

**INTENSITY OF ENTREPRENEURSHIP ENHANCEMENT  
CELL IN THE DEVELOPMENT OF PROFESSIONAL AND  
PRACTICAL EXPOSURE OF UNIVERSITY STUDENTS  
A PREREQUISITE APPROACH**

**Maida Ishaq**

MS Scholar, University of Agriculture Faisalabad, Pakistan

[maidaishaquaf@gmail.com](mailto:maidaishaquaf@gmail.com)

**Abstract**

*The contribution of entrepreneurship relevant skills and core capabilities in the development of practical and professional exposure of the students can never be discarded. Inculcating the apprentices with such skills and expertise is very much beneficial for the economic development of a country. For fostering and encouragement of abilities like innovativeness, proactiveness and affective learning it is considered as the need of time for educational institutions to have entrepreneurship enhancement cells (EEC). On the basis of this assertion current study have been done in order to check the presence of EEC in both public and private sector universities in Pakistan in the city of Faisalabad. For this purpose a sample set of 440 students have been selected from both Govt and Private institutes. Present outcomes have explained that those who have EEC relevant facilities at their university level have more Innovativeness mean score. Besides this is also presented through the calculated facts that mean innovativeness score for sciences student is more, mean proactiveness for the commerce students is more, mean risk taking approach for sciences students is more and mean affective learning for commerce students is more.*

*Key Words: Entrepreneurship, Proactiveness, Innovations, affective learning, Entrepreneurship Enhancement Cell, Pakistan*

## INTRODUCTION

Among the several other factors entrepreneurship is to be considered as one of the most significant and role player factor in the economic progression. Developed countries have got momentous output through entrepreneurs as they have a capacity to develop and manage any type of business venture with a potential for growth and success (Prakash, Jain, & Chauhan, 2015). Industrial developed countries like USA, UK and Japan enjoys significant growth just because of entrepreneurs. It is defined as recognition of narrative business relevant opportunities in the market place in order to create a value which might be for commercial, social cultural or institutional in nature (Bryant, 2015). By consideration of these outcomes it is widely relevant for overall society and economy. Its growth has been started from the industrial revolution in the 18<sup>th</sup> century.

In the contemporary business environment, entrepreneurship has got broaden meaning in its true sense with the formulation of new business firms through the concept of best utilization of resources and core capabilities (Bryant, 2015). Entrepreneurship can contribute towards the quality and development of various sectors, in the economy or for a whole state (Soriano & Peris-Ortiz, 2011). In order to create maximum values, its role in creation new set of activities is very much debatable. It also helps in creation of job and wealth maximization. The concept of Business firm entrepreneurship is under debate from last many decades (Peterson & Berger, 1971; Soriano & Huarng, 2013). At its global context Entrepreneurship has increased the level of competition among different business firms and has worldwide effects (Renko, Shrader, & Simon, 2012).

Various earlier researchers have identified the changeable stage of entrepreneurship akin to entrepreneurship concentration. The said approach of entrepreneurship is varying in terms of level of innovativeness, pro-activeness, level of risk taking and risk aversion, frequency of entrepreneurship relevant activities within educational institutions, entrepreneurship idea generation and its implementation, effective learning and some emotional intelligence (Barringer, 2008). Intensity of entrepreneurship is based on the key assumption that attitude of various individuals in different educational institutions are different from the above mentioned key factors. Researchers like (Kuratko, 2004) has stated their argument that entrepreneurship is a continues learning concept, which encompasses the factors of risk taking and persistence and opportunity on the lookout for.

In order to retain the key approach of entrepreneurship towards the economic growth and economic prosperity, both the developed and emerging states must have to provide the prospects for education and similar sectors which are directly connected with the enhancement and progression of such skills. From the perspective of Pakistan, the opportunity and

enchantment of entrepreneurship skills and core capabilities are in its emerging phase and not in its advance format. The country has rich youth human resource which can connect themselves with this opportunity for the generation of more entrepreneurs if the said facility provided with in private or public sector organizations

In higher education system (HES) the role of entrepreneurship enhancement cell is very much important to be addressed and discussed. Business fecundation can be imagined as the gateway for the facilitation and emergence of enterprises by focusing on design and delivery of multifaceted environment with the primary objective is to best survive throughout its life span. Entrepreneurship enhancement cell EEC, can be a source for the provision of a remarkable initiative for a new business venture, augmentation and enrichment of aptitude capacity of students and fostering the overall economy at large. At university level such entrepreneurship enhancement cell EEC, integrates the three parties; the student, the mentor or teachers and outside business groups which ultimately help in professional and practical exposure growth.

Department or unit like entrepreneurship enhancement cell EEC helps in many others which also include technical assistance, market research opportunities, pre-job training and development, and internal and external resource incorporation. Class room environment is very much important in this regard which will lead towards the learning environment for the entrepreneurs. The presence of unit like EEC will help educational institutions and similar organizations for the progress of energetic learning and social atmosphere. In the current study analysis our primary objective is to focus on the proposition that through the existence of EEC, educational intuitions can augment the practical exposure of the student during their study time. For this purpose we are going to analyze the strength and level of association between presence of entrepreneurship enhancement cell EEC and strength of progression towards the entrepreneurship skills for the students who are currently enrolled in various private and public sector organizations.

## LITERATURE REVIEW

For practical implication of academic knowledge it is very much significant to provide the students with some professional expertise during their educational carrier (Prakash et al., 2015). Those entrepreneurs who are academically through well and have strong background knowledge are more vital in the economic development of their region than those who have low level of such education. These individuals are more innovative by using the contemporary business models with advance and latest technology. There is a great need of high level of professional and practical skills which are the complimentary for a new business venture. Starting and sustaining new business ventures have got significant importance from both policy

makers and those who are involved in academics (Prakash et al., 2015). Higher educational institutions are not just responsible for the provision of quality education but to motivate, filled them with true and practical knowledge are also considered as tools for articulation of their key mission (Erikson, 2003; Gibb, 2000; Johannisson, Landstrom, & Rosenberg, 1998)

Among the several other objectives, educational institutions like universities have primary goal to develop the professional qualifications of the students. For this purpose they have integrated the three core objectives of Transfer of technology, entrepreneurship promotional activities and leading research boundaries as stated by (Lockett & Wright, 2005; Noura, Klosthen, & Lindholm-Dahlstrand, 2005; Zucker, Darby, & Armstrong, 2002). Besides these educational institutions have also second key goals of development of entrepreneurship relevant courage in the mind set of the students, social and public obligations, new financing sources and image (Albert & Gaynor, 2003). Besides these significant findings three decade back in 1990, Allen & McCluskey have stated such business incubators provide support and similar assistance for long term durable growth of small business firms as they dealt with supervisory business facilities. Besides this the concepts of attraction of external key investors and some advisory support also explained by (Hannon & Chaplin, 2000). Information networks are to be considered as the key role player and source for entrepreneurship firm (Neergaard, 2005).

The concept of business incubators provides a display place for networking and assessing a business and social networks is very much significant for such firms (Hung, 2006). The propinquity existence in between the educational institution and said business unit facility develops and encourages cause a key motive for the direct interaction in between the management members, key researchers at university level and entrepreneurs from the market. Such facility helps in boosting up the young generation talent who are not yet quite familiar with the market trends. As stated in the study of Kutzhanova, Lyons, and Lichtenstein (2009) "building entrepreneurial skills demand a transformation on the part of the entrepreneur, a leap to a higher level of functioning". Among the several others, it should be considered as the prime and foremost duty for every trainer that s/he must has to inculcate the students through effective learning with their actions (Dalley & Hamilton, 2000; Deakins, O'Neill, & Mileham, 2000).

Such trainers and coaches are not responsible for answering each and every problem directly but they have to create a significant context of learning in this regard (Katz & Miller, 1996). Various earlier studies have been done in order to instigate the association between performance and efficiency of new business venture in terms of growth and ultimate survival or to secure from financial disaster, initial public offering and other environmental factors (Prakash et al., 2015). In any of the organizational work setting environment, entrepreneurship and

learning seems to be very much momentous and ability to learn is very much essential for the promotion of such capabilities and core competencies (Rae & Carswell, 2000). It is supposed as central and noteworthy in entrepreneurship development (Deakins et al., 2000).

In the changing dynamic of the contemporary business environment, entrepreneurship is learning process and it is also an important element to understand that how entrepreneurs will learn (Minniti & Lévesque, 2008). For some learning individuals own self experience is to be considered as a major source and for this purpose research work of (Erikson, 2003; Lans, Wesselink, Biemans, & Mulder, 2004) have identified several different types of such experiences. In his study (Matlay, 2006) has stated the fact that in order to enhance the number of quality of entrepreneurship in the regional economy, education facilities akin to entrepreneurship are very much efficient and cost effective.

At the same time, focus on the entrepreneur's intentions to start a work in the form of business venture theory of Ajzen regarding the impact of education on entrepreneurs is very much important to discuss. The key content of this theory is based on the notion of "theory of planned behavior". The use of team learning concept in entrepreneurship has also been focused in research studies and has emphasized that it led to an experience pool and a debate for reflection (Krueger, Reilly, & Carsrud, 2000). In the study of Thomas WingYan Man (2006) who has explained that the startup of early phase training and education linked up with the entrepreneurship, more focus is required in this regard. Besides this lot of studies have been done to analyze the effectiveness and importance in the learning process (Cardon, Wincent, Singh, & Drnovsek, 2009). Emotions and self management with the ending outcomes of entrepreneurship behavior are also under the key interest of earlier researchers (Rhee & White, 2007; Shepherd, 2003).

The importance of encouragement and promotion of entrepreneurship is highlighted in the study of (Volery & Mueller, 2006). They have stated the fact that the acts of entrepreneurs are based on the level of motivation which is potentially linked up with their skills; primarily seize various opportunities with their transformation into unbeaten business venture. Gorman, Hanlon, & King, (1997) have demonstrated that key attributes of entrepreneurs are tied up with the positive persuade from educational sector and its offered programs in which similar courses are able to create an awareness for a carrier development objective and towards the enhancement of constructive attitude towards entrepreneurship. For this purpose the role of educational institutions are very much significant. In previous studies the notion of "presence of entrepreneurship enhancement cell in educational institutions and development of practical and professional exposure" has proven in its true sense as it is considered as a major source of motivation for the students.

## Research Objectives

Based on the previous research findings and proposed future outcomes, I have developed the following research objectives

1. To understand the impact of presence of entrepreneurship enhancement cell, University type (public or private) and level of courses offered on innovativeness, pro-activeness, risk taking capabilities, entrepreneurship related activities, Entrepreneurship idea generation and implementation, effective learning and level of emotional intelligence.
2. To understand the potential difference between the public and private sector universities in terms of entrepreneurship intensity and related facilities
3. To understand the entrepreneurship intensity for the students who are currently engaged in key areas of sciences and commerce.

## RESEARCH MYTHOLOGY

### The Study

A descriptive research design was adopted. A self constructed research questionnaire has been developed for five point likert scale (from strongly disagree to strongly agree) after identifying various significant factors from previous research work. For this purpose factors like presence of entrepreneurship enhancement cell, University type (public or private) and level of courses offered on innovativeness considered as independent variables and pro-activeness, risk taking capabilities, entrepreneurship related activities, Entrepreneurship idea generation and implementation, effective learning and level of emotional intelligence are considered as major dependent variables. Entrepreneurship intensity is considered as overall explained variable of the study.

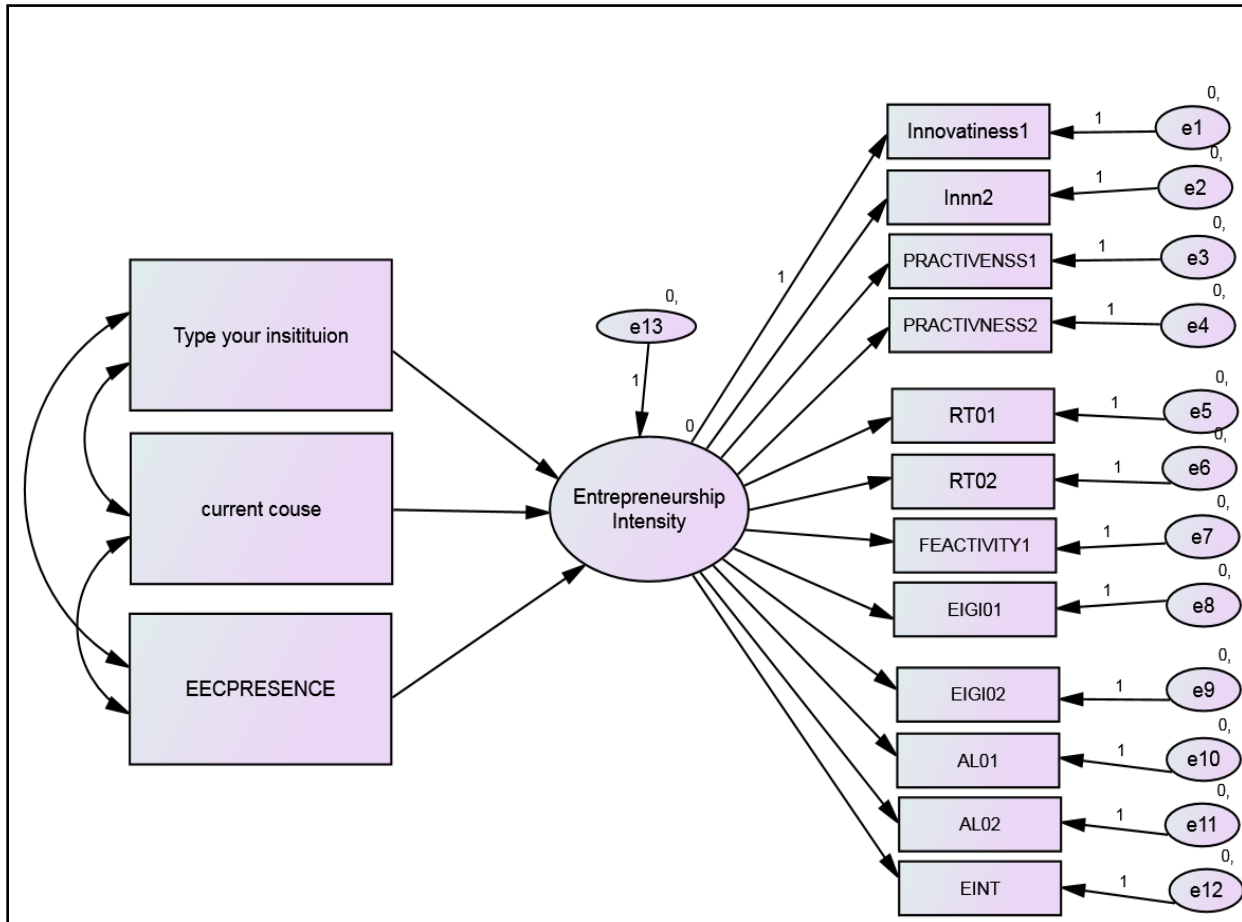
### Sampling Design

The key assumption behind formulating a sampling design is to develop a framework that assists as a road map for the purpose of survey sample. In present study, I have followed a technique of convenient sampling method for the selection of final sample size of 440 students both in public and private universities.

### Proposed Model of the Study

I have developed the following model in order to create a linkage between various dependent and independent variables:

Figure 1: Proposed Research Model



Key factors of institution type, current courses and Entrepreneurship Enhancement cell Presence are independent in nature while innovativeness 01 and innovativeness' 02 are measuring factors of explained variable of innovation, pro-activeness 01 and pro-activeness 02 are the measuring factors of pro-activeness, RT 01 and RT02 denotes the Risk taking factors 01 and 02 respectively, FEACTIONY 01 consider frequency of Entrepreneurship relevant activities, EIG01 and EIG02 are the key factors for Entrepreneurship idea generation and implementation, AL01 and AL02 stands for affective learning measures 01 and 02 and EINT demonstrates the level of emotional intelligence which is the key factor of identifying yours and emotions of others. Entrepreneurship Intensity is considered as overall major dependent variable. Besides this I also include various error terms which are considered as other factors which are not included in the model but have their impact on this causal relationship.

## EMPIRICAL RESULTS AND DISCUSSIONS

Table 1: Between-Subjects Factors

		Value Label	N
<b>Type your institution</b>	1	Govt	296
	2	Private	144
<b>current courses</b>	1	Commerce	205
	2	Sciences	235
<b>presence of EEC in Your organization</b>	1.00	yes	266
	2.00	no	174

Table above describe the outcomes of “between the subjects factors” among three independent variables; organization type, course stream and presence of entrepreneurship enhancement cell EEC. Here I have found that from total respondents of 440, 296 are those who belong to public sector universities in the city of Faisalabad, Pakistan. While those of 144 are belongs to private sector institutes. Out of 440, 205 are those who are enrolled in commerce courses and 235 are those who are in sciences. Meanwhile in case of presence of EEC, 266 have agreed with the statement that there is an Entrepreneurship enhancement cell EEC in their institute while 174 were those who were saying that there is no facility of EEC in their educational institute.

Table 2: Multivariate Analysis

Factors	Test	Value	F	Hypothesis df	Error df	Sig
<b>Intercept</b>	Wilks' Lambda	.007	4829.754 <sup>b</sup>	12.000	421.000	.000***
<b>Institution</b>	Wilks' Lambda	.831	7.121 <sup>b</sup>	12.000	421.000	.000***
<b>CCourses</b>	Wilks' Lambda	.857	5.843 <sup>b</sup>	12.000	421.000	.000***
<b>Presence EEC</b>	Wilks' Lambda	.857	5.843 <sup>b</sup>	12.000	421.000	.000***
<b>Ins*CCourses</b>	Wilks' Lambda	.891	4.281 <sup>b</sup>	12.000	421.000	.000***
<b>Ins*PresenceEEC</b>	Wilks' Lambda	.924	2.887 <sup>b</sup>	12.000	421.000	.001***
<b>CCourses*PresenceEEC</b>	Wilks' Lambda	.888	4.414 <sup>b</sup>	12.000	421.000	.000***
<b>Ins*CCourses*PresenceEEC</b>	Wilks' Lambda	.899	3.933 <sup>b</sup>	12.000	421.000	.000***

a. Design: Intercept + Institution + CCourses + PresenceEEC + Institution \* CCourse + Institution \* PresenceEEC + CCourse \* PresenceEEC + Institution \* CCourses \* PresenceEEC

b. Exact statistic

Table 02 demonstrates the outcomes of multivariate analysis of variance MANOVA with several dependent variables. I have considered the factors of Institution, Current Courses (CCourse) and presence of Entrepreneurship enhancement cell EEC as Independent variables. the outcomes of three way MANOVA has revealed the fact in terms of wilks ‘Lambda for



Intercept=.007, f value 4829, hypothesis df=12, error df=421 significant at 01 %, Institution (wilks lambda) =.831, f value= 7.21, hypothesis df=12, error df=421 significance level 01 %, current courses or CCourses (wilks lambda) =.857, f value= 5.843, hypothesis df=12, error df=421 significance level 01 %, presence of Entrepreneurship enhancement cell or EEC (wilks lambda) =.857, f value= 5.843, hypothesis df=12, error df=421 significance level 01 %, Ins\*CCourse (wilks lambda) =.891, f value= 4.281, hypothesis df=12, error df=421 significance level 01 %, Ins\*PresenceEEC (wilks lambda) =.924, f value= 2.887, hypothesis df=12, error df=421 significance level 01 %,CCourse\*PresenceEEC (wilks lambda) =.888, f value= 4.414, hypothesis df=12, error df=421 significance level 01 %, Ins\*CCourse\*PresenceEEC (wilks lambda) =.899, f value= 3.933, hypothesis df=12, error df=421 significance level 01 %.

Table 3: Tests of Between-Subjects Effects

Source	Dependent Variables	Measuring statements	Type III SSS	df	Mean Square	F	Sig.
Corrected Model	Innovativeness	My Institution is providing best opportunity for improved and emerging business ideas.	12.231 <sup>a</sup>	7	1.747	1.813	.083*
		New Business idea/Ideas are very much appreciated in my institution	16.917 <sup>b</sup>	7	2.417	1.552	.148
	Proactiveness	There is a propensity to identify opportunities for improvement in my institution	21.212 <sup>c</sup>	7	3.030	1.970	.058*
		Individuals are quite resourceful (proactive & diligent) in my Institution	28.819 <sup>d</sup>	7	4.117	2.716	.009***
	Risk Taking	In my Institution Risk taking is to be considered a significant factor for Entrepreneurship Development	31.072 <sup>e</sup>	7	4.439	5.682	.000***
		Ready for the Failure is also considered during Risk Taking process of Entrepreneurship Development	26.294 <sup>f</sup>	7	3.756	6.748	.000***
	Frequency of Entrepreneurial Activities	My Institution is Organizing Entrepreneurial Activities on Frequent basis	18.476 <sup>g</sup>	7	2.639	1.708	.105
	Idea Generation and Implementation	My Institution is dealing with the Entrepreneurial Frequency through Idea Generation	26.498 <sup>h</sup>	7	3.785	2.884	.006***
		My Institution is working on the Enchantment of Practical exposure of the students through Entrepreneurial Idea Implementation	31.135 <sup>i</sup>	7	4.448	2.928	.005***
	Affective Learning	Course Contents in my Institution are very much meaningful for Entrepreneurship Development	18.643 <sup>j</sup>	7	2.663	5.435	.000***
		Teachers are playing a vital role in Affective learning for Entrepreneurship Development	31.596 <sup>k</sup>	7	4.514	7.635	.000***
	Emotional Intelligence	Emotional awareness is playing a vital role in Entrepreneurship Development in My Institution	21.599 <sup>l</sup>	7	3.086	7.143	.000***

In table 03, I have presented the outcomes of between the subjects effect for all the major dependent variables; innovativeness, pro-activeness, risk taking, frequency of entrepreneurial activities, entrepreneurial idea generation and implementation, effective learning and emotional intelligence (ability to identify your's and others' emotions).

The outcomes for the first measuring factors of innovativeness has significant outcomes which are acceptable at 10 % level of significance, but the outcomes for 2<sup>nd</sup> measuring factors are not acceptable and have stated the fact that new business ideas are not very much appreciated in the educational institutions. In third and fourth measuring statements I have considered the key dependent variable of proactiveness. Both the measuring factors of proactiveness have significant outcomes at 10% and 01% respectively. These outcomes are in favor of the assumption that proactiveness is very much appreciated and students are very much resourceful. Third dependent variable is risk taking approach which is measured through the statements 06 and 07. Both the statements have highly significant (at 01 % level) outcomes in terms of risk taking for entrepreneurship development and ready for the failure as well. In the next step I have considered the factor of frequency of entrepreneurial activities which have shown insignificant outcomes. Such results are in favor of the statement that there is a lack of frequent entrepreneurial activities in different institutions pertaining to both public and private sectors.

In the next step I have considered the measuring statements of 08 and 09 for idea generation and implementation. The outcome for this explained variable has also shown significant results at a level of 01 % alpha. These results are in quite in favor that idea generation and implementation are very much deeply observed in different institutions from public and private sectors.

In the second last step I have considered the factor of effective learning which is measured through statement 10 and 11 respectively. The outcomes of this variable have also shown significant results for course content and teacher's role in the entrepreneurship development.

In the last step, level of emotional intelligence has been measured through a measuring factor of 12, which has confirmed the significant outcomes at 01 % level. Such results are in support of the notion that emotional intelligence (ability to identify your emotions and emotions of others) are very much important for the intensity enhancement of the entrepreneurial activities.

Table 4: Descriptive Statistics among the factors

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
<b>Mean Innovativeness</b>	Commerce	205	3.3244	1.22109	.08528
	Sciences	235	3.4404	1.14292	.07456
	Total	440	3.3864	1.18005	.05626
<b>Mean Proactiveness</b>	Commerce	205	4.8537	1.44271	.10076
	Sciences	235	4.6851	1.39013	.09068
	Total	440	4.7636	1.41576	.06749
<b>Mean Risk Taking</b>	Commerce	205	4.1878	1.04088	.07270
	Sciences	235	4.3596	.94477	.06163
	Total	440	4.2795	.99328	.04735
<b>Mean Effective Learning</b>	Commerce	205	5.7244	.81252	.05675
	Sciences	235	5.6936	.74231	.04842
	Total	440	5.7080	.77507	.03695

In table 04 I have presented the outcomes for mean difference in terms of course stream by considering the mean values of innovations, mean proactiveness mean risk taking and mean effective learning. Here I have experienced that the mean value of commerce students is 3.32 which is lesser than the mean value of sciences students which is 3.44. At the same point in time the mean outcomes for proactiveness for both commerce and science courses are different and are 4.85 and 4.68 respectively. The mean value for commerce in terms of mean proactiveness is higher. In the next step I have found that mean value of mean risk taking factors for commerce is 4.18 and for sciences are 4.35. The mean score for mean effective learning for commerce is 5.72 which is higher than the mean value of 5.69 in terms of sciences. The value of standard deviation for every factor is ranging from .74 to 1.44 which is at an acceptable level.

Table 5: Mean Innovativeness

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
<b>Yes</b>	266	3.4417	1.18536	.07268
<b>No</b>	174	3.3017	1.17022	.08871
<b>Total</b>	440	3.3864	1.18005	.05626

Table above define the mean innovativeness score for both those who have EEC facility and those who don't have it at all. Here the mean values for those who have EEC facility have greater mean score of 3.44 as compared to those who don't have it.

## CONCLUSIONS AND RECOMMENDATIONS

In order to promote and develop entrepreneurial culture it is very much need of the time for the educational institutions to work on the establishment of entrepreneurship enhancement cells. Such practical development will definitely be a perquisite for the students just before to go for the practical opportunities in the market place. Objective of such Entrepreneurship enhancement cell is to create such bread in terms of students who can best contribute towards the economic development of a country.

Current study is an attempt to analyze the intensity of entrepreneurship development in various public and private sector universities in Pakistan. A podium like entrepreneurship enhancement cell EEC will definitely help the students in inculcating and making them productive and innovative. For this purpose, such cell or business incubators have been developed by various universities but it still needs significant attention from administration and Government.

From the context of present study outcomes, it is well evident that students in both public and private sector universities have facing the lack of entrepreneurship enhancement cell facilities. Meanwhile outcomes have stated both significant and insignificant results for various factors. As an ending conclusion there is great need of appreciation for new business ideas at university level and frequent organization of entrepreneurship relevant activities. So it is highly recommended for the various universities to establish such facilities so that intensity in terms of entrepreneurship could be more valued.

## LIMITATION OF THE STUDY

Present study analysis has been done to check the contribution of EEC in the development of practical and professional exposure of university students. As usual, the study has certain limitations:

1. Current study has considered a very small sample size from the larger population group, thus restricting the generalizability of the findings.
2. Present study is considering the factor of Entrepreneurship Enhancement Cell in one city of Pakistan. It does not have considered the students in other areas which are demonstrating the larger part of the population, again restricting the generalizability of the findings of the current study.
3. Model of the study still needs some improvement by consideration of the other factors of entrepreneurship intensity.

## SCOPE FOR FUTURE RESEARCH

There is a scope for future research through which various public and private sector universities can increase their efficiency:

1. The present concept of Entrepreneurship Enhancement Cell can be redefined and reshaped in a way that it can broaden the concept of entrepreneurship intensity
2. Based on this research work various universities can put into in depth investigation of EEC facility and its impact on the professional knowledge of the students
3. The design of Model can further be improved by adding more factors to it.

## REFERENCES

- Albert, P., & Gaynor, L. (2003). *National contexts, incubator families and trends in incubation—views from four countries*. Paper presented at the The 48th ICSB Conference Proceedings, Belfast.
- Barringer, B. R. (2008). *Entrepreneurship: Successfully launching new ventures*: Pearson Education India.
- Bryant, P. T. (2015). Entrepreneurship and Organizations. [Research]. *International Encyclopedia of the Social & Behavioral Sciences* ((Second Edition)), 681-685.
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review*, 34(3), 511-532.
- Dalley, J., & Hamilton, B. (2000). Knowledge, context and learning in the small business. *International Small Business Journal*, 18(3), 51-59.
- Deakins, D., O'Neill, E., & Mileham, P. (2000). Executive learning in entrepreneurial firms and the role of external directors. *Education+ Training*, 42(4/5), 317-325.
- Erikson, T. (2003). Towards a taxonomy of entrepreneurial learning experiences among potential entrepreneurs. *Journal of Small Business and Enterprise Development*, 10(1), 106-112.
- Gibb, A. A. (2000). SME policy, academic research and the growth of ignorance, mythical concepts, myths, assumptions, rituals and confusions. *International Small Business Journal*, 18(3), 13-35.
- Gorman, G., Hanlon, D., & King, W. (1997). Some research perspectives on entrepreneurship education, enterprise education and education for small business management: a ten-year literature review. *International Small Business Journal*, 15(3), 56-77.
- Hannon, P., & Chaplin, P. (2000). The UK incubation impact assessment study 1999/2000, phase one—key literature executive summary. *UK Business Incubation: Birmingham*.
- Hung, H. (2006). Formation and Survival of New Ventures A Path from Interpersonal to Interorganizational Networks. *International Small Business Journal*, 24(4), 359-378.
- Johannisson, B., Landstrom, H., & Rosenberg, J. (1998). University training for entrepreneurship—an action frame of reference. *European Journal of Engineering Education*, 23(4), 477-496.
- Katz, J. H., & Miller, F. A. (1996). Coaching leaders through culture change. *Consulting Psychology Journal: Practice and Research*, 48(2), 104.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business venturing*, 15(5), 411-432.
- Kuratko, D. F. (2004). *Entrepreneurship education in the 21st century: from legitimization to leadership*. Paper presented at the USASBE National Conference.

- Kutzhanova, N., Lyons, T. S., & Lichtenstein, G. A. (2009). Skill-based development of entrepreneurs and the role of personal and peer group coaching in enterprise development. *Economic Development Quarterly*, 23(3), 193-210.
- Lans, T., Wesselink, R., Biemans, H. J., & Mulder, M. (2004). Work-related lifelong learning for entrepreneurs in the agri-food sector. *International journal of training and development*, 8(1), 73-89.
- Lockett, A., & Wright, M. (2005). Resources, capabilities, risk capital and the creation of university spin-out companies. *Research Policy*, 34(7), 1043-1057.
- Matlay, H. (2006). Entrepreneurship education: more questions than answers? *Education+ Training*, 48(5).
- Minniti, M., & Lévesque, M. (2008). Recent developments in the economics of entrepreneurship. *Journal of Business venturing*, 23(6), 603-612.
- Neergaard, H. (2005). Networking activities in technology-based entrepreneurial teams. *International Small Business Journal*, 23(3), 257-278.
- Nouira, S., Klofsten, M., & Lindholm-Dahlstrand, Å. (2005). The logic of the entrepreneur: Implications of the entrepreneur's perception of early-stage financing. *The International Journal of Entrepreneurship and Innovation*, 6(2), 85-96.
- Peterson, R. A., & Berger, D. G. (1971). Entrepreneurship in organizations: Evidence from the popular music industry. *Administrative Science Quarterly*, 97-106.
- Prakash, D., Jain, S., & Chauhan, K. (2015). Entrepreneurial intensity in relation to presence of entrepreneurship development cell: A study of institutes offering professional courses in national capital region Delhi, India. *The International Journal of Management Education*, 13(1), 95-105.
- Rae, D., & Carswell, M. (2000). Using a life-story approach in researching entrepreneurial learning: the development of a conceptual model and its implications in the design of learning experiences. *Education+ Training*, 42(4/5), 220-228.
- Renko, M., Shrader, R. C., & Simon, M. (2012). Perception of entrepreneurial opportunity: a general framework. *Management Decision*, 50(7), 1233-1251.
- Rhee, K. S., & White, R. J. (2007). The emotional intelligence of entrepreneurs. *Journal of Small Business & Entrepreneurship*, 20(4), 409-425.
- Shepherd, D. A. (2003). Learning from business failure: Propositions of grief recovery for the self-employed. *Academy of Management Review*, 28(2), 318-328.
- Soriano, D. R., & Huarng, K.-H. (2013). Innovation and entrepreneurship in knowledge industries. *Journal of Business Research*, 66(10), 1964-1969.
- Soriano, D. R., & Peris-Ortiz, M. (2011). Subsidizing technology: How to succeed. *Journal of Business Research*, 64(11), 1224-1228.
- Volery, T., & Mueller, S. (2006). A conceptual framework for testing the effectiveness of entrepreneurship education programs towards entrepreneurial intention. Available at [http://www1.kmu.unisg.ch/rencontres/RENC2006/Topics06/A/Rencontres\\_2006\\_Volery-MuellerS.pdf](http://www1.kmu.unisg.ch/rencontres/RENC2006/Topics06/A/Rencontres_2006_Volery-MuellerS.pdf).
- Zucker, L. G., Darby, M. R., & Armstrong, J. S. (2002). Commercializing knowledge: University science, knowledge capture, and firm performance in biotechnology. *Management Science*, 48(1), 138-153.