

TECHNICAL STUDENTS' PERCEIVED ENTREPRENEURIAL SUPPORT (IN A PRIVATE INDIAN UNIVERSITY)

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ABSTRACT: *This research empirically identifies the attitudinal, perceptual difference towards entrepreneurial support provided to technical course students. It is evident that a supportive environment is a determining factor for the technical students' orientation towards an entrepreneurial career. The objective of this paper is to identify the technical course students' attitudes towards entrepreneurial support, their personal characteristics, and entrepreneurial experience. Data was collected through questionnaires from 100 students of a private university in India. Simple random sampling was used. The questionnaire administered gathered data like students self-confidence level, supportive systems provided by university, the infrastructure, and the awareness of entrepreneurial facilities provided by the university. The results indicate that, those students with high self-confidence were more likely to take up an entrepreneurial career. It was observed that the infrastructure provided by the university played a significant role in encouraging the entrepreneurial drive in the students.*

KEYWORDS: Experience, Self-confidence, Perceived entrepreneurial support, Entrepreneurial infrastructure

INTRODUCTION

Over the last decade it has been observed that technical institutes are increasingly emphasizing on encouraging entrepreneurial activities as a whole. The main reason for this is to boost innovation and technological progression. Technical institutes are eyeing on producing job providers rather than job seekers. Carree and Thurik (2000) have pointed out that, for many nations, entrepreneurship is the engine that drives the economy and society undoubtedly. It is a challenge for the technical institutes to generate awareness among students regarding entrepreneurship and to promote entrepreneurship on a wider scale thus stimulating technological innovations.

Educational system plays an unparalleled role in encouraging entrepreneurial initiative among students and graduates. By introducing courses on entrepreneurship, by forming entrepreneurship societies and cells, the university can play a huge role in propagating entrepreneurial activities among the students and graduates. These steps principally help in

generating essential skills required to start-up and run a business boldly facing the challenges threatening the current business scenario.

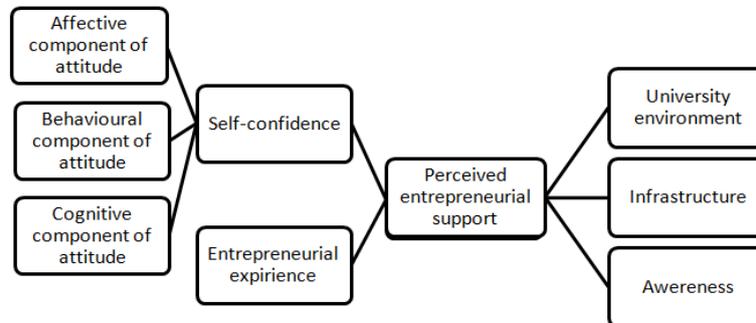
The technical institute under study in this research has adopted various strategies and supporting mechanisms with an eye on developing entrepreneurial skills and abilities. One of the major activities is providing start-up support services given by a designated cell called the innovation centre. The projects undertaken by professors and researchers and the support provided by venture capitalists to take up the first steps in creating new business has influence on startup. The students are given an opportunity to gain entrepreneurial experience during the college festivals and other entrepreneurship related competitions that are held at various instances during the academic year. Ideas that look promising are encouraged and the students are given a chance to initiate their own start-up under the guidance of the innovation centre. This early phase of the start-up is called incubation and its role is to nurture technological innovation and to foster entrepreneurship. Ideas may not always succeed and this may at times scare many want to be entrepreneurs. Many a times the incubators fail to build the self-confidence among technical students and this has an influence on the entrepreneurial activities in the educational campus.

This research attempts to investigate the technical students' perception towards entrepreneurial support. Here entrepreneurial support is taken as a dependent variable, and self-confidence and the entrepreneurial experience are considered as dependent variables. The prior studies on entrepreneurship in India have not focused much on technical course students' entrepreneurial attitudes. This research is an attempt to fill the gap between the technical students' attitude towards entrepreneurship and the awareness about the entrepreneurial support provided in the education campus.

LITERATURE REVIEW

Various researchers have defined attitudes in several ways. In its simplest form attitudes can be defined as evaluative statement or judgment concerning any object, person or event. Researchers have stated that generally, attitudes have three components namely cognitive, affective, and behavioral component. The cognitive component is the opinion segment of attitude. The affective component is a slightly more serious part that deals with emotions and feelings whereas the behavioral component refers to an intention to behave in a certain way towards someone or something. The components cognition, affect and behavior are very closely related to each other and in belief are inseparable.

In this paper, the researchers aim to find out the influence of the aforesaid attitudinal components on entrepreneurial process. In the past many studies have indicated that the behavioural aspects play a significant role in understanding the entrepreneurial process (Shapiro and Sokol, 1982; Krueger, 1993; Krueger and Brazeal, 1994). Hannan (2004) has highlighted the importance of attitudes in nurturing the entrepreneurial intentions.

Figure 1. Theoretical framework used in the research design

This paper follows the theoretical framework as shown in Fig 1. An attempt has been made to gather information through survey method pertaining to the parameters shown in the framework.

METHOD

This study aims at evaluating technical students' attitudes towards perceived entrepreneurial support provided by the university based on the sample of one hundred technical students of the Manipal Institute of Technology in Manipal, India. As Gorsuch (1983) and Kline (1979, p. 40) recommended at least 100 (MacCallum, Widaman, Zhang and Hong, 1999). No sample should be less than 100 even though the number of variables is less than 20 (Gorsuch, 1974, p. 333; in Arrindell and van der Ende, 1985, p. 166). Data for this study was collected by administering a questionnaire and the survey was carried out in the campus of MIT. Initially, respondents were briefed about the research and then asked to fill in the questionnaire on the spot and requested to submit on the same day. The questionnaire was divided into four main parts. The first part was designed to measure self-confidence aspect. Most of the questions were taken from a standard questionnaire available (Balogh, 1985) and few were added by the authors. The statements had to be rated on a five-point Likert scale, where a score of 1 = Strongly Disagree; 2 = Disagree; 3 = Uncertain (cannot say for sure); 4 = Agree; 5 = Strongly Agree and only one option could be chosen. A sample of item 'I would rather be my own boss than have a secure job' The second part was concerned about entrepreneurial experience. One item used in the questionnaire 'Have you ever started an enterprise?' The authors adopted items from Peterman and Kennedy (2003). Students were required to put a cross mark in a bipolar scale (yes/no type question). In the next section the entrepreneurial support of the university was tested by items (E.g. 'My Institute encourages entrepreneurial behavior'). The respondents were asked about factors such as university environment, infrastructure and awareness of the support provided by the university. The statements were based on an extensive literature review (Turker and Selcuk, 2009; Gallant et al., 2010; Schwarz et al., 2009; Hofer, 2010). To measure the infrastructure support the researchers used a bipolar scale, whereas to the other factors - a five point Likert scale. In the last part respondents were asked to fill in the personal data such as gender, age, year of study, branch, membership in technical association and optionally name, contact number and e-mail address.

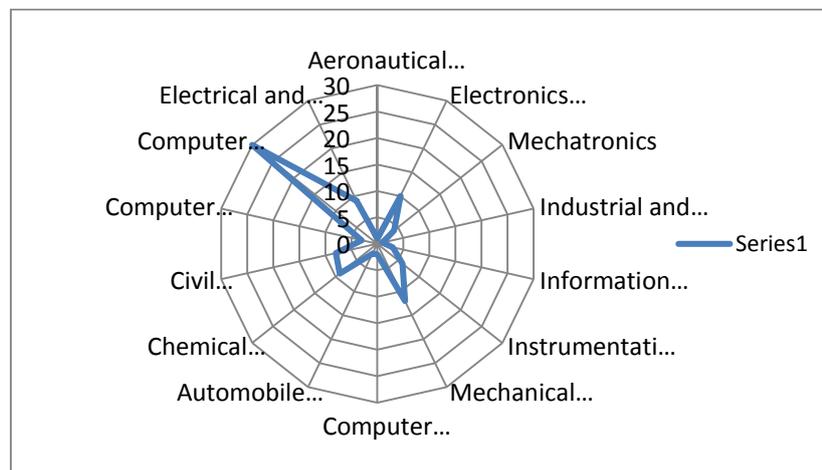
SAMPLE

A total number of 120 questionnaires were distributed but only 100 questionnaires were filled and returned to the researchers. More than half of the respondents were male (58 percent) and ranged in age from 17 to 22 years, with an average age of 19.64 years. Majority were second-year-students (44 percent), while 24 percent were third-year-students, 20 percent fourth-year-students and 12 percent first-year-student. Most of the respondents were studying Computer Science and Engineering (30 percent) and only 1 percent of the respondents were from Industrial and Production Engineering or Aeronautical Engineering. The average GPA of the respondents was 7.93, excluding the first-year students who took part in the questionnaire survey. Of all the students respondents 49 percent were active members of various student technical associations. The detailed samples characteristics are presented in the Table 1 and Figure 2.

Table 1. Demographic profile of the respondents

	Mean	Std. Deviation
Age	19.64	1.177
Year	2.52	0.948
CGPA/GPA	7.9264	0.95013

Figure 2. Distribution of respondents' branches wise



RESULT AND ANALYSIS

The demographic profile of the respondents like age, gender along with their academic performance was analyzed with mean and standard deviation (Table 1). The results revealed that there was a significant difference among male and female with t-value 8.467 at significance level 0.0001 and their mean difference was 0.420. The respondents' age had similar differences

($t=16693$, $p=0.001$) with the mean difference of 19.64. Students from fourteen different branches took part and their number and percentage is given in Table 2.

While analyzing the relation between the factors it was observed that self-confidence had a strong correlation with entrepreneurial environment and with all three segments of the perceived entrepreneurial support the researchers observed significant correlation between the entrepreneurial experience, the available infrastructure and the awareness of the entrepreneurial support. Only the entrepreneurial environment and the entrepreneurial experience are not correlated (Table 3).

Table 3. Pearson Correlation coefficients between dependent variable and independent variables

	SC	EE	E Envt.	IA	AES
SC	1				
EE	.271**				
E Envt.	.316**	-.003			
IA	.261**	.202*	.179		
AES	.302**	.248*	.195	.432**	1

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

SC- Self-Confidence, EE- Entr. Experience, E Envt. - Entr. Environment, IA- Infrastructure available, AES- Awareness on Entr. Support

The test of reliability of the scales that were used found that the Cronbach's alpha value for all the factors was above 0.60, except entrepreneurial experience (with the alpha 0.55). The probable reason of this is that most of the technical students look for a job carrier rather than consider entrepreneurial activities (Table 4).

Table 4. Reliability of the variables

Dimensions	Cronbach's ' α '
Self-Confidence (SC)	0.611
Entrepreneurial Experience (EE)	0.547
Entrepreneurial Environment (E Envt.)	0.784
Infrastructure available (IA)	0.603

The sampling adequacy test found significance with Chi-square 178.6 that explained 23.38% variance which is not due to chance cause. Kaiser-Meyer-Olkin measure of sampling adequacy

was found to be 0.613. Researcher accepts the validity measure through KMO and it is mediocre (Table 5).

Table 5. KMO sample adequacy acceptable values

KMO value	Sample Adequacy
1.00–0.90	Marvellous
0.89–0.80	Meritorious
0.79–0.70	Middling
0.69–0.60	Mediocre
0.59–0.50	Miserable
< 0.50	Unacceptable

Source: Kaiser (1974, cited in Dziuban and Shirkey 1974: 359)

DISCUSSION

In many instances the incubators fail to build the self-confidence among technical students. This leads to lack of entrepreneurial activities in the educational campus. Our results showed that students having high self-confidence will take up entrepreneurial career if there is a proper environment. In the same time with the self-confidence they would like to experience entrepreneurial process with the proper infrastructure. These self-confident technical students are aware of the university and institution collaborations with Alumni, banks, business organizations, venture capitalists. There is no proper entrepreneurial environment that could give entrepreneurial experience. This is evident from the results obtained where we observed negative correlation between the two.

The infrastructure provided by the Institute and University is influential when technical students would like to gain entrepreneurial experience by trial and error. It is evident from the result that they are aware of infrastructure but there is no dynamism on the part of gaining entrepreneurial experience. Both university initiatives and the leadership style are responsible of this stagnation.

Apart from gaining experience the environment should be conducive to promote entrepreneurial activities. Even though impressive infrastructures are built, it may not motivate the students to start an enterprise.

The University and Institute from time to time publish pamphlets, brochures and guide around infrastructural facilities available and this has broadened the awareness levels among students about the collaborative attempts made in the university campus.

CONCLUSION

This research has attempted to investigate the technical students' perception towards entrepreneurial support. The study was carried out by focusing on the dimensions like self-confidence and the entrepreneurial experience as independent variable against entrepreneurial environment, infrastructure and awareness as dependent variables.

This study has revealed that people with high self-confidence are aware of the entrepreneurial support and would like to experience entrepreneurship with a proper infrastructure. Moreover, this research has showed that the infrastructure provided by the University does not quite help the students to gain entrepreneurial experience. Furthermore, the researchers found that there should be more emphasis on the promotion of the entrepreneurial infrastructure.

IMPLICATIONS FOR FUTURE INITIATIVES

A structural equation modeling can be used to know the path coefficients and by adding moderators a complex model can be developed. Few more parameters like risk-taking abilities, energy levels, and financial awareness can be added as independent variables.

This study was conducted with a sample size of 100 and the sampling method was simple random sampling. The study could be replicated with a larger sample size that gives a true picture on a wider scale and the results can be generalized.

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