

Exploring entrepreneurial characteristics among university students: an evidence from India

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Abstract

Purpose – The purpose of this paper is to explore the entrepreneurial characteristics among university students in India studying business and also comparing the levels of entrepreneurial characteristics between entrepreneurially inclined and entrepreneurially not inclined students.

Design/methodology/approach – In this study, the authors included six entrepreneurial characteristics, namely, risk taking propensity, innovativeness, locus of control, need for achievement, general self-efficacy and tolerance for ambiguity to define the entrepreneurial profile of students. Convenient sampling was used for collecting the data using a seven-point Likert scale based on 38-items self-administered questionnaire. Data were collected from three universities of different cities, namely, Aligarh Muslim University, Aligarh, CSJM University, Kanpur and KMCUAF University, Lucknow. In total, 300 questionnaires were distributed in each of the universities, and 719 questionnaires were found statistically suitable for the study. Students were asked the question “What career option are you planning to choose after completing your graduation?” to know the inclination of the students.

Findings – Results of the *t*-test confirmed that levels of all the entrepreneurial characteristics are higher in entrepreneurially inclined students when compared to entrepreneurially not inclined students except in terms of general self-efficacy. Thus, entrepreneurially inclined students carry higher risk taking propensity, innovativeness, locus of control, need for achievement and tolerance for ambiguity.

Research limitations/implications – This study is confined only to undergraduate students from business background, and only three universities were included in the sample. Further research can be done taking students from different streams, namely, engineering, science and technology and arts etc. University-wise studies can also be conducted with the view to bring comparability among the students in terms of levels of entrepreneurial characteristics based upon the inclination shown.

Practical implications – This research provides the deeper understanding about what course contents are effective in developing entrepreneurial characteristics among the students and what are to be added with the view to raise potential entrepreneurs.

Originality/value – This paper contributes to establishing the differences across different entrepreneurial characteristics between entrepreneurially inclined and non-inclined undergraduate students.

Keywords Entrepreneurship, Entrepreneurial inclination, Entrepreneurial characteristics, India, Students, University

Paper type Research paper



1. Introduction

Entrepreneurship is considered as a phenomenon which has been talked about most in recent times. Among the researchers, immense urge for researching the entrepreneurship phenomenon has been sensed across the globe not only due to its inevitable significance in fostering the economy and creating employment opportunities but also for product and market innovation (Mueller and Thomas, 2000; Jack and Anderson, 1999). Moreover, its role is accepted as more expository within a developing economy such as India for it is considered to acting like an engine to the progress of an emerging economy. Hence, in India, new venture creation is widely being promoted the government and policymakers to trigger the economic growth.

As, among the academicians and researchers, the interest for the entrepreneurship research has extensively been witnessed widespread and is one of the world's fastest-growing economies, Indian government has also undertaken several initiatives and instituted policy measures to foster a culture of innovation and entrepreneurship in the country. Employment generation is a prime challenge that India is facing at present. India, however with a rich, resourceful and unique geographic and demographic advantage, has huge potential to innovate and raise entrepreneurs with the view to generating employment for others thus befitting the nation's economy.

Indians rate entrepreneurship as secondary career option and show more inclination to public and private sector salaried jobs when compared to factor-driven economies. For many years, the Global Entrepreneurship Monitor (GEM) have confirmed in their international reports that entrepreneurial initiatives/activities in India are impelled by necessities. The rate of Total Early-stage Entrepreneurial Activity (TEA) in India is 10.6 per cent, quite below than the average (16.8 per cent) of all factor-driven economies. Further in the GEM India report 2017-2018, Total Early-stage Entrepreneurial Activity (TEA) has further declined to 9.3 per cent. In fact, the TEA rate of India is found to be the third lowest among all the factors-driven economies. India's rank is first with 28 per cent level of innovation among the factor-driven nation. Where, in average the innovation-driven economies exhibit a level of 31 per cent for innovation, thus being a factor driven economy, India's level of innovation is not much below as compared to average level of innovation among innovation-driven nations (Herrington and Kew, 2016; Shukla *et al.*, 2019).

In the past few years, several support programs and schemes have been introduced by the Indian government to bring the innovation through fostering entrepreneurship across various sectors. From engaging with academic researchers, industries, experts, investors, SMEs, NGOs to the most disadvantaged and underprivileged parts of society.

After going through the literature on entrepreneurship, it has now become evident that majority of the researchers have paid their attention on adult entrepreneurs. As people are more likely to enter into entrepreneurial activities between the age ranging from 25 to 44 years (Ahmad, 1974). It is also important to concentrate on the people with the age of less than 25 years and understand whether having an inclination toward entrepreneurship positively affects the level of entrepreneurial characteristics among people. In the present study, the age of respondents ranges between 17 and 24 years. From the entrepreneurship literature, it is also found that not a single study had been conducted which has measured the entrepreneurial characteristics among university students and tried establishing a difference in levels of characteristics between entrepreneurially inclined and not inclined groups in the Indian context. The primary objective of this manuscript is to measure the entrepreneurial characteristics of university students and comparing these characteristics between entrepreneurially inclined and not inclined groups.

To investigate entrepreneurship, we need to identify the factors that impact entrepreneurial conduct. Those factors could be related to individuals, society or environment. The Social Model examines the demographic profiles and social background i.e. background of both individual as well as of a family, status of the career (Robinson *et al.*, 1991; Alstete, 2002; Green *et al.*, 1996), life experiences and opportunities available for the growth (Gibb, 1993). On the other hand, the Environmental Model examines contextual factors such as financial status, tax redemptions and other benefits, market conditions (Alstete, 2002), social turmoil and propitious socio-economic environment (Green *et al.*, 1996).

While the factors related to individuals, generally known as the traits model, concentrate on customized entrepreneurial qualities (Chye Koh, 1996). This model is based on the supposition that entrepreneurs possess some exceptional characteristics, own such orientation and values which create an inducement for them thus differentiate them from others (Thomas and Mueller, 2000; Chye Koh, 1996). Some of the previous studies used the characteristic model focusing on the basic queries such as; who become entrepreneurs, why people think of becoming entrepreneur and what qualities do successful entrepreneurs possess (Bygrave and Hofer, 1991; Littunen, 2000). This model has been an important component of entrepreneurial research. Several studies have examined various personality traits and established them as its attributes. For example, in the study conducted by Entrialgo *et al.* (2000) locus of control, need for achievement and tolerance of ambiguity are considered potential as determinants of the propensity for entrepreneurship. As opposed to this, the research by Stewart *et al.* (1998) mentions the need for achievement, innovation and risk-taking propensity to be the traits of entrepreneurs, thus distinguishing them from “corporate managers” and “small business owners”.

2. Review of literature and hypotheses development

In their study, authors have used six personality attributes of the university students, namely, risk-taking propensity, innovativeness, the *locus* of control, need for achievement, general self-efficacy and tolerance of ambiguity to assess the levels of entrepreneurial characteristics. These attributes were chosen based on their repeated citations in studies on entrepreneurship, and the belief of various authors that these attributes correctly represent the entrepreneurial behavior of an individual. However, it is interesting to note that the general results of the researches conducted on these attributes are yet to be concluded. The present literature both supports and counters the interrelatedness of the attributes mentioned below. Complexities regarding methodology, definitions and concepts are viewed as key reasons for the contrast (Stewart *et al.*, 1998; Robinson *et al.*, 1991).

Risk taking propensity

Risk taking propensity is considered as the capacity of an individual to take or avoid risks when posed against perilous situations. Entrepreneurship may verifiably be connected with risk-taking. For a standout amongst the earliest examples, Cantillon (1755), demonstrates that the differentiating factor between employed workers and entrepreneurs is the ability of the latter to assume uncertainty and risk (Entrialgo *et al.*, 2000; Thomas and Mueller, 2000). Especially what maybe accentuated reason for distinguishing the entrepreneurs from professional managers is that the entrepreneurs themselves take the risk of profit or loss. Also because of unpredictable and uncertain environment, they undertake the risk related to financial concerns, opportunities for the career, family and other relations, psychic welfare (Erdem, 2001; Brockhaus, 1980; Littunen, 2000). Thus, practical judgment skills might recommend that taking risks should not be neglected by entrepreneurs. Literature also supports that entrepreneurs show higher propensity for taking risks when compared to

other people (Cho and Lee, 2018; Cromie, 2000; and Thomas and Mueller, 2000; Teoh and Foo, 1997). Thus our first hypothesis is as follows:

- H1. Entrepreneurially inclined students will show high risk-taking propensity than entrepreneurially not inclined students.

Innovativeness

Innovativeness needs a thorough definition which includes the will to make different products or offer superior quality using latest production techniques, identifying the ways enter into new markets, establishing timely sources of supply, or set up a framework for new business venture. To achieve successful innovation a leadership has to be carried through a strong willpower (Hansemark, 1998). Innovativeness is considered as a must-have characteristic among the entrepreneurs as entrepreneurs always explore for further opportunities (Zacharakis, 1997; Entrialgo *et al.*, 2000). Drucker also advocated innovativeness as crucial trait within an entrepreneur which will facilitate the systematic search for required changes within the markets to be met with new ideas and products (Cromie, 2000; Utsch and Rauch, 2000). In similarity with the available literature of different researchers from the entrepreneurial research arena, Stewart *et al.* (2003) contend that innovativeness is an ingrained part of entrepreneurship and differentiates “entrepreneurs” from “managers”. In their study, Utsch and Rauch (2000) found that there might be a close correlation between performance of the venture and innovativeness. Furthermore, Thomas and Mueller (2000) put forward that innovativeness has been taken as a prime measure when it comes to characterization of the entrepreneurship profile. Hence we frame our second hypothesis as follows:

- H2. Entrepreneurially inclined students will show more innovativeness than entrepreneurially not inclined students.

Locus of control

Out of all the characteristics extensively scrutinized, *locus* of control (LoC) is another trait. It is an identity variable that is identified with the summed up the desires of a man whether he has the capacity to control life situations (Leone and Burns, 2000). As stated by Rotter (1966) in terms of how many personal obligations they recognize and acknowledge for their conduct and outcomes. People with external LoC think that situations beyond their immediate control such as luck, destiny, fortune and other people have influence on their performance over a range of tasks. While people with internal LoC consider that they themselves control the outcomes and occasions (Chye Koh, 1996; Riipinen, 1994; Hansemark, 1998). It is widely accepted that entrepreneurs seeking newer business opportunities and forming an innovative attitude are supposed to be equipped with the quality “internal *locus* of control”. A large number of studies have also confirmed this notion (Mueller and Thomas, 2000; Hansemark, 1998; Chye Koh, 1996; Utsch and Rauch, 2000). For instance, Gilad (1982), in their study, successfully used LoC to differentiate between successful and unsuccessful small business owners (Engle *et al.*, 1997). Also in Sharpero’s study, the inference points that entrepreneurs have generally higher *locus* of inner control when compared to non-entrepreneurs (Thomas and Mueller, 2000). In summary we can propose our third hypothesis:

H3. Entrepreneurially inclined students will have more locus of control than entrepreneurially not inclined students.

Need for achievement

McClelland's (1961) theory on the need for achievement stands-out the most with respect to its application on entrepreneurship. As stated by its customary definition, the need for achievement is the stimulus that prompts an individual to struggle for the success until it is achieved (Sagie and Elizur, 1999). Persons with a strong desire for the need to achieve are those who want to be problem solvers, target setters and working towards them through their own endeavor, exhibit high execution in challenging tasks and are unconventionally imaginative while searching for different approaches their performance improvement (Littunen, 2000; Utsch and Rauch, 2000). Murray (1938) recognized the need for achievement as the most fundamental need that affects behavior. By establishing a construct in the entrepreneurial literature McClelland posited that a highly achievement motivated person is more likely to enter into the entrepreneurial world with the view to attain more of achievement satisfaction that he could attain from other career options (Entrialgo *et al.*, 2000; Stewart *et al.*, 2003). With the number of comparative studies based on entrepreneurs and non-entrepreneurs, it can be opined that the need for achievement has the most crucial connection with the entrepreneurship over other qualities existing in current the literature (Hansemark, 1998; Littunen, 2000). Thus, we have our fourth hypothesis as follows:

H4. Entrepreneurially inclined students will rate need for achievement higher than entrepreneurially not inclined students.

General self-efficacy

Self-efficacy has been studied substantially in organizational research (Bandura, 1997; Gist and Mitchell, 1992; Stajkovic and Luthans, 1998) and is generally defined as "One's own belief in one's own capabilities when posed with some situations which demand mobilizing the motivation, cognition and *modus operandi*" (Arafat *et al.*, 2018; Wood and Bandura, 1989). In various researches it has been found that self-efficacy foresees the outcomes of several related works, including attitudes related to jobs (Saks, 1995), training prowess (Martocchio and Judge, 1997) and performance related job execution (Stajkovic and Luthans, 1998). Bandura (1986, 1997) in their social cognitive theory believed that self-efficacy varies on three dimensions:

- (1) level or magnitude (difficulty level of a particular task);
- (2) strength (level of certainty to be successful while performing the task with a particular level of difficulty); and
- (3) generalization (the coverage of generalization across situations and tasks pertaining to the belief in strength and magnitude).

Entrepreneurs are generally supposed to be having higher self-confidence when comrade to others because they neck out and take up some challenging tasks and complete them successfully which seem to be unlikely if they lack in confidence. In the entrepreneurial literature, it is has been claimed that entrepreneurs carry relatively a higher degree of self-confidence in comparison to others (Chye Koh, 1996; Robinson *et al.*, 1991). Thus, this notion allows us to frame our fifth hypothesis as follows:

H5. Entrepreneurially inclined students will show higher general self-efficacy than entrepreneurially not inclined students.

Tolerance of ambiguity

Unpredictability is a situation which cannot be organized due to availability of inadequate data. The ability to tolerate ambiguity is reflected in ways a person reacts to vague and unfavorable situations. When an individual agrees with inconsistent data and trusts himself, his tolerance is side to on higher side (Teoh and Foo, 1997). On the contrary, people having low levels of tolerance are found to be more uncomfortable when put against dubious and unstructured circumstances and try to avoid being in such situations. The tolerance can be adequately conceptualized as an individual's inclination towards taking chance while taking decisions. Entrepreneurial managers are better at tolerating ambiguity than conservative managers, as the entrepreneurial ones constantly face unstructured, more uncertain circumstances, and ultimately are held responsible for their choices (Entrialgo *et al.*, 2000). Entrepreneurial behavior firmly sticks with risk and uncertainty, as decisions of the entrepreneurs result in innovative and original actions (Cromie, 2000; Teoh and Foo, 1997 and Chye Koh, 1996). Teoh and Foo (1997) also pointed out numerous researches that suggest that the entrepreneurs tend to be having greater capability to tolerate and handle ambiguous situations. Hence, we can propose our sixth hypothesis as follows:

H6. Entrepreneurially inclined students will have more tolerance of ambiguity than entrepreneurially not inclined students.

3. Research design and methodology

In this study, researchers have focused on analyzing the entrepreneurial characteristics of university undergraduate students based on presumption that few certain entrepreneurial characteristics urge people to become entrepreneurs thus discerning them as potential future entrepreneurs. For this purpose, data sample of 719 students was collected from three different universities of three different cities in India. With the support of available literature, where it has been confirmed that university students are potential future entrepreneurs, authors have used the data collected from undergraduate students of business, ranging between 17 and 24 years of age (mean age = 19.21), from three different universities, namely, Aligarh Muslim University, CSJM University and KMCUAF University. Of these three universities, first one is a central government university, while other two are state government universities. Before going for final survey we also conducted a piloting survey on 79 students. For the final survey, convenience sampling technique was used because it has been used widely in many entrepreneurial researches (Krueger *et al.*, 2000; Liñán and Chen, 2009) and 300 questionnaires were distributed in each of the above-mentioned universities among both male and female students. Out of total 900 administered questionnaires in all three universities, 776 questionnaires were returned by respondents and of them 57 were found with some discrepancies and eliminated thus forming a final sample size of total 719 students (Table I).

Research instrument

Adopting the scales on the constructs from relevant entrepreneurship literature, a self-structured questionnaire was framed on seven-point Likert like scale ranging from rating 1 (lowest) to rating 7 (highest) and used for collecting data which was divided into two parts. In the first part, questions related to demographic profile and knowing the entrepreneurial

inclination of the respondent were asked. For knowing the inclination of the students a question “What career option are you planning to choose after completing your graduation?” was posed which was followed by three statements regarding career options choice, namely, “I am planning to choose entrepreneurship as my career”, “I am planning to work as a salaried employee in private sector” and “I am planning to work as a salaried employee in public sector”. While second part of the questionnaire consist of variables to measure characteristics; risk-taking propensity, Innovativeness, *locus* of control, need for achievement, general self-efficacy and tolerance of ambiguity which are considered to be crucial for discerning between entrepreneurial and non-entrepreneurial inclination. In this part of the questionnaire, total 38 statements were posed; five items for risk-taking propensity, eight items for innovativeness, eight items for *locus* of control, five items for need for achievement, six items for general self-efficacy and six items for tolerance for ambiguity. Out of total 38 statements 15 negative statements were also used and intermixed with other statements and were reverse coded at the time of feeding the data into SPSS 21 with a view to minimize the bias of the responses (Nunnally and Bernstein, 1978; Schriesheim and Eisenbach, 1995). Table II shows the lists of the items used in the questionnaire along with their sources of adoption.

4. Results

Exploratory factor analysis and Cronbach’s alpha reliabilities

Exploratory factory analysis was used to determine whether indicators adopted from different published and widely accepted scales are loading under their respective variables or not. For the of purpose extraction of the factors, authors have used principal axis factor method with varimax rotation method. Results of exploratory factor analysis showed loadings above 0.4 for all the indicators coming under each factor and average loadings above 0.6 for each factor which is found to be significantly satisfactory for a sample size above 350 (Hair *et al.*, 2012). To test the internal consistency and reliability of the subscales, Cronbach’s alpha was used. Values mentioned in parentheses are the reliabilities of Cronbach’s alpha. Reliabilities for all the subscales have been found above 0.70 thus showing that all the subscales are having internal consistency and measuring the same concept (Table III).

Descriptive statistics of samples and variables

Out of total 719 respondents 305 students showed “entrepreneurial inclination” while rest 414 students were found “not inclined” toward entrepreneurship. Only 111 female students (33.43 per cent) evinced entrepreneurial inclination out of total 332 female students while on the other hand 194 male students (50.13 per cent) confirmed their entrepreneurial inclination as compared to total 387 male students. With the purpose of knowing whether parent’s occupation influences the student’s inclination or not, a question was posed to know the father’s occupation of the respondents. 302 students turned up with parents’ entrepreneurial or self-employed occupational background, of them 128 students (42.38 per cent) showed

Table I.
Data sample
synthesis

University name	Sample size	Male	Female
Aligarh Muslim University	216	118	98
CSJM University	274	153	121
KMCUAF University	229	113	116
Total	719	384	335

Construct name with items	Source of adoption
<p><i>Risk taking propensity (Five items)</i></p> <ol style="list-style-type: none"> 1. I am willing to take higher risks for higher returns 2. I do not care if the profit is small for a long time provided it is assured and constant* 3. I never fear moving into a new undertaking, I know nothing about 4. I prefer to avoid any risk situation at all costs* 5. I prefer a business that offers high returns with high risks over a secured job with steady salary 	Chye Koh (1996)
<p><i>Innovativeness (Eight items)</i></p> <ol style="list-style-type: none"> 1. I often surprise people with my novel ideas 2. I prefer the work that requires original thinking 3. I like the job which demands skill and practice rather than innovativeness* 4. I obtain more satisfaction from mastering a skill than coming up with a new idea* 5. I like to experiment with various ways of doing the same thing 6. I usually continue doing a job in exactly the way it was taught to me* 7. Nothing gets accomplished in this world unless you stick to some basic rules* 8. Sometimes I rather enjoy going against the rules and doing things I'm not supposed to do 	Jackson's (1994) Personality Inventory
<p><i>Locus of control (Eight items)</i></p> <ol style="list-style-type: none"> 1. My life is determined by my own actions 2. I feel in control of my life 3. I feel that what happens in my life is mostly determined by people in powerful positions* 4. To a great extent my life is controlled by accidental happenings* 5. When I get what I want, it is usually because I worked hard for it 6. When I get what I want, it is usually because I am lucky* 7. My success depends on whether I am lucky enough to be in the right place at the right time* 8. Whether or not I am successful in life depends mostly on my ability 	Levenson (1974)
<p><i>Need for achievement (Six items)</i></p> <ol style="list-style-type: none"> 1. Achievement is more important than material or financial reward 2. Achieving the aim or task gives greater personal satisfaction than receiving praise or recognition 3. Financial reward is regarded as a measurement of success* 4. Achievement-motivated people constantly seek improvements and ways of doing things better 5. Achieving the aim and task brings more financial reward than praise or recognition* 6. Achieving the aim and task is regarded as a measurement of success 	Chang <i>et al.</i> (2007)
<p><i>General self-efficacy (Six items)</i></p> <ol style="list-style-type: none"> 1. I will be able to achieve most of the goals that I have set for myself 2. When facing difficult tasks, I am certain that I will accomplish them 3. I am confident that I can perform effectively on many different tasks 4. Even when things are tough, I can perform quite well 5. Compared to other people, I can do most tasks very well 6. In general, I think that I can obtain outcomes that are important to me 	Chye Koh (1996)
<p><i>Tolerance of ambiguity (Six items)</i></p> <ol style="list-style-type: none"> 1. I like to fool around with new ideas, even if they turn out later to be a total waste of time 2. Practically every problem has a solution 3. A problem has little attraction for me if I don't think it has a solution* 4. I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer* 5. I have the adaptability to every unpleasant social situation 6. I get pretty anxious when I'm in a social situation over which I have no control* 	Kirton (1981)

Note: *Items marked with an asterisk are negative statements and reverse coded during analysis

Table II.
Questionnaire items
with adoption
sources

Variable	Indicators	Loadings	Alpha
Risk taking propensity	RTP_1	0.880	0.823
	RTP_2	0.702	
	RTP_3	0.615	
	RTP_4	0.429	
	RTP_5	0.661	
Innovativeness	Innov_1	0.703	0.851
	Innov_2	0.756	
	Innov_3	0.682	
	Innov_4	0.573	
	Innov_5	0.649	
	Innov_6	0.861	
	Innov_7	0.797	
	Innov_8	0.669	
Locus of control	LoC_1	0.775	0.878
	LoC_2	0.859	
	LoC_3	0.770	
	LoC_4	0.724	
	LoC_5	0.632	
	LoC_6	0.677	
	LoC_7	0.648	
	LoC_8	0.667	
Need for achievement	Achv_1	0.623	0.782
	Achv_2	0.547	
	Achv_3	0.674	
	Achv_4	0.454	
	Achv_5	0.769	
	Achv_6	0.671	
General self-efficacy	Efficacy_1	0.534	0.804
	Efficacy_2	0.591	
	Efficacy_3	0.628	
	Efficacy_4	0.761	
	Efficacy_5	0.469	
	Efficacy_6	0.676	
Tolerance of ambiguity	Ambiguity_1	0.726	0.835
	Ambiguity_2	0.798	
	Ambiguity_3	0.441	
	Ambiguity_4	0.401	
	Ambiguity_5	0.721	
	Ambiguity_6	0.616	

Table III.
Exploratory factor
analysis and
Cronbach's alpha
reliabilities

their entrepreneurial inclination. This finding of the results shows that in India, parents' entrepreneurial occupational background does only moderately lead to entrepreneurial inclination among the students.

Correlations

Results of correlation have been given in [Table IV](#). All the variables are fairly correlated with each other at 0.01 level. The highest correlation of 0.62 was observed between tolerance of ambiguity and innovativeness, while the lowest correlation of 0.313 was found between general self-efficacy and risk-taking propensity.

Testing of hypotheses

As this manuscript aims to investigate the mean differences within the variables based upon entrepreneurial inclination and non-inclination of the students thus the hypotheses were statistically tested using independent samples *t*-test (Table V). According to the results from Table V, *H1* was accepted as students with entrepreneurial inclination are prone to taking of the risk as compared to students with no entrepreneurial inclination. As entrepreneurially inclined students tend to be more innovative than entrepreneurially not inclined students thus resulting into acceptance of *H2*. *H3* was also accepted due to higher belief shown by entrepreneurially inclined students that they are in more control of the events in their lives than entrepreneurially not inclined students. Students who are entrepreneurially inclined turned out to be more achievement motivated when compared to their counterpart students showing no entrepreneurial inclination, this also led to acceptance of *H4*. In terms of having confidence in their own skills and abilities both entrepreneurially inclined and not inclined students have been found at the same point therefore *H5* was rejected. As entrepreneurially inclined students found to be having more tolerance when they are exposed to unpleasant situations and events in comparison to the students with no entrepreneurial inclination (Table VI).

5. Discussion

In this study, authors have used the entrepreneurship traits model to examine six entrepreneurial characteristics, namely, risk-taking propensity, innovativeness, *locus* of control, need for achievement, general self-efficacy and tolerance of ambiguity. Having the supposition that these distinct characteristics are carried by potential entrepreneurs, this study attempted to identify the students having high degree of these entrepreneurial characteristics in comparison of other general students. Given that these all characteristics are said to special attributes of entrepreneurs and each one of them measures some aspect of

Variable name	Entrepreneurially inclined <i>N</i> = 305		Entrepreneurially not inclined <i>N</i> = 414	
	Mean	SD	Mean	SD
Risk taking propensity	4.374	0.821	4.261	0.829
Innovativeness	4.482	0.637	4.332	0.754
Locus of control	4.736	0.749	4.632	0.741
Need for achievement	4.548	0.810	4.419	0.827
General self-efficacy	5.278	0.869	5.193	0.913
Tolerance of ambiguity	4.380	0.642	4.245	0.751

Table IV.
Descriptive statistics

Variable name	1	2	3	4	5	6
Risk taking propensity	1					
Innovativeness	0.530**	1				
Locus of control	0.451**	0.538**	1			
Need for achievement	0.508**	0.567**	0.530**	1		
General self-efficacy	0.313**	0.328**	0.412**	0.404**	1	
Tolerance of ambiguity	0.509**	0.620**	0.531**	0.429**	0.368**	1

Note: **Correlation is significant at 0.01 level

Table V.
Correlations

entrepreneurship phenomena thus some degree of interrelatedness should also exist among all six characteristics. Results from correlation analysis showed somewhat higher correlations we compared to the results of study conducted by Gürol and Atsan (2006).

The *t*-test was used to distinguish the students with higher degree of these entrepreneurial characteristics from others. Accordingly, hypotheses were framed and students were divided into two groups; entrepreneurially inclined and entrepreneurially not inclined by posing question defining their entrepreneurial inclination. Results generated from hypotheses testing exhibit that the students with entrepreneurial inclination are more prone to taking of risks, possess higher degree of innovativeness, tend to be more in control of the situations in their lives, highly achievement motivated and have more tolerance when exposed to any unpleasant or unfavorable situation. Both entrepreneurially inclined and entrepreneurially not inclined groups were found having no difference when it comes to self-belief in their own skills and abilities. These results are somewhat similar to the findings of previous researches but with the exception that insignificant difference only in general self-efficacy has been found here while Gürol and Atsan (2006), in their study reported that two students groups are insignificantly different at general self-efficacy and tolerance of ambiguity.

About 42.40 per cent of total respondents hinted their inclination toward entrepreneurship which is quite at higher side when compared to similar previous researches. In the study of Gürol and Atsan (2006), 362 university students were taken as sample size in Turkish settings, of them only 66 students (18.23 per cent) were found to be entrepreneurially inclined which is significantly low as compared to the rate of entrepreneurial inclination shown by students in this study. The reason for this higher rate of entrepreneurial inclination could be the various programs and schemes launched by government of India to promote and feed the entrepreneurship. Another reason behind this might be the inability of the present system to provide employment to number of literate youths added to the total employable workforce of India which averted the Indian students from being bossed by others to being their own boss. Sample of total 719 students also consists of 332 females and 33.43 per cent of them were found to be entrepreneurially inclined which seem to be pretty high given that India has been a country dominated by males. Results of this manuscript also revealed that out of total entrepreneurially inclined students, the rate (42.45 per cent) of students with non-entrepreneurial parental background was higher than the rate (40 per cent) of those with entrepreneurial parental background which is not in conformity of the findings of previous researches. As all the students taken into sample for this study come from the background of business studies, this also might be a reason for higher numbers of students showing preference to entrepreneurship as their career option.

In this research, authors have only focused on the entrepreneurial characteristics of those students studying business; hence, it is dubious that students coming from other streams would also show such higher levels of entrepreneurial characteristics. Thus, this notion creates a space for the researchers to conduct further research taking students from different

Table VI.
Results of
independent samples
t-test

Variables name	<i>N</i>	<i>t</i> -value	<i>p</i> -value
Risk taking propensity	719	2.481	0.020
Innovativeness	719	2.793	0.005
Locus of control	719	2.337	0.030
Need for achievement	719	2.717	0.008
General self-efficacy	719	1.265	0.210
Tolerance of ambiguity	719	2.773	0.006

streams, namely, engineering, science and technology and arts etc. University-wise studies can also be conducted with the view to bring comparability among the students in terms of levels of entrepreneurial characteristics based upon the inclination shown.

Authors were very optimistic for conducting this study with the belief that assessing the levels of entrepreneurial characteristics among the university students of India would be very valuable information to the policymakers as Indian Government has shown keen interest in promoting the start-ups by initiating various training and support programs for young and willing entrepreneurs. Another objective of this research was to have insights about current course contents which enable the students to raise the levels of entrepreneurial characteristics which will facilitate the educators in settings the educational programs with the view to develop and nurture entrepreneurial characteristics.

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