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## Analyzing the Impact of Entrepreneurship Development Programs on Entrepreneurs

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### Abstract

*Entrepreneurship education witnessed significant growth in industrialized and developing countries. As a result the programs imparting entrepreneurship education have increased many-fold and still continue to increase. Having recognized the importance of entrepreneurship, not only the private players but public policy makers also promote and support Entrepreneurship Development Programs (EDPs). Since the spending as well number of these events is growing, their impact on entrepreneurship development is under-researched. This study intends to help by analyzing effects on EDP's on promoting activities associated with being an entrepreneur. The analysis concludes that EDPs motivate and provide participants the preliminary knowledge to undertake an entrepreneurial venture. However, there is a need to make these programs more intense by providing internship opportunities and involving entrepreneurs from the industry to expose them to real life experiences.*

**Keywords:** Business Plan, EDP, Entrepreneurship, Entrepreneurial Intention.

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### 1. Introduction

It is believed that entrepreneurial development provide greater returns to the people in the country as it raises their standard of living and also contribute to the economic growth and progress of the nation by providing new employment opportunities. In India, the emergence of large number of e-tailing firms supports this proposition. In this context, to develop entrepreneurship skills various institutes have been set up in India on a state and national level. Also, there are number of business schools which conduct entrepreneurship development programs (EDPs) for potential and budding entrepreneurs in India on regular intervals. This will amount to benefits being taken by them to their countries in terms of profits not being reinvested by them. This “the leech effect” adversely affect the development process of that country (Akhori, 2004).

At a global level, Stanford’s Stanford Technology Ventures Program” located in Silicon Valley provides students with entrepreneurial skills to deal with problems related to environment, human health and other global issues. For the MBA program they have come up with new offering in the name of ‘entrepreneurship and innovation program’. In India, institutes like IITs, BITS Pilani, IIMs have set up separate cell for the promotion of entrepreneurship and facility of incubator. At

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a governmental level, Department of Science and Technology has taken initiatives to encourage EDP's in Universities. When there are lot of efforts being taken up at government and private level, it is pertinent to measure the impact of the EDPs on entrepreneurship development in India. This will enable evaluation the success of the programs, reveal the flaws and revise the contents and structure of the programs. This paper tries to measure the impact of EDPs on entrepreneurial motivation and relevance of the programs in terms of entrepreneurship skill development.

## **2. Literature Review**

An entrepreneur is one who innovates and creates economic opportunities for others. Schumpeter (1952) established the concept of entrepreneur as innovator and stated that the concept of entrepreneur is to recreate and cause great changes in the way that it is done in production by invention, or by using new technology, by opening new source of supply or by reorganizing an old industry and creating a new one.

Entrepreneurial education has witnessed a significant growth in the industrialized countries. Katz (2008) found that entrepreneurship programs increased by ten times in US from 1979 to 2001 (Fayolle *et al.*, 2006) stated that policy makers understand the importance of entrepreneurship and facilitate it through entrepreneurship education. European Commission Expert Group for Entrepreneurship Education report states that "important role of education in promoting more entrepreneurial attitudes and behaviors is widely recognized".

Various researches assert that there is a positive effect of entrepreneurship education (Chrisman, 1997; Peterman and Kennedy, 2003; Zhao *et al.*, 2005). Kolvereid *et al.* (1997) found that graduates who majored in entrepreneurship had a higher likelihood of becoming entrepreneurs after graduation. Similar results were found by Noel (2001) and Chen *et al.* (1998). Menzies *et al.* (2002, 2003) found that those who took electives in entrepreneurship were more likely to found a business and reach a higher management status than those who did not study entrepreneurship subjects. However, the recent studies done by Oosterbeek *et al.* (2010) and Von *et al.* (2010) found a negative effect on entrepreneurship education. These studies had methodological flaws including small samples and measuring the ex-post effect only. Galloway *et al.* (2002, 2005), who examined entrepreneurship education in Scottish universities found that it is unclear whether entrepreneurship education increases the number of start-ups immediately after graduation. Pittaway and Cope (2007) found that the link between entrepreneurship education and outcomes is under-researched. There is a continuous effort to expand entrepreneurship education program offerings. On the other hand, there is a lack of research studies and outcome of studies regarding the impact of EDPs is ambiguous. Thus, this research is undertaken keeping in mind the methodological flaws in the prior studies and tries to measure the impact of EDPs on entrepreneurial intention.

## **3. Research Framework**

In order to measure the impact of EDPs, we have collected the data through questionnaire. The respondents were the individuals who attended the EDPs. The questionnaire was mailed to 450 individuals. Finally, responses were received from 380 respondents. After scrutinizing the filled questionnaires, 69 were found incomplete. The final analysis of 311 responses is done. The questionnaire was designed in consultation with experts in the academia. Random sampling technique is used to get the responses. Apart from demographic details, the questionnaire intended to capture the responses on perceived and actual benefits of attending an EDP. Also, the responses on effectiveness of EDP through gap and deliverables are sought in the questionnaire. Once the responses are received from the respondents, these are analyzed to

identify the perceived benefits and the actual benefits received from the EDP in terms of entrepreneurial motivation. In order to understand expectation of attendees from Entrepreneurship Development Programmes, respondents were asked about the perceived importance of the program on few parameters. The formulated question, “By participating in an Entrepreneurship development program, I shall be skilled with”,

- (i) Business opportunity identification
- (ii) Market research
- (iii) Knowledge -sources of finance
- (iv) Confidence Building
- (v) Management skills
- (vi) Process of starting venture
- (vii) Risk taking
- (viii) Project Report Preparation and B plan
- (ix) Network building

Above mentioned parameters are measured by two questions. First respondents’ expected importance for specific parameters is measured on a five point scale of importance mentioned below:

LeastImportant	NotImportant	Important	Moderately Important	MostImportant
1	2	3	4	5

After quantification the data is coded in spreadsheet. The workbook so produced served as a platform for MS Excel and SPSS .Comparison of means along with variance is also used as and when needed. Following section studies objective of the study that is mentioned below:

**To Study the Perceived Benefits by the Participants Who are Potential Entrepreneurs**

Though all the parameters represent an equally important output of an EDP, sample results vary in opinion. Therefore, the mean scores of the parameters are compared to understand the variation amongst and within the sample results. A null and an alternate hypothesis are developed for generalization of results as mentioned below. Analysis of variance is applied for the purpose.

$H_{00}$ : All parameters are equally important

$$H_{00}: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6 = \mu_7 = \mu_8 = \mu_9 = \mu_{10}$$

And

$H_{10}$ :  $H_{00}$  is not true.

A one way single factor Analysis of variance is used to test the hypothesis. Following tables describe comparison of means and analysis of variance.

**Table 1: Comparison of Means and Variance-Perceived Benefits**

<b>SUMMARY</b>				
<i>Groups</i>	<b>Count</b>	<b>Sum</b>	<b>Average</b>	<b>Variance</b>
Business opportunity identification	311	655	2.11	0.66
Market research	311	911	2.93	1.77
Leadership skills	311	772	2.48	0.94
Knowledge -sources of finance	311	673	2.16	0.83
Confidence Building	311	891	2.86	1.69
Management skills	311	929	2.99	1.75
Process of starting venture	311	673	2.16	0.83
Risk taking	311	693	2.23	0.83
Project Report Preparation and B plan	311	673	2.16	0.83
Network building	311	935	3.01	1.67

Source: field survey

From Table 1 it can be observed that, network building is the most important identified parameter from respondents' point of view. That is, the respondents expect that they shall have a huge network building platform by participating in EDP and this is most important for them comparatively and business opportunity identification seems to be the least important parameter of EDP. This may be due to the cause that identification of business opportunity is a long process. Most of the people who wish to be an entrepreneur first conceive a business idea and then participate in Entrepreneurship development program in order to seek opportunity to materialize it. This is because network building becomes such an important parameter. A good business network serves a backbone for any business idea. By having a good network an entrepreneur always have a 360° access of people and companies for all his needs. Since sample means clearly state that all parameters of entrepreneurship development program are not equally important. We test it at 95% level of confidence that whether the result can be generalized for population or not. Following table tests  $H_{00}$  by using ANOVA (Analysis of variance)

**Table 2: Analysis of Variance**

<b>ANOVA</b>						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	428.651	9	47.628	40.379	1.15E-68	1.882
Within Groups	3656.559	3100	1.180			
Total	4085.211	3109				

Source: field survey

From the table above it can be observed that F-statistics is greater than F-crit. Hence we reject null hypothesis that, “all components of entrepreneurship development program are equally important”. The sample means thus hold good for population. It is of utmost importance to analyze whether education, sex, age, and family background of respondents’ have an impact on expected importance of entrepreneurship development program, or the variations in the sample means is just due to chance. This analysis is here stands as scope for further research.

**To Study Actual Benefits Delivered**

Apart from studying EDP delivery meeting expectation we also study the gap between importance of perceived output and actual output by comparison of mean and variances. Therefore, subsequently analyzing importance of expectations we collected responses on same parameters after completion of entrepreneurship development program. A five point scale for meeting the expectations is used to quantify the gap for all ten parameters in following manner.

<b>Didn't meet expectations at all</b>	<b>Didn't meet expectations expected</b>	<b>Met expectations</b>	<b>Moderately met expectations</b>	<b>Higher than</b>
1	2	3	4	5

Now we find out whether there is difference amongst parameters when it comes to level of meeting expectations from actual output. In order to do that we first compile means scores along with variance. Following table shows the sample output.

**Table 3: Summary Statistics-Actual Benefits**

<b>SUMMARY</b>				
<b>Groups</b>	<b>Count</b>	<b>Sum</b>	<b>Average</b>	<b>Variance</b>
Business opportunity identification	311	763	2.4534	1.3906
Market research	311	786	2.5273	1.3920
Leadership skills	311	738	2.3730	1.1185
Knowledge -sources of finance	311	762	2.4502	1.3773
Confidence Building	311	936	3.0096	1.7838
Management skills	311	937	3.0129	1.8773
Process of starting venture	311	761	2.4469	1.3641
Risk taking	311	761	2.4469	1.3641
Project Report Preparation and B plan	311	759	2.4405	1.3505
Network building	311	786	2.5273	1.4178

From Table 3, we can observe that the mean scores of meeting the expectations are different for each parameter. Confidence building and acquiring management skills seem to deliver as per expectations while the network building, leadership skills, and market research remain to be delivered below expectations.

$H_{02}$ : All parameters meet the expectation equally on completion of EDP or

$$H_{02}: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6 = \mu_7 = \mu_8 = \mu_9 = \mu_{10}$$

And

$H_{12}$ :  $H_{02}$  is not true.

**Table 4: Analysis of Variance**

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	157.63	9	17.515	12.13302	4.88E-19	1.882896
Within Groups	4475.1	3100	1.444			
Total	4632.7	3109				

From analysis of variance, it can be observed that F-statistics is above F-critical hence we reject null hypothesis that all parameters equally met the expectations. Therefore the difference of means (i.e. difference amongst meeting the level of expectations from EDP) is statistically significant. The description of mean values in table -4 clearly indicated the most met and least met expected parameters.

#### 4. Conclusion

It can be concluded that there is some gap between expected and actual output for Entrepreneurial Development Programmes. This shows that people were expecting a higher output in terms of network building, and market research skill enhancement but the delivery from EDP does not remain up to the mark. The delivery for enhancement of leadership skills is also little less than expected. Hence, sample output suggests that for EDP network building and market research are the areas of major concern where the delivery is less than expectation while leadership skill enhancement shall also be focused upon.

Entrepreneurship education is confirmed to be a major source of inspiration that triggers positive impact on entrepreneurial intention. The need of the hour is to make EDPs more effective by relevant education, skilled instructors in the area of entrepreneurship. There is need to integrate the institutions with government and voluntary organizations to create an eco-system that lead to development of silicon valley's in India also in diverse areas of manufacturing, biotechnology, nanotechnology, automobiles etc

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