

*Full Length Research Paper*

# Entrepreneurial characteristics among university students: Implications for entrepreneurship education and training in Pakistan

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**Purpose-**This study aims to explore the entrepreneurship profile of the Pakistan university students (Peshawar region) and evaluates their entrepreneurial inclination by making comparison with non-entrepreneurially inclined students. In this study the entrepreneurial profile of the students is constituted by six traits namely need for achievement, innovativeness, locus of control, risk taking propensity, tolerance for ambiguity, self-confidence. A random sample of master students (n = 137) from two Peshawar universities was adopted for the study. A question “what are you planning to do after completion of your studies” was asked the students to differentiate entrepreneurially inclined students from non-inclined. Respondents with answers that “I am planning to start my own business” were taken as potential entrepreneurs. Then the entrepreneurial characteristics of these students were subjected to comparative analysis with other students who do not plan to start their own business. A 31 item questionnaire is used with questions related to the student’s entrepreneurial inclination and six entrepreneurial traits with Likert type items. The results of t-test showed that except for tolerance for ambiguity and self-confidence all entrepreneurial traits are found to be higher in entrepreneurially inclined students as compared to non-inclined students. It means these students rated higher score on five traits except the one. This study is restricted only to the master students only, and the percentage of the entrepreneurially inclined students is low (27 per cent). Also, only the study restricted to two universities, could be conducted on a wider basis. This study probes entrepreneurial characteristic providing a clear understanding of entrepreneurial education, as to which entrepreneurial characteristics can be developed to produce good entrepreneurs.

**Key words:** Entrepreneurship, students, education, Pakistan.

## INTRODUCTION

Entrepreneurship has been the centre of attention for researchers and economists for the last few years (Hatten and Ruhland, 1995; Green et al., 1996; Alstete, 2002; Gurol and Astan, 2006). One factor for this heightened interest is, that entrepreneurship plays important role in boosting economic development. Entrepreneurship brings new life to, and catalyzes the slow growing and stagnant economies. The contribution of entrepreneurs to the economic growth and social

development cannot be undermined anywhere across the boundaries. For last couple of decades the importance of entrepreneurship for economic health of a country is widely understood, as evidenced by interest taken in establishing universities, colleges for imparting entrepreneurial education, establishment of different supporting and facilitating authorities, and forums and platforms at different national and international levels.

In today’s turbulent job market, starting and having own

business venture is a dream of young generation.

Practitioners and experts from seventy countries around the world gathered to address developmental challenges the countries faced with, tackling this with innovative approach and incubation (Innovation and Venture Creation for Inclusive Development, October, 26-30, 2009).

Global Entrepreneurship Monitor (GEM) study (Bosma and Levie, 2009) reported that entrepreneurial activities decline in most of the studied 54 GEM countries in 2009; notwithstanding, about one third of the countries showed increased entrepreneurial activities. However, Pakistan was not a part of this study.

Since the inception of Pakistan, entrepreneurial activities have not got due attention and support of the government (Chemin, 2008). But over the past few years, government has been taking initiatives towards entrepreneurship especially for SMEs.

The vital role of entrepreneurship and small and medium enterprises in the economy is widely accredited. Established in October 1998, a premier institution of government of Pakistan, the Small and Medium Enterprise Development Authority, has been focusing on promoting, providing an enabling environment to, and business development services to small and medium enterprises. According to Economic Survey 1998-99 SME generated 80% of the country total employment (The Role of Small and Medium Enterprises, Industry and Economy, October, 29, 2000).

Recognizing the role of entrepreneurship the government of Pakistan devised a comprehensive policy for the composed SME task force, for creating an enabling environment and facilitation to enterprises. (SME led Economic Growth, Creating Jobs And Reducing Poverty, SME Policy, 2007).

For the last many years the unemployment problem in Pakistan has been aggravated. Unemployment rate is substantially high with 7.4 % 2009. In addition, the degree holders for employment are greatly dependent on public sector and private sector.

To way out these concerns and issues, a re-examination of the higher education system is considered necessary to uncover obstacles that inhibit the expansion and growth of entrepreneurial activities. Along with this, it is considered necessary to examine the entrepreneurial inclination of universities students. This will help to eradicate or minimize these issues and concerns of unemployment and economic deterioration.

There is not much explored specifically on this topic in Pakistan. This paper will contribute to this particular area of entrepreneurship by examining the entrepreneurial characteristics among university students.

This study will help in devising a clear policy to promote a national level entrepreneurship, for our current and coming generations, particularly for graduate and post graduate, so that they can be developed and able to become good entrepreneurs.

## LITERATURE REVIEW

Entrepreneurship has been an area of interest among scholars across the world, for some sizeable time. This sustained and sharpened interest in entrepreneurship motivated by several factors, one that entrepreneurial activity (new venture formation) has seen a mean of revitalizing economy and helps to cope with unemployment problems. Furthermore, it is admitted as an incubator and energizer for market innovation, product, and technological growth (Jack and Anderson, 1999; Mueller and Thomas, 2000). An entrepreneurial activity is considered important for health of the economy of developing countries. It is seen as the force that revitalizes the economy and leads to economic progress, job creation for the community. Hence, small and medium business development/new business formation is encouraged, and supported by national economic policies to stimulate and foster economic growth.

Despite this huge and keen interest and research in entrepreneurship has been criticized for the lack of consensus about the definition of entrepreneurs and entrepreneurship. Entrepreneurship has been classified into six different major schools of thought by Cunningham and Lischeron (1991), namely great person, psychological characteristics, classical, management, leadership, and intrapreneurship school of entrepreneurship. These schools of thought tell us that agreement on, what actually entrepreneur is, and what it does, is not achieved till now.

The great person school describes an entrepreneur as a person having intuitive ability.

The classical school argues innovation is the main characteristic of an entrepreneur. According to the management school, entrepreneurs are organizer of an economic venture; they are people who organize, own, manage and assume all the risk.

The leadership school identifies entrepreneurs as leader, who senses and understands the needs of the people and adopts their styles of leadership according to the needs of the people and situation. Where the intrapreneurship school claims that entrepreneurial abilities and skills can be valuable within an organization, intrapreneurship is working within an organization and presenting new ideas, establishing new units to create new markets, products, and services.

Psychological school of thought describes entrepreneur, as a person having some internal forces which drives him. Entrepreneur has a set of some unique values, attitudes, and needs, that compel him to behave in accordance these values to satisfy their needs.

This school of thought focuses on the personality/psychological characteristics related with entrepreneurship which has been taking the attention of many academicians, and scholars around the globe, such as, locus of control, need for achievement, tolerance for ambiguity innovation, self confidence, and propensity to risk taking

(Gurol and Astan, 2006; Yusof et al., 2007).

These characteristics are the focus of my study as they are frequently talked about and recited in the literature as entrepreneurial characteristics and association is shown between these characteristics and entrepreneurship (Koh, 1996).

Need for achievement, locus of control have been finding their place in the entrepreneurship literature (Shaver and Scott, 1991).

While another study by Stewart et al. (1998) shows need for achievement, innovation and risk taking propensity have been used to discriminate entrepreneurs from corporate managers and small business owners.

Entrepreneurship literature includes research that both supports and rebuts the relationship among these characteristics.

Bygrave (1989) introduced a model that exhibits tolerance for ambiguity (TOL), locus of control (LOC), need for achievement, and risk taking propensity as the critical components.

### **Need for achievement**

McClelland presented one of the most famous theories on entrepreneurship called need for achievement theory (Koontz and Wehrich, Management, eleventh edition, pp.381). The need for achievement was found higher in small business students assessing their entrepreneurial orientation (Sagie and Elizur, 1999).

Different studies conducted on entrepreneurs and non-entrepreneurs show that need for achievement has a strong relation with the entrepreneurship (Hansemark, 1998).

A relationship is found between need for achievement and entrepreneurship (shaver and Scott, 1991; Yosof et al., 2007).

### **Innovativeness**

Innovativeness means search for new markets, products, or ideas (Utsch and Rauch, 2000). Innovation is basic for the entrepreneurs, as it differentiates between managers and entrepreneurs (Stewart et al., 1998).

Entrepreneurs are the one who are in continuous search of new opportunities (Zacharakis, 1997). Innovativeness is taken as one of the major characteristic in defining the entrepreneurship profile (Gurol and Astan, 2006).

Koh (1996)'s study suggests the relationship of innovativeness with entrepreneurship.

### **Locus of control**

This is another trait which is extensively researched and

connected with entrepreneurship. Individuals with external locus of control believe that they cannot control the circumstances such as luck, fate, and others affect their performance. Individuals with internal locus of control can personally control events and situations (Koh, 1996; Hansemark, 1998). Locus of control was used to distinguish between entrepreneurs and employees (Engle et al., 1997).

Similarly, in the study it was reached that entrepreneurs have scored higher on locus of control than those who are not entrepreneurs (Gurol and Astan, 2006; Entranlgo et al., 2000).

### **Risk taking propensity**

It is the propensity to exhibit risk taking or risk avoidance when faced with risky situation. Entrepreneurship is about risk taking. Risk taking and uncertainty is the characteristic which differentiates between entrepreneurs and non entrepreneurs (Yosof et al., 2007). Risk taking is considered a major characteristic of entrepreneurs and is widely discussed in entrepreneurship literature (Cunningham and Lischeron, 1991; Koh, 1996).

### **Tolerance for ambiguity**

Insufficient information creates a situation of uncertainty. The tolerance for ambiguity means responding positively to ambiguous situations.

A person with tolerance for ambiguity finds ambiguous situations more challenging and strives to control to perform well (Koh, 1996; Gurol and Atsan, 2006).

The entrepreneurial managers have high tolerance for ambiguity as compared to non entrepreneurial, as indicated by the study of Entranlgo et al. (2000).

### **Self confidence**

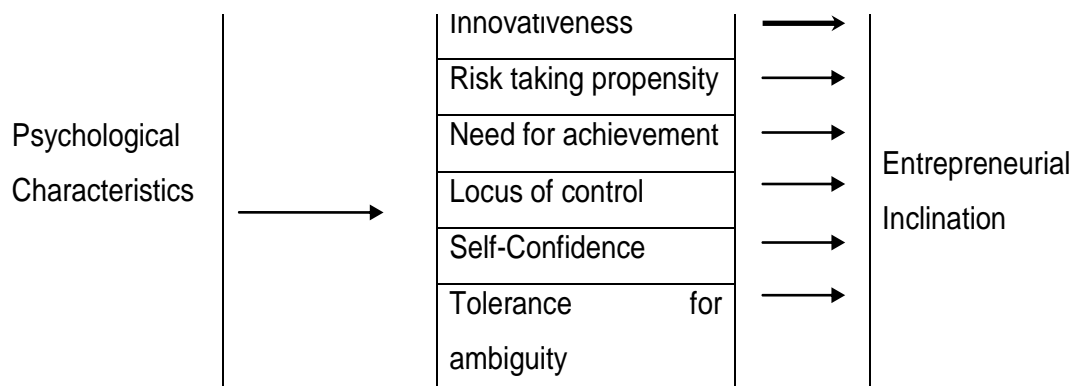
Entrepreneurs are characterized as confident in the entrepreneurship literature.

Entrepreneurs seek for challenging and demanding tasks, which require greater confidence. It is shown that entrepreneurs demonstrate high level of confidence with respect to others (Koh, 1996; Yusof et al., 2006).

Self confidence is an important characteristic for entrepreneurship (Gurol and Astan, 2006).

### **Conceptual framework**

The psychological school of thought provides the basis for the conceptual design of the model (Cunningham and Lischeron, 1991). The independent variables in this model are need for achievement, innovativeness, locus of



**Figure 1.** Diagram of theoretical framework.

control, risk taking propensity tolerance for ambiguity, and self confidence and the dependant variable is entrepreneurial inclination.

The relationship between dependant and independent variable is depicted in Figure 1.

### Aim of the study

This study has two aims. First, to examine the entrepreneurship profile of Peshawar based (Institute of management sciences, and City University) university students (MBA). Second, to discuss the implications the profile has, for devising nationwide entrepreneurship educational plans and training programs.

### DESIGN AND METHODOLOGY

This study analyzes the entrepreneurial characteristics of Peshawar based university students (MBA) on the basis of collected data. The assumption for the study is that certain entrepreneurial characteristics encourage people to become entrepreneurs (Or create inclination toward entrepreneurship) and distinguish them from the rest of the society.

In the study the following hypothesis are tested on the basis of the framework of variables.

H1. Entrepreneurially inclined students will score innovativeness higher than those who are not entrepreneurially inclined.

H2. Entrepreneurially inclined students will score achievement higher than those who are not entrepreneurially inclined.

H3. Entrepreneurially inclined students will score locus of control higher than those who are not entrepreneurially inclined.

H4. Entrepreneurially inclined students will score risk taking higher than those who are not entrepreneurially inclined.

H5. Entrepreneurially inclined students will score tolerance for ambiguity higher than those who are not entrepreneurially inclined.

H6. Entrepreneurially inclined students will score self confidence higher than those who are not entrepreneurially inclined.

The sample of the study comprises the university students of two Peshawar based universities, City University, and Institute of Management Sciences. It should be stated that the assumption of the study is that university students constitute a significant pool of potential entrepreneurs.

The data were collected through a questionnaire. A five point liker scale was used to catch the responses of the respondents. The respondents have to state the extent to which they agreed or disagreed with the statements in the questionnaire. A total number of one hundred fifty questionnaires were distributed by hand, and a good response of 136 was achieved.

To distinguish between potential entrepreneurs and non entrepreneurs a question "After completion of your studies what are you intending do?" was asked the students. Out of total one hundred fifty, thirty seven replied that "I am going to start my own business". These respondents were marked as potential entrepreneurs.

On the other side those with the response that "I am going to work for salary in public or private sector" were considered as non entrepreneurs.

Then the entrepreneurially inclined student's entrepreneurial traits were analyzed comparatively with those who have no inclination to be entrepreneurs.

### Data collection tool

A thirty one item questionnaire was used for catching the responses of the respondents, comprising variables, to measure innovativeness, risk taking propensity, tolerance for ambiguity, need for achievement, and locus of control, which are considered to distinguish potential

**Table 1.** The elements of entrepreneurship.

Variables	Potential entrepreneurs		Non-entrepreneurs		Co-relation matrix and reliability						
	Mean	SD	Mean	SD	1	2	3	4	5	6	
Innovativeness	4.30	0.63	2.51	0.37	1(0.91)						
Risk taking propensity	4.35	0.74	2.50	0.38	0.71**	1(0.89)					
Need for achievements	4.33	0.65	2.52	0.39	0.69**	0.62**	1(0.89)				
Locus of control	4.29	0.65	2.47	0.36	0.65**	0.63**	0.65**	1(0.89)			
Self confidence	4.35	0.58	2.50	0.37	0.78**	0.68**	0.58**	0.64**	1(0.89)		
Tolerance for ambiguity	4.33	0.63	4.24	0.76	.20*	0.24**	0.22*	0.23**	.20*	1(0.88)	

Notes: \*\* Significance level 0.01;  $\alpha$  value is shown in parenthesis.

**Table 2.** Potential difference between entrepreneurs and non-entrepreneurs, with respect to tolerance for ambiguity.

Variables	N	t-value	p-value
Innovativeness	136	20.3	.000
Risk taking propensity	136	19.3	.000
Need for achievement	136	19.7	.000
Locus of control	136	20.7	.000
Self-confidence	136	18.2	.000
Tolerance for ambiguity	136	.656	.513

entrepreneurs and non entrepreneurs. Every trait of these six included five questions, except innovativeness which included six questions.

For all the mentioned dimensions, scales were designed in such a way that higher rate on these by respondents mean more inclination toward innovativeness, risk taking propensity, need for achievement, tolerance for ambiguity, locus of control and self-confidence.

### Correlation analysis

In the analysis, the elements of entrepreneurship (innovativeness, risk taking propensity, need for achievement, locus of control, tolerance for ambiguity, and self-confidence) were transformed into sub-scales. The mean, standard deviation, correlation, and reliability values are measured (Table 1). A meaningful high correlation values was obtained among the sub-scales, representing and measuring the entrepreneurial characteristics.

The values shown in parenthesis are reliabilities of these sub-scales (Table 1).

All the reliability values obtained are quite high, above 0.70.

### Hypothesis testing

The hypotheses of the study were tested conducting t-

test to examine statistically the difference. Based on the obtained results shown in both Tables 1 and 2, H1 was substantiated, which means that there is a significant difference between inclined and non-inclined students, on innovativeness. H2 was substantiated, which means that significant difference exists between potential entrepreneurs and non-entrepreneurs, with respect to risk taking propensity. H3 was substantiated, which means that a significant difference exists between potential entrepreneurs and non-entrepreneurs, with respect to tolerance for ambiguity. H4 was substantiated, which means that a significant difference exists between potential entrepreneurs and non-entrepreneurs, with respect to need for achievement. H6 was also substantiated, which means that a significant difference exists between potential entrepreneurs and non-entrepreneurs, with respect to self-confidence.

However, H5 was not substantiated, which means that no significant difference exists between potential entrepreneurs and non-entrepreneurs, with respect to tolerance for ambiguity (Table 2).

### DISCUSSION

This study followed the psychological characteristics school of thought to study six entrepreneurial characteristics related with entrepreneurship, like innovativeness, risk taking propensity, tolerance for ambiguity, need for achievement, locus of control and self confidence. As discussed above all the sub-scales measure different dimensions of entrepreneurship, measuring the same concept so there may be some interrelatedness among the sub-scales. The correlations among these scales obtained in the study were statistically significant.

The results of the t-test showed that entrepreneurially inclined students are comparatively more innovative, have risk taking attitudes, are motivated for achievement, more self confident, with high internal locus of control.

However, the result shows that there is not much difference between the inclined and non-inclined students with regard to tolerance for ambiguity. The reason behind this could be that Pakistani society shows a tendency for

avoiding uncertainty and ambiguity ([www.geert-hofstede.com/hofstede\\_pakistan.shtml](http://www.geert-hofstede.com/hofstede_pakistan.shtml)). The uncertainty avoidance index (UAI) is quite high.

This study is limited to the Peshawar region and only two universities are chosen for the study, the sample size is fairly limited, and out of it a small number of students opt for starting a new venture and considered potential entrepreneur.

The present turbulent economic, social and political situation guides people to opt for jobs. This situation has also affected the student tendencies toward entrepreneurship.

Most probabilistic view is that Pakistan dynamic and young population constitutes a significant pool of potential entrepreneurs. But this potential is not fully put on the right track and utilized. In this respect, therefore, to tap the potential of the young population, the study has to develop a clear cut policy with special focus on entrepreneurship education.

This study presents some limitations, first the cross sectional nature of the study, second the sample size is limited to understand the entrepreneurial characteristics among students in a comprehensive manner. The observation of students, at regular intervals, over their whole educational period would have provided some understanding and insights into the effects of entrepreneurial education on the entrepreneurial characteristics.

This study helps to provide guidance and insights to design entrepreneurial education and training programs, while considering the entrepreneurial characteristics.

It is the need of the time to explore the entrepreneurial potential and talents of our young educating lot. For entrepreneurial activities to flourish, they need to be encouraged and supported at all levels.

The purpose of the study is to develop a national level perspective on entrepreneurial education to encourage universities to offer entrepreneurial courses and as major subjects as well.

Even special institutions should also be developed to teach, train, and develop future entrepreneurs.

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