
**An inquiry into entrepreneurial characteristics amongst students in
Ahmedabad**

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ABSTRACT

The aim of this study is to find the intensity of entrepreneurial characteristics and influence of demographic factors i.e. gender, family background and education on the entrepreneurial characteristics of university students. A questionnaire survey of 106 students of Ahmedabad University was conducted. The questionnaire consisted of two sections. The first section measured the demographic profile of the respondents and the second section measured the six entrepreneurial characteristics i.e. Locus of Control, Need for Achievement, Propensity to take Risk, Tolerance for ambiguity, Self-Confidence, Innovativeness. Descriptive statistics was used to measure the intensity of various entrepreneurial characteristics and chi-square test was conducted to verify the dependence of entrepreneurial characteristic on various demographic variables. It was found that, among the six characteristics studied, students have highest intensity of 'Need for achievement' and lowest intensity for 'Tolerance of Ambiguity'. Further, no statistically significant impact of demographic variables was observed on most of the entrepreneurial characteristics under study, which is also in consensus with the various previous researches. But a significant dependence of propensity to take risk on gender, and innovativeness on academic performance were the major findings of the study. The study provides an insight into the intensity of Entrepreneurial characteristics of the students which can be helpful from the perspective of designing Entrepreneurship education curriculum, focusing more on the skills found to have lesser intensity among the students.

Keywords: Entrepreneurial characteristics, under-graduate management students, demographic variables, India, Ahmedabad

1. Introduction

Etymologically, derived from the French word 'entreprendre' which literally means 'to undertake', Entrepreneurship owes its origin to the western societies. But even in the west, it has undergone changes from time to time from army leaders in the early 16th century, to contractors of public work in 17th century, Cantillon risk bearers in 18th century and later on Schumpeter's innovators in 20th century. Entrepreneurship is pertinent to the analysis of how new ideas or 'recipes' for reconfiguring objects in the material and social world can be harnessed to enhance a nation's wealth (Harper 2003). Entrepreneurship and wealth creation are ancient themes in Indian mercantile history. Chandragupta Maurya's minister, Kautilya, wrote in the Arthashastra: "The king shall ever be active and discharge his duties; the root of wealth is activity and of evil its reverse". Earlier entrepreneurship in India was reserved to the mercantile castes and classes which most of the old industrial families seemed to represent. But, this is fast changing in the young confident and dynamic India that we see today i.e. 'GenNext' of Indian entrepreneurs who are, not as a general rule from traditional business families or communities. They are more than willing to take risks and are prepared to accept

failure as well (Parera et al., 2008). The opportunities created by today's global knowledge economy coupled with the unshackling of indigenous enterprise, have contributed to making India a fertile ground for Entrepreneurship (Goswami et al., 2008). Individual's initiatives and social inheritances have played a dominant role in the creation of Indian start-ups. According to GEM, Total Entrepreneurial Activity index for the country was 17.9% for the year 2002, the second highest among 37 countries (Manimala et al., 2002). Looking at the future, by 2016, India's working population will rise to 830 million and a very large proportion of them will go into self-employment (Parera et al., 2008).

Gujarat, better known as the entrepreneurial hub of India, can be considered as a major centre for innovations occurring at the grass-roots level, with a strong cultural influence. This enterprising behaviour can be largely attributed to a typical culture consisting of traditions, values and attitudes of the region. With a population of about 5% of the whole country, Gujarat accounts for about 10% of India's gross national product (Mehta and Joshi, 2002). Ahmedabad (home to traditional entrepreneurial communities) shows a higher degree of family support for Entrepreneurship (88%) compared to the national average (74%) (Goswami et al., 2008). Starting up a new firm is very much an individual's decision, which is why the individual's characteristics as an entrepreneur are central in the investigation of entrepreneurship (Littunen 2000). This study is targeted towards the final year undergraduate management students who are yet not entrepreneurs. Through this study we try to investigate entrepreneurial characteristics of these students.

2. Review of literature

The question remains what is the key difference between the students intending to take an entrepreneurial career and those who don't. There is very less consensus on what entrepreneurship is and who is an entrepreneur. Kilby titled his research on Entrepreneurship as *Hunting the Heffalump* (Kilby 1971). Later in 1988, Gartner suggested two approaches to understand entrepreneurship, the trait approach and the behavioural approach. The trait approach focuses on the personality type of the entrepreneur whereas behaviour approach focuses on the organisation (Gartner 1988). Cunningham and Lischeron (1991) have identified six schools of thoughts on entrepreneurship. The "great person school" believes that entrepreneur has an intuitive ability and instincts whereas the leadership school proposes that entrepreneur has the ability to adapt their styles to the needs of people. The management school describes entrepreneurs as those who organise, own, manage and assume the risk whereas classical school focus on innovation. The psychological characteristics school believes entrepreneurs are driven by unique values, attitudes and needs whereas the central characteristic of entrepreneurial behaviour is innovation. In contrast, Intrapreneurship school focusses on skilful managers within complex organisations.

In our study we have adopted Gartner's trait approach and psychological characteristic as well as classical school of thought. This focuses on personality and characteristics of the entrepreneur. The entrepreneurial characteristics have important impact on the entrepreneurial inclination of the students. Students who are more entrepreneurially inclined have higher propensity to take risk, more tolerance for ambiguity and greater innovativeness (Koh 1996). There are significant differences between the psychological characteristics of entrepreneurs and those of corporate managers and executives (Sexton and Bowman, 1985). A study in Turkey suggested that there is no significant difference between those entrepreneurially inclined and those who are not entrepreneurially inclined with respect to characteristics of Self Confidence and Tolerance of ambiguity whereas significant difference

is seen in characteristics like locus of control, need for achievement, propensity to take risk and innovativeness (Gürol and Atsan, 2006)

In the present research, six entrepreneurial characteristics i.e. Locus of Control, Need for Achievement, Propensity to take Risk, Tolerance for Ambiguity, Self-Confidence and Innovativeness are chosen as they are frequently cited in different studies in entrepreneurial literature (Koh, 1996; Gürol and Atsan, 2006; Demirer and KARA, 2007; Nishantha, 2008; Ramana et al., 2009).

Locus of control concept was first developed by Julian B. Rotter. The effect of reward depends in part on whether the person perceives the reward as contingent on his own behaviour or independent of it (Rotter 1966). People with internal locus of control believe that events in life are in their control whereas people with external locus of control believe life's events are result of fate or luck (Nishantha 2008).

McClelland's need for achievement theory (1961) highly emphasized that need for achievement is one of the strongest psychological factors influencing entrepreneurial behaviour. Need for achievement predisposes people to enter entrepreneurial occupations or to function in traditional occupations in entrepreneurial ways (McClelland 1965).

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The risk-taking is defined as “the perceived possibility of receiving the rewards associated with success of a proposed situation”, required before embarking on a venture (Brockhaus 1980). The earliest definition of entrepreneurship, dating from the eighteenth century, used it as an economic term describing the process of bearing the risk of buying at certain prices and selling at uncertain prices (Allah and Nakhaie, 2011)

When there is insufficient information to structure a situation, an ambiguous situation is said to exist. The manner in which a person perceives ambiguous situation and organises the available information to approach it reflects his/her tolerance of ambiguity (Koh 1996). Entrepreneurs have a higher tolerance of ambiguity than middle as well as top level managers (Schere 1982).

Self-confidence refers to the belief in one's own actions. An entrepreneur initiates and takes actions individually; hence self-confidence is one the most required trait for an entrepreneur (Kuip and Verheul, 2004).

Innovation refers to the new ways of combining means of production. Innovation can occur through introducing new quality in a product, introducing new product, discovering fresh demand or fresh source of supply or by bringing changes in the organisation and management. Schumpeter has been the pioneer in introducing the importance of innovativeness to the literature of entrepreneurship. The critical factor to distinguish entrepreneurs from non-entrepreneurial managers and small business owners is innovation (Carland et al., 1984).

As noted by Koh, Hongkong (Asian) students are innovative and have higher need of achievement in comparison to other entrepreneurial characteristics (Koh 1996). Also depending upon the different geographies and environment, certain entrepreneurial characteristics may be different. European and Asian students have similar risk taking propensity and self-confidence but European students have more market knowledge whereas Asian students have more need for achievement and creativity (Aghazamani and Roozikhah, 2010). Entrepreneurship literature provides a mixed review on the impact of demographic

factors on the entrepreneurial characteristics. There is significant difference between males and females regarding certain entrepreneurial characteristic like tolerance for ambiguity while there is no significant difference in characteristics like need for achievement, propensity to take risk and innovativeness (Demirer and KARA, 2007). Whereas Ahmed (2010) noted that entrepreneur cannot be differentiated from non-entrepreneur on the basis of age and gender. While studying the influence of family context on entrepreneurial characteristics, positive correlation was found between entrepreneurial characteristic of self-confidence and family context (Patel 2007). Similarly Ahmed (2010) suggested family background and level of education matters while intending to become an entrepreneur. Career of parents and family members is one of the most important social factors triggering the entrepreneurial drive of the students (Dabic et al., 2011). Family values, lifestyle and attitude towards work also have significant bearing on the students' attitude. Those coming from family business tend to have some tacit knowledge, which they utilise while developing idea (Romer-Paakkanen 2009). Most of the research support the positive impact of family background on entrepreneurial characteristics but Kumara and Saharranam (2009) suggested that students' parent's occupation has little influence on their entrepreneurial characteristics.

In the context of impact of education on entrepreneurial characteristics, research reveal that entrepreneurs with a higher academic background are more often innovative, use modern business models, and base their ventures on the use of new technology (Pajarinen et al., 2006). But Kumara and Saharranam(2009) suggested that the students' degree marks have little influence on their entrepreneurial characteristics. From the point of view of a national economy it is hoped that a large portion of academically educated people would pursue an entrepreneurial career (Sowmya et al., 2010).

3. Research Objectives

The research primarily aims to study the intensity of entrepreneurial characteristics of undergraduate management students on the basis of the data collected in late 2012.

Taking trait approach and physiological characteristic school of thought into consideration, it is also important to study the relation between the demographic variables and entrepreneurial characteristics of the students, for the purpose of which, the following hypothesis are formulated:

H₁ : There is no significant relation between gender and entrepreneurial characteristics of students.

H₂ : There is no significant relation between family background and entrepreneurial characteristics of students.

H₃ : There is no significant relation between academic performance and entrepreneurial characteristics of students.

4. Research methodology

4.1 Conceptual framework

Demographic variables considered in this study are gender, family background and academic performance of the students. Family background here refers to the occupation of the parents of the students. Two categories of occupation have been considered; business and service/profession. Based on which, students are classified into two different groups.

Academic performance is considered based on the students Cumulative Grade Point Average (CGPA) of the last eight trimesters of undergraduate management study

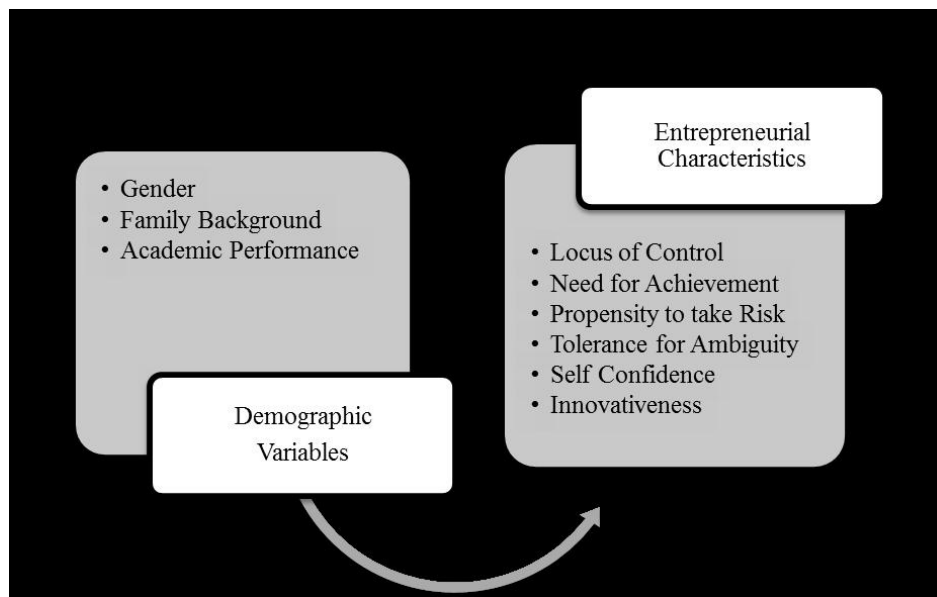


Figure 1: Conceptual Framework

4.2 Sample selection

A sample of 106 BBA students of B. K. Majumdar Institute of Business Administration, Ahmedabad University was taken for the purpose of research. Ahmedabad was considered to be an appropriate place to conduct the research on entrepreneurship as Gujarat is considered to be well equipped with a rich heritage of entrepreneurial skills and land of many famous Indian entrepreneurs. The average of the respondents was 21 years. No responses were found to have any deficiencies, hence all 106 responses were considered for further analysis.

4.3 Research instrument

A close-ended, self-administered questionnaire was given to the students during their lectures. The questionnaire consists of two sections. The first section measures the demographic profile of the respondents as these variables have been associated with entrepreneurship in the literature (Appendix A). The second section measures the six entrepreneurial characteristics mentioned in the conceptual framework with the help of the Entrepreneurial Self-Assessment Scale, first published in the *Entrepreneurs' Handbook*, a journal produced by the Institute of Small Scale Industries, University of Philippines in 1981. This questionnaire has been used in the previous research and tested for its reliability (Koh, 1996; Patel, 2007). The six entrepreneurial characteristics are measured with the help of 36 statements (six statements for each characteristic) for which a five-point Likert scale is used from (1) for strongly disagree to (5) for strongly agree. Some statements are reverse scored and intermingled with other statements so as to reduce the bias. The scoring sheet for compiling scores of each characteristic was developed accordingly (Appendix B).

4.4 Statistical methods

Descriptive statistics (Mean, standard deviation, cross tabulation and frequency distribution) was used to compare the intensity of various entrepreneurial characteristics in the students.

Chi-square test of independence was conducted to verify the independence or dependence of entrepreneurial characteristic w.r.t. various demographic variable.

4.5 Analysis and interpretation

Descriptive statistics of the sample including the frequency distribution and percentage is presented in Table I. The study has nearly equal representation of both genders (55.7% male and 44.3% female). A large proportion of the respondents (nearly 81%) are from family business background whereas parent's occupation of the remaining respondents is service or profession. Academic performance is generated by converting CGPAs into corresponding percentage bands and classified into four categories based on average of the percentage band. None of the students were found to score below 50%, hence below 60% has been considered as the lowest class interval. Similarly very few students had scored above 85%, hence above 80% is considered as the upper class interval.

Table 1: Gender, Family Background and Academic Performance of the Respondents

Socio-Demographic Factors	Particulars	No. of respondents	%
Gender	Male	59	55.7
	Female	47	44.3
	Total	106	100
Family Background	Business	86	81.1
	Service/Professional	20	18.9
	Total	106	100
Academic Performance	Below 60%	18	17.0
	60%-70%	44	41.5
	70%-80%	30	28.3
	Above 80%	14	13.2
	Total	106	100

Descriptive statistics of the variables including the mean, standard deviation, coefficient of variation as well as minimum and maximum score is presented in Table-II. For our analysis, firstly we generated the mean score of each entrepreneurial characteristic of every respondent by dividing their total score for that characteristic by six. Further, intensity of each characteristic was calculated by taking the mean of mean scores of all respondent for that particular characteristic. Among all the characteristics, students have higher need for achievement and locus of control ($\bar{x} = 3.77$ and 3.71 respectively) whereas tolerance for ambiguity was found to be least ($\bar{x} = 3.01$). The scores of self-confidence had maximum variation (CV=19.53%) whereas need for achievement had least variation (CV= 14.04%)

Table 2: Descriptive Statistics of Entrepreneurial Characteristics

Characteristics	Mean (\bar{x})	Standard Deviation (s)	Coefficient of Variation (CV)	Minimum	Maximum
Locus of control	3.71	0.52	14.04	2.33	4.83
Need for achievement	3.77	0.48	12.73	2.67	4.83

Propensity to take risk	3.29	0.46	14.08	2.17	4.83
Tolerance for ambiguity	3.01	0.46	15.27	1.67	4.67
Self-Confidence	3.55	0.69	19.53	2.00	4.83
Innovativeness	3.64	0.61	16.64	2.17	4.83

4.6 Hypothesis testing

All the three hypothesis were tested using chi-square Test for Independence to investigate whether the demographic variables and entrepreneurial characteristics have statistically significant relation. To construct bi-variate frequency distribution entrepreneurial characteristic scores were classified into four categories i.e. 1-3, 3-3.5, 3.5-4 and 4-5 which signifies mean score of less than 60%, 60-70%, 70-80% and 80% or above respectively. As shown in Table III, at 0.1 significance level, all the Null hypothesis were rejected except impact of gender on propensity to take risk and academic performance on innovativeness.

Table 3: Relation between Demographic Variable and Entrepreneurial Characteristics through Chi Square Test of Independence

Characteristics	p-value		
	Gender	Family Background	Academic Performance
Locus of Control	0.758	0.198	0.405
Need for Achievement	0.993	0.156	0.486
Propensity to take Risk	0.002	0.789	0.591
Tolerance for Ambiguity	0.162	0.620	0.337
Self-Confidence	0.229	0.375	0.673
Innovativeness	0.287	0.197	0.075

4.7 Findings

It was found, that among the six entrepreneurial characteristics studied, students have highest intensity score for need for achievement followed by locus of control whereas the intensity scores for tolerance for ambiguity is found to be least. Findings with respect to impact of demographic variables on entrepreneurial characteristics suggest that there is statistically significant relation between:

1. Propensity to take risk and Gender; males have higher propensity to take risk than females. Family background and academic performance has no impact on propensity to take risk.
2. Innovativeness and Academic performance; students scoring more during their under graduation have higher scores on innovativeness.

There is no statistically significant relation between demographic variables and locus of control as well as need for achievement but relatively low p-value in the demographic

variable of family background (referring to parents' occupation of students under study) indicates that family background impact these two characteristics to some extent, though not significant. Similarly, there is no statistically significant relation between demographic variables and tolerance for ambiguity but low p-value in the demographic variable of gender, provides little evidence that gender impacts tolerance for ambiguity to an extent, though not significant. Also mean scores indicated that males have higher tolerance for ambiguity than females. Entrepreneurial characteristic of Self-confidence is not found to be statistically related to any of the demographic variable.

4.8 Limitation of the study

The present research has some limitations. The survey was carried out on a sample of business management undergraduate students from only one college of Ahmedabad. Also, majority of the students in our research come from family business background hence we have not been able to get a balanced representation from both the categories of students i.e. those coming from family as well as non-family business background.

5. Conclusions

The primary objective of the research was to study the intensity of entrepreneurial characteristics in students which was derived with the help of mean scores of each of the six characteristics measured on the Likert scale of five using six statements for each characteristic. Students were found to have high need for achievement but less tolerance for ambiguity. High need for achievement is a positive indication for the success of prospective entrepreneurs. The research also aimed at studying the impact of demographic variables on entrepreneurial characteristics. Overall there was not very significant impact of demographic variables on the six entrepreneurial characteristics under study. This result is also in consensus with various previous researches (Kumara and Saharranam, 2009; Ishfaq Ahmed, 2010). But there was significant dependence of propensity to take risk on gender. Also students with better academic performance were found to be more innovative (Pajarinen et al., 2006).

5.1 Future Work

The research opens several possibilities for future research. The present study can be replicated in a more comprehensive manner, covering a larger group of students from same university as well as from different universities. Furthermore, the study of entrepreneurial characteristics of the students who undergo entrepreneurial education and those who don't undergo the same could be an interesting topic.

6. References

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