospect of achievement (not money) that motivates them.

N-pow authority/power motivation : The motivation for this person is authority. They want their ideas to prevail and want to make an impact. They are strongly attracted to prestige and status.

N-affil or affiliation motivation : A person with this trait gets motivated through team playing. They want popularity and would like that their team places them in high regard.

The different mix of these motivations are found in most persons, which result in different behavioural patterns. According to McClelland a decision taken by a person who is strongly achievement motivated would be different from that of a person who is motivated through authority or affiliation. A person who has a strong need for affiliation may take decisions which make him popular, instead of taking the right decision. Similarly a person with a strong need

for "authority" may not be able to lead a team of highly critical people who need a lot of flexibility.

According to McClelland persons with strong 'achievement motivation' make the best leaders. They take calculated on the flip side they may expect their team also to be highly achievement motivated. According to McClelland(1961) Achievement-motivated people are not gamblers or big risk takers, but they are result driven. They set achievable and attainable goals. They take calculated risks. This is the basic character make-up of all successful businessmen. For Achievement motivated people security, status, financial or material rewards etc are not prime. They need reliable, quantifiable and factual feedback for constantly and continually improving their performance. They are in other words very "entrepreneurial". They attain their objectives, through organisation of factors of production. According to McClelland they often demand too much of their staff because they prioritise achieving the goal above the many varied interests and needs of their people.

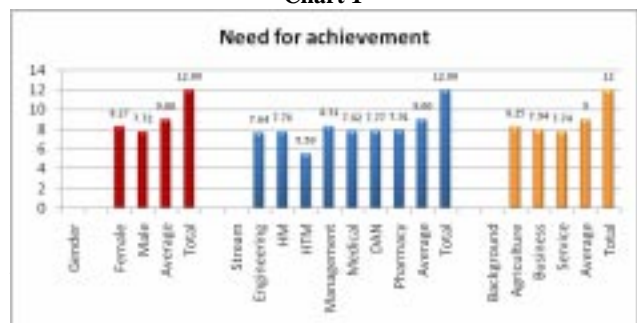
Through the GETT, analysis was made to compare the need for achievement amongst the female and male students; students with agricultural, service, and business background; and students from various streams of education viz Engineering, Hotel management, Tourism and hospitality management, Medical, Nutrition and Dietetics (DAN) and Pharmacy students.

The GETT result of the students need for achievement indicates that the scores in this trait is less than the averages.

Table 1

Need for achievement					
Gender		Stream		Background	
Total	12.00	Total	12.00	Total	12.00
Average	9.00	Average	9.00	Average	9.00
Female	8.27	Management	8.31	Agriculture	8.25
Male	7.72	Pharmacy	7.91	Business	7.94
		Medical	7.82	Service	7.74
		DAN	7.77		
		HM	7.76		
		Engineering	7.64		
		HTM	5.50		

Chart 1



A comparison of scores of students of various streams indicates that though the scores are less than averages for all streams Management students have slightly better achievement motivation than the rest of the streams, which are varying with very minor differences in scores. The Hospitality



and tourism students scores appear to be the least but the number of students taking the test were very few. Contrary to the belief that the business background students have high achievement motivation, the students with agricultural background have higher scores than the business and the service background students.

Need for Autonomy/independence : The second trait tested by GETT is "Need for Autonomy/independence." Autonomy can be considered a human need that requires satisfiers to secure a sufficient level of competence to effectively participate in social life, and a combined capability to make choices in significant matters and achieve positive results in one's life. Mirtha R. Muñiz Castillo.

The dictionary meaning of autonomy is self government, freedom to act or function independently, the capacity to make an informed, un-coerced decision, the quality or state of being self-governing, self directing freedom and especially moral independence

Autonomy is considered a human need and a capability, intrinsically and instrumentally important to human development. Human development is promoted not only by providing resources to people, but also by supporting their autonomy so that people themselves can sustain their gains in well-being and promote further enhancements once aid flows are withdrawn (Muñiz Castillo and Gasper, 2009). Human development refers to the expansion of people's opportunities to lead the lives that they have reason to value (Sen, 1999).

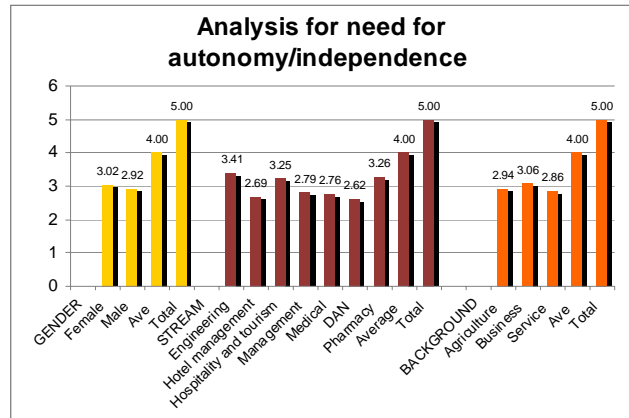
Those individuals who take up opportunities without coercion or controls are said to have a "need for autonomy, enhancing 'the personal but learned skills or reasoning and acting' (Gasper, 2000, p. 998) that are foundations for autonomy. Nations governments promote entrepreneurship through empowerment. Empowerment of select groups leads to individual and economic development. Empowerment enhances autonomy. Since empowerment has a cost, knowledge of different groups that have more traits of autonomy/independence, helps in allocation of resources to the right groups.

The results of the present study with reference to the entrepreneurial trait "need for autonomy/independence is discussed below. The trait was analysed under three headings namely the scores under the categories gender, streams and background. Table 2 gives the average scores.

Table 2

Analysis for need for autonomy/independence					
GENDER		STREAM		BACKGROUND	
Total	5.00	Total	5.00	Total	5.00
Ave	4.00	Average	4.00	Ave	4.00
Female	3.02	Engineering	3.41	Business	3.06
Male	2.92	Pharmacy	3.26	Agriculture	2.94
		Hospitality and tourism	3.25	Service	2.86
		Management	2.79		
		Medical	2.76		
		Hotel management	2.69		
		DAN	2.62		

Chart 2



The scores for the "need for autonomy" is below-average for males as well as females. This confirms the age-old belief in the Indian society that the children need protection from parents until attending a level of education or employment, unlike in the developed nations. However contrary to the general belief that women are the weaker section and need protection, analysis indicates that the female students have scored more than the male students in "need for autonomy/independence." This shows that improved facilities to enhance the education of the girl child has had an effect on the perception of freedom and independence by the female students. The scores indicate that the female students are in favour of independence and autonomy, to make their own decisions and work towards attaining their goals.

All the scores are below average. Amongst the various streams the engineering students have got the highest scores but there is not much difference between the scores of various streams. As expected the comparison of the scores of students with different backgrounds, it is found that the business background students have scored higher than agricultural or service background.

Creative tendency : Creative tendency is an important trait with which innovations are possible and entrepreneurship itself is an innovation. Persons with creative tendencies can engage in activities related to production of new goods or services, or improve existing ones, which leads to entrepreneurship. Creativity is the ability to develop new ideas and to discover new ways of looking at problems and opportunities (Thomas Zimmer and Norman M. Scarborough (2005) p35). Entrepreneurial activity involves the carrying out of new combinations, the "creative destruction" of an existing equilibrium within a particular industry. Schumpeter (1934). It is the successful implementation of creative ideas to produce a new business, or a new initiative within an existing business. Schumpeter's portrayal is valid and accurate for understanding the psychological profile typical of the real-world entrepreneur. . . . and for understanding the "creative destruction" which Schumpeter sees as the central and distinguishing feature of the capitalist system. . . . M. Krizner.

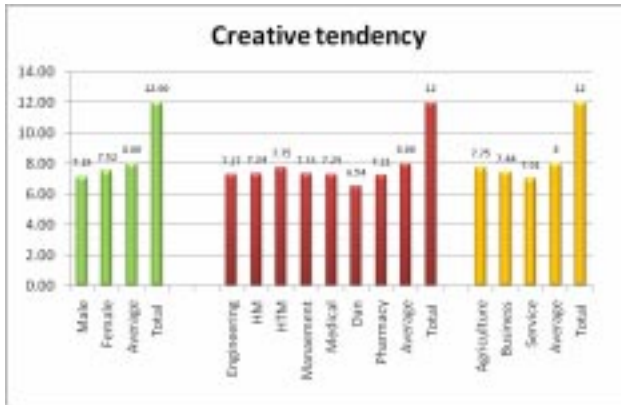
The scores for creative tendency based on the GETT is given below



Table 3

Creative tendency					
Gender		Stream		Background	
Total	12.00	Total	12.00	Service	7.01
Average	8.00	Average	8.00	Business	7.44
Female	7.52	HTM	7.75	Agriculture	7.75
Male	7.15	HM	7.34	Average	8.00
		Management	7.33	Total	12.00
		Medical	7.29		
		Engineering	7.27		
		Pharmacy	7.21		
		Dan	6.54		

Chart 3



The following observations emerge from the analysis of the scores.

The scores are much below averages, the female students are slightly better than the male students, the scores for all the streams are almost equal except HTM. the nutrition students are least and the Hospitality and tourism students have scored higher and students with agriculture background have scored highest followed by business background followed by the service background students.

Moderate /calculated risk taking : Generally risk taking is associated with decisions that are taken without really analysing the required information. Risk taking is more like gambling. Calculated risk taking is however, indicates that the "risk taker" makes a lot of analysis before taking decisions which may have a probability of failing. Moderate/calculated risk taking is "a chance of failure, the probability of which is estimated before some action is undertaken (Random house Dictionary).

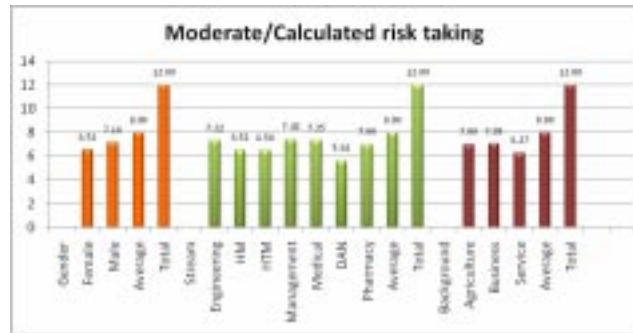
Calculated risk is a chance taken after careful estimation of the probable outcome, as in "taking their dispute to arbitration was definitely a calculated risk. This term uses calculated in the sense of "planned with forethought" a usage from the mid-1800s. It's pairing with risk dates from World War II when the chances of losing bombers were taken into account before a bombing mission was sent out. After the war the term was transferred to other undertakings, where taking a chance to succeed had to be weighed against the costs of failure.(American Heritage Dictionary).

An important trait for entrepreneurial tendency is that of "Calculated risk-taking". The scores of the students related to this trait is presented below:

Table 4

Moderate/Calculated risk taking					
Gender		Stream		Background	
Total	12.00	Total	12.00	Total	12.00
Average	8.00	Average	8.00	Average	8.00
Male	7.16	Management	7.42	Business	7.05
Female	6.52	Medical	7.35	Agriculture	7.00
		Engineering	7.32	Service	6.27
		Pharmacy	7.00		
		HM	6.52		
		HTM	6.50		
		DAN	5.62		

Chart 4



Analysis for the trait for Calculated/moderate risk taking reveals the following.

The scores are much below average for all categories. True to the popular believe the male students' score for this trait is more than that of the female students. The scores for Management and medical students are higher than that of other streams. The scores for service background students are lesser than that of business and agriculture.

Drive and determination : The third trait tested by GETT is Drive and Determination". The dictionary meaning of drive is a "feeling that makes you act in a particular way" it is the energy and determination that makes you try hard to achieve something. Determination is the act of taking or arriving at a decision. It is a fixed intention or resolution or a firmness of purpose or resolve.

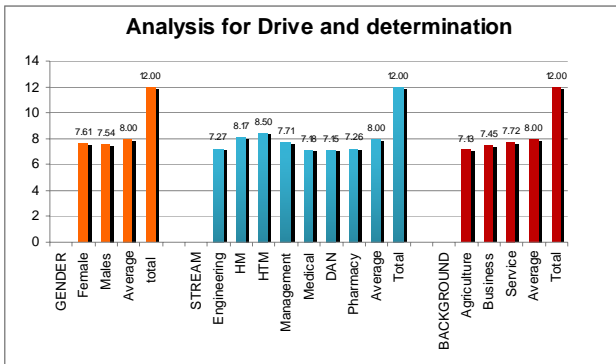
There has been some agreement that entrepreneurs normally display a high degree of commitment and determination in their efforts(McClelland and Winter 1969; Brockhaus, 1980)...Entrepreneurs are able to maintain an accelerated work rhythm over relatively long periods of time, and persevere in their efforts(Gasse 1990)Hatch and Zweig(2000) found many of the entrepreneurs whom they studied displayed a formidable will to succeed in the face of setbacks encountered in the path towards growth Colette Henry, et al (p 43).

Table 5

Analysis for Drive and determination					
GENDER		STREAM		BACKGROUND	
Total Scores	12.00	Total	12.00	Total Scores	12.00
Average	8.00	HTM	8.50	Average	8.00
Female	7.61	HM	8.17	Service	7.72
Males	7.54	Average	8.00	Business	7.45
		Management	7.71	Agriculture	7.13
		Engineering	7.27		
		Pharmacy	7.26		
		Medical	7.18		
		DAN	7.15		



Chart 5



The scores for the trait "drive and determination" shows more than average scores for the hospitality students. For all other categories it is less than average. The scores indicate the trait "drive and determination is slightly more for female students. The scores for hotel management students appear to be above average in this trait and for management students it's a close second. With regard to background the students with service back ground have scored higher than the other students in this trait

Total scores for all the traits

The total scores based on all the traits were compiled and is presented below :

than that of other streams. Contrary to the popular belief that students with business background would have better entrepreneurial traits could be higher than that of service or agricultural students, the scores for agricultural students appear higher.

Findings : The comparative table of Top scoring categories are as under.

Table 7

Category	Need for Achievement	Need for Autonomy	Drive and determination	Creativity	Risk	All traits
Gender	Female	Female	Female	Female	Male	Female
Stream	Management	Engineering	Hospitality	Hospitality	Management	Management
Background	Agriculture	Business	Service	Agriculture	Business	Agriculture

This analysis suggests that psychologically the female population is more entrepreneurially oriented and is in fact better than the male counterpart for entrepreneurship in all the traits, expect in the trait of risk taking, which is as might be expected. The policy makers must in fact consider better capacity building for the females.

Students of management stream have scored overall higher than the other as might be expected.

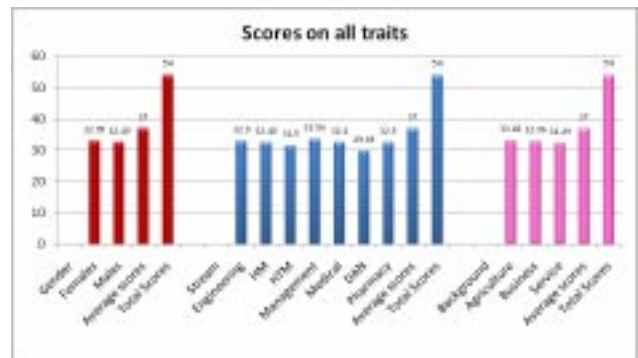
In contrast to the popular notion that a person from business background would be possessing higher entrepreneurial traits, the study indicates that the students from agricultural background are scoring highest in all scores, however as might be expected in the areas of Need for autonomy and Risk taking traits the students from business background are excelling.

Table 6

Total scores on all traits

Gender	Stream	Background			
Total Scores	54.00	Total Scores	54.00	Total Scores	54.00
Average scores	37.00	Average scores	37.00	Average scores	37.00
Females	32.95	Management	33.56	Agriculture	33.06
Males	32.49	Engineering	32.91	Business	32.94
		Pharmacy	32.53	Service	32.29
		HM	32.48		
		Medical	32.41		
		HTM	31.50		
		DAN	29.69		

Chart 6



The scores are much below average for all categories. Contrary to the popular belief that the males are more entrepreneurial, the scores for female students appear higher. The scores for Management and Engineering students are higher

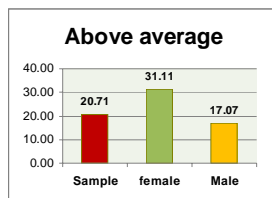
students with business background would have better entrepreneurial traits, the scores for agricultural students appear higher.

Sample	Female	Male
20.71	31.11	17.07

Table 8

Taking into consideration the higher scores of female students in all traits, further analysis was made to gain insight through analysis of further data. It revealed that about 21 percent of the students scored above average marks with the percentage of female students being much higher than the male students.

Chart 7



The analysis indicates that the female students have more entrepreneurial traits compared to the males and amongst the students scoring higher marks than the average

Conclusions and implications : This study focused on analysing the entrepreneurial traits of University Students studying in different streams, and hailing from different backgrounds. The instrument used for testing is the General Entrepreneurial Tendency Test (GETT) developed at Durham University by John and Caird(1988). It revealed that the scores for all the traits were below average. However, it also revealed that the female students are scoring higher in many of the traits as compared to male students. This study has provided insight into the entrepreneurship traits prevalent over a cross section of students. The fact that the women students have better entrepreneurial traits is helpful in capacity building for the women entrepreneur. This study has contributed to understand the difference in the traits found in different groups of students. Because, once the entrepreneurial traits are identified in certain groups, further training to the identified groups could have the right impact to develop entrepreneurship amongst the students with the right traits. The funds invested entrepreneurship development programmes should result in creating the right environment to the right kind of students. Only then one can hope for positive economic development through promotion of entrepreneurship culture amongst youth.

Research limitations : The study comprised students of a single university. Future research using a wider sample may be necessary to understand the entrepreneurial traits amongst various groups in order to develop different approaches to teaching entrepreneurship as well as capacity building of entrepreneurial students. Future research using a wider sample in may be necessary to understand the entrepreneurial traits amongst various groups in order to develop different approaches to teaching entrepreneurship as well as capacity building of entrepreneurial students.

References :

Brockhaus, R.H., (1980). Risk-taking propensity of entrepreneurs, *Academy of Management Journal*, 23(3), 509-520. Sherbrooke, Quebec, Rene Prince.

Caird, S., (1991), The enterprising tendency of occupational groups *International Small Business Journal*, 9, 4, 75-81.

Caird, S. (1991) Testing Enterprising Tendency in Occupational Groups, *British Journal of Management* 2: 177-86.

Caird, S. (2006) General Measure of Enterprising, Tendency Version 2 (GET2), Appendix in T. Mazzarol *Entrepreneurship and Innovation Australia*: Tilde University Press. May.

Caird, S. (1990) an Enterprise Competencies: An Agenda for Research *Journal of European Industrial Training*, Vol.14, No.7, pp. 3-9.

Caird (1990) b What Does It Mean To Be Enterprising? *British Journal Of Management*, Vol. 1, No. 3.,pp 137-147.

Caird, S. (1991) Research On The Enterprising Tendency Of Occupational Groups *International Journal Of Small Business*, Vol 9, No. 4.,pp 75-82.

Caird, S. (1993) What Do Psychological Tests Tell Us About Entrepreneurs? *Journal of Managerial Psychology*, Volume 8, No. 3, pp. 11-20.

Colette Henry, Frances Hill, Claire Leitch, *Entrepreneurship education and training* Asghate publishing limited pg 48

Cromie, S., (2000), Assessing Entrepreneurial Implications: some approaches and empirical evidence. *European Journal of Work and Organisational Psychology*, 9, 1, 7-30.

Cromie, S., Callaghan I., (1997) Assessing Enterprising Attributes - the usefulness of Caird's General Enterprising Tendency (GETT) Test, *Journal of Small Business and Enterprise Development*, Vol. 4 Iss: 2, pp.65 - 71

Cromie, S., I. Callaghan and M. Jansen, (1992), The entrepreneurial tendencies of managers: A research note. *British Journal of Management*,- 3, 1-5.

Cromie, S. and J. O'Donoghue (1992), Assessing entrepreneurial inclinations. *International Small Business Journal*, 10, 2, 66-73.

Gasper, D. (2000) Development as freedom: taking economics beyond commodities -the cautious boldness of Amartya Sen, *Journal of International Development*, 12, pp. 989-1001.(3).

Hornaday J.A, Bunker C.S., (1970) The Nature of Entrepreneur (1970), *Personal Psychology* Vol 23, Issue 1, 47-54

Israel M. Kirzner *Review of Austrian Economics*, 11: 5-17 (1999) c 1999 Kluwer Academic Publishers: Creativity and/or Alertness: A Reconsideration of the Schumpeterian Entrepreneur.

McClelland, D.C., (1961), *The Achieving Society*, Princeton, N.J.: Van Nostrand.

McClelland, D. C. & Winter, D.G. (1969), *Motivating Economic Achievement*. New York: the Free Press.

Muñiz Castillo, M.R. and Gasper, D. (2009) Looking for long-run development effectiveness: An autonomy-centred framework for project evaluation, *MGSOG Working Paper*, 2009/005, Maastricht University, Maastricht.(2)

Sen, A. (1996) Freedom, capabilities and public action: a response, *Notizie di Politeia*, 43/44, pp. 107-125(1)

Thomas W. Zimmer and Norman M. Scarborough (2005). *Essentials of entrepreneurship and small business management*. pg 35.

Timmons, J.A. (1989), *The Entrepreneurial Mind*, Brick House Publishing.

Timmons, J.A., (1999), *New Venture Creation. Entrepreneurship for the 21st century* McGraw hill International editions (P221).

www.12manage.com
 methods_mcclelland_theory_of_needs.html
<http://www.get2test.net/>