## Impact of Entrepreneurship Education on Attitudes of Students **Towards Entrepreneurship**

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Abstract: Entrepreneurship has become an international interest of students. The economic and social relevance of entrepreneurship is established across the world and many offerings are available by the universities. This has resulted into an increased focus of university teachers on entrepreneurship and entrepreneurial activities. The purpose of this paper is to study and evaluate the impact of entrepreneurship education on attitude of students to become an entrepreneur. Relationship between the education and student in development of entrepreneurial attitude is proposed. Review of the literature also shows the importance of entrepreneurship education in development of entrepreneurial attitude. This study was carried out in universities of Pakistan and data was collected from 10 different universities in which entrepreneurship is available as a course or discipline. Sample of 329 students was collected and statistical tests were used to evaluate the relationship. It is found that a strong relationship and positive correlation exist between attitude towards entrepreneurship and entrepreneurship education.

Keywords: Entrepreneurship, Universities, Entrepreneurship teaching, Entrepreneurial attitude, Entrepreneurial intentions.

### INTRODUCTION

Entrepreneurship is an argument or debate of behaviors, which includes initiative taken, organization of resources and the acceptance of risk or failure [1]. During the last few decades, entrepreneurial intentions and attitudes have become the focus and foremost paradigm and construct. In developing countries, to overcome economic depression and misery has given birth the intention to become own boss [2]. Entrepreneurship has immense value and it is in discussion at different levels including politics, media, books, and academia. At all of these forums, consensus is there that entrepreneurship is important for economic development, employment opportunities and growth [3].

History of Entrepreneurship education is very long and it is receiving high importance. Entrepreneurship education is a process in which individuals or groups of individuals spot out innovative ideas for upcoming opportunity and transform them into execution, whether in a social, cultural or economic context [4].

Education is main source of knowing about the entrepreneurship and most of the times teacher plays critical and central role in developing this mindset. Some authors argue on entrepreneurial intentions of students [5-8]. Entrepreneurship education is an important element for entrepreneurial attitude and intention for upcoming entrepreneur [9]. According to another author, it is evident that entrepreneurial training entrepreneurship courses have affirmative influence for entrepreneurship as a career choice [10]. There is a significant and substantial consensus that entrepreneurship is a skill which can be developed through education. Education and teachers' training should train themselves on the new skills, knowledge and attitude towards entrepreneurship so that they provide a learning environment and innovative course curricula that can students to develop entrepreneurial skills and competencies [11]. In Pakistan, like many developing countries, teachers are not being trained according to the national and international level requirements.

Intention to be an entrepreneur is a wish or desire of an individual to be his or her own boss by starting up a new firm rather than working for any organization [12]. Entrepreneurial intention is the search of information, which can be used to create a firm [13]. Hence entrepreneurial intention is the judgment and assessment of one's ability about the creation of one's own firm and it has strong influence to shape the entrepreneurial behavior.

According to a study on Pakistan, Haque, N (2007) interesting results and opines that presents

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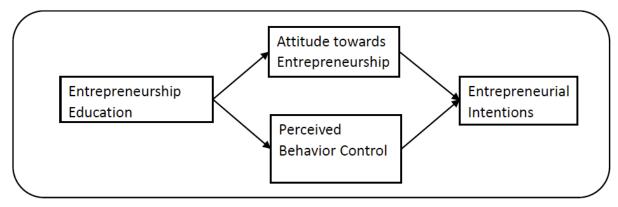


Figure 1: Model for the Study.

government should take steps to limit rent-seeking and should encourage innovation to increase the entrepreneurial attitude in Pakistan. [14]. In another study on Pakistan Chemin, M (2008) analyzes the role of government policies for SME's and emphasizes the important factors such as employment of workers, credit acquisition, payments of taxes and contracts enforcement. Study also reveals how failure to address these issues effectively might bring obstacles in nurturing entrepreneurship in Pakistan [15].

In current study, direct impact of entrepreneurship education on entrepreneurial intentions of students is under discussion as per following model (Figure 1).

In Figure 1, impact of Entrepreneurship Education is drawn on Entrepreneurship Intentions through attitudes of students towards entrepreneurship and perceived behavior control. Relationship between entrepreneurship education and entrepreneurial intentions has been explored and presented.

#### **METHODOLOGY**

One part of the questionnaire was developed using researches previously conducted on entrepreneurship intentions [16-17] and the authors developed another part of the questionnaire. Of these two parts of the questionnaire, one was related to Entrepreneurship Education and the other was related to Attitude towards Entrepreneurship and Perceived Behavior Control. The instrument comprises of two section and a total of twenty one (21) questions were asked except demographics, among which twelve (12) were related to Entrepreneurship Education, five (05) were related to Attitude towards Entrepreneurship and four (04) were related to Perceived Behavior Control. To check the reliability of the instrument, a statistical test was conducted and data was collected from 25 students.

Cronbach alpha for this test run was 0.809 which showed good reliability.

Data was collected from university level students of various disciplines who have studied entrepreneurship as a course. Respondents were undergraduate students of various disciplines. Ten Pakistani universities across the country were selected for data collection. Selected universities were also offered to provide a brief analysis of entrepreneurial intentions of their respondents. Questionnaires were collected from 420 students. After refining and excluding missing data, clean data reflected opinion of 329, comprising of 67% male and 33% female students (Table 1).

Table 1: Age and Gender Distribution

Age	Male	Female
18-20	87	46
20-22	78	38
22-24	54	26
Total	219	110

One section of the questionnaire consisted of a set of statements representing a high level of entrepreneurship teaching/education and the students were asked to provide their agreement/ disagreement to the statements on Likert scale. Another section of the questionnaire consisted of a set of statements representing а positive attitude towards entrepreneurship and perceived behavior control, the students were again asked to provide their agreement/disagreement to the statements on Likert scale. Cronbach alpha came out to be 0.843 which good data reliability. Entrepreneurship Education was taken as input and attitude towards entrepreneurship and perceived behavior control was taken as output.

In this study, responses to each section (Attitude towards Entrepreneurship & Perceived Behavior Control) were evaluated separately. The respondents were stratified into Group-I, Group-II & Group-III according to their response status of disagreement, neutrality and agreement to the questionnaire statements respectively with respect to main independent variable (Entrepreneurship Education), as shown in Table 2.

Table 2: Distribution of Responses

Groups	Responses
Group-I (Disagree)	52
Group-II (Neutral)	149
Group-III (Agree)	128
Total	329

# **Distribution of Responses**



Figure 2: Distribution of Responses.

## **RESULTS & DISCUSSION**

The results of the survey were compiled and evaluated on the basis of responses from 329 students. Responses to each question were evaluated separately. The respondents were stratified into Group-

I, Group-II &Group-III according to their response status of disagreement, neutrality and agreement to the questionnaire statements respectively, as shown in Table 2.

To check multicollinearity, Variance Inflation Factor (VIFs) test was used and a value of 1.73 was obtained. This Value indicates non-existence of multicollinearity.

Data was analyzed through correlations and standard multiple regression. Correlation between Entrepreneurship Education and Attitude towards Entrepreneurship & Perceived Behavior Control was calculated separately for all the three groups. The detailed correlations of the groups are available in Figure 3 and Tables 3 & 4.

Results show that there is a positive relationship between Entrepreneurship Education and Attitude towards Entrepreneurship.

Group-I consists of 52 respondents who disagree with the statements representing a high level of *Entrepreneurship Education*. Responses of the same group responding to *Attitude towards entrepreneurship* statements are also negative. Correlation& value of Beta for group-1 came out to be 0.868 (Tables 3 & 4), which is quite good. In case of *Perceived Behavior Control*, responses of the same group came out to be 0.52, which is acceptable.

Group-II consists of 149 respondents who are neutral to the statements representing a high level of *Entrepreneurship Education*. Responses of the same group responding to *Attitude towards Entrepreneurship* statements are also neutral. Correlation & value of Beta for group-II came out to be 0.736 (Tables 3 & 4), which

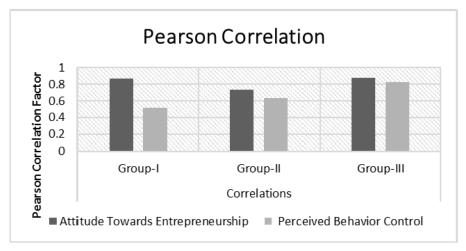


Figure 3: Pearson Correlations for Groups.

Table 3: Correlations for Group-I, Group-II & Group-III

Independent Variable	Dependent Variable	Correlations		
	Dependent variable	Group-l	Group-II	Group-III
Entrepreneurship Education	Attitude Towards Entrepreneurship	0.868	0.736	0.878
Entrepreneurship Education	Perceived Behavior Control	0.52	0.637	0.829

Table 4: Regression Results (Beta) for Group-I, Group-II & Group-III

Coefficients						
Dependent Variable	Model	Group-I	Group-II	Group-III		
		Standardized Coefficients	Standardized Coefficients	Standardized Coefficients		
		Beta	Beta	Beta		
Attitude Towards Entrepreneurship	(Constant)	0.868	0.736	0.878		
	Entrepreneurship Education	0.000	0.700	5.576		
Perceived Behavior Control	(Constant)	0.52	0.637	0.829		
	Entrepreneurship Education	0.52	0.037	0.029		

is good. In case of *Perceived Behavior Control*, responses of the same group came out to be 0.637, which is good.

Group-III consists of 128 respondents who agree with the statements representing a high level of *Entrepreneurship Education*. Responses of the same group responding to *Attitude towards Entrepreneurship* statements are also positive. Correlation& value of Beta for group-III came out to be 0.878 (Tables 3 & 4), which is again quite good. In case of *Perceived Behavior Control*, responses of the same group came out to be 0.829, which is quite good.

When data reliability was calculated, Cronbach's alpha coefficient came out to be 0.8 on average for all

three groups (Figure 4), which shows a good level of reliability.

Figure 5 shows questionnaire responses of Entrepreneurship Education questionnaire VS. responses of Attitude towards Entrepreneurship and Figure 6 shows questionnaire responses Entrepreneurship Education VS. questionnaire responses of Perceived Behavior Control for each individual respondent. A rising trend line and a value of R<sup>2</sup> (0.9482 & 0.9149) indicate a strong positive relationship between the two variables. The graphs also indicate that respondents with strong negative and strong positive responses are comparatively less in number whereas most of the respondent (45%) fall in

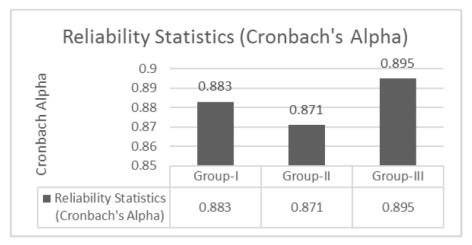


Figure 4: Reliability Statistics.

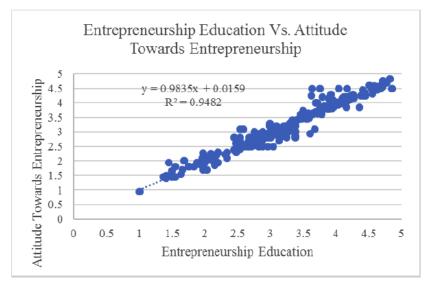


Figure 5: Entrepreneurship Education vs. Attitude towards Entrepreneurship.

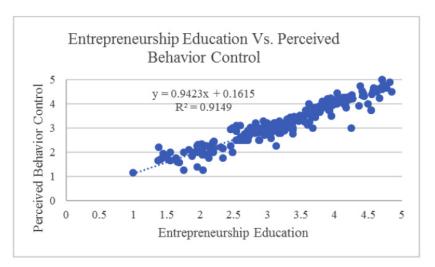


Figure 6: Entrepreneurship Education vs. Perceived Behavior Control.

group-II which indicates that most of the students do not have a strong bias on either side.

## CONCLUSION

Entrepreneurship education shows very strong impact on entrepreneurial intentions through attitudes of students with average correlation and beta value of 0.8273 for all three groups namely Group-I, Group-II & Group-III (The respondents were stratified into Group-I, Group-II & Group-III according to their response status of disagreement, neutrality and agreement to the questionnaire statements respectively). This relationship is comparatively less strong when impact of entrepreneurship education is measured through Perceived Behavior Control with average correlation value 0.662 for Group-I, Group-II and Group-III.

On the basis of current research, conclusion can be drawn that a strong relationship and positive correlation exist between Entrepreneurship Education and Intentions of Students through Attitude towards Entrepreneurship and Perceived Behavior Control. The group that is happy with the entrepreneurship course also has a positive attitude towards entrepreneurship. Thus results of the research translate into the message that it is necessary to have good entrepreneurial education to develop positive entrepreneurial intentions among students.

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#### **REFERENCES**

- [1] Kirzner I. Competition and Entrepreneurship. Chicago 1973.
- [2] Tang J, Tang Z, Zhang Y, Li Q. The impact of entrepreneurial orientation and ownership type on firm performance in the emerging region of china. Journal of Developmental Entrepreneurship 2007; 12(4): 383-397. http://dx.doi.org/10.1142/S1084946707000733
- [3] Gartner WB, Shane SA. Measuring Entrepreneurship over time. Journal of Business Venturing 1995; 10(4): 283-301. http://dx.doi.org/10.1016/0883-9026(94)00037-U
- [4] Kuratko DF, Hodgetts RM. Entrepreneurship: Theory, Process, Practice Mason, OH: South-Western Publishers 2004.
- [5] Gupta V, Turban D, Wasti S, Sikdar A. The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneure. Entrepreneurship Theory & Practice 2009; 33(2): 397-417. <a href="http://dx.doi.org/10.1111/ji.1540-6520.2009.00296.x">http://dx.doi.org/10.1111/ji.1540-6520.2009.00296.x</a>
- [6] Guerrero M, RJ, UD. The impact of desirability and feasibility on entrepreneurial intentions. International Entrepreneurship and Management Journal 2008; 4(1): 35-50. http://dx.doi.org/10.1007/s11365-006-0032-x
- [7] Kuckertz A, Wagner M. The influence of sustainability orientation on entrepreneurial intentions: investigating the role of business experience. Journal of Business Venturing 2010; 524-539. http://dx.doi.org/10.1016/j.jbusvent.2009.09.001
- [8] Liñán FaCY. Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. Entrepreneurship Theory and Practice 2009; 33(3): 593. http://dx.doi.org/10.1111/j.1540-6520.2009.00318.x
- [9] Souitaris V, SZ, Al-Laham. Do entrepreneurship programmes raise entrepreneurial intention of science and ngineering

- students?the effect of learning, inspiration and resources. Journal of Business Venturing 2007; 22(4): 593. http://dx.doi.org/10.1016/j.jbusvent.2006.05.002
- [10] Dyer J, GW. Toward a theory of entrepreneurial careers. Entrepreneurship Theory and Practice 1994; 19(2): 7-21.
- [11] Commission E. A report on teacher education and training toprepare teachers for the challenge of entrepreneurship education. [Online].; 2011. Available from: HYPERLINK "http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/files/education/teacher\_education\_final\_rep ort\_en.pdf" http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/files/education/teacher\_education\_final\_report\_en.pdf.
- [12] Bird B. Implementing Entrepreneurial Ideas: the Case for Intention. The Academy of Management Review 1988; 13(3): 442-453.
- [13] Wong M, Choo S. Entrepreneurial intention: Triggers and barriers to new venture creation in Singapore. Singapore Management Review 2009; 28(2): 47-64.
- [14] Haque N. Entrepreneurship in Pakistan. Pakistan Intitute of Development Economics: Working papers 2007; p. 29.
- [15] Chemin M. Entrepreneurship in Pakistan: Government Policy on SMEs, Environment for Entrepreneurship, Internationalization of Entrepreneurs and SMEs. Montreal Canada 2008.
- [16] Autio E, Keeley RH, Klofsten M, Ulfstedt. Entrepreneurial intent among students: testing an intent model in Asia, Scandinavia, and USA 1997.
- [17] Lüthje C, Franke N. The "making" of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT. R&D Management 2003; 33(2): 135-147. http://dx.doi.org/10.1111/1467-9310.00288

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