

**A STUDY ON THE ENTREPRENEURIAL TRAITS AND
ACHIEVEMENT MOTIVATION AMONG COLLEGE
STUDENTS IN THOOTHUKUDI DISTRICT**

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By

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DECLARATION

I **N. HARIPRAKASH** hereby declare that the thesis entitled “**A STUDY ON THE ENTREPRENEURIAL TRAITS AND ACHIEVEMENT MOTIVATION AMONG COLLEGE STUDENTS IN THOOTHUKUDI DISTRICT**” submitted by me for the Degree of Doctor of Philosophy in Commerce is the result of my original and independent research work carried out under the guidance of **Dr. LOURDES POOBALA RAYEN**, Associate Professor in Commerce in St. Xavier's College (Autonomous), Palayamkottai and it has not been submitted for the award of any degree, diploma, associateship, fellowship of any university or institution.

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LIST OF ABBREVIATIONS

AC	- Academic Challenge
AD	- Anno Domini
ADP	- Agriculture Development Programme
ATE	- Attitude Towards Education
ATT	- Attitude Towards Teachers
CAM	- Components of Achievement Motivation
CEI	- Carl and Entrepreneurship Index
CFA	- Confirmatory Factor Analysis
CIPET	- Central Institute of Plastics Engineering and Technology
CITRA	- Center for International Regulatory Assistance
CLRI	- Central Leather Research Institute
CSIR	- Council of Scientific and Industrial Research
DCMSME	- Development Commissioner for Micro, Small and Medium Enterprises
DIC	- District Industries Centers
EAC	- Entrepreneurship Awareness Camp
EDP	- Entrepreneurship Development Programmes
EEZ	- Exclusive Economic Zone
EFA	- Exploratory Factor Analysis
EPPS	- Edwards Personal Preference Schedule
ESDP	- Entrepreneurship cum Skill Development Programme
ET	- Entrepreneurial Trait
FCRI	- Fisheries College and Research Institute
FDP	- Faculty Development Programme
GDP	- Gross Domestic Product

GEM	- Global Entrepreneurship Monitor
GIS	- General Interests and Sports
HEI	- Higher Education Institution
IIE	- Indian Institute of Entrepreneurship
IOM	- Importance of Marks
ITI	- Industrial Training Institute
JPI	- Jackson Personality Index
KMO	- Kaiser-Mayer-Olkin
KVIC	- Khadi and Village Industries Commission
MSME	- Micro, Small and Medium Enterprise
MTWM	- Meaningfulness of Task and Work Method
NFA	- Need for Achievement
NIESBUD	- National Institute for Entrepreneurship and Small Business Development
NI-MSME	- National Institute for Micro, Small and Medium Enterprises
NISIET	- National Institute for Small Industries Extension Training
NSDC	- National Skill Development Corporation
OIS	- Occupational Interest Survey
PRF-E	- Personality Research Form-E
R&D	- Research and Development
SESEY	- Self-Employment Scheme for Educated Youth
SEZ	- Special Economic Zones
SHG	- Self Help Group
SIPCOT	- State Industries Promotion Corporation of Tamilnadu
SIV	- Survey of Interpersonal Values
SME	- Small and Medium Enterprises

SOAC	-	Score on Academic Challenge
SOAM	-	Score on Academic Motivation
SOATE	-	Score on Attitude Towards Education
SOATT	-	Score on Attitude Towards Teachers
SOET	-	Score of Entrepreneurial Trait
SOGIS	-	Score on General Interests and Sports
SOIOM	-	Score on Importance given to Marks
SOMTWM	-	Score on Meaningfulness of Task and Work Method
SONFA	-	Score on Need for Achievement
SSI	-	Small Scale Industries
TDS	-	Total Discriminant Score
TEDP	-	Technology Based Entrepreneurship Development Programme
WEDP	-	Women Entrepreneur Development Programme

CHAPTER - I

INTRODUCTION AND DESIGN OF THE STUDY

- 1.0 Introduction
- 1.1 Statement of the problem
- 1.2 Objectives of the study
- 1.3 Scope of the study
- 1.4 Operational definition of concepts
- 1.5 Study area
- 1.6 Period of study
- 1.7 Hypotheses
- 1.8 Methodology
- 1.9 Limitations of the present study
- 1.10 Scheme of report
- 1.11 Conclusion

CHAPTER - I

INTRODUCTION AND DESIGN OF THE STUDY

1.0 INTRODUCTION

Entrepreneurs are individuals who recognize opportunities where others see chaos or confusion. They are the aggressive catalysts for change within the market place. Entrepreneurship is more than the mere creation of business. The characteristics of seeking opportunities, taking risks beyond security and having tenacity to push an idea through reality combine into a special perspective that permeates entrepreneurs. India is currently one of the leaders in economic growth. India's economic growth is the result of the exploitation of opportunities by those individuals who have able to think beyond the traditional concept of a job or profession. The economic development largely depends on human resources. Again, human resources alone cannot produce economic development. It requires an agent who is nothing but a dynamic entrepreneur.

Entrepreneurship plays a crucial role in the growth of any society particularly in a fast developing country like India. The entrepreneur is an important agent in our society, who can be a catalyst of social and economic changes.¹ As a career, it can offer unlimited scope for development and diversity of choices. It is the only profession where there is absolutely no bar of any sort, be it age, sex, education or any other.²

The entrepreneur is one of the most important inputs in the economic development of a country or of regions within the country. Entrepreneurial competence makes all the difference in the rate of economic growth. Entrepreneurial talent exists in

¹ Patel V.G., "Entrepreneurs are Made Not Born", *Economic Times*, July 1990, p. 16.

² Nalinaksha Mutsuddi, "*You Too Can Become an Entrepreneur*", Wheeler Publishing, New Delhi, 1996, p.183.

all sections of the society. A high level of entrepreneurship is found in developed economy. Once it was considered that entrepreneurs are born and not made. Entrepreneurial talents can be developed by motivating people and making them capable of perceiving and exploiting business opportunities. Hence the entrepreneurs can be 'Made' by proper motivation and training. Realising the importance of entrepreneurship development the planners and policy makers have formulated Entrepreneurship Development Programmes (EDP) for various target groups of population in the country.

An entrepreneurial mindset can be developed in individuals. This mind set can be exhibited inside or outside an organization, in profit or not for profit enterprises, and in business or non business activities for the purpose of bringing forth creative ideas. Thus entrepreneurship is an integrated concept that permeates an individual's business in an innovative manner. It is this mindset that has revolutionized the way business is conducted at every level and in every country. Imitative entrepreneur has a vital role to play in developing countries. Innovative entrepreneurs are scarce in developing countries. To add fuel to fire, there is also a problem of scarcity of capital and skilled labour in the developing countries, which hinder innovative entrepreneurship. In this context, the imitative entrepreneur fills up this gap very admirably by simply imitating the technology, skill and techniques already developed by innovative entrepreneurs from the developed countries.

The role of entrepreneurship in economic development varies from economy to economy depending upon its material resources, industrial climate and the responsiveness of the political system to the entrepreneurial function. The entrepreneurs contribute more in favorable opportunity conditions than in the less

favorable opportunity conditions. Entrepreneurs are the prime movers of economy. They perform overall co-ordinating function of bringing together the factors of production, locating new ideas and putting them into effect. These casual people see things as opportunities for creative goal setting and putting events into motion. Institutions of higher learning play a vital role in developing entrepreneurship. An equally challenging role is that of instilling the traits that successful future entrepreneurs, intrapreneurs and managers must possess, including that of transferring / diffusing entrepreneurial knowledge and values to all of its constituents. A formal education with special emphasis on entrepreneurship can help to prepare a person to start a business. The entrepreneurial traits and values could be intensified through education system.

Thoothukudi district have numerous educational institutions, Polytechnic Colleges, Schools which provide quality education. There are eighteen arts and science colleges which produces nearly six thousand graduates every year. They have lot of opportunities in the district to become an entrepreneur but they are not focusing on this. Most of the students are preferring job instead of becoming an entrepreneur. As the entrepreneurship is playing a vital role in the economic development of a nation, initiatives needs to be taken to infuse the need for entrepreneurship in the minds of the students.

1.1 STATEMENT OF THE PROBLEM

Entrepreneurial development in a country accelerates industrial growth of a nation. Development of entrepreneur in a country contributes industrial growth. Industrial growth depends upon the growth of the young entrepreneurs in the country. But the involvement of the youngsters in entrepreneurship activities is very low.

Majority of the youngster are showing interest to grasp a job after their graduation. They are not ready to take risk to become entrepreneur. Today's youth are the tomorrows pillar stone of a nation. So the educated youth need to be motivated to take up this challenging task. Instead of searching for job the youth must become the job provider.

In India the institutes of higher learning produce approximately 3.1 million graduates every year. India currently has around 347 institutes of higher learning and 16,885 colleges with a total enrollment of over 9.9 million. These institutes produce around 495,000 technical graduates, nearly 2.3 million other graduates and over 3,00,000 post-graduates every year. Among this a majority are from Arts and Science Colleges. Out of that most of them are job seekers. In Tamil Nadu this case remains the same. The same trend prevails in the Thoothukudi district where the aspiration of the students is getting a good job and they are not ready to take risk to become a provider of job. Though Thoothukudi district is having a major port, the industrial scenario has not changed much. The District administration is also taking necessary steps to improve the industrial development. So there is an urgent need to encourage the younger generation to pursue entrepreneurship especially the college students.

Taking into account the need for industrial growth and the steps to be taken to encourage the freshers from the college to opt for entrepreneurship as the career, the researcher wish to study the entrepreneurial traits and achievement motivation of the college students. This study will give an insight in to the entrepreneurial traits and achievement motivation among the arts and science college students. The research findings will help the planners and policy makers to do the necessary to promote entrepreneurial acumen among the college students.

1.2 OBJECTIVES OF THE STUDY

The study has the following objectives.

1. To study the socio economic background of the final year college students.
2. To ascertain the entrepreneurial traits among the final year college students.
3. To analyses the factors leading to entrepreneurial traits.
4. To examine the achievement motivation of the final year college students.
5. To assess the entrepreneurial motivation of the final year college students.
6. To study the relationship between the profile variables and the entrepreneurial traits of the college students.
7. To examine association between factors leading to entrepreneurial traits and entrepreneurial motivation.

1.3 SCOPE OF THE STUDY

The main aim of the study is to assess the entrepreneurial traits and achievement motivation of college students in Thoothukudi district. This study was conducted among the outgoing under graduate arts and science college students of Thoothukudi district. The study also examines the factors leading to entrepreneurial traits, relationship between the profile variables and the entrepreneurial traits of the college

students. Moreover, the study also examines the association between factors leading to entrepreneurial traits and entrepreneurial motivation.

1.4 OPERATIONAL DEFINITION OF CONCEPTS

Entrepreneurship

Entrepreneurship is the purposeful activity of an individual or a group of associated individuals, undertaken to initiate, maintain or aggrandize profit by production or distribution of goods and services.

Motivation

Motivation refers to the way in which urges, drives, desires, striving, aspirations or needs direct, control or explain the behavior of human being.

Achievement Motivation

The need for achievement plays an important role in making an entrepreneur as successful. It is an inner spirit that activates an entrepreneur to strive for success. The need for achievement is the desire to do well.

Entrepreneurial Traits

The possession of certain knowledge, skill or personality profile is called entrepreneurial competencies or traits. In other words the underlying characteristics possessed by an entrepreneur which result in superior performance are called entrepreneurial traits.

1.5 STUDY AREA

Thoothukudi district was purposively selected for this study for many reasons. Thoothukudi being the port town more number of opportunities are available for the business people to thrive and succeed. Moreover, industries are also concentrated in Thoothukudi. This throws a lot of opportunities for the prospective entrepreneurs to step in to the business. Considering entrepreneurial potentials of the district, the researcher wish to study the entrepreneurial traits and achievement motivation among college students.

1.6 PERIOD OF STUDY

The primary data relevant to the study was collected from June 2012 to April 2013 from the final year undergraduate students of arts and science colleges in Thoothukudi district.

1.7 HYPOTHESES

The following hypotheses are framed by the researcher and it will be tested using appropriate statistical tools to draw inferences.

- There is no significant difference in factors leading to entrepreneurial traits and profile variables.
- There is no significant relationship between factors leading to entrepreneurial traits and entrepreneurial traits.
- There is no significant relationship between factors leading to entrepreneurial traits and achievement motivation.

- There is no association between profile of the students and their level of achievement motivation.
- There is no relationship between components of achievement motivation and entrepreneurial traits.
- There is no association between profiles of the students and their level of entrepreneurial motivation.
- There is no relationship between entrepreneurial traits and achievement motivation.
- There is no relationship between achievement motivation and entrepreneurial motivation.

1.8 METHODOLOGY

The present study was based on both primary and secondary data. Interview schedule was used to collect the primary data from the sample respondents. A well structured interview schedule was prepared after consulting the experts in the field. Before finalizing the interview schedule, a pilot study was made and with that response, final interview schedule was prepared to collect the information required for the study. The relevant secondary data were collected from the books, journals, magazines, and published materials. The information available in the website was also collected for the study.

1.8.1 Sampling

The study attempts to measure the entrepreneurial traits and achievement motivation of college students in Thoothukudi district. Hence it is decided to select sample respondents from final year undergraduate students of arts and science colleges

in Thoothukudi district. Stratified proportionate random sampling method was used to select the sample respondents from the population. The arts and science colleges were stratified in to three categories such as urban, semi-urban and rural on the basis of place where the college is situated. From among the final year undergraduate arts and science students ten per cent of the students were selected from each category at random as detailed in Table 1.1.

Table 1.1

Place of College wise stratification

S.No	Place of College	Final year undergraduate Arts and Science students	Sample Respondents
1	Urban	1,484	148
2	Semi-urban	2,942	294
3	Rural	1,340	134
	Total	5,766	576

1.8.2 Plan of Analysis

The collected data were classified and grouped according to the purpose for which it was collected. Necessary tables were prepared and the tabulated data were analysed with the help of appropriate following statistical tools exploratory factor analysis, confirmatory factor analysis, analysis of variance, multiple regression and discriminant analysis to interpret the data to arrive at relevant inferences.

Exploratory factor analysis

Factor analysis is a very useful method of reducing data complexity by reducing the number of variables being studied. It is a good way of resolving the confusion and identifying latent or underlying factors from an array of seemingly important variables.

Exploratory factor analysis is used to analyse the factors leading to entrepreneurial traits among the college students. The validity of data for EFA have been tested with the help of Kaiser - Meyer - Olkin measure of sampling adequacy and Bartlett's test of sphericity.

In order to narrate the important components of entrepreneurial motivation, variables in entrepreneurial motivation have been included for Exploratory Factor Analysis. The validity of data for EFA is tested with the help of KMO measure of sampling adequacy and Bartlett's test of sphericity.

Confirmatory factor analysis

The Confirmatory Factor Analysis is one of the multivariate statistical tools which is applied to confirm the extracted variables in the factor which explains the factor in a reliable manner or not. It explains the reliability and validity of variables in each construct developed in the present study. The content validity, convergent validity and discriminant validity have been tested through the Confirmatory Factor Analysis.

In the present study, the CFA has been administered to examine the reliability and the validity of variables related to entrepreneurial traits, achievement motivation and entrepreneurial motivation.

The score of variables in entrepreneurial traits have been included for confirmatory factor analysis in order to examine the reliability and validity of variables in entrepreneurial traits. The overall reliability of variable in entrepreneurial traits has been estimated with the help of Cronbach alpha.

Analysis of Variance

The one way analysis of variance has been administrated to find the significant differences existing among the three or more sample groups in relation to a variable. The total variance in a set of data is divided into variation within groups and variation between groups.

In this study analysis of variance has been administered to find out the significant difference among urban, semi-urban and rural students regarding their entrepreneurial traits, achievement motivation and entrepreneurial motivation.

The analysis of variance has also been used to find out the association between the profile of the respondents and level of entrepreneurial traits, level of achievement motivation and entrepreneurial motivation.

The association between the profile of the respondents and their level of entrepreneurial traits has been estimated with the help of one way analysis of variance.

The achievement motivation has been measured with the help of variables under eight dimensions. The one way analysis of variance has been executed to find out the significant difference among the urban, semi-urban and rural college students towards each dimension.

The one way analysis of variance has been executed to examine the significant difference among the three groups of students regarding their views relating to entrepreneurial motivation.

Multiple Regression analysis

Multiple regression analysis has been administrated to find out the impact of factors leading to entrepreneurial traits on the level of entrepreneurial traits.

The fitted regression model is:

$$y = a + b_1 X_1 + b_2 X_2 + \dots + b_{12} X_{12} + e$$

Whereas y – score on entrepreneurial traits among the students

X_1	-	Score on coordination among the students
X_2	-	Score on innovativeness among the students
X_3	-	Score on optimism among the students
X_4	-	Score on informativeness among the students
X_5	-	Score on decision making among the students
X_6	-	Score on hard work among the students
X_7	-	Score on problem solving among the students
X_8	-	Score on confidence among the students
X_9	-	Score on enterprising among the students
X_{10}	-	Score on punctuality among the students
X_{11}	-	Score on sincerity among the students
X_{12}	-	Score on forecasting ability among the students
b_1, b_2, \dots, b_{12}	-	Regression coefficient of independent variables
a	-	intercept and
e	-	error term

Multiple regression analysis has also been administrated to find out the impact of achievement motivation on the entrepreneurial traits, the impact of factors leading to

entrepreneurial traits on the entrepreneurial motivation and the impact of achievement motivation on entrepreneurial motivation.

Discriminant analysis

The discriminant analysis has been applied to study the important discriminant factors regarding entrepreneurial traits, achievement motivation and entrepreneurial motivation among urban, semi-urban and rural college students.

The Discriminant factors leading to entrepreneurial traits, achievement motivation and entrepreneurial motivation among the urban, semi-urban and rural respondents has been examined with its statistical significance. The discriminant power of factor has been estimated with the help of wilks lambda.

1.9 LIMITATIONS OF THE PRESENT STUDY

The present study is subjected with the following limitation.

1. The sample size of the study is arbitrarily assigned as ten per cent of the total population.
2. The scope of the study is limited to Thoothukudi district only. Further the scope is confined to undergraduate arts and science college students only.
3. The present study on the entrepreneurial traits and achievement motivation is based on the data collected from the sample respondents.

1.10 SCHEME OF REPORT

The present study on entrepreneurial traits and achievement motivation among college students in Thoothukudi District is presented in seven chapters as detailed below.

The first chapter deals with the design of the study. This chapter includes statement of the problem, scope of the study, objectives of the study, hypotheses, methodology, plan of analysis, limitations of the study and chapter scheme.

The second chapter presents the review of literature. Reviews of previous studies organized according to topics of importance in the chronological order have been presented in this chapter.

The third chapter gives the profile of the study area. The study area is Thoothukudi district. This chapter gives information about the history of Thoothukudi district and the entrepreneurial opportunities which are available in the district.

The fourth chapter deals with the socio economic background of the students and their entrepreneurial traits. All the information relating to socio-economic conditions of the undergraduate students of arts and science colleges were classified and grouped on the basis of the location of the college like urban, semi-urban and rural.

The fifth chapter deals with the analysis of achievement motivation and entrepreneurial traits among undergraduate students of arts and science colleges in Thoothukudi district.

The sixth chapter deals with entrepreneurial motivation and its determinants among urban, semi-urban and rural undergraduate students of arts and science colleges in Thoothukudi district.

The seventh chapter highlights the summary of findings and suggestions based on the analysis and interpretation of the study.

1.11 CONCLUSION

The design of the study helped the researcher to draw the detailed plan or outline for the research work to be conducted. The objectives of the study shows the action plan and the direction of the study. This chapter also gives information about the tool to be used for the data collection, the sampling methods and the size of the sample, the plan of analysis and the limitations of the study.

CHAPTER - II

REVIEW OF LITERATURE

- 2.0 Introduction
- 2.1 Entrepreneurial traits
- 2.2 Factors influencing entrepreneurship
- 2.3 Achievement motivation
- 2.4 Entrepreneurial motivation
- 2.5 Conclusion

CHAPTER - II

REVIEW OF LITERATURE

2.0 INTRODUCTION

Review of literature paves the way for a clear understanding of the areas of research already undertaken and throws a light on the potential areas which are yet to be covered. Keeping this fact in mind, an attempt has been made to make a brief survey of the previous works undertaken in the related field of the present study.

For any research, the survey of related literature is of utmost importance because it throws light on the issues relating to the study. It helps the researcher for a well conceived and planned approach in conducting the study. A review of literature relevant to study has been presented in this chapter and it covers earlier research studies relating to entrepreneurial traits and other related aspects of the entrepreneurial development.

2.1 ENTREPRENEURIAL TRAITS

Dunhof¹ (1949) found that at the initial stage of economic development, entrepreneurship had less initiative and drive but as economic development preceded it became more innovative and enthusiastic.

Hazlehurst L.W² (1966) compared two native trading castes (Agarwal Banias and Suds) with two refugee castes from Pakistan (Khatris and Aroras). He found that

¹ Donh of Clarence, *Observations on Entrepreneurship in Agriculture*, In Arthur Cole (Ed.) Change and the Entrepreneur, Harvard University Press, 1949, pp.22-24.

² Hazlehurst L.W, *Entrepreneurship and the Merchant Castes in Punjab City*, Monograph and Occasional Paper Series, no.1, Duke University Press, Durham, 1966.

the caste traders achieved more than the refugees, since they had both willingness and ability to adjust to changing conditions.

Hornaday J.A. and Bunker C.S³ (1970) conducted a study to identify and measure the personal traits of a successful entrepreneur. To develop an instrument for the study, twenty entrepreneurs were interviewed individually. Background information of these entrepreneurs was obtained through these interviews. To determine what traits these entrepreneurs believed were essential for the successful start-up of a business, a self-rating scale of twenty one personality traits and a series of questions were used. This information was formulated into an interview guide sheet. In addition, three objective tests also were utilized to determine personality and motivational traits of entrepreneurs: Occupational Interest Survey (OIS), Edwards Personal Preference Schedule (EPPS), and Survey of Interpersonal Values (SIV). They administered the five-point Likert scale survey of traits to entrepreneurs. The traits the entrepreneurs rated were risk-taking, leadership effectiveness, ability to relate effectively to others, physical health, desire for money, innovation, and accuracy in perceiving reality.

Das T.K and Bing Sheng Teng⁴ (1977) stated that risk and risk behavior form an important segment of the entrepreneurship literature. Entrepreneurial risk behaviour has been studied with both trait and cognitive approaches, but the findings do not adequately explain either how entrepreneurs differ from non-entrepreneurs, or how different types of entrepreneurs can be specified in terms of their risk behavior. This paper is an attempt to address these issues by introducing two temporal attributes that we consider significant for understanding risk behaviour, given that risk is inherently

³ Hornaday J.A and Bunker C.S, "The Nature of the Entrepreneur", *Personnel Psychology*, 23, 1970, pp. 47-54.

⁴ Das T.K and Bing-Sheng Teng, "Time and Entrepreneurial Risk Behavior", *Winter*, 1042- 2587, 1977, pp. 69-88.

embedded in time. First, we suggest the notion of risk horizon, differentiating short-range risk from long-range risk. Second, we examine the risk behavior of entrepreneurs in terms of their individual future orientation, in tandem with their risk propensity. We propose a temporal frame work that seeks to explain, at once, the different types of risk behavior among entrepreneurs as well as the distinction between entrepreneurs and non-entrepreneurs. The framework is also applied to networking and alliancing activities of entrepreneurs. Finally, a number of propositions are developed to facilitate empirical testing of the insights implicit in the temporal framework of entrepreneurial risk behavior.

Brockhaus R.H⁵ (1980) concluded that the risk taking propensities of entrepreneurs were not significantly distinguishable from managers or the population in general. Risk-taking propensity cannot easily be measured as it has several dimensions. Although much of the risk-taking propensity one has is predisposed, there are environmental factors that can alter one's perception of a risk situation. For example, the amount of uncertainty one perceives in a decision-making environment affects the degree of risk the decision maker will take.

Brockhaus R.A⁶ (1982) determined that risk-taking in varying degrees was indicative of entrepreneurs. He indicated that when there is greatest uncertainty of the outcome of a situation, performance level should be the greatest. He studied the risk-taking propensity of entrepreneurs and managers. He found no significant difference in risk-taking between the two groups. He concluded that both entrepreneurs and managers were moderate risk-takers. However, Brockhaus concluded that both

⁵ Brockhaus R.H, "Risk-taking Propensity of Entrepreneurs", *Academy of Management Journal*, 3, September 1980, pp.509-520.

⁶ Brockhaus R.A, "*The Psychology of Entrepreneurs*" in C.A. Kent, D.L. Sexton and K.H. Vesper (Eds). *Encyclopedia of Entrepreneurship*, New Jersey: Prentice Hall Inc., 1982, pp.39-57.

compared the entire range of scores he obtained with the scores from Kogan and Wallach's study of the risk-taking propensity of the general population. The study found no distinguishable difference in risk-taking scores among the three groups. Therefore, Brockhaus concluded that there was no risk-taking difference in entrepreneurs, managers, and the general population.

Thangamuthu and Iyyam Pillai⁷ (1983) stated that the new generation of entrepreneurship had gained very little from their own family background. Particularly education and occupational attainments of their parents had not contributed much to their entrepreneurial achievements. The extended family relations and caste connections had however facilitated the emergence of entrepreneurs and concentration of entrepreneurship within certain caste groups.

Donald L. Sexton and Nancy B. Bowman⁸ (1983) administered the Jackson Personality Inventory, personality research Form-E, Kogan and Wallach choice Dilemmas questionnaire, and the Williams work values inventory to 401 students majoring in entrepreneurship and other areas to identify psychological characteristics, risk-taking propensity and work values. A comparative analysis of the data indicated that the characteristics normally associated with entrepreneurs were significantly different between entrepreneurship major (Budding entrepreneurs) and other students on eleven of the 35 personality scales and on three work values. Significant differences were found in the risk-taking personality scale of the Jackson personality inventory but

⁷ Thangamuthu C and Iyyampillai, "A Social Profile Entrepreneurship", *The Indian Economic Journal*, October, Vol.31, No.3, December 1983, p.107.

⁸ Donald L. Sexton and Nancy B. Bowman, "*Comparative Entrepreneurship Characteristics of Students: Preliminary Results*", Frontiers of Entrepreneurship Research, Proceedings of the Babson College Conference on Entrepreneurship, Babson College, Wellesley, Massachusetts, 1983, pp.213-225.

not on risk taking propensity as measured by the choice dilemmas questionnaire. Achievement was not found to be a statistically significant value.

Bhattacharya S.N⁹ (1983) studied the industrial and agricultural entrepreneurs of South East Asian countries, namely Brunei, Cambodia, Indonesia, India, Laos, Malaysia, North Vietnam, Singapore, South Vietnam, Philippines and Thailand. He developed a model of entrepreneurial development for these countries. However he opined that the model itself would not work miracles unless followed by a sustained herculean effort to solve the numerous gigantic and deep-rooted problems.

Donald L. Sexton and Nancy B. Bowman¹⁰ (1984) presented results of a validation study of modified Jackson personality index (JPI) and personality research form-E (PRF-E) tests designed to measure nine psychological characteristics which previous research has found to discriminate students majoring in entrepreneurship from other students majoring in the more functional business areas and from students majoring in non-business areas. The modified test was administered to 43 entrepreneurship majors, 41 business majors in areas other than entrepreneurship and to 51 non-business majors. Statistical techniques consisting of a multivariate analysis of differences between group means and two multiple comparison tests; Scheffe's multiple comparison procedure and Bonferroni's t-test of differences at a alpha level of 0.05, showed significant differences occurred in the means of the nine variables measured. It was demonstrated that the reliability and validity of the modified JPI/PRF-

⁹ Bhattacharya S.N, *Entrepreneurship Development in India and South East Asian Countries*, Metropolitan Book Co. (P) Ltd., New Delhi, 1983, p.113.

¹⁰ Donald L. Sexton and Nancy B. Bowman, "*Personality Inventory for Potential Entrepreneurs: Evaluation of a modified UPI/PRE-E test instrument*", *Frontiers of Entrepreneurship Research, Proceedings of the Babson College Conference on Entrepreneurship, Entrepreneurial Studies*, Babson College, Wellesley, Massachusetts, 1984, pp.513-528.

E tests were not adversely affected by reducing the variables measured and combining the tests.

Subhi Reddi and Shoba Reddi¹¹ (1985) stated that the reasons for their high success were having attained the age of 50 years, moving technical education from the agricultural background, holding investment more than ₹10 lakhs with previous experience in service and adopting a limited company type of ownership.

Rao¹² (1986) stated that most of the entrepreneurs started their enterprises on their own initiative and were motivated by their familiarity with the industry, and expectation of high profits which guided them in choosing their particular line of manufacture.

McClelland¹³ (1986) enlisted the assistance of McBer and Company to develop an instrument which would measure an individual's need for achievement. After refining the instrument, it was administered to many individuals, particularly in countries economically deprived. McClelland found that individuals could be trained to develop a high need for achievement. If such courses included an experimental component, McClelland found that performance of these small businesses also improved significantly. These findings led McClelland to seek the answer to if, or what, traits are common to successful entrepreneurs. Once again, he worked with McBer to develop an Instrument which would determine if successful entrepreneurs possessed more key traits for success than average entrepreneurs. The research revealed that successful entrepreneurs were more proactive, achievement oriented, and

¹¹ Subhi Reddi and Shoba Reddi, "Successful Entrepreneurship", *A Study of Productivity*, 1985, Vol.XXVI, No.1.

¹² Rao, *Entrepreneurship: Reflections and Investigations*, Chug Publications, Allahabad, 1986, p.16.

¹³ McClelland, "Characteristics of Successful Entrepreneurs", *The Journal of the Creative Behavior*, Vol.21, No.3, 1986. pp.219-233.

committed to others than average entrepreneurs. In addition, both sets of entrepreneurs were found to possess the following traits at the same level: self-confidence, persistence, and persuasion, use of influence strategies, expertise, and information seeking. The study did have its limitations. One limitation, which is pertinent to this study, was that no non-entrepreneur was studied. Therefore, it could be possible that all of the competencies were more characteristic of entrepreneurs than non-entrepreneurs. In addition, the instruments developed by McClelland and McBer needed to be administered, interpreted, and evaluated by psychologists because the results were difficult for a layman to interpret.

John D. Van Slooten *et.al*,¹⁴ (1986) surveyed the collegiate entrepreneurs regarding their characteristics and the characteristics of their ventures. The student characteristics studied were individual demographic data, personality measures, responses prior business and entrepreneurial experience, effect on school work, and future plans. The venture characteristics studied were reasons for starting, source of ideas, objectives and goals, type of venture, strategies and overall performance.

Medha Dubhasi Vinze¹⁵ (1987) stated that women in general faced many difficulties, whenever and wherever they attempted to compete with one another. New ground they were ridiculed and discouraged. As they moved into the modern economic sector women encountered barriers of tradition and prejudice, which too often diminished the productive impact, they should have on national development. In most third world countries women were still struggling against many obstacles in-built in their social status. They had shown a great deal of initiative, persistence and tenacity,

¹⁴ John D. Van Slooten, Robert Layne Hild and H. Keith Hunt, “*Frontiers of Entrepreneurship Research*”, Proceedings of the Babson College Conference on Entrepreneurship, Entrepreneurial Studies, Babson College, Wellesley, Massachusetts, 1986, pp.52-63.

¹⁵ Medha Dubhasi Vinze, “*Women Entrepreneurs in India*”, Mittal Publications, New Delhi, 1987.

which were essential qualities of entrepreneurs. Women's education should be promoted and only then one could think of a variety of opportunities of employment welfare of the family.

Robert F. Scherer *et.al*,¹⁶ (1991) assessed on relationships between personality variables and entrepreneurial career preference variables. Promoter and entrepreneurial career preference were complementary for individuals with a wand perceived to be a high performer. An inverse relationship between personality and entrepreneurial career preference was observed for both individuals with a parent entrepreneur around to be a low performer and those without a parent entrepreneur.

Sharma D.D *et.al*,¹⁷ (1994) has made an attempt to identify a list of entrepreneurial traits which are desirable in the potential entrepreneurs amongst polytechnic students. A relationship has been established between socio-economic background and presence of entrepreneurial traits in polytechnic students of different background. It has been found that degree of potential for entrepreneurial career vary from one given demographic profile to another. Thus, the study leads to conclude that a specific target group of potential entrepreneurs exists in the polytechnics and needs special training in entrepreneurship and management. An entrepreneurial culture in polytechnic system of education can be inculcated in social-economic background of the students vis-à-vis entrepreneurial traits are systematically analysed.

¹⁶ Robert F. Scherer, James D. Brodzinski and Frank A. Wiebe, "*Examining the Relationship Between Personality Entrepreneurial Career Preference*", Entrepreneurship and Regional Development, 3, 1991, pp.195-206.

¹⁷ Sharma D.D, Singla S.K and Prof. Saini J.S, "*Application of Demographic Profile and Entrepreneurial Traits in identification of Potential Entrepreneurs*" paper presented in National Seminar on Current Research in Indian Entrepreneurship, Entrepreneurship Development Institute of India, Ahmedabad, 1994, pp. 1-13.

Aurora C. Barcelona and Abelardo C. Valida¹⁸ attempted to establish the profile and entrepreneurial potentials of eight hundred randomly selected, senior students of the UUM, who were enrolled during the school year 1991-1992 and attempted to analyse the inter-relationships among them. It was hypothesized that there were no significant relationships between the student's personal variables and their mean entrepreneurial character traits ratings. A set of Questionnaire made up to two parts, namely: Respondents Profile and Character Traits of Potential Entrepreneurs, was used. The latter part of the instrument has been employed in at least four other prior research studies. The findings show that the subjects exhibited "medium" entrepreneurial character trait ratings, except for knowledge ability which was reported to be "low". A good number of significant linear relationships or associations were found between the personal variables and the character trait ratings. The significant relationships identified can help educational strategy and services at the UUM. The study is anchored upon a firm belief that entrepreneurial development, a major challenge facing Institutions of Higher Learning, especially among developing countries, will ultimately be the major means towards achieving quality and productivity by effectively minimizing the problem of social economic inequality.

Pillai. J¹⁹ (1995) pointed out that empowerment is not something which could be bought, sold or given away. According to her it is women who must empower themselves if they are to attain rural development. The total development includes development in political, economic, social, cultural and other dimensions of human life as also the physical, moral, intellectual and cultural growth of the human person.

¹⁸ <http://mgu.mim.epu.my.com>

¹⁹ Pillai J, "*Women Empowerment*", Gyan Publishing House, New Delhi, 1995, pp.3-6.

Hian Chye Koh²⁰ (1996) analysed the hypothesis of entrepreneurial characteristics. In particular, the study investigates if entrepreneurial inclination is significantly associated with the psychological characteristics of need for achievement, locus of control, propensity to take risk, tolerance of ambiguity self-confidence and innovativeness. T-test results and logit analysis at a 0.05 level of significance indicate that those who are with entrepreneurial inclination have greater innovativeness, more tolerance of ambiguity and higher propensity to take risk, as compared to those who are not entrepreneurially inclined. The logit model has an overall holdout accuracy rate of 87.04 per cent.

Nalinaksha Mutsuddi²¹ (1996) stated that by nature, women were endowed with certain qualities found favourable for the growth of entrepreneurship. They possessed the inherent gift to motivate others by raising their self worth and self-esteem, making them feels important. This affability and helpful nature brought out the best in others without hurting their age or creating any tension or conflict. By encouraging active participation and sharing power and information, women could contribute better performance and higher productivity. Women skillfully integrated professional life with family life.

Hyrsky *et.al.*²² (1999) in his study centers on innovativeness and risk- taking. These two personality traits are among the most distinctive entrepreneurial characteristics. They provide a good starting point for a comparison of entrepreneurial behavior between the Finnish and the U.S entrepreneurs and small business owners.

²⁰ Hian Chye Koh, "Testing hypothesis of entrepreneurial characteristics a study of Hong Kong MBA students", *Journal of Managerial Psychology*, Vol. 10, No.3, 1996, pp.12-25.

²¹ Nalinaksha Mutsuddi, "*You too Can Become an Entrepreneur*", Wheeler Publishing, New Delhi, 1996.

²² Hyrsky, Kimmo and Tuunanen, Mika, "*Innovativeness and Risk-Taking Propensity: A Cross-Cultural Study of Finnish and the U.S. Entrepreneurs and Small Business Owners*", *Leiketaloudelliness Aikkauskirja*, 48(3), 1999, pp.238-56.

The Carl and Entrepreneurship Index (CEI) was employed to measure the varying degrees of innovativeness and risk-taking displayed by the Finnish and the U.S entrepreneurs and small business owners. The Americans (N=456) had greater risk-taking propensity than the Finns (N=434) who tended to be more conservative and the risk-averse. Americans also exhibited slightly higher levels of innovation. Regarding gender, in the combined Finnish and U.S sample, the females had higher levels of innovation preference than the males. Meanwhile, the male respondents scored significantly higher on risk-taking. In both countries respondents with detailed business plans had much higher risk-taking propensity and preference for innovation than those with no detailed plans. Finally, profit and growth oriented informants in both countries scored higher on both scales compared to those oriented to earning family income.

Hannu Littunen²³ (2000) examined the characteristics of the entrepreneurial personality and the effects of changes in the entrepreneur's personal relationships. According to the empirical findings, becoming an entrepreneur and acting as an entrepreneur are both aspects of the entrepreneur's learning process, which in turn has an effect on the personality characteristic of the entrepreneur. The entrepreneur's drive to solve problems (equal to mastery) had increased, and control by powerful others decreased since the start-up phase. Change in the entrepreneur's relations with others is also observed to have an effect on the entrepreneur's personality characteristics. The empirical findings also show that as the number of co-operative partners decreased, control by powerful others also decreased, and that, since the start-up phase, entrepreneurs whose personal relations had increased also showed a clear increase in mastery.

²³ Hannu Littunen, "Entrepreneurship and the Characteristics of the Entrepreneurial Personality", *International Journal of Entrepreneurial Behaviour and Research*, Vol.6, No.6, 2000, pp.295-309.

Hein Erasmus and Pieter S. Nel²⁴ (2001) stated that most of the individuals were born with some degree of entrepreneurial ability but without the necessary confidence, they would not pursue careers as entrepreneurs. The findings of the research further affirmed that individuals needed to learn practical skills that would give them the confidence to pursue entrepreneurial careers.

Nirmala Mary²⁵ (2001) considered ten entrepreneurial traits for her analysis namely innovation, perseverance and hardwork, leadership and motivation ability, need for achievement, risk-taking ability, decision-making, planning, foresight and problem solving, information seeking and receiving feedback, inter-personal skills and positive self-concept. She analysed these traits framing ten variables under each trait. She found that the branches of study influenced the level of entrepreneurial traits like Risk-taking ability and decision-making. Irrespective of the branch of study the major numbers of respondents were associated with a medium level of entrepreneurial traits, showing that they needed motivation to become successful entrepreneurs. She also found that there was no significant relationship between both parental occupation and the level of entrepreneurial traits. She also stated that the various branches of study offered by colleges had failed to provide entrepreneurial skills to students who wanted to become entrepreneurs.

Shelley Van Eeden²⁶ (2003) formulated the aim of the research as to learn more about the entrepreneurial traits of undergraduate Commerce students at selected tertiary institutions in each of the following countries, namely South Africa, the United States of America and the Netherlands. The objective of this research are to report on

²⁴ www.usfca.edu/sobam/nvc/conf/proceedings.html

²⁵ Nirmala Mary, *“Assessment of Entrepreneurial Skills among Women College Students in Madurai City”*, Unpublished PhD Thesis submitted to Madurai Kamaraj University, Madurai, 2001

²⁶ www.upe.ac.za.

the levels of students entrepreneurial traits in the different countries and to establish whether significant differences exist between the countries with regard to the level of entrepreneurial traits of students. Inferential statistical analysis (ANOVA) was conducted to establish whether significant differences existed between the countries with regard to the level of entrepreneurial traits of students. It appears that undergraduate students from the United States score higher on most of the entrepreneurial traits investigated than the students from the other two countries. The Dutch students, on the other hand, scored the lowest on most of the traits investigated. Significant differences were found between countries with regard to all the entrepreneurial traits investigated. These findings provide important of a trait in one country could provide the answer as to how to develop them in another.

Sergio Postigo *et.al*,²⁷ (2003), found that there is a growing consensus that in the ‘information society’ education is one of the key factors for the emergence of new firms and their development prospects. In this context, new ventures set up by graduates to play a critical role especially for the emergence of knowledge and technology-based firms. The main aim of the paper is to analyze the influence of different contexts- developed and developing countries- on: a) the image that students have about entrepreneurs; b) the influence of social background on the motivation to become an entrepreneur; c) the perception about what positive or negative factors affect the creation of new ventures. The countries analyzed are Argentina (San Andres University) and Italy (Universita Politecnica della Marche). Overall there are more similarities than differences between Argentinian and Italian students in their perception of entrepreneurship and in their attitude to setting up their own firms.

²⁷ Sergio Postigo, Donato Lacobucci and Maria Fernanda Tamborini, “*Undergraduate Students as a Source of Potential Entrepreneurs: A Comparative Study between Italy and Argentina*”, paper presented at the 13th Global Inter- Internationalizing Conference, Grenoble, France, September 8-10, 2003.

However, the social background of the students plays a major role. Although this can be considered a preliminary study, it offers interesting indications for the design of entrepreneurship programme for university students.

David F. Llewellyn and Kerry M. Wilson²⁸ (2003) stated that the usefulness of personality traits in the explanation and prediction of entrepreneurship is critically evaluated, and both contemporary theory and existing empirical findings are reviewed, emphasizing the need for conceptual clarity and methodological reform. Detailed recommendations for future research are outlined, and this critique is complemented by a detailed case study of a practical research design drawn from an ongoing project. Taken together, these provide a powerful illustration of how abstract principles can be used to inform research practices and the underlying message emanating from this evolving body of knowledge can be used enrich teaching materials and educational activities.

Louw. L *et.al.*,²⁹ (2003) stated that developments in the global and national economies as well as the labor market have made it necessary that more attention be paid to entrepreneurship and the updating of curricula presented by tertiary institutions. For this purpose reliable and valid information is required. The primary objectives of this article are to report on the levels of student's entrepreneurial traits, to establish whether these traits are interrelated, and to determine the extent of the impact that demographic variables have on these entrepreneurial traits. A convenience sampling method (n= 1,215) was used. The best developed entrepreneurial traits observed included: "Competing against self-imposed standards", "Self-confidence" and "Dealing

²⁸ David F. Llewellyn and Kerry M. Wilson, "The Controversial Role of Personality Traits in Entrepreneurial Psychology", *Emerald*, Vol.45, No.6, 2003, pp.241-345.

²⁹ Louw L, Van Eden S.M and Bosch J.K, "Entrepreneurial Traits of Undergraduate Students at Selected South African Tertiary Institutions" *International Journal of Entrepreneurial Behaviour and Research*, Vol.9, No.1, 2003, pp.5-26.

with Failure”. Statistically significant relationships were also identified between the entrepreneurial traits of students and the tertiary institution attended, and student gender, race and age.

Stephen L. Muller³⁰ (2004) measured the differences between men and women with respect to traits associated with the potential for undertaking entrepreneurial activities to determine whether gender “gaps” in these traits vary across countries and cultures. In this seventeen-country study, the male-female gap in internal locus of control orientation was found to be negatively correlated with Hofstede’s masculinity dimension of culture. The gender gap in risk-taking propensity was positively correlated with the individualism dimension of culture and negatively correlated with the uncertainty avoidance dimension of culture. Gender gaps in entrepreneurial traits were greatest among advanced economies and least among the less developed economies.

Robert Baum J. and Edwin A. Locke³¹ (2004) found that previous research on entrepreneurship as well as goal, social-cognitive, and leadership theories has guided hypothesis regarding the relationship between entrepreneurial traits and skill (passion, tenacity, and new resource skill) and situationally specific motivation (communicated vision, self-efficacy, and goals) to subsequent venture growth. Data from 229 entrepreneur- chief executive officers and 106 associates in a single industry were obtained in a 6-year longitudinal study. Structural equation modeling revealed a web of relationships that impact venture growth. Goals, self-efficacy, and communicated vision had direct effects on venture growth, and these factors mediated

³⁰ Stephen L. Muller, “Gender Gaps in Potential for Entrepreneurship Across Countries and Cultures”, *Journal of Developmental Entrepreneurship*, Vol. 9, No.3, December 2004, pp.199-220.

³¹ Robert Baum J and Edwin A. Locke, “The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth”, *Journal of Applied Psychology*, Vol.89, No.4, 2004, pp.587-598.

the effects of passion, tenacity, and new resource skill on subsequent growth. Furthermore, communicated visions and self-efficacy were related to goals, and tenacity was related to new resource skill.

Chawala A.S and Albert Butare³² (2005) stated that the development of entrepreneurship is essential both for solving the problems of unemployment and for industrial development and balanced regional development. Most of the developing countries have, of late, adopted a deliberate policy of developing and encouraging small entrepreneurs as a strategy for the overall development. Entrepreneurship development is a human resource development process which deals with the human motivation, skills, competence, social and economic risks and investment of financial and physical resources of the individual and the State. It is crucial for industrial development and for alleviating the problem of unemployment which is attaining alarming proportions all over the world. It is often felt that in the developing countries educated persons do not seek entrepreneurial options but prefer government or private jobs. Thus, entrepreneurship gets a lower priority in the career plans of educated youth. Though everyone is not expected to become an entrepreneur, yet experience of the last few decades all over the world clearly shows that it is possible to develop entrepreneurship through planned efforts.

Maryam Sharifzadeh³³ (2005) measures the entrepreneurial traits of students and relates these traits to the discipline the students chose to study, and whether they are sophomores or seniors. The results reveal that there is no significant difference between students as far as their study area (discipline) and their level of education

³² Chawala A.S and Albert Butare, "Developing Entrepreneurial Competencies Amongst Rwandan Youth", *Indian Marketing Studies Journal*, Vol.9, No. 1, April 2005, pp.25-36.

³³ Maryam Sharifzadeh, *Entrepreneurship and Agricultural College Students; A Case of Shiraz University*, AIAEE 2005, Proceedings of the 21st Annual Conference

(sophomore/senior) concerns. The findings suggest a need to expose university students to entrepreneurial thinking. Therefore, it should be noted that education as a catalyst for creating entrepreneurs and entrepreneurial attitudes, should create entrepreneurs by motivating and developing the right entrepreneurial direction. To promote need for achievement, need for power, competitiveness and risk taking propensity, required skills, knowledge and ideas should be provided to the students.

Gaurav³⁴ (2006) stated that successful entrepreneurs were both born and made as they had a dual composition- a certain set of inborn personality traits that drive them to seek out and succeed in the entrepreneurial life, as well as a set of learned skills that enable them to apply their natural gifts most effectively.

Yonca Gurol and Nuray Atsan³⁵ (2006) stated that the purpose of this research is to explore the entrepreneurship profile of Turkish university students and to make an evaluation for their entrepreneurship orientation by comparing them with non-entrepreneurially inclined students. In this study, six traits, namely need for achievement, locus of control, risk taking propensity, tolerance for ambiguity, innovativeness and self-confidence, are used to define the entrepreneurial profile of students. The study is conducted on a random sample of fourth year university students (n=400) from two Turkish universities. The question “What are you planning to do after graduation?” was asked to students in order to discriminate between those who are entrepreneurially inclined and those who are not. Respondents who have a response saying that “I’m planning to form my own business venture” are accepted as potential entrepreneurs. Then, the entrepreneurial traits of these students are subjected to a

³⁴ www.vit.ac.in/ecell/PDF/a3.pdf

³⁵ Yonca Gurol and Nuray Atsan, , “Entrepreneurial Characteristics amongst University Students- Some Insights for Entrepreneurship Education and Training in Turkey”, ***Emerald***, Vol.48, No.4, 2006, pp.25-38.

comparative analysis with other students who do not plan to start their business, and thus are not included in the group of potential entrepreneurs. In short, a 40- item questionnaire is administered to students, with questions related to demographic variables, entrepreneurial inclination, and six entrepreneurial traits above cited (with Likert type items). The results of the t-tests 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 entrepreneurially non – inclined students. That is, these students are found to have higher risk taking propensity, internal locus of control, higher need for achievement and higher innovativeness.

Lourdes Poobala Rayen³⁶ (2010) in his study states that significant correlation exists between entrepreneurship and personality traits variables, namely decision making ability, economic motivation, managerial ability, problem recognition and risk taking willingness. Their correlation co-efficient are statistically significant at five per cent level

Levent Altinay *et.al*,³⁷ (2012) investigated the influence of family tradition and psychological traits on the entrepreneurial intention of university hospitality students in the UK. The empirical study was predicated on the need to consider both socio-demographic variables and especially family background and personality traits. The research also tested the suggestion that risk taking propensity may act as a potential mediator. The findings of the study suggest that family entrepreneurial background and innovation influence the intention to start a new business; that there is positive relationship between tolerance of ambiguity and risk taking propensity; and a negative

³⁶ Lourdes Poobala Rayen, “ *Entrepreneurship in Tiny Sector Industries*” Discovery Publishing House Pvt. Ltd, New Delhi, 2010, p.222

³⁷ Levent Altinay, Melih Madanoglu, Roberto Daniele and Conrad Lashley, “The influence of family tradition and psychological traits on entrepreneurial intention” *International Journal of Hospitality Management* Volume 31, Issue 2, June 2012, Pages 489–499

relationship between locus of control and risk taking propensity. The paper emphasizes the importance of taking a more holistic approach when researching the factors that influence entrepreneurial intention.

Ignas G. Sidik³⁸ (2012) contributed in filling the gap by identifying factors affecting SME performance and, hence, their development; and to develop a conceptual framework explaining their relationships. The literature reveals that although there is positive relationship between entrepreneur traits and firm performance in the context of SMEs, the relationship is still inconclusive; suggesting that there are intervening constructs between the two constructs. Field observations and literature reviews suggest five second- order constructs serving mediating roles between entrepreneur traits and firm performance that may clarify the relationship, i.e., (1) innovative performance, (2) innovative capacity, (3) organizational search, (4) market orientation, and (5) entrepreneurial orientation. Although the relationships among the seven constructs have been extensively studied in the extant literature, this paper is one of the few efforts, if any, in investigating the seven constructs in a comprehensive framework as a basis for further studies. If empirically supported, the proposed framework may provide an effective alternative in assisting entrepreneurs and SMEs' owners to develop their firms more effectively.

Tushar Chaudhari³⁹ (2013) made an attempt to study entrepreneurial trait among various course students. It has notified some important qualities enlisted by students essential for successful entrepreneurs. Furthermore it has study the role of education institutes in upgrading these qualities. This study shows that the

³⁸ Ignas G. Sidik, "Conceptual Framework of Factors Affecting SME Development: Mediating Factors on the Relationship of Entrepreneur Traits and SME Performance", *Procedia Economics and Finance*, Volume 4, 2012, Pages 373–383

³⁹ Tushar Chaudhari, "A Study of Entrepreneurial Attitude among Post Graduate Students" *Research Journal of Commerce and Behavioral science*, Volume: 02, Number: 06, April-2013.

entrepreneurial motive among the respondents is very low. The reason behind this scenario is mostly due to lack of technical knowledge, unwillingness to take risk and inferior personality. The effort must be made to incorporate some leadership qualities among student. The course curriculum must be designed in a way as to give technical knowledge to students. The education institutions on the other hand must arrange the guest lecture of local entrepreneur for their students. It was suggested that arranging these lectures will help student to overcome the problems faced by them in the effort of becoming an entrepreneur.

Marcela Rodica Luca *et.al*,⁴⁰ (2013) analysed the relations between entrepreneurial personality traits and entrepreneurial intentions in students belonging to bachelor, master and doctoral level. From the comparison between two paired samples, one involved in entrepreneurial training and the other one not involved, results a strong interaction effect between involvement/ non-involvement in entrepreneurial training and the intent of starting a business on all the entrepreneurial personality traits.

Cynthia Mathieu *et.al*,⁴¹ (2013) established a number of personality features and behaviours associated with business creation and success. The similarities between these traits and narcissism, a concept with roots in clinical psychology and psychiatry, led the authors to conduct this study, which proposes to measure whether entrepreneurs score higher on a narcissism scale than other vocational groups. The second goal of this study is to measure the role of narcissism on intention to start a business. Student entrepreneurs have been compared with non-entrepreneur students, city workers, and employees and managers from a branch of a large financial institution. Then, students

⁴⁰ Marcela Rodica Luca, Ana-Maria Cazan and Denisa Tomulescu, “ Entrepreneurial Personality in Higher Education” *Procedia - Social and Behavioral Sciences*, Volume 84, 9 July 2013, Pages 1045–1049

⁴¹ Cynthia Mathieu and Étienne St-Jean, “Entrepreneurial personality: The role of narcissism” *Personality and Individual Differences*, Volume 55, Issue 5, September 2013, Pages 527–531.

filled out measures of general self-efficacy, locus of control and risk propensity as well as a narcissism scale. Results indicate that student entrepreneurs score significantly higher than all other vocational groups on a measure of narcissism. Results also indicate that narcissism is positively correlated with general self-efficacy, locus of control and risk propensity. Moreover, narcissism plays a significant role in explaining entrepreneurial intentions, even after controlling for self-efficacy, locus of control and risk propensity. Overall, these findings shed new light on the underlying personality traits of entrepreneurs and entrepreneurial intentions and suggest new directions in the study of entrepreneurs' personality profile.

Jeya Ani J. and Lourdes Poobala Rayen⁴² (2014) in their study says that the rural women entrepreneurs doing family business have higher business management skills than the family of women entrepreneurs doing private occupation, agriculture and others. Moreover, the rural women entrepreneurs doing family business are having higher enterprise skills than the other categories.

2.2 FACTORS INFLUENCING ENTREPRENEURSHIP

Dhar and Lydall⁴³ (1961) stated that small industry was a follower rather than a pioneer and it was the large industry that had created external economies and produced potential small entrepreneurs from among the rank of skilled workers. Industrial estates acted as nursery beds for the growth of small industry rather than permanent houses. The industry promoted efficiency and growth.

⁴² Jeya Ani. J, Lourdes Poobala Rayen, *Women Entrepreneurship in Rural Areas*, Discovery Publications, New Delhi, 2014, p 232

⁴³ Dhar P.N and Lydall H.F, *The Role of Small Enterprises in Indian Economic Development*, Asia Publishing House, Bombay, 1961, pp.10-32.

James Berna. J⁴⁴ (1966) found that the entrepreneurs hailed from diverse castes. Occupations and classes are only small scale operations. They came up to their present positions and diversified their production. This is attributed to their youth, education and technical training.

Papanek⁴⁵ (1967) in his study stated that educational, occupational and financial backgrounds were the sources of entrepreneurship in Pakistan.

Kameshwar Jha. S⁴⁶ (1970) in his study stated that a favourable economic environment had a positive impact on entrepreneurship.

Peter Killby⁴⁷ (1971) based on his study of Nigerian experience, observed that the deficiencies in developing entrepreneurship could be removed over a relatively short period by providing proper education and training.

Nafziger E.W⁴⁸ (1975) in his study arrived at two conclusions. Firstly rich families succeeded as entrepreneurs due to education, work experience, access to capital and availability of Government assistance. Secondly, the social-economic status of businessmen was generally higher than that of the general population in the non-socialistic countries.

⁴⁴ James Berna J, *Industrial Entrepreneurship in Madras State*, Bombay Asia Publishing House, 1966.

⁴⁵ Papanek F and Gustav, *Pakistan's Development: Social Goals and Private Incentives*, Harvard University Press, Cambridge, Mass, 1967.

⁴⁶ Kameshwar Jha S, *Growth of Entrepreneurship in Underdeveloped Region with Special Reference to Bihar State*, Ph.D. Thesis 1970,

⁴⁷ Peter Killby, *"Entrepreneurship and Economic Development"* The Free Press, New York, 1971, p.36

⁴⁸ Nafziger E.W, "Class, Caste and Community of South Indian Industrialists. An Examination of the Horatio Alger Model", *Journal of Development Studies*, Vol.II, No.2, January 1975, pp.131-148.

Wilkin P.H⁴⁹ (1979) stated that in Germany the objective of entrepreneurial development could not be achieved unless the Government arranged improved supply of capital and raw materials. Similarly the Meiji Government in Japan provided improved supply of capital and exploited new foreign markets to compensate for the lack of raw materials for heavy industries.

Rao⁵⁰ (1983) in his study reported that technically trained entrepreneurs showed a higher level of entrepreneurship than what entrepreneurs with no training did.

Chakravarthy T.K⁵¹ (1987) stated that the promotion of entrepreneurship to be effective it has to be designed as a long range plan executed through a well-orchestrated institutional support system.

Khanka S.S⁵² (1990) held the view that the emergence and development of entrepreneurship was not a spontaneous event but a dependent phenomenon of economic, social, political and psychological factors. These factors have both positive and negative influences. The positively influencing factors will be facilitative and create a conducive conditions for the emergence of entrepreneurship whereas negative influences inhibiting the milieu to the emergence of entrepreneurship.

Ravichandra. K⁵³ (1991) had taken into account their background, personality, attitudinal and behavior characteristics and managerial perception and practices.

⁴⁹ Wilkin P.H, *Entrepreneurship: A Comparative and Historical Study*, Norwood, Ablex Publishing Corporation, New Jersey, 1979, p.264.

⁵⁰ Rao B.S.S, "Entrepreneurship Development Among Technical Personnel: A Few Observations", *SEDME*, Vol. X, No.3, September 1983, pp.33-36

⁵¹ Chakravarthy T.K, "Entrepreneurship Development: Present Status and Emerging Priorities", *SEDME* 14(4) December 1987.

⁵² Khanka S.S, "*Entrepreneurship in Small Scale Industries*", Educational Publishers, New Delhi, 1990.

⁵³ Ravichandra K, "*Entrepreneurial Success – A Psychological Study*", Sterling Publishers Private Limited, 1991, p.120

Moreover, the author has examined the trend in the entrepreneurial career. The study shows that the success of the entrepreneurs is closely linked to the careful identification and selection of potential opportunities. Hence, the author suggests that the promotional activities should be organized and revamped.

Garudachar B.N.⁵⁴ (1994) pointed out that an important missing linkage, which deserved urgent attention, was the absence of responsible liaison machinery. At present interactions between academics and industry are inhibited by fears that “industrial problems are mundane” or “academicians prefer sophisticated problems”. The climate for entrepreneurship development called for a search for a meeting ground and he gave suggestions to trade unions to resolve these fears.

Baldev Singh⁵⁵ (1996) says that in India planners and policy-makers realized that though a rapid rate of economic growth was essential, it could not by itself remove poverty and unemployment. Consequently, a number of deliberate efforts had to be made continually by the state for the generation of self-employment opportunities. The burden of India’s unemployment problem, especially of the educated class, lay largely in the lack of entrepreneurial initiative. Therefore, there was a need to have a massive programme to identify potential entrepreneurs and training should be given to them to start small industrial units in the sectors and service units in the tertiary sector. He elaborately explained the Self-Employment Scheme for Educated Youth (SESEY).

⁵⁴ Garudachar B.N, “Enrichment of Entrepreneurship Culture through University-Industry Interaction”, *Progressive Educational Herald*, 9 (1) October 1994, pp 18-19.

⁵⁵ Baldev Singh, *Self-Employment through Entrepreneurship Development*, MD Publications Pvt. Ltd., New Delhi, 1996.

Shanmugakani. C⁵⁶ (1996) analysed the impact of the growth of educational facilities on the development of entrepreneurial abilities in Sivakasi region. After widely analyzing the educational facilities available in schools and colleges functioning in the region, the researcher noted the absence of illiteracy among the entrepreneurs surveyed. Most of them felt that school level education was adequate to start any industry. A sample survey among students of different educational institutions proved that 18 per cent of them had undergone degree courses in order to look after family business and another 14 per cent aimed to get business knowledge through courses of study. The researcher also proved that there was a positive correlation of the study that practical training and education helped the growth of the entrepreneurial ability in that region.

Gopal Krishna Dhar Sanapati⁵⁷ (1997) stated that the development of an entrepreneurial culture among the students of engineering had been recognized by the developing countries as an important factor in the field of technical education. There was a criticism from industries that the quality of technicians trained in the state engineering institutions was not satisfying the needs of the industries. He suggested that the industry and technical education should interact with each other in a variety of ways if maximum benefits of the infrastructure should be obtained. He also identified some of the important reasons for the indifference of student's towards entrepreneurship.

Khanka S.S⁵⁸ (1998) discussed the factors associated with the making of entrepreneurs. The factors identified by him are stimulation, support and sustaining.

⁵⁶ Shanmugakani C, "*Growth of Educational Facilities and Development of Entrepreneurial Abilities in Sivakasi*", Unpublished M.Phil Dissertation submitted to Madurai Kamaraj University, Madurai, 1996.

⁵⁷ Gopal Krishna Dhar Sanapati, "Developing Entrepreneurship in Engineering Institutions", *University News*, 35(20) 19 May 1997, pp.7-8.

⁵⁸ Khanka S.S, "Making the Entrepreneurial society", *Yojana*, Vol.42, No.2, February, 1998, pp.9-11

The stimulation has been coming from the entrepreneurial development programmes sponsored by some 686 financial institutions functioning all over India. The help from the Government in the form of the provision of infrastructural facilities, incentives and concessions are grouped under support. The Development Agencies, which pay too much attention in the start-up phase of industrial units, pay too little attention in the operational stage in the industry. So, provision for expansion activities- modernization, diversification, consultancy service and marketing is to be made for sustaining of industries.

Sharma D.D⁵⁹ (1999) stated that India was a developing country and had been facing acute and chronic problem, of unemployment. Polytechnic diploma holders and engineering graduates had also been seriously affected by unemployment in recent years. The promotion of entrepreneurship in the technical education system was thus the need of the hour. In India tremendous latent entrepreneurial talent existed which, if properly harnessed, could help in solving many of the serious problems the country was facing. They also discussed the lacunae in the present activities and suggested possible solutions to overcome them. They suggested a strategy for further promotion of entrepreneurship among the technical graduates.

Batra C.S and Dangwala R.C⁶⁰ (1999) identified the two problems in India, namely mass poverty and widespread and chronic unemployment. A massive industrial wealth had created only a couple of thousands of jobs, which proved to be totally inadequate. India was now left with no alternative but to search for entrepreneurial talent in order to solve the problems to ensure the rapid growth of the industrial sector

⁵⁹ Sharma D.D, Dhameja S.K and Gujar B.R, *Entrepreneurship, Strategic Management and Globalisation*, Rawat Publications, Jaipur and New Delhi, 1999.

⁶⁰ Batra C.S and Dangwala R.C, *Entrepreneurial and Small Scale Industries New Potentials*, Deep & Deep Publications Pvt. Ltd., New Delhi, 1999.

which may need low capital requirement and high labour intensity the authors wanted an effective mechanism to enlarge the pool of new entrepreneurs from non-traditional groups who could be trained and guided to establish new ventures. They also explained the Indian NEC programmes popularly known as Entrepreneurship Development Programmes.

Cameron Alan *et.al*,⁶¹ (2000) observed that the results from the Global Entrepreneurship Monitor Project gave new insights into the role of entrepreneurs in economic growth. They also found that the level of entrepreneurial activity was positively correlated with the recent gains in GDP for the ten countries covered in the study.

Kets De Vries M.F.R⁶² (2001) reviewed the concept of entrepreneurship and empirical studies of entrepreneurial behavior patterns. In addition, his study explores the social, economic and psychodynamic forces influencing entrepreneurship. A conceptualization of the entrepreneurial personality is proposed. Finally, the organizational impact of these entrepreneurial behavior patterns on work environment and management succession is discussed.

Sharma K.P⁶³ (2002) pointed out that respect for the individual, continued opportunity for advancement and open door policies were the factors that helped the development of entrepreneurship.

⁶¹ Cameron Alan, Claire Massey and Daniel Tweet, "Entrepreneurs- A Vital Force?" *Chartered Accountants Journal of New Zealand*, Vol.79, no.10, 2000 pp. 10-13

⁶² Kets De Vries M.F.R, "The Entrepreneurial Personality: A Person at the Crossroads", *The Journal of Management Study*, February 2001, pp.34-56.

⁶³ Sharma K.P, *Rise of Entrepreneurship in Haryana, A Case Study of Rannog Enterprises*, 2002.

Tapan K. Panda⁶⁴ (2004) tried to identify the key variables of entrepreneurial success. The various socio-economic parameters selected for the study explained the level and degree of association with entrepreneurial success. The study showed that there was association between success levels with factors like technical education, occupational background of parents and previous job experience of entrepreneurs.

Lorna Collins Paul. D⁶⁵ (2004) reviewed the gap between student's entrepreneurial needs and aspiration and the entrepreneurship education offerings within higher education institutions (HEIs) in Leicestershire, the UK. Utilizing data from three surveys of university fresher students, held in 2001 findings are arrived at. The findings are used as the basis to assess the gap between fresher students' entrepreneurial needs and aspiration.

A study was conducted by the **Elke Schroder**⁶⁶ (2005) and tested with a sample of 623 students (aged 14-26 years). Apart from teaching entrepreneurship, the programme particularly focused on the 'crystallization' of training significantly improved the 'crystallization' of entrepreneurial interest. The training proved to be particularly beneficial to students without any relation to entrepreneurship through role models in their family. This study found that benefited in terms of general knowledge and self-awareness out of these programme.

Satya Sundaram. I⁶⁷ (2006) stated that entrepreneurship among women in India was at a low level for various reasons. But the situation was slowly improving thanks to the emergence of Self-help Groups and micro finance programmes. Women

⁶⁴ <http://dspace.iimk.ac.in/bistream/2259/199>.

⁶⁵ Lorna Collins Paul D. Hannon and Alison Smith, "Enacting Entrepreneurial Intent: the gaps between student needs and higher education capability", *Emerald*, Vol.46, No.819, 2004, pp.454-463.

⁶⁶ http://www.defi.gour.qc.ca/Publications/depliant_defi_en.pdf. p 79.

⁶⁷ Satya Sundaram I, "Women Empowerment and Globalisation", *Southern Economist*, Vol.44, No.13, November 1, 2005, pp.19-23

have now access to institutional credit and training facilities. She concluded that the future would see women setting their own industrial establishments.

Bhagmar and Verma B.L⁶⁸ (2006) stated that a nation's ability to generate a steady stream of business opportunities could only come about when its people take to entrepreneurial activities. Entrepreneurs are essentially the engines of growth for a nation. There are several factors that go into making a successful entrepreneur, and he or she need not necessarily possess a strong business and financial background. On the contrary, well-conceived and well-directed training could always produce an outstanding entrepreneur.

Nair K.R.G and Anu Pandey⁶⁹ (2006) examined the social-economic and attitudinal characteristics of entrepreneurs on the basis of primary data for the state of Kerala. It does not appear that business acumen runs in families nor is there evidence that religion has an impact of entrepreneurship. The economic status of the family, age, technical education/training and work experience in a similar or related field seem to favour entrepreneurship. In comparison to the rest of the population, entrepreneurs tend to be more innovative in their attitude, but do not seem to have greater faith in the internal locus of control.

Urve Venessar et.al,⁷⁰ (2006) used the Likert Scale for measurement of students' attitudes based on their own opinions about motivations to start in business. The research results showed that differences exist in the motives like ambition for freedom, self-realization and pushing factors to start a new venture in the near future.

⁶⁸ Bhagmar M and Verma B.L, "Spirit of Entrepreneurship: The Only Way to Success", *Southern Economist*, Vol.44, No.18, January 15, 2006, pp.18-21

⁶⁹ Nair K.R.G and Anu Pandey, "Characteristics of Entrepreneurs: An Empirical Analysis", *The Journal of Entrepreneurship*, 15 (1), 2006, pp. 46-61.

⁷⁰ <http://ideas.repec.org/p/ttu/wpaper/154.html> p. 102

They further found that business administration students found more often than the students from non-business specialties that the knowledge obtained during the studies help most to start a business.

Mathivanan. R and Kumar. D⁷¹ (2006) stated that in India what was lacking was not the spirit of entrepreneurship, but the application of the related skills and the spirit of enterprise to profitable economic activities. They stressed the need for the development of rural entrepreneurship in India as labour absorption in agriculture and in the industrial and service sector had been fast enough to absorb the growing rural labour force. They concluded that the environment in the family, society and the support system were generally not conducive to encourage the rural people especially the young to consider self-employment and the entrepreneurial career as an option.

Lourdes Poobala Rayen⁷² (2010) in his study states that four important factors influence a person to start or manage the tiny enterprises namely; achievement and support factor, interest factor, traditional status factor and economic necessity factor.

Mumtaz Begam *et.al*,⁷³ (2012) analyzed the relationship between educational support towards entrepreneurial intention. Data were collected via questionnaire from 183 students of three different programmes offered in MARA Professional Colleges. The study utilized correlation and regression statistics to analyse the data. The finding of the survey shows that there is a significant relationship between attitudinal factor($r=0.5324$), behavioural factor ($r=0.5668$) and educational support($r=0.6241$)

⁷¹ Mathivanan R and Kumar D, "Strength and Weakness of Rural Entrepreneurship", *Kissan World*, Vol.22, No.11, November, 2006, pp.24-29

⁷² Lourdes Poobala Rayen, "*Entrepreneurship in Tiny Sector Industries*" Discovery Publishing House Pvt. Ltd. New Delhi, 2010, p.223

⁷³ Mumtaz Begam Abdul Kadir, Munirah Salim and Halimahton Kamarudin, "The Relationship Between Educational Support and Entrepreneurial Intentions in Malaysian Higher Learning Institution" *Procedia - Social and Behavioral Sciences*, Volume 69, 24 December 2012, Pages 2164–2173

towards entrepreneurial intention. Educational support contributed 40.8 per cent to attitudinal factor and 57.6 per cent to behavioural factor. All three factors (attitudinal, behavioural and educational support) contribute 43.3 per cent towards entrepreneurial intention among MARA Professional College. It is suggested educational support through professional education in these colleges is an efficient way of obtaining necessary knowledge about entrepreneurship. The result of the study has valuable implications for policy makers in Higher Education Division, college administrators and educators.

Thomas Lans *et.al*,⁷⁴ (2014) analysed sustainable entrepreneurs, i.e. those who proactively facilitate latent demands for sustainable development, are now in higher demand than ever before. Higher (business) education can play an important role in laying the foundation for these sustainable entrepreneurs. Traditionally, however, educational scholars focus either on the issue of education for sustainability or on entrepreneurship education. There is little work which explores and/or crosses the boundaries between these two disciplines, let alone work in which an effort is made to integrate these perspectives. In this article, a competence approach was taken as a first step to link the worlds of education for entrepreneurship and for sustainability because we postulate that both, apparently different, worlds can reinforce each other. Based on a literature review, focus group discussions with teachers in higher education ($n = 8$) and a structured questionnaire among students ($n = 211$), a set of clear, distinct competencies was developed, providing stepping stones for monitoring students' sustainable entrepreneurship development in school-based environments.

⁷⁴ Thomas Lans, Vincent Blok and Renate Wesselink, "Learning apart and together: towards an integrated competence framework for sustainable entrepreneurship in higher education", *Journal of Cleaner Production*, Volume 62, 1 January 2014, Pages 37–47.

Merle Kuttim *et.al*,⁷⁵ (2014) identified the content of university entrepreneurship education and its impact for students' entrepreneurial intentions. The study design used was cross-sectional study and the sample consisted of the students from 17 European countries that have been grouped for the purpose of analysis by the level of economic development into two country groups: efficiency-driven and innovation-driven economies. Frequencies and binary logistic regression was used to analyze the impact of different factors, including participation in entrepreneurship education, for entrepreneurial intentions. Results indicate that what is offered is not necessarily the most demanded in entrepreneurship education as lectures and seminars are provided more, but networking and coaching activities are expected more by the students. Participation in entrepreneurship education was found to exert positive impact on entrepreneurial intentions.

Astri Ghina⁷⁶ (2014) examined that Indonesia concerns promoting entrepreneurship to all people in order to develop successful entrepreneurs. Despite several entrepreneurship programs are developed by government and Higher Education Institutions (HEIs) to support this entrepreneurship movement, very little is known about effectiveness of entrepreneurship programs" implementation. Therefore this study will evaluate to what extent the effectiveness of entrepreneurship education in Indonesia. This research uses case study methods and will be carried out in two stages. The first stage is descriptive and evaluative phase. Here the research will focus on mapping of existing learning and institutional supports within HEIs. Data exploration regarding learning process within HEIs will be evaluate from internal perspective and

⁷⁵ Merle Küttim, Marianne Kallaste, Urve Venesaar and Aino Kiis, "Entrepreneurship Education at University Level and Students' Entrepreneurial Intentions", *Procedia - Social and Behavioral Sciences*, Volume 110, 24 January 2014, Pages 658–668

⁷⁶ Astri Ghina, "Effectiveness of Entrepreneurship Education in Higher Education Institutions", *Procedia - Social and Behavioral Sciences*, Volume 115, 21 February 2014, Pages 332–345

external perspectives in order to get better understanding of learning experiences that support to become successful entrepreneurs. The second stage is explanatory phase, this stage lead to discover, develop the concepts, categories, and propositions from the phenomena to develop entrepreneurial learning theory.

Kare Moberg⁷⁷ (2014) analysed the influence of two different approaches to entrepreneurship education at the lower secondary level of education. The influence of education for entrepreneurship and education through entrepreneurship on pupils' level of school engagement and entrepreneurial intentions is analysed and assessed. The paper builds on and extends research about entrepreneurship education for pupils at the lower secondary and upper secondary levels of education by including theories about cognitive and non-cognitive skill formation, school engagement, and purposeful learning in the theoretical framework. It is found that education for entrepreneurship, which focuses on content and cognitive entrepreneurial skills, has a positive influence on pupils' entrepreneurial intentions but a negative influence on their level of school engagement. The opposite is true for education through entrepreneurship, which has a more pedagogical orientation and focuses on fostering non-cognitive entrepreneurial skills. Furthermore, the role of supportive teaching styles and action-based teaching methods in entrepreneurship education at this level of education is investigated. The analysis is based on data from two surveys including 801 randomly selected Danish ninth-graders (aged 14–15) and 576 randomly selected Danish tenth-graders (aged 15–16). The findings have implications for policy makers and curriculum designers, inasmuch as the influence of two educational approaches is assessed and analysed, but

⁷⁷ Kare Moberg , “Two approaches to entrepreneurship education: The different effects of education for and through entrepreneurship at the lower secondary level” *The International Journal of Management Education*, 11, June 2014

also for the academic community since it presents an alternative way to assess educational dimensions (content and teaching methods) separately.

2.3 ACHIEVEMENT MOTIVATION

Habibah Elias and Atan Bin Long⁷⁸ (1984) stated that the performance of pupils in the primary five assessment examination was examined in relation to a number of variables namely achievement motivation, socio-economic status, intelligence, area of residence, school milieu and parental encouragement to assess the correlation between them. The subjects were 90 pupils selected from 40 primary schools in Selangor and represented the Chinese, Malays and Indians. Individual interviews were conducted by the researcher. Subjects were asked to answer questionnaires, the Thematic Apperception Test, and the Raven's Progressive Matrices. The results showed that achievement motivation correlated highly with performance in the stated examination. The other variables which showed significant correlations with performance were socio-economic status, intelligence, school milieu and parental encouragement.

Habibah Elias and Wan Rafea Abdul Rahman⁷⁹ (1995) examined the achievement motivation of 1050 University Kebangsaan Malaysia students in relation to faculty and year of study, ethnic group, gender and place of origin. Three other dependent variables, locus of control, attitude towards learning and study habits, were also examined. The results showed that there were significant differences in achievement motivation among students based on faculty, year of study and ethnic

⁷⁸ Habibah Elias and Atan Bin Long, "A Correlational Study of Achievement Motivation and Pupils' Performance in the Standard Five Assessment Examination From Selected Schools in Selangor" *Pertanika Journal of Social Sciences & Humanities* 7(2), pp. 31 -38 (1984)

⁷⁹ Habibah Elias and Wan Rafea Abdul Rahman, "Achievement Motivation of University Students" *Pertanika Journal of Social Sciences & Humanities* 3(1): 1-10 (1995)

group. On locus of control, it was found that male students were more internal than female students. Significant differences were also found in attitudes of subjects in relation to ethnic group, year of study and faculty.

Yonca Gürol and Nuray Atsan⁸⁰ (2006) explore the entrepreneurship profile of Turkish university students and to make an evaluation for their entrepreneurship orientation by comparing them with non-entrepreneurially inclined students. The results 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 entrepreneurially non-inclined students. That is, these students are found to have higher risk taking propensity, internal locus of control, higher need for achievement and higher innovativeness.

Ahmet Erdogan⁸¹ (2007) examined the variable which affects students' mathematics anxiety is their achievement motivation, another variable affecting students' mathematics anxiety is their social comparison. This study aims to determine if achievement motivation and social comparison are significant predictors of high school students' mathematics anxiety. The study groups were comprised of 166 9th grade students still attending a private tutoring center. In this study, a multiple linear regression analysis was used. In multiple linear regression analysis, the relationship between the predictor variables, students' achievement motivation, and social comparison, and the dependent variable, mathematics anxiety, were tested. It was determined that achievement motivation alone, and achievement motivation and social

⁸⁰ Yonca Gürol and Nuray Atsan, (2006) "Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey", *Education and Training*, Vol. 48 Iss: 1, pp.25 – 38

⁸¹ <http://ilkogretim-online.org.tr>

comparison together are significant predictors of high school students' mathematics anxiety.

Paul A. Story *et.al*,⁸² (2009) analysed a two-factor theory of achievement motivation (intrinsic and extrinsic factors) to predict three achievement-related factors: generalized expectancy for success, need for cognition, and self-reinforcement. As predicted, intrinsic achievement motivation was positively associated with scores on all three achievement-related factors, whereas extrinsic achievement motivation was positively related only to generalized expectancy for success. Subsequent regression analyses revealed that intrinsic achievement motivation better predicted all three factors than did extrinsic achievement motivation. Implications for employing a two-factor model of achievement motivation are presented for both basic and applied applications.

Chao Ching Chen *et.al*,⁸³ (2011) adopted student personal characteristics as independent variable, environment cognition as the intervening variable, and attitude toward entrepreneurship as the dependent variable. The results indicated that student attitude toward entrepreneurship was affected by environment cognition and personal traits, which indirectly affected attitude toward entrepreneurship. According to the analysis result, the need for achievement, locus of control and creative thinking are the most important characteristics for entrepreneurship. The family, society, education and economic environment are also important factors. They should enhance the attitude toward entrepreneurship in students at technological colleges and universities through entrepreneurship education. There must be supply of entrepreneurial knowledge to

⁸² Paul A. Story, Jason W. Hart, Mark F. Stasson, John M. Mahoney "Using a two-factor theory of achievement motivation to examine performance-based outcomes and self-regulatory processes", *Personality and Individual Differences*, Volume 46, Issue 4, March 2009, Pages 391–395

⁸³ Chao Ching Chen, Yu Fen Chen and Ming Chuan Lai (2011) "*A study on entrepreneurial attitude and the influential factors for business department students at technology colleges and universities in Taiwan*"

students and also promote more entrepreneurial actions and foster entrepreneurial personalities.

Farshid Ghasemi *et.al*,⁸⁴ (2011) investigated the relationship between creativity and achievement motivation with high school students' entrepreneurship in Shiraz. In this regard, the relationship of the four dimensions of creativity (fluency, initiative, flexibility, and elaboration) accompanied by eight characteristics of achievement motivation (hard working, vision, eagerness, purposefulness, progress, insistence, primarity of colleague experts, and the utmost use of time) with entrepreneurship were investigated. 365 (171 male and 194 female) students were chosen using multistage cluster sampling and were asked to complete the questionnaires. After collecting and analyzing the data, the results indicated that there was a meaningful relation between students' creativity and entrepreneurship. There was also meaningful positive relation between achievement motivation and entrepreneurship. Among the components of creativity, fluency and initiative had positive relation to entrepreneurship. Among components of achievement motivation, hardworking, purposefulness, and insistence had positive meaningful relation to entrepreneurship; however, the utmost use of time had negative relation to entrepreneurship. Other components of achievement motivation had weak relations with entrepreneurship. Moreover, the results showed that girls were higher than boys in creativity, achievement motivation, and entrepreneurship. Among the four regions of education, region two had better situation regarding the three variables than other regions.

⁸⁴ Farshid Ghasemi, Ahmad Rastegar Reza Ghorban Jahromi and Roghayeh Roozegar Marvdashti, The relationship between creativity and achievement motivation with high school students' entrepreneurship *Procedia - Social and Behavioral Sciences* Volume 30, 2011, Pages 1291–1296

Kulwinder Singh⁸⁵ (2011) one of the most important factors that lead one to their goals is the drive. This drive is known as motivation. It is a determination with a kind of excitement that leads one to persevere to reach greater heights, in no matter what avenue of their life; be it – personal or professional. The drive may come from an internal or external source. The individual determines this. The factors that motivate an individual keep changing as one climbs the ladder of age and maturity. And also, achievement of one goal sets the ball rolling for another one to be achieved. Thus, to be motivated is a constant need. There are times when one faces a period of de-motivation and everything seems bleak. It is then that they need to find what would motivate them back into action.

Adedeji J. Ogunleye⁸⁶ (2012) attempts to bring the importance of an individual person's traits (personality) in fostering business and economic growth and development. The objective is to ignite a focus on the need for education and trainings, enabling environment, gender equality and intellectual property rights as preconditions for psychological well-being necessary for entrepreneurial behaviours, economic growth and development. It is thus recommended that education and training systems be entrenched to create positive attitudes towards entrepreneurship and provide managerial skills. It is also opined that trainings in the understanding of self and self-worth could be useful in fostering innovations and encourage risk taking and independent workings.

⁸⁵ Kulwinder Singh "Study of Achievement Motivation in Relation to Academic Achievement of Students" *International Journal of Educational Planning & Administration* Volume 1, Number 2, 2011, pp. 161-171.

⁸⁶ Adedeji J. Ogunleye, "Self Esteem and Achievement Motivation: Behavioral Traits for Entrepreneurship, Business and Economic Growth and Development" *Research Journal in Organizational Psychology & Educational Studies* 2012 1(3) 145-148.

Ming Te Wang and Jacquelynne S. Eccles⁸⁷ (2013) adopted a multidimensional perspective to examine the relationships between middle school students' perceptions of the school environment (structure support, provision of choice, teaching for relevance, teacher and peer emotional support), achievement motivation (academic self-concept and subjective task value), and school engagement (behavioral, emotional, and cognitive engagement). Participants were from an ethnically diverse, urban sample of 1157 adolescents. The findings indicated that student perceptions of distinct aspects of the school environment contributed differentially to the three types of school engagement. In addition, these associations were fully or partially mediated by achievement motivation. Specifically, student perceptions of the school environment influenced their achievement motivation and in turn influenced all three types of school engagement, although in different ways. Moderation effects of gender, ethnicity, and academic ability were also discussed.

Muhammad Zaman⁸⁸ (2013) 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. The results 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. This study probes entrepreneurial characteristic providing a clear understanding of entrepreneurial

⁸⁷ Ming Te Wang and Jacquelynne S. Eccles “School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using a multidimensional perspective”, *Learning and Instruction*, Volume 28, December 2013, Pages 12–23

⁸⁸ Muhammad Zaman, “Entrepreneurial characteristics among university students: Implications for entrepreneurship education and training in Pakistan” *African Journal of Business Management* Vol.7(39), pp. 4053-4058, October 2013.

education, as to which entrepreneurial characteristics can be developed to produce good entrepreneurs.

Asanee Tongslip⁸⁹ (2013) studied the path analysis of relationships between factors with achievement motivation of students of private Universities in Bangkok. The sample was 840 students who were randomized by the multi-stage method. The results of this research were the correlations among academic achievement, classmate relationships, future expectation and self-directed learning with achievement motivation were statistically significant. For path analysis, the results of the study found self-directed learning, academic achievement and future expectation had a direct effect to achievement motivation. However, classmate relationships did not have direct effect on relationships with achievement motivation. Moreover, it was found that there was an indirect effect in three dimensions namely: classmate relationships through self-directed learning through achievement motivation, classmate relationships through future expectation, through academic achievement and through achievement motivation, and classmate relationships through future expectation and through achievement motivation.

Foluso Ilesanmi Jayeoba *et.al*,⁹⁰ (2013) examined the influence of achievement motivation on entrepreneurial abilities using the factorial analysis that considered also whether sex differences account for differential entrepreneurial abilities. The outcome shows that sex plays no significant role in entrepreneurial abilities. Achievement motivation correlates significantly with entrepreneurial abilities

⁸⁹ Asanee Tongslip, "A Path Analysis of Relationships between Factors with Achievement Motivation of Students of Private Universities in Bangkok, Thailand" ,*Procedio- Social and Behavioral Sciences*, Volume 88, 10 October 2013, Pages 229–238

⁹⁰ Foluso Ilesanmi Jayeoba, Olayinka Yusuf Sholesi and Olufemi Akanji Lawal., "Achievement Motivation, Gender and Entrepreneurial Ability" *International Journal of Academic Research in Accounting, Finance and Management Sciences* Vol. 3, No.1, January 2013, pp. 248–256.

and has significant influence on entrepreneurial abilities. It is suggested that continuous observance of correlation between entrepreneurship and some personality variables should draw attention of government and other stake holders especially in Nigeria to consideration of these factors in policy formulation and interventions aimed at jumpstarting an entrepreneurial society.

Tanja⁹¹ (2014) investigated the role of three basic motivational needs (need for power, affiliation, achievement) as antecedents of goals within the 2×2 achievement goal framework, and examined their combined predictive validity with regard to academic performance in a sample of 120 university students. Structural equation modeling analysis largely supported our postulated model, linking motivational needs indirectly to course grades through goals. Achievement goals were formed by a combination of different motives: need for achievement was a positive predictor of all four achievement goals, and need for affiliation was negatively related to performance-approach and performance-avoidance goals. Additionally, need for power was a positive predictor of performance-avoidance goals. Performance-approach goals had a direct (positive) effect on performance outcomes. In sum, our results integrate basic motivational needs with the achievement goals literature and extend therefore hierarchical achievement motivation models, by showing how basic human motives of achievement, affiliation, and power are related to goal striving motivation and performance outcomes in an academic setting.

⁹¹ Tanja Bipp Karen Van Dam “Extending hierarchical achievement motivation models: The role of motivational needs for achievement goals and academic performance”, *Personality and Individual Differences* Volume 64, July 2014, Pages 157–162

2.4 ENTREPRENEURIAL MOTIVATION

Sharma K.L⁹² (1978) showed that those who had neither business nor industrial background before entering into manufacturing had a higher degree of motivation than those coming from business/industrial families.

Vani and Vinayak⁹³ (1980) showed the possibility of the emergence and development of entrepreneurship among two less enterprising namely tribals and woman.

Clifford M. Baumbach and Joseph R. Maneuro⁹⁴ (1981) stated that to develop autonomous entrepreneurs in the area a long-term remedy were needed. For this, one should examine the sources of entrepreneurial talent and the forces both psychological and environmental, which engendered the entrepreneurial personality. Functional deficiencies might suffice for use as a short-run measure for the most probes much deeper for an adequate long-run solution.

Patel V.G⁹⁵ (1985) found that in India 40 per cent of the entrepreneurs were from the trading background, 30 per cent from service, 10 per cent were fresh graduate engineers, 10 per cent were from self-employed professionals and the remaining 10 per cent came from artisans, unemployed farmers and the like. Therefore the study showed that 60 per cent of the entrepreneurs did not have a business background.

⁹² Sharma K.L,” A Multivariate Model for the Analysis of Entrepreneurship in Manufacturing Organisation”, *Sociological Bulletin*, Vol.27, No.1, March 1978, pp.48-65.

⁹³ Vani and Vinayak, “Entrepreneurship Development (among) Tribals” *Yojana*, Vol.14, No.16, 1st April, 1980, pp.8-9.

⁹⁴ Clifford Baumbach M and Joseph Mancuso R, *Entrepreneurship and Venture Management*, DB. Taraporevala Sons & Co. Pvt. Ltd., Published by Arrangement with Prentice- Hall, INC, 1981.

⁹⁵ Patel V.G, *Organisation Development for Entrepreneurship Programmes*, Entrepreneurship Development Institute of India, Ahmedabad, 1985, pp.56.

Akhouri M.M.P and Mishra S.P ⁹⁶ (1990) stated that entrepreneurs played an important role in developing and contributing to the economy of a nation. In most of the developing countries including India entrepreneurship did not find a place in educational curriculum. Education was a strong interventional or influencing medium that set values, developed attitudes and created the drive in people to move in the profession and vocational direction with confidence. Education had the prime role of moulding human resources in a particular direction. They felt that there was a need to develop a conceptual base for evolving a curriculum, which could be used in the school system that ensured the emergence of Entrepreneurial spirit including values, attitudes, motivation and competencies among masses at a very early stage of their development to successfully take up entrepreneurial pursuits.

Mishra D.N ⁹⁷ (1990) found that making money was rated the highest of all ambitions of entrepreneurs. Independent living and social prestige were also ambitions. The entrepreneur's family members played a useful role though limited in giving shape to the entrepreneur's ambitions. Further the communities with a mercantile background encouraged their children to have high regard for earning money and saving it. Unfortunately, only a few from other communities had such an opinion and hence the mercantile communities were branded as anti-social elements. That attitude was very unhelpful and it did not promote economic growth through the development of small-scale industry. According to him what was essentially needed to face difficulties was not merely the material support from family or friends or a government agency. It was the moral support that was badly needed. Lack of moral support dampened all the enthusiasm of the entrepreneur despite adequate or an over-dose of material support. In

⁹⁶ Akhouri M.M.P and Mishra S.P, "Entrepreneurship Education: A Conceptual Base, Approach and Methodology", *Indian Management*, 29 (11-12) November – December 1990, pp.53-65.

⁹⁷ Mishra D.N, *Entrepreneur and Entrepreneurship Development and Planning in India*, Chug Publications, Allahabad, 1990, 00.224-226.

contrast, moral support from the near and dear inspired him, redoubled his confidence, made him reassuring and prepared him to face new challenges boldly, even if the moral support was made available in less than adequate quantities.

Ganeshan. R⁹⁸ (1992) found that the educational level of entrepreneurs was an important factor motivating entrepreneurship in small-scale industries.

Gangadhara Rao. M⁹⁹ (1992) stated that in order to change the social and economic structure of society and to uplift its disadvantaged action like women, greater emphasis should be given to entrepreneurial development programmes particularly directed towards women. Such programmes could provide women with economic security, family and social status and individual dignity. He further stated that it was necessary to take care of their aspirations by creating an environment and also by developing entrepreneurial ability which could really help in self-reliance.

Gautam Raj Jain and Debmuni Gupta¹⁰⁰ (1994) stated that entrepreneurship was relatively a new discipline in formal education. The work presented on this theme included entrepreneurship at different levels of formal education, ranging from school to college and to professional courses, including those run by management and technical institutions. The innovations in these areas include motivation to the target group concerned to take up entrepreneurship courses to spread entrepreneurship in a large number of institutions to cover as many students as possible, devise course

⁹⁸ Ganeshan R, “*Growth of Entrepreneurship in Small Scale Industries – A study with reference to Pudukottai District, Tamil Nadu*”, Unpublished Ph.D., Thesis submitted to Alagappa university, Karaikudi, 1992.

⁹⁹ Gangadhara Rao M, *Entrepreneurship and Entrepreneurial Development*, Kanishka Publishing House, New Delhi, 1992.

¹⁰⁰ Gautam Raj Jain and Debmuni Gupta (ed.) ‘*New Initiatives in Entrepreneurship Education and Training*’, Fredrich – Naumann – Stifung, New Delhi, 1994.

curriculum and teaching methods and develop faculty resources. He also discussed the issues and problems relating to innovations in entrepreneurship education.

Brimmer A.F¹⁰¹ (1995) made an extensive appraisal of the role of an industrial organization known as the Managing Agency System, which was formed by the British and Indian entrepreneurs to overcome the limitations of their lack of capital and business ability. Though the system played a major role in the entrepreneurial development it led to certain illegal acts by its agents. However he felt that the abolition of the system was not a good remedy to check those acts.

Nalinaksha Mutsuddi¹⁰² (1996) stated that by nature, women were endowed with certain qualities founded favourable for the growth of entrepreneurship. They possessed the inherent gift to motivate others by raising their self-worth and self-esteem, making them feels important. This affability and helpful nature brought out the best in others without hurting their ego or creating any tension or conflict. By encouraging active participation and sharing power and information, women could contribute more towards better performance and higher productivity. Women skillfully integrated professional life with family life.

Suresh K and Dhameja K¹⁰³ (1998) stated that inspite of considerable modifications and changes, the education systems of many developing countries did not deal adequately with the problem faced by young school-leavers. Instead of promoting the potentiality for gainful self-employment, the education systems tended to strengthen the motivation for wage employment often in Government establishments. Most of the

¹⁰¹ Brimmer A.F, "The setting of Entrepreneurship in India", *Quarterly Journal of Economics*, Vol. LXIY, No.4, November 1995.

¹⁰² Nalinaksha Mutsuddi, *You too can Become an Entrepreneur*, Wheeler Publishing, New Delhi, 1996.

¹⁰³ Suresh K and Dhameja K, *Entrepreneurship and Small Business*, Rawat Publications, Jaipur and New Delhi, 1998.

educated youth of rural areas flocked to towns and cities in search of jobs. Due to slow economic growth and increase in population over the years, the ranks of educated unemployed had swelled. He felt that the expansion of facilities for technical training provision of vocational courses as part of general Lower and Senior secondary education and introduction of work experience as an integral part of school curriculum would be notable attempts to be made by educational institutions to motivate the young students to become successful entrepreneurs.

Martin Patrick¹⁰⁴ (1999) stated that lack of alternative wage employment had forced many especially the poor to seek employment by setting up their own small production trade or service. This proves was evident from the tremendous growth of self-employment in both developed and developing countries.

Stevenson and Lundstrom¹⁰⁵ (2001) stated that promoting an entrepreneurial culture required a combination of specific programmes and initiatives to create positive attitudes towards entrepreneurship and entrepreneurs. The mentioned that the best practice countries were probably those like the United States, Canada, Australia and New Zealand that use a combination of approaches to promote entrepreneurship in their countries.

Madhushree Nanda Agarwal¹⁰⁶ (2004) found that the combination of skills and motivations was associated with certain entrepreneurial “types”. She identified five types of entrepreneurs in the five-cluster situations.

¹⁰⁴ Martin Patrick, *Self Employment and Successful Entrepreneurship*, Kaniska Publishers and Distributors, New Delhi, 1999.

¹⁰⁵ www.ilo.org, p.75

¹⁰⁶ [http://www.immcal.ac.in/programmes/fpm/Thesis Abstract/madhushree2004.pdf](http://www.immcal.ac.in/programmes/fpm/Thesis%20Abstract/madhushree2004.pdf).

Kamala Balachandran¹⁰⁷ (2005) stated that for a country like India, rich in manpower, it was only by multiplying the number of job provider, we could hope to take all the Indians on the economic climb up. But there was a strong perception among the salaried class parents that a substantial capital was needed to start with. In fact, in the present times when the new economy rules, the essential investment required for entrepreneurship is not so much money power as powerful idea. She finally suggested to the current generation of parents to discard the old prejudices against business and encourage their wards to become entrepreneurs.

Luke Pittaway *et.al*,¹⁰⁸ (2007) provided an illustration of both the forms of knowledge gained through the use of inquiry-based learning in entrepreneurship education and could itself be used in teaching about invention, innovation and commercialization processes. Finally the paper concluded that highlighting the benefits and challenges of this type of course for the students explained how such a course may provide a different pedagogic approach for entrepreneurship education targeted at science and engineering students.

A research and policy guide issued by the **Ewing Marion Kauffman Foundation (U.S.A)**¹⁰⁹ (2007), stated that entrepreneurship was no different than any other skill people were born with; it could be, and was likely to be, useless unless the skill was developed through education and experience. It implied that a central task for educators and policy makers was not to give students the key skills to thrive in any work environment – reading, mathematics, science, technology and history- but also to nurture the creative entrepreneurial skills each of them had by birth. Programs that

¹⁰⁷ Kamala Balachandran, “Minding One’s Own Business”, *The Hindu*, Madurai, Tamil Nadu, December 25, 2005, p.14.

¹⁰⁸ <http://www.usfca.edu/sobam/nvc/conf/proceedings.html>

¹⁰⁹ <http://EntrepreneurialRoadmapweb.pdf>. P.13

teach basic entrepreneurial skills to middle and high school students may be especially valuable for children from disadvantaged backgrounds. At the college level, universities need to infuse entrepreneurship and creativity more deeply into their curricula, for both students majoring in business and those in other subjects. It finally concluded that it was established through years of economic researches that the most important driver of economic growth was innovation.

Thomas E.C¹¹⁰ (2007) stated that good education was necessary for young people, but innovative thinking should be a part of that education and encouraged by design. He stressed that young persons who had dreams should be saved from the shackles of suffocating straightjacket education to think freely. He finally suggested that the parents, universities, private business enterprise and the state should be a holistic alliance with a hidden agenda to keep the innovative spirit burning in the brilliant minds of your youngsters.

Amran Awang *et.al*,¹¹¹ (2008) examined that the relationship between personality factors and contextual factors as a means of identifying predictors of entrepreneurial intention among Malaysian University Students. The finding provides evidences that Malaysian students' belief in the self-efficacy, proactive personality and needs for achievement capability to reinstate their entrepreneurial intention. The finding also pointed out the role of family support should not be abandoned in fostering the emergence of entrepreneurs. It was concluded that entrepreneurship curriculum in Malaysian Universities should instigate those capabilities as part of the syllabus.

¹¹⁰ Thomas E.C, "Keeping the Fires of Innovative Spirit Burning", *The Hindu*, Madurai, Tamil Nadu, July 29, 2007, p.18

¹¹¹ Amran Awang, Shaiful Annuar Khalid and Mohammad Ismail, "*Personality and Contextual factors as Determinants of Entrepreneurial Intention among Malaysian Students*" 2008

Gallaway *et.al*,¹¹² (2010) found that the students who had completed an enterprise module at university were more likely to aim for entrepreneurship within their careers than students who had not included enterprise in their study.

Botsaris. C and Vamvaka. V¹¹³ (2012) revealed that intention-based models of entrepreneurship have moderate to high predictive power in explaining the entrepreneurial behaviour. Both of the two main intention-based models reviewed in this study, the theory of planned behaviour and the theory of entrepreneurial event, as well as their variants, offer researchers a valuable tool for understanding the process of organizational emergence. It was concluded that, more sophisticated models are required in order to better understand entrepreneurial behaviors and these models need to be tested in different entrepreneurial settings.

Reaz Uddin, Tarun Kanti Bose¹¹⁴ (2012) tested a causal model in context of business students of Bangladesh to identify what determines their intentions to be an entrepreneur. Variables like risk taking, locus of control, need for achievement, autonomy, challenges, security of job, environment for starting business and entrepreneurial education offered by Universities have been tested using multiple regression model. The model results show tendency of taking risk, need for achievement, education and environment for starting business, job security are statistically significant in determining the intention of students where except job security, variables are found positively related. The outcome reveals that there are few major variables that trigger entrepreneurship and thus those factors required to be

¹¹² <http://www.hi-is/~joner/eaps/deaing2.htm> p.86

¹¹³ Botsaris C and Vamvaka V., "Models of the determinants of Entrepreneurial Behaviour: A literature Review" *Regional Science Inquiry Journal*, Vol. IV, (3), 2012, Special Issue, pp.155 – 172

¹¹⁴ Md Reaz Uddin, Tarun Kanti Bose, "Determinants of Entrepreneurial Intention of Business Students in Bangladesh" *International Journal of Business and Management*; Vol. 7, No. 24; 2012

boosted in the education and social set up of the country. This study will immensely help the policy maker into setting such entrepreneurship friendly education system and social structure which will carry the development activities of the nation in upcoming years.

Mumtaz Begam *et.al*,¹¹⁵ (2012) built on psychological model based on Ajzen's theory of planned behaviour to identify the factors influencing the entrepreneurial intention of these students. It is suggested that educational system which provides adequate knowledge and inspiration for entrepreneurship develop the students' intention to perform entrepreneurial behaviours and the possibility of choosing an entrepreneurial career might increase among young people. This study confirms the key role of educational support in the development of entrepreneurial intention. Therefore, the current study shows that entrepreneurship can be fostered through learning process.

Anisa Kume *et.al*,¹¹⁶ (2013) Entrepreneurship education is an important solution to the employment difficulty of university graduates by guiding them to organize a new business venture. Some questions are frequently posed: What are the factors that inspire entrepreneurialism in college students in Albania? What kinds of students are most likely to become entrepreneurs? Are male students more inclined toward entrepreneurialism than are female students? This study investigates the tendency towards entrepreneurship among university students in Albania. Specifically, it aims to examine the relationship between the desire for having your own business and family business background on university students. The survey centered around two dimensions: entrepreneurial attitude, defined as the degree of positivity one feels

¹¹⁵ Mumtaz Begam Bt Abdul Kadir and Pn Munirah Bt Salim, (2012) "Factors Affecting Entrepreneurial Intentions among Mara Professional college students" *Academy of Management Journal*. 23(3), 509-520

¹¹⁶ Anisa Kume, Vasilika Kume and Besa Shahini (2013)" Entrepreneurial Characteristics Amongst University Students in Albania" *European Scientific Journal*, vol.9, No.16

towards the idea of becoming an entrepreneur; and motivation factors for growing their own business. To define the entrepreneurial profile of students four traits are used: locus of control, entrepreneurial self-efficacy, independence motive, innovation motive. The question “What are your career expectations for the time directly after your studies?” was asked to students in order to do a distinction between those who are entrepreneurially disposed and those who are not. Those who responded “I’m going to start-up my own business” are considered as potential entrepreneurs. Then, the entrepreneurial traits of these students are compared with other students who do not plan to start their own businesses. The study is conducted on a random sample of fourth year university students (n = 519) from three Albanian universities. This paper argues that it is very necessary for Albanian universities to introduce sustainable development ideas to their entrepreneurship education and re-orientate the education objectives, content and methodology of entrepreneurship education.

Hua Zhang and Ying Zhang¹¹⁷ (2013) in their study investigated the psychological characteristics of entrepreneurship of 829 college students in China by questionnaire. The psychological characteristics include five aspects: entrepreneurial capacity, entrepreneurial belief, entrepreneurial consciousness, entrepreneurial motivation, and entrepreneurial de-termination. In the five factors, the entrepreneurial consciousness of college students is the highest, and the other four are almost at the same level. There is significant difference on entrepreneurial belief, consciousness, and motivation in different gender of students. Also there is significant difference on entrepreneurial consciousness in different major students and on entrepreneurial motivation in different degree students. However, the college students only with high

¹¹⁷ Hua Zhang and Ying Zhang, “Psychological Characteristics of Entrepreneurship of College Students in China” *Psychology Journal* 2013. Vol.4, No.3, 159-164

entrepreneurial consciousness are not enough to succeed in business. The other four psychological characteristics are not only essential to entrepreneurship, but also necessary to their future professional development. College students should have a lot of preparation and accumulation on the other four psychological characteristics of entrepreneurship, and give much more effort to improve them.

Anca Draghici *et.al*,¹¹⁸ (2014), examined the strategy developed by the European authorities regarding the improvement of the economic performance in a knowledge- based economy has not provided the expected results. One reason for this semi-failure is related to a shy entrepreneurial activity stimulus generated in the member countries. In this context, the paper will show that the entrepreneurial attitude and perception stand for an important knowledge asset. Furthermore, using linear but also dynamic panel data analyses for the period 2007-2011, the paper demonstrates that the entrepreneurial attitude and perception strongly influence the entrepreneurial activity in Europe. Both the entrepreneurial attitude and the entrepreneurial activity are measured based on an aggregate index, using Global Entrepreneurship Monitor (GEM) data.

Fumero *et.al*,¹¹⁹ (2014), aimed to demonstrate the reliability and validity of the attitudes to entrepreneurship test in a sample of Spanish adolescents and to detect differences between curricular diversification and non-diversification groups. For this study, 145 young completed entrepreneurship, personality and academic motivation tests. Study 2 used two groups of 55 young (curricular diversification vs. non-diversification). The results confirmed the reliability of the test; entrepreneurial

¹¹⁸ Anca Draghici, Claudiu Tiberiu Albulescu and Matei Tamasila, "Entrepreneurial Attitude as Knowledge Asset: Its Impact on the Entrepreneurial Activity in Europe", *Procedia - Social and Behavioral Sciences*, Volume 109, 8 January 2014, Pages 205–209

¹¹⁹ Fumero A, De Miguel A, Marrero R.J and Carballeira M, "Entrepreneurial potential in adolescents" *Personality and Individual Differences*, Volume 60, Supplement, April 2014, Pages S57

potential was related to achievement motivation and affected by gender. Attitudes to entrepreneurship were higher in the non-curricular diversification group for the global score and mainly in the Leadership factor. The suitability of the scale, as a way of measuring entrepreneurial potential in a Spanish sample, was confirmed as well as the need for specific attention of the students in curricular diversification.

2.5 CONCLUSION

Reviews relating to entrepreneurial traits, factors influencing entrepreneurship, achievement motivation and entrepreneurial motivation helped the researcher to understand the various studies already conducted in this field. The reviews collected from various sources paved the way to identify the research gap.

CHAPTER - III

PROFILE OF THE STUDY AREA

- 3.0 Introduction
- 3.1 History
- 3.2 Profile of the education avenues
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- 3.4 Agriculture
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CHAPTER - III

PROFILE OF THE STUDY AREA

3.0 INTRODUCTION

Thoothukudi is known as "Pearl City" due to the pearl fishing carried out in the town. It is a commercial seaport which serves the inland cities of Southern India and is one of the sea gateways of Tamil Nadu. It is also one of the major seaports in India with a history dating back to the 6th century AD. The city is believed to be of significant antiquity and has been ruled, at different times, by the Early Pandyas, Medieval Cholas, Later Cholas, Later Pandyas, Malbar Sultanate, Tirunelveli Sultanate, Vijayanagar Empire, Madurai Nayaks, Chanda Sahib, Carnatic kingdom, Portuguese, Dutch and the British. Thoothukudi was settled by the Portuguese, Dutch and later by the British East India Company. The city is administered by a Thoothukudi Municipal Corporation covering an area of 90.663 km (35.005 sq. miles) and had a population of 237,830 in 2011. The Urban agglomeration had a population of 410,760 as of 2011.

Thoothukudi also known as Tuticorin is a port city and a Municipal Corporation and an Industrial city in Thoothukudi district of the Indian state of Tamil Nadu. The City lies in the Coromandel Coast of Bay of Bengal. Thoothukudi is the headquarters of Thoothukudi District. It is located about 590 kilometres (367 miles) south of Chennai and 190 kilometres (118 miles) northeast of Thiruvananthapuram (Trivandrum). According to Confederation of Indian Industry, Thoothukudi has the second highest Human Development Index in Tamil Nadu next to Chennai. Thoothukudi City serves as the headquarters of Tamilnad Mercantile Bank Limited.

Major Educational establishments in the city includes Thoothukudi Government Medical College, Fisheries College and Research Institute, Marine Training Academy, V.O.C. Arts & Science College, Government Polytechnic College, and Anna University Tuticorin Campus. Tuticorin Port is one of the fastest growing Major Ports in India in terms of total volume of unit handled.

Majority of the people of the city are employed in salt pans, sea-borne trading, fishing and tourism. A major attraction in the city is Our Lady of Snows Basilica, a 16th century shrine. The 21 islands between Thoothukudi and Rameswaram shores in the Gulf of Mannar are notified as the first Marine Biosphere Reserve of India having around 36,000 species of flora and fauna. It is a protected area and is called as Gulf of Mannar Marine National Park. Our Lady of Snows Basilica festival celebrated annually during August and the Shiva temple festivals like Adi Amavasai, Sasti and Chittirai chariot festivals are the major festivals of the area. Roadways are the major mode of transport to Thoothukudi, while the city also has rail, air and sea transport.

3.1 HISTORY

Thoothukudi is one of the major seaports in India with its history dating back to the 6th century A.D. Traditionally known as “Pearl City” on account of the prevailing pearl fishing in the area, Thoothukudi has had a fascinating history. It forms part of the Pandiyan kingdom between 7th and 9th century A.D. Thoothukudi remained in the hands of the Cholas during the period between 9th and 12th century. Emergence of Thoothukudi as a maritime port attracted travellers, adventures, and eventually colonists. The Portugese were the first to arrive in Thoothukudi in 1322 A.D followed by the Dutch in 1582 A.D. The English captured Thoothkudi from the Dutch in 1782 and the East India Company established their control over Thoothukudi in the same

year. The Thoothukudi district has given India many great freedom fighters, like the great poet Subramanya Baharathi, V.O.Chidambaram Pillai, Oomaithurai, Veerapandiya, Kattabomman, Vellaiyathevan, Veeran Sundaralingam etc. From this Port only V.O.Chidambaram Pillai sailed the first Indian Swadesi Steamer S.S.Gaelia on 1st June 1907.

Tuticorin (Thoothukudi) is also known by the name 'Thiru mandira Nagar'. It is also called as "Sea Gateway of Tamil Nadu". Thoothukudi is part of the Pearl Fishery Coast, and is known for its pearl fishing and ship building industries. Thoothukudi was the seat of Portuguese during 16th century, and the Dutch occupied in 17th century. During 18th century the British overpowered and occupied the town. Being a port town, the town received attention from the rulers for improving their trade, and so it was brought to Municipal status in 1866.

On the 20th October 1986, a new district carved out of the erstwhile Tirunelveli district was born in Tamil Nadu and named after V.O.Chidambaranar, a great national leader hailing from Ottapidaram who led the Swadeshi Movement in the South. Since 1997 as in the case of other districts of Tamil Nadu, this district has also been named after its headquarters town, Thoothukudi.

Thoothukudi became the citadel of freedom struggle in the early 20th century. It was in Thoothukudi that the illustrious patriot, V.O.Chidambaram established the first Swadesi Steam Navigation Company, sailing the first steamer S.S.Gaelia to Thoothukudi on 1st June 1907.

The minor port of the Thoothukudi anchorage port with lighter age facilities has had flourished traffic for over a century. The first wooden Jetty of this port was commissioned in 1864. This port was being used for export of salt, cotton yarn, senna

leaves, palmyrah stalks, palmyrah fibers, dry fish, country drugs etc. to neighboring countries and for import of coal, cotton, copra, pulses and grains. The minor port of the Thoothukudi had the distinction of being intermediate port handling the highest traffic tonnage of over 1million per annum.

The major harbour of Thoothukudi is well known as a pearl diving and fishing centre. It is one of the oldest seaports in the world and was the seaport of the Pandyan kingdom after Korkai, near Palayakayal. It was later taken over by the Portuguese in 1548, captured by the Dutch in 1658, and ceded to the British in 1825. The lighthouse built in 1842 marked the beginning of the history of harbour development in the city.

3.1.1 Location

Thoothukudi district, the study area, is situated in the extreme South Eastern corner of Tamil Nadu state and bounded on the north by the districts of Tirunelveli, Viruthunagar and Ramanathapuram, on the East and South East by Gulf of Mannar and on the west and south west by the district of Tirunelveli. The district of Thoothukudi was carved out as a separate district on 20th October 1986 as a result of bifurcation of the Tirunelveli district of Tamil Nadu State.

Figure 3.1

District Map



The salient features of the district include its lengthy, curvy and scenic sea coast which was an international cynosure in the days of yore for its pearl fishery; beautiful coastal villages with their sacred temples, churches and mosques like Tiruchendur, Manappadu and Kayalpattinam respectively, Adhichanallur, one of the cradles of the ancient civilizations, Korkai, an ancient port of the Sangam Pandyas, Kayal, the confluence of the river Tamiraparani with the Bay of Bengal, one of the five illustrious rivers of Tamilnadu.

Panchalamkurichi, the capital of Veerapandiya Kattabomman, an early martyr, for the cause of freedom, Ettayapuram, the birth place of the great poet Subramanya Bharathi, Ottapidaram the home town of V.O.Chidambaram Pillai, who dared to sail

ships as a measure to combat British imperialism; Maniyachi, where Vanchinathan assassinated Ashe, the British Collector for this high handedness against the leaders during Swadeshi Movement; Kulasekarapattinam and Kurumbur where patriots showed their anger against alien rule.

Temple towns like Srivaikundam, Meignanapuram, one of the cradles of Christianity, Thoothukudi, besides being a major port, the earliest settlement of the Portuguese and the Dutch, the tall and dense palmyra groves and the bushy Odai trees, the Teris and the adjacent coral islands, Idayankudi and Manappadu and the adjacent places which became the headquarters of great missionaries like G.U.Pope, Veeramamunivar, Caldwell and others who, besides their missionary work, contributed a lot for the development of Tamil language and literature and above all the enterprising and hardworking people who now constitute a major trading community in the State.

3.2 PROFILE OF THE EDUCATION AVENUES

Education began in the earliest prehistory, as adults trained the young of their society in the knowledge and skills they would need to master and eventually pass on. In pre-literate societies this was achieved orally and through imitation. Story-telling continued from one generation to the next. As cultures began to extend their knowledge beyond skills that could be readily learned through imitation, formal education developed.

Education in its general sense is a form of learning in which the knowledge, skills, and habits of a group of people are transferred from one generation to the next through teaching, training, or research. Education frequently takes place under the guidance of others, but may also be autodidactic. Any experience that has a formative

effect on the way one thinks, feels, or acts may be considered educational. Education is commonly divided into stages such as preschool, primary school, secondary school and then college, university or apprenticeship.

There are numerous educational institutions, Polytechnic Colleges, schools in and around Thoothukudi giving quality education. Thoothukudi district has high literacy rates and lower literacy rate gap between males and females. Thoothukudi district schools usually scores high honours during board examinations.

3.2.1 Pre School

Preschools provide education up to the age of between 4 and 8 when children enter primary education. Preschool education is important because it can give a child the edge in a competitive world and education climate. While children who do not receive the fundamentals during their preschool years will be taught the alphabet, counting, shapes and colors and designs when they begin their formal education they will be behind the children who already possess that knowledge. There are several preschools in Thoothukudi district.

3.2.2 Primary School

Primary (or elementary) education consists of the first 5–7 years of formal, structured education. In general, primary education consists of six or eight years of schooling starting at the age of five or six, although this varies between, and sometimes within, countries. There are 1076 primary schools in Thoothukudi district.

3.2.3 Secondary School

In most contemporary educational systems of the world, secondary education comprises the formal education that occurs during adolescence. It is characterized by

transition from the typically compulsory, comprehensive primary education for minors, to the optional, selective tertiary, "post-secondary", or "higher" education (e.g. university, vocational school) for adults. Depending on the system, schools for this period, or a part of it, may be called secondary or high schools, gymnasiums, lyceums, middle schools, colleges, or vocational schools. There are 284 middle schools, 73 high schools, 97 Higher Secondary Schools in Thoothukudi district to nurture the students to develop good human resource.

3.2.4 Higher Education

Higher education, post-secondary education, tertiary education or third level education is an optional final stage of formal learning that occurs after secondary education. Often delivered at universities, academies, colleges, seminaries, and institutes of technology, higher education is also available through certain college-level institutions, including vocational schools, trade schools, and other career colleges that award academic degrees or professional certifications.

3.2.5 Engineering College

Teaching engineering is teaching the application of scientific, economic, social, and practical knowledge in order to design, build, maintain, and improve structures, machines, devices, systems, materials and processes. It may encompass using insights to conceive, model and scale an appropriate solution to a problem or objective. The discipline of engineering is extremely broad, and encompasses a range of more specialized fields of engineering, each with a more specific emphasis on particular areas of technology and types of application. Engineering disciplines include: aerospace, biological, chemical, computer, electrical, industrial, and mechanical. In Thoothukudi there is a Government Engineering college affiliated to Anna University

on the highway to Tirunelveli, and many private engineering colleges are there in the district.

3.2.6 Agricultural College

The Agricultural College and Research Institute, Killikulam was established in 1984 – 85 as the third constituent College of Tamil Nadu Agricultural University. At the beginning, the College started functioning in rented building of MDT Hindu College, Pettai in Tirunelveli. Subsequently, after the acquisition of land and buildings from the State Seed Farm, Killikulam, a part of the educational activities was shifted to Killikulam during 1986–1987. Consequent on the completion of hostel buildings, entire academic activities were shifted to Killikulam campus from 01.11.1989. The institution was upgraded as Agricultural College and Research Institute in 1989. The college was also upgraded as a Post-graduate teaching institute from November 1990. The first batch of B.Sc. (Ag.), graduates passed out in 1988. The institution was made into a co-education institution from 1990–1991.

3.2.7 Arts and Science Colleges

While the passion for professional courses continue, arts and science colleges have a two-pronged strategy as the transition to an exciting future – they are creating new career oriented courses and industry-linked research opportunities even as they tout the value of a holistic liberal arts education that offers the life skills needed for success. In Thoothukudi district there are eighteen arts and science colleges which provide under graduate and post graduate courses in different disciplines and equip their knowledge in their discipline.

3.2.8 Polytechnic

One of the distinguishing features of polytechnic education is the strong emphasis on practice-based learning. A polytechnic education also opens doors to a professional career and other avenues for career advancement. In this district several polytechnic colleges are offering several courses.

3.2.9 Fisheries College

Fisheries College and Research Institute (FCRI) initially started as Fisheries College was established in the year 1977 as a constituent unit of Tamil Nadu Agricultural University at Thoothukkudi, a famed town for Pearl fishing. Thereby it became the first college in the state of Tamil Nadu and the second one in India (after College of Fisheries, Mangalore) to offer the Bachelor of Fisheries Science (B.F.Sc) degree in India. Tamil Nadu is endowed with a long coast line (1076 kms) and innumerable number of tanks, village ponds and several rivers. All these water resources have been providing much needed fish to people of the state. More than one million fishermen are engaged in catching and supplying much needed fish to the populations.

FCRI functions from four campuses. The Main Campus of FCRI is about 10 km away from the city of Thoothukkudi and is spread over an area of 24 ha which is accessible through the Harbour bypass road. The Shore Laboratory Campus is separated from the main campus by a distance of 11 km, and is located within the Fishing Harbour Complex, Thoothukkudi over an area of 0.4 ha and is connected by the North Beach Road. Maritech Research & Extension Center is located on the outskirts of Tharuvaikulam, a fishing village which is 25 km away from the main campus, and facilitates research on marine culture activities. It is accessible through the

familiar East Coast Road that runs along the coast of Tamil Nadu. There is a separate campus for residential purposes housing the staff quarters and hostel in an area of 1 ha which is 3 km away from the main campus and is located at the Teachers Colony, Thoothukkudi.

'Bachelor of Fisheries Science' (B.F.Sc) is a four year course, The post graduate degree Master of Fisheries Science (M.F.Sc) is a two year course offered in 10 disciplines, The Doctor of Philosophy (PhD) is a three year course offered in 4 disciplines and one year Post-graduate Diploma is offered in Fish Quality Management and Business management in Animal and Fisheries Sciences.

3.2.10 Medical College

There is also a Government Medical college and Hospital. The colleges are affiliated to the Manonmaniam Sundaranar University in Tirunelveli. The city has Government Medical College Hospital and new ESI Hospital is being constructed at the Bypass road.

The Thoothukudi Government Medical College was started functioning from 16.08.2000. In this college, Non-Clinical and Clinical departments are functioning. Sanction has been given for admission of 100 students for M.B.B.S. course every academic year from the year 2000-2001.

In Thoothukudi Government Medical College Hospital, departments such as General Surgery, Plastic Surgery, General Medicine, Ophthalmology, ENT, Paediatrics, Anaesthesia, Dermatology, Thoracic Medicine, Psychiatry, Obstetrics and Gynaecology, Orthopaedics, Radiology, Radiotherapy, Physical Medicine, Dentistry, Neuro Surgery, Neuro Medicine, Onco Surgery, Physiotherapy, Paediatric Surgery,

Urology Surgery, Gastro Enterology are functioning. Ten Operation Theatres are available in this hospital. The medical equipments are available in this institution.

3.2.11 Industrial Training Institutes

Industrial Training Institutes which provide training in technical field and constituted under Directorate General of Employment & Training (DGET), Ministry of Labour & Employment, Union Government of India. Normally a person who has passed 10th standard (SSLC) is eligible for admission to ITI. The objective of opening of ITI is providing technical manpower to industries. These persons are trained in basic skills required to do jobs of say operator or a craftsman. The course in ITI is designed in way to impart basic skill in the trade specified. The duration of course may vary from one year to three years depending upon trade opted. There are three Industrial Training Institutes runs in the district.

3.3 ECONOMY

Salt pans in and around the city contribute mainly to the economy of the city. The salt pans produce 1.2 million tonnes of salt every year, contributing to 90 per cent of the salt produced in the state and 50 per cent needed by the chemical industries of the state. The other major industries are shipping, fishing, agriculture, power and chemical industries. Fishing is one of the largest contributors to the local economy. Tuticorin Fishing Harbour is one of the oldest and largest in Tamil Nadu. The Tuticorin Thermal Power Station has five 210 megawatt generators. The first generator was commissioned in July 1979. The thermal power plants under construction include the coal-based 1000 MW NLC TNEB Power Plant. In addition to this there are several private power plants like Ind Barath Power Limited, Coastal Energen, Sterlite Industries Captive power plant. Southern Petrochemical Industries Corporation,

Tuticorin Alkali Chemicals, Heavy Water Board Plant, Sterlite Industries, Venus Home Appliances, Madura Coats and Mills, Dhrangadhra Chemical works, Kilburn Chemicals, Nila Sea foods, Diamond Sea foods, Maris Associates, VVD Coconut oil mill, AVM oil mill, Wartsila India Pvt Ltd, OEG Pvt Ltd, Ramesh flowers, Agsar Paints, Tuticorin Spinning Mills Ltd and KSPS Salts are some of the small scale and large scale industries in the town. Thoothukudi is the headquarters of Tamilnad Mercantile Bank Limited. It is one of the fastest growing banks in India during the period of 2007-12. Its total business is worth 390 billion. The bank targets a Total Business of 500 Billion INR in 2014-15. Thoothukudi also has a research institute set up by Central Marine Fisheries Research Institute and a Spices laboratory set up by Spices Board of India.

Thoothukudi also has a State Industries Promotion Corporation of Tamil Nadu, Industrial Estate and SIDCO's Industrial Estate which comprises several Small scale and Medium scale Industries. Tuticorin is the end point of the proposed Madurai-Tuticorin Industrial Corridor. The study for this Corridor was completed by the Government of Tamil Nadu recently. The Corridor would consist of four manufacturing regions, one agri-business region, two business investment regions, a special tourism zone, one rural tourism hub and one knowledge hub. The government estimates that this Corridor would attract 1,90,000 crore industrial investment over a period of 10 years. The State Government recently formed a Special Purpose Vehicle (SPV) for Speedy implementation of the Project.

3.4 AGRICULTURE

Agriculture is the main occupation on which 70 per cent of the people depend on. The main food crop in this district is paddy. Out of the total area 470724 hectares,

178083 hectares are brought under the cultivation of different crops which of nearly 38 per cent of total area of the district. The important food crops in the district are paddy, cholam, kambu, Ragi, Varagu, Samai and commercial the important crops like Cotton, Chilly, sugarcane and Groundnut.

3.5 INDUSTRIAL SCENARIO IN THOOTHUKUDI

The district constitutes 70 per cent of the total salt production of the state and meets 30 per cent requirement of our country. There are two Industrial Estates one at Kovilpatti with 11 units and the other at Thoothukudi with 20 units. The former is managed by SIDCO and the latter by SIPCOT. There are 2,200 and above Small Scale Industries registered in the district and about 12 major industries. They are engaged in the production of cotton and staple yarn, caustic soda, PVC resin, fertilizers, soda-ash, carbon dioxide gas in liquid form etc., Some of the major industries are SPIC, TAC, Dharangadhara Chemical Works, Loyal Textails Ltd., Madura coats Ltd., Sterlite Copper Industries, Kilburn Chemicals, Ramesh Flowers, Nila sea foods, Deva and Co., and Transworld Granite Industries. Tata steel recently announced plans to set up a Titanium dioxide project in Thoothukudi. Four national brand products are made in Thoothukudi they are VVD Coconut Oil, Agsar Paints, BIO Food Ltd. Hip Tea & Genkii Tea (Herbal Tea) and Venus Water Heaters.

The important public sector undertakings in this district are the Thoothukudi Thermal Power Station unit of the Tamil Nadu Electricity Board, Heavy Water Plant (HWP) and Port Trust. During this year 1,128 vessels entered this port and cargo to the tune of 12.13 lakhs tonnes was handled. Thoothukudi port has been issued the prestigious ISO-9002 certificate for the port operation and services and has joined the select group of World ports by becoming the first Indian major port to get such

certificate. The Central Government is considering the construction of Titanium and Zirconium Sponge Plant, which comes under the control of Department of Atomic Energy at Palayakayal village of Srivaikundam Taluk. The District Industries Centre and the Tamil Nadu Industrial Investment Corporation are catering to the needs of the small and large scale industries in this district.

3.5.1 Large and Medium Scale Industries in Thoothukudi District

Travancore Chemical and Manufacturing Co. Ltd produces Sulphate and alumina ferric, Alkali Chemicals and Fertilizers Ltd., produces Soda Ash (Heavy chemicals), ammonium chloride (Fertilizers) and Southern Petro Chemical Industries Corporation Ltd., (SPIC) produces Urea, DAP, aluminium fluoride etc. which are situated in Thoothukudi block. Dharangadara Chemical works Ltd., in Sahupuram produces Caustic soda, liquid chlorine, tri-chloro-ethylene, upgraded illuminate and PV Resin, Shantha Marine Bio Technologies Pvt. Ltd produces Pharmaceuticals (Beta Carotene) which are situated in Thiruchendur block. Lakshmi Mills Co. Ltd, Loyal Textile Mills Ltd and The Bharathi Co-op spinning mills Ltd., produces Yarn and cloth which is situated in Kovilpatti block. Cotton yarn and threads are produced in Tuticorin spinning mills and Madura Coats Ltd and Arasan Textile Mills Pvt ltd which are situated in Thoothukudi block. Heavy water plant and Thermal power station is situated in Thoothukudi block. Copper smelting/ Copper anodes are produced in Sterlite Industries Thoothukudi. Kilburn chemicals in Thoothukudi block produces Titanium Di Oxide. Garnet Abrasives are produced in Transworld Garnet India pvt Ltd., in Thoothukudi block.

3.5.2 Non - Farm Sector

Non-farm sectors in Alwarthirunagari proposed to produce Bakery products, Leather goods, readymade garments, country bricks, etc. Wooden toys, stone crusher, wax candle readymade garments, bricks etc. are proposed to produce in Karungulam. Bakery, readymade garments, flour mills, masala powder, jewellery etc. are proposed to produce in Kayathar. Non-farm sector in Kovilpatti proposed to produce match industries, candles, power loom, bakery etc. Match Factory, readymade garments, Fabrication of grills and gates, etc. are proposed to produce in Ottapidaram. Charcoal manufacturing, match factory Appalam and masala powder, etc. are proposed to be produce in Pudur. Plastic wire, leather goods, timber works, Country bricks, flour mills, limestone works, etc. are proposed to be produce in Sattankulam. In Thiruchendur, Salt pans, coir fibre, readymade garments Palmyra products are proposed to produce. Palmyra products, readymade garments, timber sawing, jewellery, etc. are proposed to produce in Udangudi. Salt panes, coconut oil, leather goods, dry flower, masala powder, etc. are proposed to produce in Thoothukudi. Non-farm sector in Vilathikulam produce matches, handloom/power loom, leather goods etc.

3.5.3 District Industrial Possibilities - Location Analysis

Banana powder, Banana based products, fruits and vegetable processing industries are the proposed industrial sectors in Srivaikuntam, Tiruchendur, Kovilpatti, Vilathikulam. Dehydration of drumsticks and oil from dry seeds of drumsticks is the proposed industrial sector in Sathankulam and Vilathikulam. Poultry and Cattle feed, Sea food Industry, Chemical Industries, Mechanical boats/ small ships building units, are the proposed industrial sectors in Thoothukudi. Extraction, refining of edible oils in Kovilpatti and Karungulam, Oleoresin and spice oils, spice based products in

Vilathikulam, Kovilpatti, Thoothukudi are the proposed industrial sectors. Meat processing industry is the proposed industrial sector in Pudur, Vilathikulam. Textile based industry, Readymade Garments in Ottapidaram, Kovilpatti, Thoothukudi block. Coconut based products, Palmyrah based products, Mini Cement Plant are the proposed industrial sectors in Udangudi and Sathankulam. Flyash/ Chamber bricks in Karungulam and Cold storage unit in Srivaikundam, Tiruchendur, Vilathikulam blocks. Dhall milling, Mini Modern Rice Mill, are the proposed industrial sectors in Thoothukudi, Srivaikundam, Tiruchendur, Vilathikulam, Ottapidaram, Kovilpatti blocks.

3.5.4 Potential and Viable Projects Under MSME – Blockwise

In Thoothukudi block the following projects are considered potential and viable under MSME. They are; Sea food industry, sea weeds cultivation, pearl oyster culture, salt industries, chemical industries, poultry and cattle field, spice based products, readymade garments, mechanical boats / small ships building units, pulses processing, dhall mills, coconut oil, masala powder, dry flowers, senna leaves processing, bakery products, poly bags, general engineering, processing and canning of gherkins etc.

The following viable projects are considered viable under MSME in Kovilpatti block. They are; Match industries, power loom, cereals and pulses processing, masala powder, processing of herbals, readymade garments, printing press, bakery products, vermicelli, etc.

In Thiruchendur block the following projects are considered viable under MSME. They are; Value added products from banana, palmyrah products, cashew nut processing, extracting oil from cashew kernals, prawn culture, sea weeds cultivation, salt industries, sea food industries, bakery products, mini modern rice mills, etc.

The following projects are considered viable under MSME in Alwarthirunagari block. They are; Modern rice mills, processing of pulses and cereals, banana products, bio fertilizers, bakery products, cattle feed, readymade garments, country/ chamber bricks, vermicelli, etc.

In Srivaigundam block the following projects are considered viable under MSME. They are; Country bricks, Modern rice mills, banana products, flour mills, lime stone works, dry flowers, cold storage, coconut oil, coconut coir, waste pith processing units, gherkins processing units, fruits and vegetables processing units, etc.

The projects considered viable in Udangudi block under MSME are as follows. Coconut based products, Palmyrah based products, timber sawing, jewellery works, Modern rice mills, readymade garments, value added products from drumstick, fish processing, activated carbon, etc.

In Karungulam block the following projects are considered viable under MSME. Chamber bricks, stone crusher, wooden toys, wax candle, readymade garments, products from banana, guava and mango pulp producing units, cereals and pulses processing, dry flowers, bio fertilizers, modern rice mills, cold storage, etc.

The following projects are considered viable under MSME in Sathankulam block. They are Value added products from drumstick, cashew nut processing, leather goods, timber works, pappads, noodles, cattle field, palmyrah based products, bakery products, etc.

In Kayathar block the following projects are considered viable under MSME. They are Bakery products, readymade garments, flour mills, masala powder, herbal

products, aloe-vera gel, gherkins processing units, pulses processing, senna leaves processing, dyes from flower extract, etc.

The following projects are considered viable under MSME in Ottapidaram block. They are; Salt refinery, readymade garments, tomato processing, herbal products, curry leaf powder manufacturing, gherkins processing units, aloe- vera gel, roller flour mills, cold storage, sea weed cultivation, etc. In Pudur block the following projects are considered viable under MSME. They are; Charcoal manufacturing, match factory, masala powder, cereals and pulses processing, oleoresin extraction units, etc.

The following projects are considered viable under MSME in Vilathikulam block. They are; Match factory, handloom/power loom, charcoal manufacturing, masala powder, oleoresin extraction, iodised salt manufacturing, coastal aqua culture, value added products from amla etc.

3.6 THOOTHUKUDI PORT

One of the various infrastructural facilities, which contribute towards development of fisheries in general, and marine products export in specific in Thoothukudi district is the port of Thoothukudi. This port, a major gateway for India's international trade from the southern region, is located on the South Eastern coast of India adjoining the Gulf of Mannar of the state of Tamil Nadu about 600 km., south of Chennai.

The natural harbour with a rich hinter land activated the development of the port initially with wooden piers and it was declared as a minor anchorage port in 1868. The marine port of Thoothukudi, an anchorage port with litharge facilities has had flourishing traffic for over a century. This port was being used for export of salt, Cotton

yarn, sonar leaves, palmyrah stalks, Palmyra fibers, dry fish, country drugs and other products, to neighboring countries and for import of coal, cotton, copra pulses and grains.

Thoothukudi became the citadel of the freedom struggle in the early 20th century. In 1906, one of the greatest freedom fighters of India, Mr. V.O.Chidambaram Pillai, launched the first Swadeshi “S.S Gaelia” in British India, After Independence; the minor port of Thoothkudi witnessed a flourishing trade and handled a variety of cargo meant for the neighbouring countries of Srilanka, Maldives etc, and the coastal regions of India.

In 1969 the Government of India sanctioned a project for the development of a major port of Thoothukudi for handling ships of 9.14 km (30’) draft. An artificial harbour was constructed within a break water system projecting into the sea for about 4 km and Thoothukudi port became the 10th major port of India in July 1974. The minor port of Thoothukudi was merged with the newly commissioned major port in 1979. The capacity of the port is 20.75 million tonnes and it handled 21.48 million tonnes.

Thoothukudi port is an artificial deep-sea harbour formed with rubble mound type parallel breakwaters projecting into the sea for about 4 Kms., (Length of North breakwater is 4098.66 m. length of South breakwater is 3873.37 m and the distance between the breakwaters is 1275m). The port was designed and executed entirely through indigenous efforts. The harbour basin extends to about 400 hectares of protected water area and is served by an approach channel of 1450 meters length and 183 meters width¹.

¹http://www.investingintamilnadu.com/tamilnadu/infrastructure/tuticorin_port_profile.php

3.6.1 Shipping Agencies

The informal service of shipping agency which existed at the time of emergence of Thoothukudi as a port even in A.D. Loading and unloading of cargo was done manually from the thonies. The informal service continued even after constructing the jetties in 1894. After independence planned development took place to improve Thoothukudi harbour and garnishing the prospects of the trade, any families who were involved in the trade realized the need for dedicated man power for efficiently loading and unloading the cargo formed informal agencies. They also realized the need for systematic support service for the ships sailing and reaching the harbour. The smaller groups grew into 9 at the time when Thoothukudi port was declared as a major port in the year 1974.

The special features of this all weather port are round the clock operation navigation, Anchorage operation for lightening cargo, fourteen alongside berth, adequate warehousing and storage facility, modern cargo handling equipments to handle variety of cargo, good rail road connectivity for seamless transportation, integrated computerized system, EDI network, quick turn round of vessels and cordial industrial relations.

3.6.2 Marine Products

India with a long coast line of 8129 Km, 2 million sq. Km of Exclusive Economic Zone and 1.2 million hectores of brackish water bodies, offer vast potential for development of fisheries. Against an estimated potential of 3.9 million tonnes from marine sector, only 2.6 million tones are tapped. Fishing efforts are largely confined to the inshore waters through artisanal, traditional and mechanised sectors. The major marine products exported from the state include Frozen Shrimp, Prawn, Fish, Cuttle

Fish, Squid, Dried Items like Shrimp, Shark Fins, Cuttle Fish Bones, Fish Maws, Canned Shrimps, Fish, Lobster, Crab, Clam, Mussel, Squid Tubes, Aquarium fishes, Fresh fish, and others.

3.6.3 Marine Product Export

There are four distinct channels by which fish is marketed in the country. They are Local Fresh Fish Trade, Processed Fish Trade, Export Trade, and Domestic urban Trade. Exports of marine products have played a key role in developing the fishing and aquaculture sectors in India and this makes the fishery sector a key player in poverty alleviation and employment. India has a share of 2.58 per cent of the world seafood export trade. In terms of shrimp production India occupies the fifth position in the world and it is the top most suppliers of cephalopods to Europe. Aquaculture contributes 19 per cent by volume and 55 per cent by value of total seafood exports whereas farmed shrimp contributes 61 per cent by volume and 83 per cent by value of the shrimp exports².

3.6.4 Seafood Exports

Till the end of 1960, export of Indian marine products mainly consisted of dried items like dried fish and dried shrimp. Although frozen items were present in the export basket from 1953 onwards in negligible quantities, it was only since 1961 the export of dried marine products was overtaken by export of frozen items leading to a steady progress in export earnings. With the devaluation of Indian currency in 1966 the export of frozen and canned items registered a significant rise. Frozen items continued to dominate the trade. Markets for Indian products also spread fast to developed countries from the traditional buyers in neighboring countries.

²MPEDA *News letter*, Cochin, 2012.

3.7 CLUSTERS

Thoothukudi district has the possibilities of cluster development in the following industries.

3.7.1 Salt industry

3.7.2 Readymade garments

3.7.3 Handmade matches

3.7.4 Fish processing/Fish based products

3.7.1 Salt Industry

Salt industry is the main backbone of economic development of the district. It is the cluster group of industry of Thoothukudi district and was extended in an area of 15700 Acres with production of 17.12 Lakhs M.T. Thoothukudi district is endowed with a coastal line of about 121 Kms and territorial waters covering thousands of Hectares. During the survey it is reported that 2208 Units are engaged in salt production. The total area found viable for salt cultivation is about 40,000 Acres. Further it is reported from the survey 126 permitted iodised salt plants and 4 refined free flow iodised manufacturing units are functioning and produce about 70,000 M.T per Annum. The concentration of salt unit is centered on Thoothukudi, Srivaikundam and Thiruchendur Taluks. Also a considerable number of salt units are clustered in Vilathikulam block. There are about 2000 small - scale salt manufactures and traders in Thoothukudi district

3.7.2 Readymade Garments

Puthiamputhur is one of important village involved in manufacturing ready-made clothes. The clothes are sent all over Tamil Nadu and even to several parts of

India like Mumbai. It provides employment for more than 1500 people mostly hailing from near villages.

3.7.3 Hand Made Matches

There are about 1100 handmade safety matches manufacturing units available in Thoothukkudi District. These units are mostly clustered in Kovilpatti and Villathikulam taluks. These clusters provide employment to about 30,000 persons.

3.7.4 Fish Processing / Fish Based Products Cluster

Thoothukkudi District is blessed with a coastal line of 121 Kms. and fisheries, fish processing is the ancient and traditional industry. The fisherwomen of this district can be formed into groups and they can be trained in activities like fish processing, value added fish products. The Fisheries College and Research Institute, Thoothukkudi imparts high profile training to the willing entrepreneurs and women SHGs in value added fish products, ornamental fish culture etc., There is a good scope in Thoothukkudi District for this cluster which has an excellent market potential.

3.8 ROLE OF INSTITUTION IN ENTREPRENEURIAL DEVELOPMENT IN THOOTHUKUDI

3.8.1 District Industries Centre

The District Industries Centers programme was launched on May 1, 1978, with a view to providing an integrated administrative framework at the district level, which would look at the problems of industrialisation in the district, in a composite manner. In other words District Industries Centers is the institution at the district level which provides all the services and support facilities to the entrepreneurs for setting up small and village industries. DIC identification suitable schemes for SSI units, preparation of

feasibility reports, arranging for credit, machinery and equipment, provision of raw materials and other extension services are the main activities undertaken by these centers. Broadly DICs are trying to bring change in the attitude of the rural entrepreneurs and all other connected with economic development in the rural areas.

The important objectives of DICs are as follow :

- i) Accelerate the overall efforts for industrialisation of the district.
- ii) Rural industrialisation and development of rural industries and handicrafts.
- iii) Attainment of economic equality in various regions of the district.
- iv) Providing the benefit of the government schemes to the new entrepreneurs.
- v) Centralisation of procedures required to start a new industrial unit and minimisation - of the efforts and time required to obtain various permissions, licenses, registrations, subsidies etc.

The main functions of District Industries Center are as follows.

- Acts as the focal point of the industrialisation of the district.
- Prepares the industrial profile of the district
- Statistics and information about existing industrial units in the district in the large, Micro, Medium, small as well as co-operative sectors.
- Opportunity guidance to entrepreneurs
- Compilation of information about local sources of raw materials and their availability.
- Manpower assessment with respect to skilled, semi-skilled workers.

- Assessment of availability of infrastructure facilities like quality testing, research and development, transport, prototype development, warehouse etc.
- Conducting Motivation campaigns.
- Counseling and guiding the entrepreneurs
- Issuing Part I EM Acknowledgements to micro, small and medium enterprises by manual and online.
- Issuing Part II EM Acknowledgements to micro, small and medium enterprises which commenced production by manual and online.
- Conducting Single Window Committee Meeting periodically to get the clearances fast from different agencies like TNEB, local body etc.,
- Preparing technical feasibility report, whenever the financial institution ask for.
- Issuing registration certificate for Cottage Industries
- Issuing registration certificates for Handicrafts Industries
- Conducting task force committees to select the beneficiaries under Prime Minister's Employment Generation Program (PMEGP) for the unemployed youth, to set up manufacturing and service industries by tying up with financial institutions for loan assistance with subsidies.
- Conducting task force committees to select the beneficiaries under Unemployed Youth Employment Generation Program (UYEGP) for the unemployed educated youth, to set up manufacturing, service and business enterprises by tying up with financial institutions for loan assistance with subsidies.

- Giving incentives such as state capital subsidy, LTPT power tariff subsidy, generator subsidy, VAT subsidy etc., to Micro and Small enterprises in Thoothukudi district
- Conducting entrepreneur development program at selected institutes for the probable entrepreneur.
- Conducting seminars, workshops, etc., on industrial development and related subjects.
- Formation of industrial co-operatives societies
- Recommending the industries for district level and state level awards
- Identifying the sick units and assisting them, through district sick units declaration committee.
- Assisting the Micro, Small and Medium enterprises to get their long pending dues from their borrowers through regional industrial facilitation council. Assisting SC/ST entrepreneur under twenty point programme.
- Conducting regular meeting with local SSI association to solve any particular problem.
- Assisting the banks in recovering the dues from the PMRY /PMEGP/ UYEGP beneficiaries by conducting regular recovery campaigns
- Associating with various Department / Government agencies like TAHDCO, TABCEDCO etc., for the upliftment of the entrepreneur belonging to the socially weaker sections

- Identifying and developing cluster of industries under cluster development programme
- Operating Export Guidance and promotion Cell in District Industries Centre, Thoothukudi to provide guidance to develop exports of various products manufactured by Industries

3.8.2 National Skill Development Corporation

National Skill Development Corporation (NSDC), which was formed under the Ministry of Finance, is one of its kind public-private partnership with 51 per cent equity held by private sector and the balance 49 per cent by the Union Government. Formed in 2010, NSDC is a professionally run not-for-profit company that includes 39 sector skill councils and 136 training partners with over 2500 training centres spread across 366 districts in the country. NSDC is mandated to provide skill to 150 million Indians by 2022.

3.8.3 State Industries Promotion Corporation of Tamilnadu

State Industries Promotion Corporation of Tamilnadu Ltd (SIPCOT) was established in the year 1971 to develop industrial growth in Tamilnadu. To give main thrust to area development activities, the organization involves in the formation of industrial complexes by providing basic and comprehensive infrastructure facilities for the industries to set up their units. SIPCOT has so far developed 20 Industrial Complexes in 12 districts and Six Sector Specific Special Economic Zones (SEZs) across Tamil Nadu. SIPCOT also acts as a Nodal Agency of Government of Tamil Nadu in the sanction / disbursement of Structured Package of Assistance to large industrial units.

3.8.4 Entrepreneurship Development Institute

Established in 2001, the Entrepreneurship Development Institute (EDI), Chennai is an apex organisation in the field of entrepreneurship education and self-employment promotion in the state of Tamil Nadu. Entrepreneurship Development Institute, Chennai (EDI) was constituted by Government of Tamil Nadu and is administered by Department of Micro, Small and Medium Enterprises (MSME). EDI has embarked on a multipronged strategy to be executed in the next few years which involves a series of programs to be introduced with the objective of promoting Entrepreneurship in Tamilnadu.

The different training programs which are provided by the department will certainly help the individuals who have an ambition to start their own enterprise and thereby follow their dreams. EDI is partnering with the best HR and training companies in the country to deliver these programs. These companies have experienced trainers in specific domains who will be able to deliver the programs in an effective manner.

3.9 MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES

Micro, Small and Medium Enterprises (MSME) contribute nearly 8 percent of the country's GDP, 45 percent of the manufacturing output and 40 percent of the exports. They provide the largest share of employment after agriculture. They are the nurseries for entrepreneurship and innovation. They are widely dispersed across the country and produce a diverse range of products and services to meet the needs of the local markets, the global market and the national and international value chains.

The Ministry has a number of programmes to help and assist entrepreneurs and small businesses. If you are planning to set up business, you may contact National

Institute for Entrepreneurship and Small Business Development (NIESBUD), National Institute for Micro, Small and Medium Enterprises (NI-MSME), Indian Institute of Entrepreneurship (IIE) or the Development Commissioner (DCMSME) for details about their programmes. If you are an existing entrepreneur and would like to improve your competitiveness, you may contact DC, MSME who can be of assistance in various ways. If you want to set up a village industry or want to know more about Khadi or Coir Products, you may contact KVIC or Coir Board.

Ministry of MSME encourages and honors innovation and enterprise. We work in close coordination with the State Governments, Industry Associations, Banks and other stakeholders through our numerous field offices and technical institutions to help the ‘engines of growth’ throughout the country.

3.9.1 Entrepreneurship Development Programmes

Entrepreneurship development is one of the key elements for promotion of micro and small enterprises, particularly, the first generation entrepreneurs. Entrepreneurship, and resultant creation of employment and wealth, is a major means for inclusive development. Hence, entrepreneurship development has been one of the priorities in countries the world over. The Entrepreneurship Development Institute, Chennai has organised a series of Entrepreneurship Development Programmes entitled “you can be an entrepreneur” at various Districts. The programme is designed to equip first generation entrepreneurs with business ideas, project report preparation and ways to tap financial assistance for their business plan. This programme is exclusively for unemployed SC/ST graduates / Diploma holders only. EDI will conduct the programme at an Institution in the district selected by the EDI. The programme is entirely free for all SC/ST candidates.

Entrepreneurship Development Institute (EDI), Chennai, organise entrepreneurship development programmes to benefit educated youths (graduates in engineering / management, arts and science and diploma holders in engineering, both men and women) who aspire to be self-employed. The participants will be motivated and thoroughly guided to set up and manage small-scale industrial or service projects. This one month, full-time intensive programme will cover all aspects of entrepreneurship / self-employment guidance. Topics such as (i) product / project identification, (ii) procedures of starting small-scale enterprises, (ii) business plan preparation and (iv) financial and subsidy schemes for new entrepreneurs, will be discussed by specialist officers from govt. promotional depts., commercial banks / financial institutions. Renowned industrial consultants specialised in micro and small projects, chartered accountants and prominent successful entrepreneurs will be invited to deliver lectures and offer mentoring services³.

3.9.2 Women Entrepreneurship Development Program (WEDP) and Entrepreneurship Cum Skill Development Programmes for Women (WESDP)

The EDI will organise Women Entrepreneur Development Programmes [WEDPs] in order to create a business environment that encourages the initiative of rural and urban women entrepreneurs and to enhance the human and institutional capacities required to foster entrepreneurial dynamism and enhance productivity.

The Women Entrepreneur Development Programme aims at providing entrepreneurship training to women, mentoring women entrepreneurs and technical skills upgrading. The WEDPs will help women entrepreneurs to improve their production processes and management techniques and support their initiatives to start new enterprises. The Entrepreneurship cum Skill Development Programme (ESDP)

³ http://www.editn.in/govtof_india.aspx

will combine skill training in a variety of sectors with modules in management, marketing, finance and business plan preparation to help women set up skill based enterprises⁴.

3.9.3 General Entrepreneurship Development Program (EDP) and General Entrepreneurship Development Program (EDP)

An Entrepreneurship Development Programme (EDP), aims at providing training in the essentials of conceiving, planning, initiating and launching an economic activity or an enterprise successfully. The programme content includes class room training on essentials of entrepreneurship, identification of business opportunities, schemes of assistance offered by various constituents of the support system, preparation of a technically feasible and economically viable project report, Achievement Motivation Training and also the nuances of management of an enterprise. Target Group: The Diploma Holders /Graduates and above - for 4 Weeks Programmes. 10th pass/+2 pass - for 2 Weeks Programmes. Duration : 2 Weeks and 4 Weeks Age : 18 Years to 35 Years.

3.9.4 Entrepreneurship and Skill Development Program (ESDP) General Candidates

The objective of the ESDP is to provide training for skill upgradation so as to equip the trainees with modern technological skills. Typical ESDPs may be conducted in Machine Shop Practice, CNC, Heat Treatments, Electroplating, Sheet metal, Welding, Tool and Die Making, Glass and Ceramics, Industrial and Art Wares, Herbal Cosmetics, Fashion Garments, Hosiery, Food and Fruit Processing Industries, Information Technology, Hardware Maintenance, Soap and Detergents, Leather

⁴ <http://www.editn.in/compendium.aspx>

Products/Novelties, Servicing of Household Electrical Appliances and Electronic Gadgets, Gem Cutting and Polishing, Engineering Plastics etc. However, the above list is only illustrative and not exhaustive. Based on Market need and demand, more skills can be identified and Skill Development Programmes will be designed and offered. There will also be a management module on how to establish and manage an enterprise.

Target Group: The Diploma Holders / ITIs / any Certified Trade Course / VTP.

Duration : 180 hours - over 30 days Age : 18 Years and above

3.9.5 Technology Based Entrepreneurship Development Program (TEDP)

A TEDP is designed to motivate and develop entrepreneurs in specific products/processes/ cutting edge / intermediate technologies developed by CSIR labs, CLRI, CIPET, CITRA, FTDI, R&D institutions, State Universities etc., for the qualified graduates/ diploma holders in various disciplines of Science and Technology who can generate ideas and develop Business Plan and Business Ventures. The EDI will identify the above institutions as knowledge partner who will give technological training and EDI will give the management training. Based on the Technological input, entrepreneurs will be encouraged to prepare Business Plans in collaboration with the partner institutions. A Technology Based EDP primarily focuses on the training and development needs of S&T entrepreneurs in a specific technology area (for example, Leather, Plastic, Electronics and Communication, Fragrance and Flavour, Instrumentation, Sports Goods, Bio-technology, IT Computer Hardware, Food Processing, Bio-medical Equipment, Glass and Ceramics, Jute Products, Sustainable Building Materials, Herbs and Medical Plants Processing, etc.). The above list is only illustrative and not exhaustive. Based on Market requirement, more sunrise industries will be identified and designed according to the market demand. The participants will

be provided with hands-on training in indigenous technologies developed by R&D institutions that may be available for commercial exploitation.

Target Group: B.E. Graduates/Graduates/Post Graduates in any branch of Science/ Diploma/Degree in a specified branch of Engineering/Technology depending on the nature of TEDP. Duration : 6-weeks duration Age :18-35 Years,(relaxable in exceptional circumstances).

3.9.6 Entrepreneurship Awareness Camp

In order to create awareness among faculty and students of Engineering and Science courses about various facets of entrepreneurship as an alternative career option as also to highlight the merits of pursuing such an option. In each EAC, about 75 students will be exposed to different aspects of entrepreneurship, including Achievement Motivation, Identification of opportunities for entrepreneurs, How to start a SSI unit, Government regulations, rules & procedures, location, Creativity and business, Communication skills etc., will be covered. A visit to the industries located in the region will also be arranged to bring the students in direct touch with practicing entrepreneurs.

Target Group: Science and Technology graduates/diploma holders or those who are doing their final year diploma / degree in engineering / technology / science. Duration : 3- days duration Age :18 Years and above.

3.9.7 Scheme of Mentorship for New Entrepreneurs

The main lacuna standing in the way of potential entrepreneurs from becoming successful is the absence of a mentor. Quite often, the absence of timely information relating to the market, trends in the economy, a proper understanding of how to

approach financial institutions and potential investors, ignorance of the plethora of acts, rules and regulations - these can make the difference between success and failure for the first generation entrepreneur.

3.9.8 Technology Based Entrepreneurship Development Program

The objective of the scheme is to supplement the efforts of public extension in the agriculture sector by technology and management inputs to promote a new brand of entrepreneurs in Agriculture called Agripreneurs. Identification of Agripreneurs will be based on experience and educational background. The ADP will support agricultural development and create gainful self-employment opportunities to unemployed agricultural graduates. Target Group Agricultural graduates, agricultural Diploma holders, Intermediate in agriculture and biological science graduates with PG in agri-related courses. Duration : 2 month (Residential) - 60 days Age : 18-35 Years,(relaxable in exceptional circumstances).

3.9.9 Cluster Based Awareness Programmes

The Cluster Development Programme is aimed at the development of MSMEs in the various Industry clusters in the State to face various challenges which are common to that industry. The programme will improve their operational performance and help them to sustain themselves in the face of Global competition. Prominent clusters in the State cover Tannery, Textiles, cashew, coir, Engineering, silk etc. Target Group MSMEs clusters in various of Districts namely leather, coir, cashew, Automobile / Engineering, etc. will be covered. The list is, however, not exhaustive, but only indicative. New clusters will be identified and covered by continuous survey.

3.10 CONCLUSION

This chapter explains about the profile of the educational avenues available and the industrial scenario in Thoothukudi district. The role of Government in the development of entrepreneurship is also presented in this chapter.

CHAPTER - IV

PROFILE OF THE RESPONDENTS AND THEIR ENTREPRENEURIAL TRAITS

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- 4.7 Religion among the respondents
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CHAPTER - IV

PROFILE OF THE RESPONDENTS AND THEIR ENTREPRENEURIAL TRAITS

4.0 INTRODUCTION

The profile of the respondents provides the background information of the students. Since the study is about the entrepreneurial traits and achievement motivation among the college students, the background of the students, the entrepreneurial traits and their achievement motivation needs to be studied. The entrepreneurial traits of the students are the fundamental concept which is essential for the purpose of entrepreneurial motivation among the students. In this chapter, the entrepreneurial traits, the factors leading to entrepreneurial traits and the impact of the factors leading to entrepreneurial traits on the entrepreneurial traits have also been discussed.

4.1 LOCATION OF THE COLLEGE

The location of the college refers to the place at which the college located at present. Since the place of college is one of the important factors which play the vital role in shaping the behavior, ambition, aspirations and attitude of the students, it is included as a basic profile variable to classify and group the students. In the present study, the location of college is classified in to urban, semi-urban and rural. The distribution respondents on the basis of the location of the college are given in Table 4.1.

Table 4.1

Distribution of the Respondents According to the Location of the College

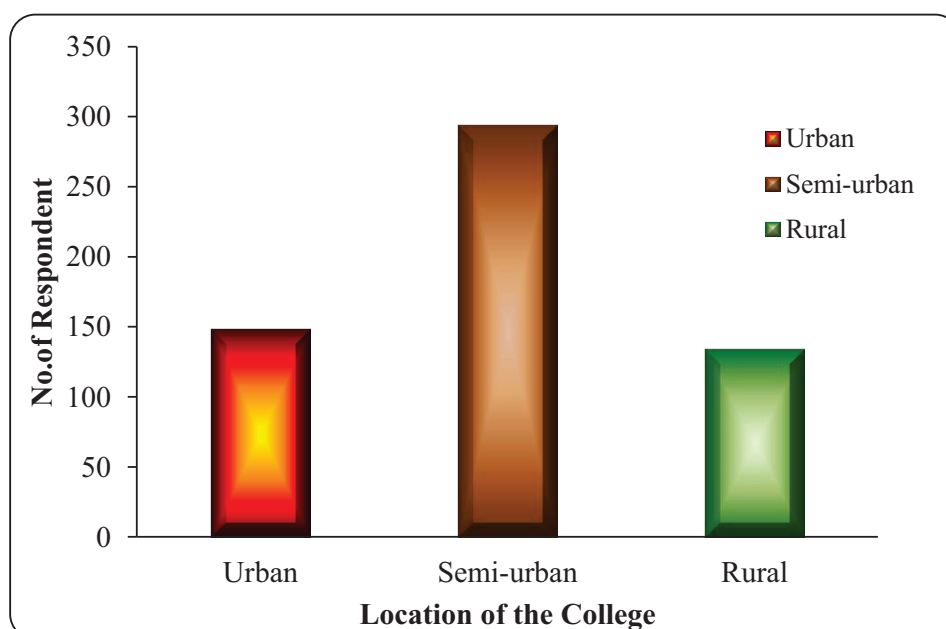
S.No	Place of College	Number of Respondents	Percentage
1	Urban	148	25.69
2	Semi-urban	294	51.04
3	Rural	134	23.27
	Total	576	100.00

Source: Primary data

The above Table 4.1 reveals that a maximum (51.04 per cent) of the respondents are studying in the college located in the semi-urban areas. 25.69 per cent of the respondents are studying in the college located in the urban areas. The remaining 23.27 per cent of the respondents are studying in the college located in the rural areas. The analysis exhibits that majority (51.04 per cent) of the respondents are studying in the college located in the semi-urban areas.

Figure 4.1

Distribution of the Respondents According to the Location of the College



4.2 GENDER OF THE RESPONDENTS

One of the important profiles of the respondents is their gender. Since the gender may play a major role in the determination of entrepreneurial traits and achievement motivation among the respondents, it is included as one of the profile variables. The distribution of respondents on the basis of gender is given in Table 4.2.

Table 4.2

Gender of the Respondents

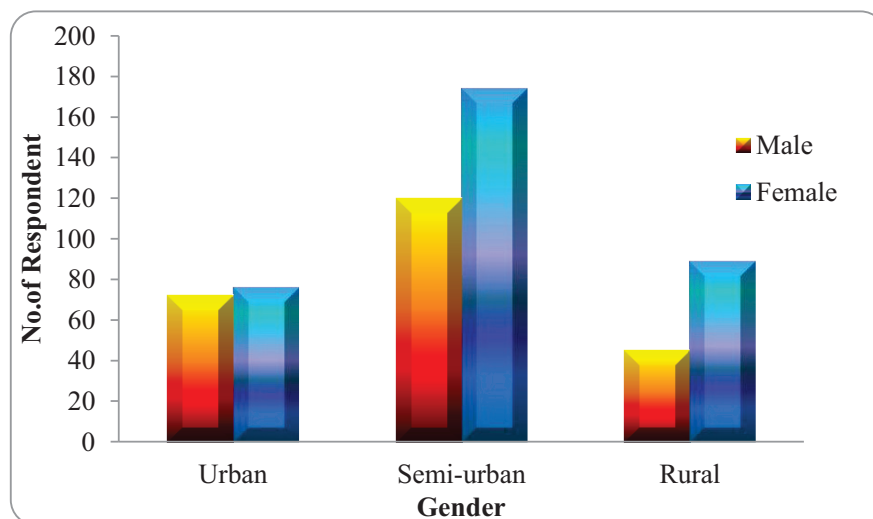
S.No	Gender	Number of Respondents			Total
		Urban	Semi-urban	Rural	
1	Male	72	120	45	237
2	Female	76	174	89	339
	Total	148	294	134	576

Source: Primary data

The most important gender among the respondents is female which constitutes 58.85 per cent to the total. The female respondents in the urban, semi-urban and rural area constitute 51.35, 59.18 and 66.42 per cent to its total respectively. The analysis reveals that the majority (58.85 per cent) of the respondents are female.

Figure 4.2

Gender of the Respondents



4.3 AGE OF THE RESPONDENTS

The age of the respondents may have its own influence on the entrepreneurial traits and achievement motivation among the respondents. Hence, it is included as one of the profile variables. The age of the students in the present study is classified in to below 19 years, 19 to 21, and 22 and above. The distribution of respondents on the basis of their age is given in the Table 4.3.

Table 4.3

Age of the Students

S.No	Age in years	Number of Respondents			Total
		Urban	Semi-urban	Rural	
1	Below 19	19	26	14	59
2	19 – 21	111	236	92	439
3	22 and above	18	32	28	78
	Total	148	294	134	576

Source: Primary data

The important age group among the respondents is 19 to 21 years which constitutes 76.22 per cent to the total. The most important age group among the urban and semi-urban students is 19 to 21 years which constitutes 75.00 and 80.27 percent to its total of 148 and 294 students respectively. Among the rural students, it is also 19 to 21 years which constitutes 68.66 percent to its total. The analysis reveals that the important age group among the students is 19 to 21 years.

4.4 PLACE OF RESIDENCE OF THE RESPONDENTS

The place of residence of the respondents represents the area where the respondents are living. Since the place of residence may be associated with the entrepreneurial traits and achievement motivation among the respondents, it is included as one of the profile variable of the respondents. The place of residence in the present study is classified into urban, semi-urban and rural areas. The distribution of respondents on the basis of the place of residence is given in Table 4.4.

Table 4.4
Place of Residence among the Respondents

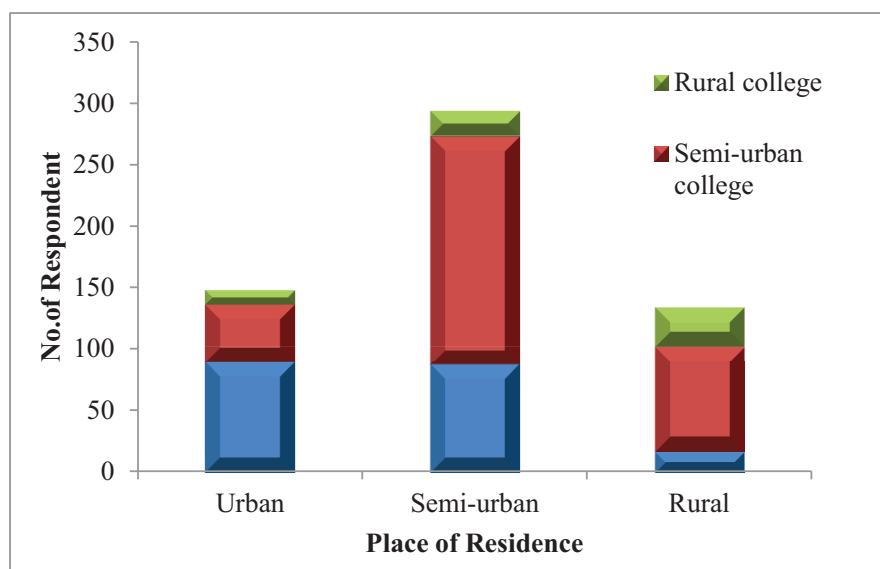
S.No	Place of Residence	Number of Respondents			Total
		Urban	Semi-urban	Rural	
1	Urban	89	87	17	193
2	Semi-urban	47	186	85	318
3	Rural	12	21	32	65
	Total	148	294	134	576

Source: Primary data

It is evident from Table 4.4 that majority (55.21 per cent) of the respondents are residing in semi-urban areas. 46.11 per cent of the respondents living in the urban areas are studying in the college situated in the urban areas. 58.49 per cent of the respondents living in the semi-urban areas are studying in the college situated in the semi-urban areas. 49.23 per cent of the respondents living in the rural areas are studying in the college situated in the rural areas. The above analysis clearly shows that most of the respondents are doing their collegiate education in the college where they are residing.

Figure 4.3

Place of Residence among the Respondents



4.5 RESPONDENTS BRANCH OF STUDY

Respondents' branch of study represents the branch chosen by the respondents for their collegiate education. As the branch of study chosen by the respondents may have its own influence on their level of achievement motivation, it is included as one of the profile variables. As study is conducted among the arts and science college students, the branch of study is classified into arts and science. The distribution of respondents on the basis of their branch of study is presented in Table 4.5.

Table 4.5

Branch of study among the students

S.No	Branch of Study	Number of Respondents			Total
		Urban	Semi-urban	Rural	
1	Arts	61	156	71	288
2	Science	87	138	63	288
	Total	148	294	134	576

Source: Primary data

The above Table 4.5 shows that 58.78 per cent of the respondents studying in the urban college are undergoing science courses. Among the semi-urban college students, 53.06 per cent of them are studying arts courses. 52.99 per cent of the rural college students are studying arts courses. The analysis reveals that majority of the semi-urban and rural college students are undergoing arts courses whereas, majority of the urban college students are undergoing science courses.

4.6 SOCIAL GROUP AMONG THE RESPONDENTS

Social group among the respondents represents the community to which the respondents belong. As the social group of the respondents may have its own influence on the entrepreneurial traits and achievement motivation, it is included as one of the profile variables in the present study. It is classified into forward class, backward class, most backward class and SC/ST. The distribution of respondents on the basis of their social group is illustrated in Table 4.6.

Table 4.6

Social Group among the Respondents

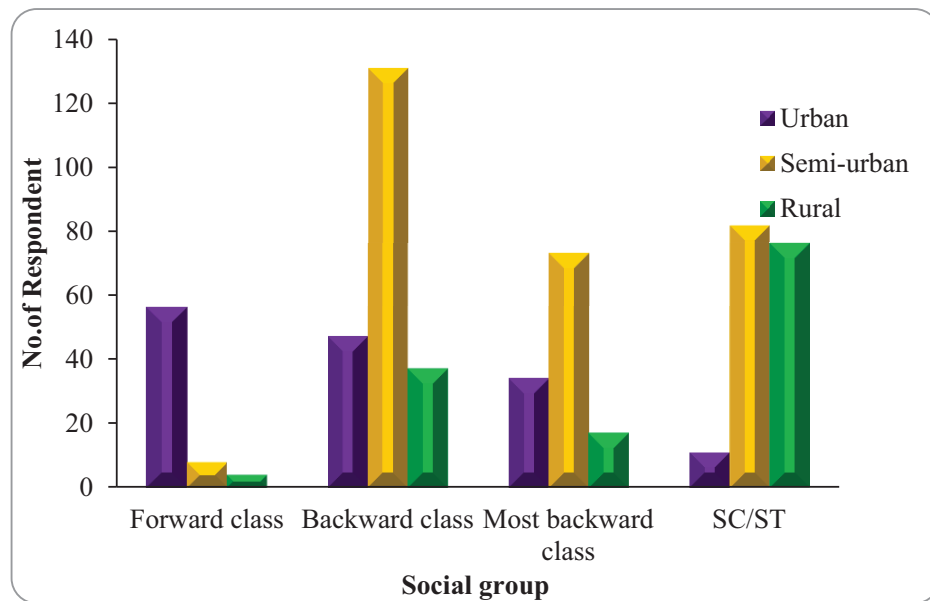
S.No	Social Group	Number of Respondents			Total
		Urban	Semi-urban	Rural	
1	Forward class	56	8	4	68
2	Backward class	47	131	37	215
3	Most backward class	34	73	17	124
4	SC/ST	11	82	76	169
	Total	148	294	134	576

Source: Primary data

It is evident from Table 4.6 that 37.84 per cent of the urban college students belong to forward class community. 44.56 of the semi-urban college students belong to backward class community whereas, 56.71 per cent rural college students belong to SC/ST community. The analysis reveals that forward and backward class community respondents are more in the urban colleges whereas backward and SC/ST community respondents are dominating in the semi-urban and rural colleges.

Figure 4.4

Social Group among the Respondents



4.7 RELIGION AMONG THE RESPONDENTS

Religion among the respondents represents the religion to which the respondents belong. The religion is included as one of the profile variables of the respondents since it may have its own influences on the entrepreneurial traits and achievement motivation. In the present study, the religion among the respondents is classified into Hindu, Muslim, Christian and others. The distribution of respondents on the basis of their religion is illustrated in Table 4.7.

Table 4.7

Religion among the Respondents

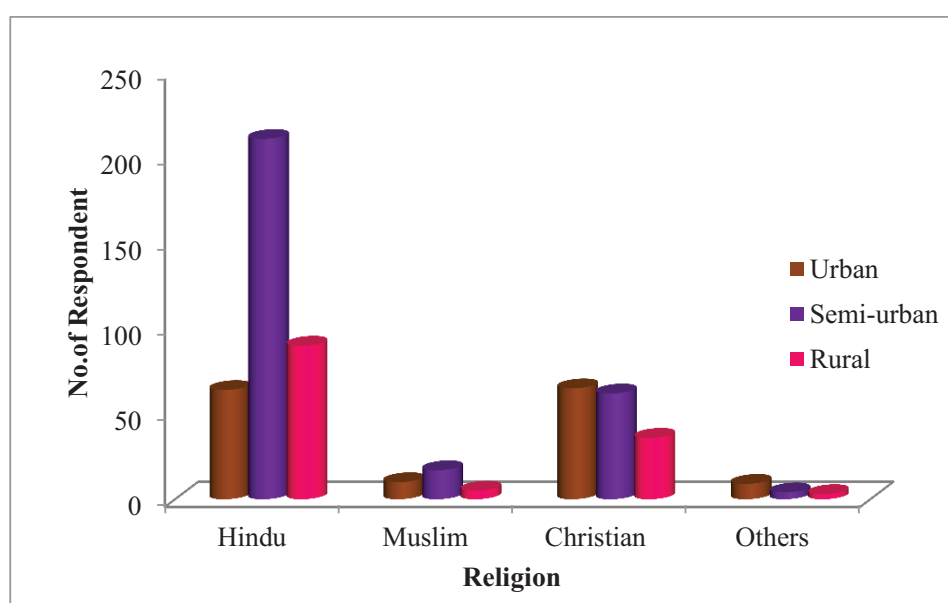
S.No	Religion	Number of Respondents			Total
		Urban	Semi-urban	Rural	
1	Hindu	64	211	90	365
2	Muslim	10	17	5	32
3	Christian	65	62	36	163
4	Others	9	4	3	16
	Total	148	294	134	576

Source: Primary data

The above Table 4.7 shows that the important religion among the respondents is Hindu and Christian which constitutes 63.37 and 28.30 per cent to the total respectively. Among the urban, semi-urban and rural college students majority of them belong to Hindu religion which constitutes 43.24, 71.77 and 67.16 per cent to its total respectively. The analysis reveals that majority of the respondents irrespective of the college where they are studying belong to Hindu religion.

Figure 4.5

Religion among the Respondents



4.8 FAMILY TYPE OF THE RESPONDENTS

The family type of the respondents represents the family structure of the respondents' family. The type of family in the present study is classified into joint family and nuclear family. The distribution of respondents on the basis of the type of family is given in Table 4.8.

Table 4.8
Respondents Family Type

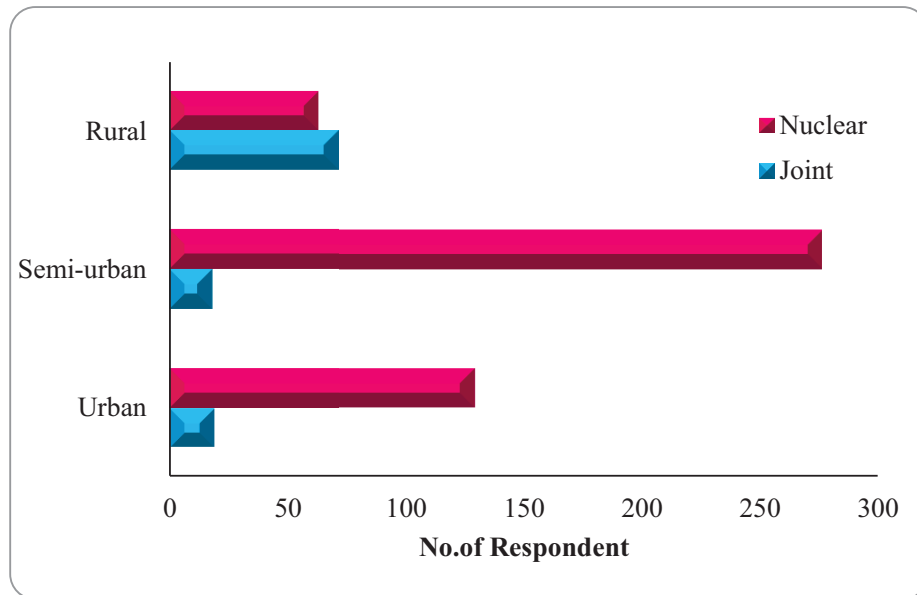
S.No	Type of Family	Number of Respondents			Total
		Urban	Semi-urban	Rural	
1	Joint	19	18	71	108
2	Nuclear	129	276	63	468
	Total	148	294	134	576

Source: Primary data

The Table 4.8 reveals that majority (81.25 per cent) of the respondents belong to the nuclear family system. The most important family type among the urban and semi-urban college students is nuclear family system which constitutes 87.16 and 93.88 per cent to its total respectively. Among the rural college students, it is joint family system which constitutes 52.99 per cent to its total. The analysis exhibits that majority (81.25 per cent) of the respondents belong to the nuclear family system.

Figure 4.6

Respondents Family Type



4.9 FAMILY SIZE OF THE RESPONDENTS

The size of the family of the respondents represents the total family members in the respondent's family. As the number of family members in the respondents' family may have its own influence on their level of achievement and entrepreneurial motivation, it is included as one of the profile variable in the study. The family size among the respondents in the present study is confined to below 4, 5 to 6 and above 6. The distribution of respondents on the basis of the family size is given in Table 4.9.

Table 4.9**Size of Family among the Respondents**

S.No	Size of Family	Number of Respondents			Total
		Urban	Semi – urban	Rural	
1	Below 4	76	32	17	125
2	5 – 6	65	251	68	384
3	Above 6	7	11	49	67
	Total	148	294	134	576

Source: Primary data

The above Table 4.9 exhibits that majority (66.67 per cent) of the respondents family have 5 to 6 members. Among the urban college students family majority (51.35 per cent) of them are having less than 4 members whereas among the semi-urban and rural college students family majority of them are having 5 to 6 members which constitutes 85.37 and 50.75 per cent to its total respectively. The analysis reveals that majority (66.67 per cent) of the respondents family are having 5 to 6 members.

4.10 MONTHLY FAMILY INCOME OF THE RESPONDENTS

Monthly family income of the respondents represents the family income of the respondent per month. As the family income will play a vital role in influencing the family members as regards their achievement and motivation, the family income is considered as one of the important profile variable in the present study. The family income of the respondents is confined to less than ₹ 10,000, ₹ 10,000 to 20,000, ₹ 20,001 to 30,000, ₹ 30,001 to 40,000, ₹ 40,001 to 50,000 and above ₹50,000. The distribution of respondents on the basis of their monthly family income is given in Table 4.10.

Table 4.10**Monthly Family Income of the Respondents**

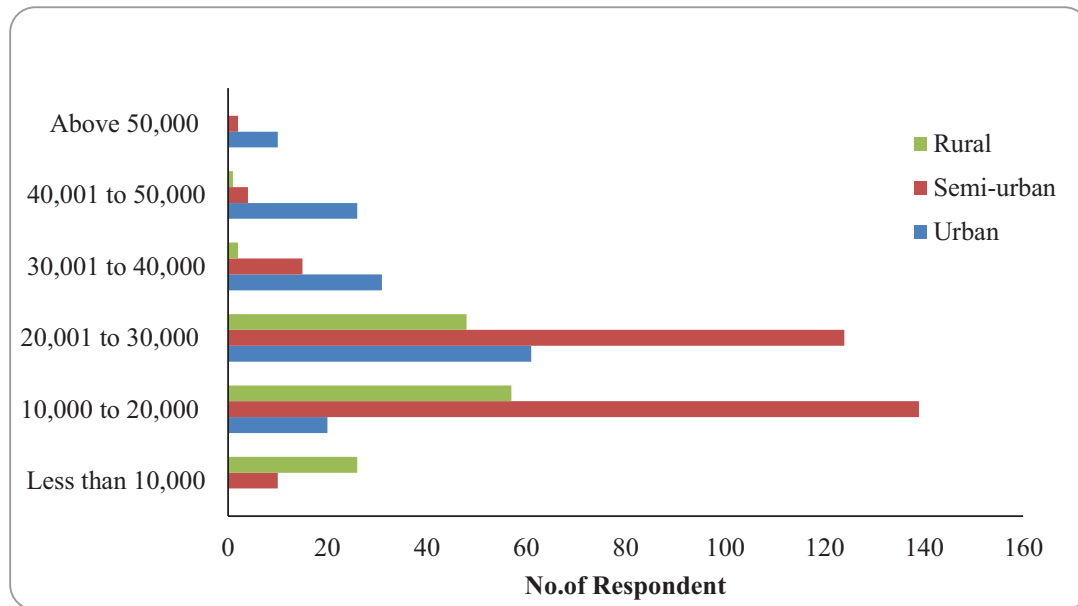
S.No	Monthly income (in ₹)	Number of Respondents			Total
		Urban	Semi-urban	Rural	
1	Less than 10,000	-	10	26	36
2	10,000 to 20,000	20	139	57	216
3	20,001 to 30,000	61	124	48	233
4	30,001 to 40,000	31	15	2	48
5	40,001 to 50,000	26	4	1	31
6	Above 50,000	10	2	-	12
	Total	148	294	134	576

Source: Primary data

Table 4.10 reveals that majority (40.45 per cent) of the respondents family are having monthly family income of ₹ 20,001 to 30,000. 37.5 per cent of the respondents' families are having monthly income of ₹ 10,000 to 20,000. Among the urban college students' families 41.22 per cent of them are having monthly income of ₹ 20,001 to 30,000 whereas among the respondents of semi-urban and rural colleges majority of the respondents families are having ₹ 10,000 to 20,000. It is inferred from the analysis that the monthly family income among the urban college students is higher (₹ 20,001 to 30,000) than the monthly family income among the semi-urban and rural college students.

Figure 4.7

Monthly Family Income of the Respondents



4.11 FATHER'S OCCUPATION OF THE RESPONDENTS

Father's occupation of the respondents represents the nature of work or occupation of the respondents' father. Since the father's occupation may play its own role in the determination of the entrepreneurial traits and achievement motivation among the respondents, it is included as one of the profile variables in this study. Father's occupation is confined to Government employment, private employment, business, farmers, professional and others. The distribution of respondents on the basis of their father's occupation is illustrated in Table 4.11.

Table 4.11**Father's Occupation among the Respondents**

S.No	Father's Occupation	Number of Respondents			Total
		Urban	Semi – urban	Rural	
1	Government employment	48	23	4	75
2	Private employment	39	141	29	209
3	Business	23	22	12	57
4	Farmers	6	99	89	194
5	Professional	28	8	-	36
6	Others	4	1	-	5
	Total	148	294	134	576

Source: Primary data

From Table 4.11 it is evident that majority (36.28 per cent) of the respondent's father are working in the private sector. 33.68 per cent of the respondents' fathers are farmers. Among the urban college respondent's fathers 32.43 per cent of the respondent's fathers are having government employment. Among the semi-urban college students 47.96 per cent of the respondent's fathers are working in the private sector whereas 66.42 per cent of the rural college respondent's fathers are farmers. The analysis reveals that the important father's occupation among the respondents is private employment and farmers.

4.12 MOTHER'S OCCUPATION AMONG THE RESPONDENTS

The mother's occupation among the respondents in the present study is confined to Government employment, private employment, business, farmer, professional and others (House wife). The distribution of respondents on the basis of their mother's occupation is given in Table 4.12.

Table 4.12

Mother's Occupation among the Respondents

S.No	Mother's Occupation	Number of Respondents			Total
		Urban	Semi – urban	Rural	
1	Government employment	5	10	2	17
2	Private employment	9	19	18	46
3	Business	-	1	2	6
4	Farmers	-	6	32	38
5	Professional	-	-	-	-
6	Others (House wife)	134	258	80	472
	Total	148	294	134	576

Source: Primary data

Table 4.12 reveals that majority (81.94 per cent) of the respondent's mothers are house wife. The important occupation of mother's of urban, semi-urban and rural college students is house wife. The analysis reveals that majority of the respondent's mothers are house wife.

4.13 ENTREPRENEURIAL TRAITS OF THE RESPONDENTS

The entrepreneurial traits of the respondents in the present study are measured with the help of eight variables. The respondents are asked to rate these eight variables at five point scale according to the order of existence among them. The mean score of each variable among the urban, semi-urban and rural college students have been computed separately along with its 'F' statistics. The results are given in Table 4.13.

Table 4.13

Entrepreneurial Traits (ET) among the Respondents

S.No	Variables in Entrepreneurial Traits	Mean score among Respondents			F Statistics
		Urban	Semi – urban	Rural	
1	Risk Taking	3.6503	3.0175	3.0086	3.2676*
2	Hard Work	3.1172	3.4542	3.8917	3.1071*
3	Ability to take decision	3.7375	3.2676	3.0172	3.4569*
4	Self Confidence	3.8891	3.1173	2.8973	3.9092
5	Capacity to Solve Problem	3.6069	2.9098	2.6696	3.9773*
6	Leadership	3.7308	3.1109	2.9037	3.5173*
7	Creativity	3.8587	3.2676	3.0176	3.6568*
8	Ability to Foresee future	3.7808	3.0179	2.8676	3.8141*

*Significant at five per cent level

The highly possessed entrepreneurial traits among the urban college students are self-confidence and creativity since their mean scores are 3.8891 and 3.8587 respectively. Among the semi-urban college students the highly possessed entrepreneurial traits are handwork, ability to take decision and creativity since their mean score are 3.4542 and 3.2676 respectively. Among the rural college students the highly possessed entrepreneurial traits are handwork and creativity since their mean

scores are 3.8971 and 3.0176 respectively. Regarding the possession of entrepreneurial traits, significant difference among the three group of respondents have been noticed in the case of all eight variables since their respective 'F' statistics are significant at five per cent level.

4.14 VARIABLES IN ENTREPRENEURIAL TRAITS (ET) AND ITS RELIABILITY

The score of eight variables in ET have been included for confirmatory factor analysis (CFA) in order to examine the reliability and validity of variables in ET. The overall reliability of variable in ET has been estimated with the help of Cronbach alpha. The results are given in Table 4.14.

Table 4.14

Reliability and validity of variables in Entrepreneurial Traits

S. No	Variables in Entrepreneurial Traits	Standardized factor loading	t Statistics	Cronbach alpha	Composite Reliability	Average variable extracted
1	Self confidence	0.9089	4.1711*	0.8108	0.7911	56.68
2	Ability to foresee future	0.8667	3.5881*			
3	Ability to take decision	0.8334	3.4546*			
4	Risk Taking	0.8117	4.3884*			
5	Creativity	0.7508	3.0994*			
6	Leadership	0.7331	2.8081*			
7	Hard work	0.6886	2.5089*			
8	Capacity to solve problem	0.6245	2.1786*			

*Significant at five per cent level

The standardized factor loading of the variables in ET are varying from 0.6245 to 0.9089 which reveals the content validity. The significance of 't' statistics of the

standardized factor loading of the variables in ET reveals the convergent validity. It is also supported by the composite reliability and average variable extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively. The included 8 variables in ET explain it to an extent of 81.08 per cent since its Cronbach alpha is 0.8108.

4.15 LEVEL OF ENTREPRENEURIAL TRAITS AMONG THE RESPONDENTS

The level of entrepreneurial traits among the respondents is measured by the mean score of the variables in ET. It is denoted by SOET. In the present study, the SOET is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of respondents on the basis of their SOET is given in Table 4.15.

Table 4.15

Score of Entrepreneurial Traits (SOET) among the Respondents

S.No	Score of Entrepreneurial Traits	Number of students in			Total
		Urban	Semi – urban	Rural	
1	Less than 2.0	5	12	15	32
2	2.0 to 3.0	19	103	26	148
3	3.1 to 4.0	59	145	86	290
4	Above 4.0	65	34	7	106
	Total	148	294	134	576

Source: Primary data

The important SOET among the respondents are 3.1 to 4.0 and 2.0 to 3.0 which constitutes 50.35 and 25.69 per cent to the total respectively. The important SOET among the urban and semi urban college students are above 4.0 and 3.1 to 4.0 which constitutes 43.92 and 49.32 per cent to its total respectively. Among the rural college

students, the important SOET is 3.1 to 4.0 which constitutes 64.18 per cent to its total. The analysis reveals that the level of entrepreneurial traits among the urban college students is higher than the level of entrepreneurial traits among the semi-urban and rural college students.

4.16 ASSOCIATION BETWEEN THE PROFILE OF RESPONDENTS AND THEIR SOET

The association between the profile of the respondents and their level of entrepreneurial traits has been estimated with the help of one way analysis of variance. The included profile variables are gender, age, place of college, branch of study, social group, religion, type of family, size of family, monthly family income, father's occupation and mother's occupation. The result of one way analysis of variance is given in Table 4.16.

Table 4.16
Association between profile of the respondents and their
Score of Entrepreneurial Traits

S.No	Profile variables	F-Statistics	Table value of 'F' at five per cent level	Result
1	Gender	3.4547	3.84	Non Significant
2	Age	2.4546	3.00	Non Significant
3	Place of residents	2.5441	3.00	Non Significant
4	Branch of study	3.2887	3.84	Non Significant
5	Social group	2.6568	2.60	Significant
6	Religion	2.4345	2.60	Non Significant
7	Type of family	3.2667	3.84	Non Significant
8	Size of family	2.8117	3.00	Non Significant
9	Monthly family income	3.1786	2.21	Significant
10	Father's occupation	2.9108	2.21	Significant
11	Mother's occupation	2.8986	2.21	Significant

Regarding the level of entrepreneurial traits, the significantly associating profile variables are social group, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level. The analysis reveals the importance of above said significant profile variables in the determination of entrepreneurial traits among the respondents.

4.17 FACTORS LEADING TO ENTREPRENEURIAL TRAITS AMONG THE RESPONDENTS

There are too many variables influencing the entrepreneurial traits of the respondents. The present study confines these in to 70 variables. The respondents are asked to rate these variables at five point scale according to the order of importance attached with these variables as a factor leading to determine their entrepreneurial traits. The scores of the variables are taken for Exploratory Factor Analysis (EFA) in order to narrate the variable into factors. Initially, the validity of data for EFA have been tested with the help of Kaiser - Meyer - Olkin measure of sampling adequacy and Bartlett's test of sphericity. Both these two tests satisfy the validity of data for EFA. The EFA results in 12 factors. The Eigen value and per cent of variation explained by each factor is shown in Table 4.17.

Table 4.17**Factors leading to Entrepreneurial Traits among the Respondents**

S.No	Factors	Number of variables	Eigen value	Per cent of variation explained	Cumulative per cent of variation explained
1	Co-ordination	12	7.8974	11.28	11.28
2	Innovativeness	8	4.9175	7.03	18.31
3	Optimism	9	4.5609	6.52	24.83
4	Informativeness	7	3.8865	5.55	30.38
5	Decision making	7	3.7091	5.30	35.68
6	Hard work	7	3.6945	5.28	40.96
7	Problem solving	5	2.9808	4.25	45.21
8	Confidence	5	2.8227	4.03	49.24
9	Enterprising	3	2.2965	3.28	52.52
10	Personality	3	2.1173	3.02	55.54
11	Sincerity	2	1.8986	2.71	58.25
12	Forecasting ability	2	1.7345	2.47	60.72
	Total	70			
	KMO measures of sampling adequacy: 0.7379		Bartlett's test of sphericity: Chi square value: 80.79*		

*Significant at five per cent level

The first three important factors are co-ordination, innovativeness and optimism since their Eigen values are 7.8974, 4.9175 and 4.5609 respectively. The per cent of variation explained by these factors are 11.28, 7.03 and 6.52 per cent respectively. The next three factors identified by the EFA are informativeness, decision making and hard work since their Eigen values are 3.8865, 3.7091 and 3.6945 respectively. The per cent

of variation explained by these three factors are 5.55, 5.30 and 5.28 per cent, respectively.

The next three factors identified by the EFA are problem solving, confidence and enterprising since their Eigen values are 2.9808, 2.8227 and 2.2965 respectively. The per cent of variation explained by these three factors are 4.25, 4.03 and 3.28 per cent respectively. The last three factors identified by the factor analysis are personality, sincerity and Forecasting ability since their Eigen values are 2.1173, 1.8986 and 1.7345 respectively. The per cent of variation explained by these three factors are 3.02, 2.71 and 2.47 per cent respectively. All the 12 factors explain the 70 variables to an extent of 60.72 per cent. The analysis result in 12 factors leading to entrepreneurial traits among the respondents.

4.18 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO COORDINATION

In total, there are twelve variables included in coordination. It is important to examine the reliability and validity of variables in coordination. The confirmatory factors analysis (CFA) has been administered for their purpose. The reliability has been tested with the help of Cronbach alpha. The results are given in Table 4.18.

Table 4.18**Reliability and validity of variables relating to Coordination**

S.No	Variables in Coordination	Standardised factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Capable of encouraging others	0.8988	3.9969*	0.8088	0.7819	55.96
2	Inspiring others	0.8504	3.8118*			
3	Moving friendly with others	0.8099	3.5961*			
4	Guiding other in their work	0.7842	3.4509*			
5	Accommodating others to carryout task	0.7596	3.3896*			
6	Getting helps from others	0.7417	3.2483*			
7	Helping others	0.7226	3.0971*			
8	Accepting others with open minded	0.6909	2.9661*			
9	Appreciating others	0.68170	2.8089*			
10	Taking effort to encourage others	0.6549	2.5969*			
11	Interested in working with others	0.6308	2.3117*			
12	Like challenges giving scope for thinking differently	0.6211	2.1084*			

*Significant at five per cent level

The standardised factor loading of the variables in coordination are greater than 0.60 which shows the content validity. The significance of 't' statistics of the standardized factor loading of the variables in coordination reveals the convergent validity. It is also proved by the composite reliability and average variance extracted since these are greater than it's minimum threshold of 0.50 and 50.00 per cent respectively. The twelve variables included in coordination explain it to an extent of 80.88 per cent since its Cronbach alpha is 0.8088.

4.19 VARIABLES IN INNOVATIONS AND ITS RELIABILITY

In total there are eight variables in innovativeness which are identified by the explanatory factor analysis. Before summarising the scores of the variables in innovativeness, it is imperative to examine the reliability and validity with the help of confirmatory factor analysis. The overall reliability of the variables in innovativeness has been tested with the help of Cronbach alpha. The results are present in Table 4.19.

Table 4.19

Reliability and validity of variables relating to Innovativeness

S.No	Variables in innovativeness	Standardised factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Willing to do new things and to accept new ideas	0.9097	1.2144*	0.8117	0.7906	56.04
2	My new ideas mostly got the approval of my friends	0.8649	3.9676*			
3	Like to scale new heights	0.8208	3.7121*			
4	Loving newness	0.8011	3.5676*			
5	Taking new initiatives	0.7845	3.3918*			
6	Finding new ways of answering questions	0.7309	3.0172*			
7	Interested in writing assignments on innovative topics	0.6776	2.6917*			
8	Taking right decision at the right time	0.6344	2.3894*			

*Significant at five per cent level

The standardised factor loading of the variables in innovativeness varies from 0.6344 to 0.9097 which shows the content validity of the factor. The convergent validity of the factor is proved since the ‘t’ statistics of the standardised factor loading to the variables in innovativeness are significant at five per cent level. It is also

supported by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The included eight variables in innovativeness explain it to an extent of 81.17 per cent since its cronbach alpha is 0.8117.

4.20 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO OPTIMISM

The optimism factor consists of nine variables which are noted by the exploratory factor analysis. It is extracted to confirm the reliability and validity of variables in optimism factor summarizing the score of the variable in it. The confirmatory factor analysis has been administered for this purpose. The Cronbach alpha has been computed to examine its overall reliability. The results are given in Table 4.20.

Table 4.20

Reliability and validity of variables relating to optimism

S. No	Variables in optimism	Standardised factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Facing problem boldly	0.8454	3.8661*	0.7804	0.7646	53.91
2	Facing exams without fear	0.8166	3.7104*			
3	Giving positive feedback	0.8082	3.6891*			
4	Failure never deter me from trying further	0.7671	3.3896*			
5	Courageous to meet the unknown	0.7339	3.1144*			
6	Registering successes always	0.7024	2.8041*			
7	Holding positive attitude when things go wrong	0.6817	2.6098*			
8	Withstand physical and mental stress	0.6546	2.4542*			
9	After failure, I am able to pick myself up and proceed further	0.6417	2.3969*			

* Significant at five per cent level

The nine variables included in the optimism factor explain it to an extent of 78.04 per cent since its cronbach alpha in 0.7804. The content validity of the factor is proved since the standardised factor loading of the variables in it are greater than 0.60. The convergent validity is proved since the ‘t’ statistics of the standardised factor loading of the variables in optimism are significant at five per cent level. It also supported by the composite reliability and average variance extracted since they are greater than it’s minimum threshold of 0.50 and 50.00 per cent respectively.

4.21 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO INFORMATIVENESS

The scores of the seven variables in informativeness have been included for confirmatory factor analysis in order to examine the reliability and validity of variables in informativeness. The cronbach alpha has been computed in order to reveal the overall reliability of the variables in informativeness. The results are illustrated in Table 4.21.

Table 4.21

Reliability and Validity of variables relating to informativeness

S. No	Variables in Informativeness	Standardised factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Excelling in the academic activities	0.8709	3.8144*	0.7696	0.7708	54.91
2	Not hesitating to clarify doubts	0.8224	3.4173*			
3	Having the habit of extra reading	0.7968	3.2676*			
4	Always consult teachers on subjects to learn more	0.7544	3.9096*			
5	Winning prizes in the competitions	0.7192	3.7318*			
6	Attending different courses besides regular course	0.6683	2.5969*			
7	Reading dailies regularly	0.6408	2.3814*			

* Significant at five per cent level

The standardised factor loading of variables in informativeness varies from 0.6408 to 0.8709 which reveals the content validity of the factor. The significance of 't' statistics of the standardised factor loading of the variables in informativeness are revealing the convergent validity. It is also proved by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The included seven variables in informativeness explain it to an extent of 76.96 per cent since its cronbach alpha is 0.7696.

4.22 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO DECISION MAKING

Seven variables are included in the decision making factor. It is essential to examine the reliability and validity of variables in decision making factor. In order to examine its reliability and validity the confirmatory factor analysis has been executed for this purpose. The cronbach alpha has been computed in order to reveal the overall reliability. The results are presented in Table 4.22.

Table 4.22**Reliability and Validity of variables relating to Decision Making**

S. No	Variables in Decision Making	Standardised factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Taking decisions even when outcome is not sure	0.9046	4.1733*	0.8022	0.7811	56.04
2	Interested in taking quick decisions	0.8371	3.4588*			
3	Capable of deciding on my higher studies	0.8044	3.2173*			
4	Not depending on others to decide	0.7679	3.0146*			
5	While shopping, choice of dress is mine	0.7238	3.8447*			
6	Never looks back	0.6691	2.5973*			
7	I like teachers who are more creative in their approach	0.6407	2.3961*			

* Significant at five per cent level

The seven variables included in decision making factor explain it to an extent of 80.22 per cent since its cronbach alpha is 0.8022. The standardised factor loading of the variables in decision making factor are greater than 0.60 which reveals the content validity. The significance of ‘t’ statistic of the standardised factor loading of variables in decision making factor reveal the content validity. It is also proved by the composite reliability and average variable extracted since they are greater than its minimum threshold 0.50 and 50.00 per cent respectively.

4.23 VARIABLES RELATING TO HARD WORK AND ITS RELIABILITY

The hard work factor consists of seven variables which are noticed by the exploratory factor analysis. The scores of the variables in hard work have been included for confirmatory factor analysis in order to examine the reliability and validity of

variables in it. The overall reliability has been extracted with the help of cronbach alpha. The variables are shown in Table 4.23.

Table 4.23

Reliability and Validity of Variables relating to Hard work

S. No	Variables in hard work	Standardised factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Taking more effort to complete a task	0.8227	4.7447*	0.7811	0.7642	52.86
2	I spend more time to score good marks	0.8018	3.6117*			
3	Won't put off things	0.7667	3.4091*			
4	Prepared to travel long distance without advance booking of tickets	0. 7508	3.3898*			
5	Doing regular and continuous preparation for exams	0. 7345	3.1172*			
6	Willing to study long hours	0.6917	2.8661*			
7	Mentally and physically fit to do hard work	0.6682	2.4886*			

* Significant at five per cent level

Seven variables are included in hard work factor which explain it to the extent of 78.11 per cent since its cronbach alpha is 0.7811. The standardised factor loading of the variables in hard work are greater than 0.60 which shows the content validity. The significance of 't' statistic of the standardised factor loading of variables in hard work reveal the composite reliability and average variable extracted since these are greater than its minimum threshold 0.50 and 50.00 per cent respectively.

4.24 VARIABLES RELATING TO PROBLEM SOLVING AND ITS RELIABILITY

The exploratory factor analysis identified five variables in problem solving skills factor. The scores of the variables in problem solving skills are included for confirmatory factor analysis in order to examine the reliability and validity of variables in it. The overall reliability in the factors has been tested with the help of cronbach alpha. The results are illustrated in Table 4.24.

Table 4.24

Reliability and validity of variables relating to problem solving skills

S. No	Variables in problem solving skills	Standardised factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Having alternative plan for future studies	0.8545	3.8414*	0.7749	0.7502	52.17
2	Taking decisions after analysing the pros and cons	0.8017	3.3886*			
3	Friends approach me for solving their problems	0.7595	3.1965*			
4	Flexibility in solving problems	0. 7344	2.9969*			
5	Realising and overcoming the problems	0. 6849	2.8082*			

* Significant at five per cent level

The standardised factor loading of variables in problem solving skills are varying from 0.6849 to 0.8545 which reveals the content validity. The standardised factor loading of the variables in this factor reveals the content validity. It is supported by the composite reliability and average variance extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively. The included variables

in problem solving factor explain it to an extent of 77.49 per cent since its cronbach alpha is 0.7749.

4.25 VARIABLES RELATING TO CONFIDENCE AND ITS RELIABILITY

The confidence factor consists of five variables which were identified by the exploratory factor analysis. Before summarising the scores of variables in confidence, it is essential to examine its reliability and validity. The confirmatory factor analysis has been administered for this purpose. The overall reliability has been estimated with the help of cronbach alpha. The variables are illustrated in Table 4.25.

Table 4.25

Reliability and validity of variables relating to confidence

S. No	Variables in confident	Standardised factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Taking initiation for doing things	0.9117	4.0868*	0.8021	0.7844	55.92
2	Always going in for excellence	0.8408	3.3969*			
3	Accepting the task without hesitation	0.7668	2.9117*			
4	Bold enough to visit unknown places independently	0.7349	2.6919*			
5	When I take a job, I am always confident that I can carry it out	0.6546	2.3891*			

* Significant at five per cent level

The five variables included in confidence factor explain the reliability and validity of the variables to an extent of 80.21 per cent since its cronbach alpha is 0.8021. The standardised factor loading of the variables in confidence factor reveals the

content validity. The significance of ‘t’ statistic of the standardised factor loading of the variables shows its content validity. It is also proved by the composite reliability and average variable extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively.

4.26 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO ENTERPRISING

The exploratory factor analysis identified the variables included in the enterprising factor. The scores of the variables in enterprising are included for confirmatory factor analysis in order to confirm the reliability and validity of variables in it. The overall reliability has been estimated with the help of cronbach alpha. The results are shown in the Table 4.26.

Table 4.26

Reliability and validity of variables relating to Enterprising

S. No	Variables in Enterprising	Standardised factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Talk openly and give straight answers	0.8491	3.7331*	0.8091	0.7842	53.45
2	Creative in writing assignments	0.7608	3.3844*			
3	Maintaining physical and emotional balance	0.6886	2.5969*			

* Significant at five per cent level

The standardised factor loading of variables in enterprising factor is varying from 0.6886 to 0.8491 which reveals the content validity. The significance of ‘t’

statistics of the standardised factor loading reveals the convergent validity. It is also supported by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The variables included in enterprising factor explain its reliability and validity to an extent of 80.91 per cent since its cronbach alpha is 0.8091.

4.27 VARIABLES RELATING TO PUNCTUALITY FACTOR AND ITS RELIABILITY

The punctuality factor consists of three variables. It is informative to examine the reliability and validity of variables in punctuality factor before summarising the scores of the variables in it. The confirmatory factor analysis has been administrated for this purpose. The overall reliability has been estimated with the help of cronbach alpha. The results are shown in Table 4.27.

Table 4.27

Reliability and validity of variables relating to punctuality

S. No	Variables in punctuality	Standardised factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Submission of assignments and home work in time	0.8117	3.2673*	0.7242	0.7041	51.49
2	Taking right decision at right time	0.7228	2.8868*			
3	Don’t keep problems pending	0.6089	2.0917*			

* Significant at five per cent level

The three variables included in punctuality factor explain to an extent of 72.42 per cent since its cronbach alpha is 0.7242. The standardised factor loading of the variables in punctuality factor are greater than 0.60 which shows the content validity.

The significance of 't' statistics of the standardised factor loading in punctuality factor shows the convergent validity. It is also supported by the composite reliability and average variable extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively.

4.28 VARIABLES RELATING TO SINCERITY FACTOR AND ITS RELIABILITY

The sincerity factor consists of two variables in it. Before summarising the scores of the variables in sincerity factor, it is essential to examine the reliability and validity of variables in sincerity factor. The confirmatory factor analysis has been administrated for this purpose. The overall reliability has been tested with the help of cronbach alpha. The results are presented in Table 4.28.

Table 4.28

Reliability and validity of variables relating to sincerity

S. No	Variables in sincerity	Standardised factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Use to attend the examination with full preparation	0.8099	3.1738*	0.7394	0.7102	52.76
2	Spend holidays usefully	0.6593	2.3969*			

* Significant at five per cent level

The standardised factor loading of variables in sincerity factor varies from 0.6593 to 0.8099 which shows the content validity. The convergent validity is proved since the 't' statistics of the standardised factor loading of the variables in sincerity factor are significant at five per cent level. It is also proved by the composite validity and average variance extracted since these are greater than 0.50 and 50.00 per cent

respectively. The included two variables in sincerity factor explain it to an extent of 73.94 per cent since its cronbach alpha is 0.7394.

4.29 VARIABLES RELATING TO FORECASTING ABILITY FACTOR AND ITS RELIABILITY

The forecasting ability factor included two variables in it. Before summarising the scores of the variables in it, it is necessary to examine the reliability and validity of variables in forecasting ability factor with the help of confirmatory factor analysis. The overall reliability has been tested with the help of cronbach alpha. The results are given in Table 4.29.

Table 4.29

Reliability and validity of variables relating to foretelling ability

S. No	Variables in foretelling ability	Standardised factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Planning things in advance	0.8644	3.4962*	0.7889	0.7642	52.91
2	Preparation for future carrier planning	0.7279	2.5969*			

* Significant at five per cent level

The two variables included in forecasting ability factor explain to an extent of 78.89 per cent since its cronbach alpha is 0.7889. The standardised factor loading of the variables in forecasting ability factor are greater than 0.60 which shows its content validity. The significance of ‘t’ statistics of the standardised factor loading shows the overall convergent validity. It is also proved by the composite reliability and average variable extracted since they are greater than its minimum threshold of 0.50 and 50.00 per cent respectively.

4.30 RESPONDENTS VIEW ABOUT THE FACTORS LEADING TO ENTREPRENEURIAL TRAITS

The respondents view about the factors leading to entrepreneurial traits are examined with the help of 12 factors namely coordination, innovativeness, optimism, informativeness, decision making skill, hard work, problem solving, confidence, enterprising, punctuality, sincerity and forecasting ability. The scores of the above said factors have been computed by the mean score of the variables in each factor. The mean score of each factor among the groups of respondents have been computed along with its 'F' statistics. The results are given in Table 4.30.

Table 4.30

Respondents view about the Factors leading to Entrepreneurial Traits

S.No	Factors	Mean score of the Respondents			F statistics
		Urban	Semi – urban	Rural	
1	Coordination	3.0889	3.5869	3.9197	3.6557*
2	Innovativeness	3.9197	3.3441	3.0461	3.3841*
3	Optimism	3.8082	3.4509	3.2671	3.0991*
4	Informativeness	3.6889	3.1703	3.3089	2.9969
5	Decision making	3.7172	3.8684	3.5341	2.0441
6	Hard work	3.3038	3.8991	3.9677	3.1172*
7	Problem solving	3.8917	3.3842	3.0441	3.4509*
8	Confidence	3.8084	3.6674	3.5084	1.8967
9	Enterprising	3.9692	3.3845	3.2171	3.2676*
10	Punctuality	3.1171	3.2671	3.3089	1.0946
11	Sincerity	3.8844	3.6649	3.7334	0.9697
12	Forecasting ability	3.8911	3.5344	3.1782	3.2673*

* Significant at five per cent level

The highly viewed factors leading to entrepreneurial traits by the urban college students are enterprising and innovativeness since their mean scores are 3.9692 and 3.9197 respectively. Among the semi-urban college students, the highly viewed factors leading to entrepreneurial traits are hard work and decision making skills since their mean scores are 3.8991 and 3.8684 respectively. Among the rural college students, the highly viewed factors leading to entrepreneurial traits are hard work and coordination since their mean scores are 3.9677 and 3.9197 respectively.

Regarding the respondents' view about the factors leading to entrepreneurial traits, significant difference among the three groups of respondents have been noticed in the case of seven out of 12 factors since their respective 'F' statistics are significant at five per cent level.

4.31 ASSOCIATION BETWEEN PROFILE OF THE RESPONDENTS AND THEIR VIEWS ABOUT THE FACTORS LEADING TO ENTREPRENEURIAL TRAITS

The profile of the respondents may be associated with their views towards the factors leading to entrepreneurial traits. The present study has made an attempt to examine these associations with the help of one way analysis of variance. The profile variables included in the study are gender, age, place of college, branch of study, social group, religion, type of family, size of family, monthly family income, father's occupation and mother's occupation. The result of one way analysis of variance is given in Table 4.31.

Table 4.31

Association between Profile of the Respondents and their views towards the factors leading to Entrepreneurial Traits

S. No	Profile variables	F statistics											
		Co ordination	Innovative ness	Optimism	Informative ness	Decision making	Hard work	Problem solving	Confidence	Enterprising	Punctu ality	Sin cerity	Fore casting ability
1	Gender	3.1186	3.2788	3.3996	3.7643	2.9798	2.8084	3.4661	3.0996	3.5672	3.8011	3.7162	3.5673
2	Age	3.3011*	3.2891*	2.7084	2.6686	2.5868	3.2868*	3.8343*	2.1179	3.6208*	3.4541*	2.9739	3.0869*
3	Place of college	3.1173*	3.0886*	2.8117	2.9083	2.6584	2.7173	3.4118*	3.6562*	2.7341	2.9667	2.8331	3.1765*
4	Branch of study	3.0845	3.5996	3.7676	3.8314	3.9182*	3.9091*	3.1172	3.0996	3.1145	3.5089	3.6282	3.7585
5	Social group	2.8673*	2.9082*	2.7978*	2.8224*	2.4543	2.5082	2.7344*	2.8646*	2.7484*	2.2673	2.8184*	2.6568*
6	Religion	2.0881	2.0616	1.8991	2.0443	2.4311	2.2109	2.4165	2.5051	2.7389*	2.8119*	2.6861*	2.5894*
7	Type of family	3.4516	3.6611	3.8084	3.5886	3.4108	3.5224	3.0899	3.3349	3.5911	3.7333	3.8661*	3.4546
8	Size of family	3.6567*	3.0891*	2.4546	2.9172	3.2459*	3.3996*	3.1145*	3.2676*	2.9192	2.6562	2.8086	2.4509
9	Monthly family income	2.6063*	2.9117*	2.8028*	2.9029*	2.5969*	2.4886*	2.5941*	2.5661*	2.3899*	2.6076*	2.9194*	2.6562*
10	Father's occupation	2.7139*	2.5889*	2.7661*	2.5919*	2.7331*	2.5969*	2.6081*	2.4084*	2.4085*	2.7339*	2.8045*	2.8149*
11	Mother's occupation	2.8028*	2.4544*	2.6089*	2.6086*	2.8081*	2.6886*	2.4889*	2.6117*	2.6162*	2.8084*	2.6546*	2.7244*

Significant at five per cent level

Regarding the association between profile of respondents and their views on the factors leading to entrepreneurial traits, the significantly associating profile variables with the 'coordination' and 'innovativeness' factors are age, place of college, social group, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables of the respondents with their views on 'optimism' and 'informativeness' factors are social group, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

Regarding the respondents view on 'decision making' factor, the significantly associating profile variables are branch of study, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables of the respondents regarding their views towards 'hard work' factor are age, branch of study, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

Regarding the respondents view on 'problem solving' factor, the significantly associating profile variables are age, place of college, social group, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables with the factor 'confidence' are place of college, social group, size of family, monthly family income, father's

occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables of the respondents regarding the 'enterprising' factor are age, social group, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

Regarding the significantly associating profile variables of the respondents with the 'punctuality' factor are age, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables with the 'sincerity' factor are social group, religion, type of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

Regarding the respondents view on 'forecasting ability' factor, the significantly associating profile variables are age, place of college, social group, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

4.32 DISCRIMINANT FACTORS AMONG THE URBAN AND SEMI-URBAN COLLEGE STUDENTS

The factors leading to entrepreneurial traits among the urban college students differ from the semi-urban college students. The present study has made an attempt to identify the important discriminant factors among the two groups of respondents.

Initially, the mean difference among the two groups of respondents has been examined with its statistical significance. The discriminant power of factor has been estimated with the help of wilks lambda. The results are given in the Table 4.32.

Table 4.32
Discriminant factor leading to Entrepreneurial Traits among
Urban and Semi-urban College students

S. No	Factors	Mean score among Respondents		Mean difference	t-statistics	Wilks lambda
		Urban	Semi-urban			
1	Coordination (X ₁)	3.0889	3.5869	-0.4980	2.4919*	0.1396
2	Innovativeness (X ₂)	3.9197	3.3441	0.5756	3.1173*	0.1173
3	Optimism (X ₃)	3.8082	3.4509	0.3573	2.1903*	0.2865
4	Informativeness (X ₄)	3.6889	3.1703	0.5186	2.7391*	0.2733
5	Decision making (X ₅)	3.7172	3.8684	-0.1512	1.3318	0.5549
6	Hard work (X ₆)	3.3038	3.8991	-0.5953	3.3965*	0.1946
7	Problem solving (X ₇)	3.8917	3.3842	0.5075	2.6891*	0.2132
8	Confidence (X ₈)	3.8084	3.6674	0.1410	0.8417	0.4881
9	Enterprising (X ₉)	3.9692	3.3845	0.5847	3.9173*	0.1045
10	Punctuality (X ₁₀)	3.1171	3.2671	-0.1500	0.9696	0.4733
11	Sincerity (X ₁₁)	3.8844	3.6649	0.2195	1.3388	0.3892
12	Forecasting ability (X ₁₂)	3.8911	3.5344	0.3567	2.1211*	0.1817

* Significant at five per cent level

It is observed from Table 4.32 that the discriminant factor among the urban and semi-urban college students regarding the entrepreneurial traits, significant mean difference is noticed in the case of coordination, innovativeness, optimism, informativeness, hard work, problem solving, enterprising and forecasting ability since their respective 't' statistics are statically significant at five per cent level. Higher mean differences are noticed in the case of hard work and enterprising since their mean differences are 0.5953, 0.5847 respectively. The higher discriminant power is noticed in the case of the entrepreneurial traits factors 'enterprising' and 'innovativeness' among the urban and semi-urban respondents since their wilks lambda are 0.1045 and 0.1173 respectively.

The significant factors have been included to estimate the two group discriminant function. The unstandardised procedure has been followed to estimate the two group discriminant functions. The estimated function is:

$$Y = 0.7384 - 0.0845 X_1 + 0.1244 X_3 + 0.1865 X_4 - 0.0733 X_6 + 0.1459 X_7 + 0.1738 X_9 + 0.1673 X_{12}$$

The relative contribution of factors in total discriminant score is computed by the products of discriminant coefficient and the mean difference of the respective factors. The results are given in Table 4.33.

Table 4.33**Relative contribution of Discriminant factors in Total Discriminant Scores (TDS)**

S. No	Factors	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Coordination (X_1)	-0.0845	-0.4980	0.0421	7.77
2	Innovativeness (X_2)	0.1379	0.5756	0.0794	14.66
3	Optimism (X_3)	0.1244	0.3573	0.0444	8.21
4	Informativeness (X_4)	0.1865	0.5186	0.0967	17.86
5	Hard work (X_6)	-0.0733	-0.5953	0.0436	8.05
6	Problem solving (X_7)	0.1459	0.5075	0.0740	13.67
7	Enterprising (X_9)	0.1738	0.5847	0.1016	18.76
8	Forecasting ability (X_{12})	0.1673	0.3567	0.0597	11.02
	Total			0.5415	100.00
Per cent of cases currently classified: 71.82					

The higher discriminant coefficient is noticed in the case of the entrepreneurial traits ‘informativeness’ and ‘enterprising’ since their coefficient are 0.1865 and 0.1738 respectively. It shows the higher influence of the above said two factors in the discriminant function. The dominant discriminant factors among the urban and semi-urban college students are ‘enterprising’ and ‘informativeness’ since their relative contribution are 18.76 and 17.86 per cent respectively. The estimated two group discriminant analysis correctly classifies the cases to the extent of 71.82 per cent.

The analysis reveals that the important discriminant factors among the urban and semi-urban college students are ‘enterprising’ and ‘informativeness’ which are higher among the urban college students than among the semi-urban college students.

4.34 DISCRIMINANT FACTORS AMONG THE URBAN AND RURAL COLLEGE STUDENTS

The factors leading to entrepreneurial traits among the urban college students may differ from the rural college students. It is imperative to exhibit the important discriminant factors among these two groups of college students with the help of discriminant analysis. Initially, the mean difference and its statistical significance have been computed. The discriminant power of factor has been estimated with the help of wilks lambda. The results are given in the Table 4.34.

Table 4.34

Discriminant Factor leading to Entrepreneurial Traits among Urban and Rural College Students

S. No	Factors	Mean score among students in		Mean difference	t-statistics	Wilks Lambda
		Urban	Rural			
1	Coordination (X ₁)	3.0889	3.9197	-0.8308	3.4676*	0.1817
2	Innovativeness (X ₂)	3.9197	3.0461	0.8736	3.6874*	0.1458
3	Optimism (X ₃)	3.8082	3.2671	0.5411	2.4517*	0.1702
4	Informativeness (X ₄)	3.6889	3.3089	0.3800	2.0196*	0.1667
5	Decision making (X ₅)	3.7172	3.5341	0.1831	1.4331	0.2886
6	Hard work (X ₆)	3.3038	3.9677	-0.6639	2.6968*	0.1497
7	Problem solving (X ₇)	3.8917	3.0441	0.8476	3.5133*	0.1082
8	Confidence (X ₈)	3.8084	3.5084	0.3000	1.8646	0.1997
9	Enterprising (X ₉)	3.9692	3.2171	0.7521	3.3969*	0.1452
10	Punctuality (X ₁₀)	3.1171	3.3089	-0.1918	1.5889	0.2667
11	Sincerity (X ₁₁)	3.8844	3.7334	0.1510	1.2673	0.3045
12	Forecasting ability (X ₁₂)	3.8911	3.1782	0.7129	3.1884*	0.1173

* Significant at five per cent level

Significant mean differences are noticed in the case of coordination, innovativeness, optimism, informativeness, hard work, problem solving skills, enterprising and forecasting ability since their respective 't' statistics are significant at five per cent level. The higher mean differences are found in the case of 'innovativeness' and 'problem solving' factor since their mean difference are 0.8736 and 0.8476 respectively. The higher discriminant power is noticed in the case of 'problem solving' and 'forecasting ability' factor since their wilks lambda are 0.1082 and 0.1173 respectively.

The significant factors are included to estimate the two group discriminant function. The unstandardised procedure is followed to estimate it. The estimated functions is:

$$Z = 0.9908 - 0.0456 X_1 + 0.1887 X_2 + 0.1336 X_3 + 0.0917 X_4 - 0.1776 X_6 + 0.1887 X_7 + 0.0997 X_9 + 0.0456 X_{12}$$

The relative contribution of factors in total discriminant scores have been estimated with the help of the products of discriminant coefficient and the mean difference of the respective factors. The results are given in Table 4.35.

Table 4.35**Relative Contribution of Discriminant Factors in Total Discriminant Scores (TDS)**

S. No	Factors	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Coordination (X_1)	-0.0456	-0.8308	0.0379	5.45
2	Innovativeness (X_2)	0.1887	0.8736	0.1648	23.71
3	Optimism (X_3)	0.1336	0.5411	0.0722	10.38
4	Informativeness (X_4)	0.0917	0.3800	0.0348	5.02
5	Hard work (X_6)	-0.1776	-0.6639	0.1179	16.97
6	Problem solving (X_7)	0.1887	0.8476	0.1599	23.01
7	Enterprising (X_9)	0.0997	0.7521	0.0749	10.78
8	Forecasting ability (X_{12})	0.0456	0.7129	0.0325	4.68
	Total			0.6949	100.00
Per cent of cases currently classified: 78.86					

The higher discriminant coefficients are noticed in the case of ‘innovativeness’ and ‘problem solving’ since their discriminant coefficient are 0.1887 and 0.1887 respectively. It shows the higher influence of the above said two factors in discriminant functions. The higher relative contributions of factors in total discriminant scores is noticed in the case of aforesaid two factors since its relative contribution are 23.71 and 23.01 per cent respectively. The estimated two groups discriminant analysis correctly classifies the cases to an extent of 78.86 per cent.

The analysis reveals that the important discriminant factors among the urban and rural college students are ‘innovativeness’ and ‘problem solving’ which are higher among the urban college students than among the rural college students.

4.35 DISCRIMINANT FACTORS AMONG THE SEMI-URBAN AND RURAL COLLEGE STUDENTS

The factors leading to entrepreneurial traits among the semi-urban college students may be different from the rural college students. It is estimated to identify the important discriminant factors among the two groups of college students. Initially, the mean difference and its statistical significance have been estimated along with wilks lambda. The results are given in the Table 4.36.

Table 4.36
Discriminant Factor leading to Entrepreneurial Traits among
Semi-urban and Rural College Students

S. No	Factors	Mean score among Respondents		Mean difference	t-statistics	Wilks Lambda
		Semi –urban	Rural			
1	Coordination (X ₁)	3.5869	3.9197	-0.3328	3.0141*	0.1279
2	Innovativeness (X ₂)	3.3441	3.0461	0.2980	2.7616*	0.1302
3	Optimism (X ₃)	3.4509	3.2671	0.1838	2.0145*	0.1455
4	Informativeness (X ₄)	3.1703	3.3089	-0.1386	-0.8667	0.4173
5	Decision making (X ₅)	3.8684	3.5341	0.3343	3.2661*	0.1177
6	Hard work (X ₆)	3.8991	3.9677	-0.0686	-0.4557	0.5886
7	Problem solving (X ₇)	3.3842	3.0441	0.3401	3.3969*	0.1072
8	Confidence (X ₈)	3.6674	3.5084	0.1590	1.1771	0.4177
9	Enterprising (X ₉)	3.3845	3.2171	0.1674	1.2496	0.4542
10	Punctuality (X ₁₀)	3.2671	3.3089	-0.0418	-0.4991	0.6227
11	Sincerity (X ₁₁)	3.6649	3.7334	-0.0685	-0.6447	0.5889
12	Forecasting ability (X ₁₂)	3.5344	3.1782	0.3562	3.6562*	0.1526

* Significant at five per cent level

The higher mean differences are noticed in the case of ‘forecasting ability’ and ‘problem solving’ since their mean difference are 0.3562 and 0.3401 respectively. The

significant mean differences are noticed in the case of ‘coordination’, ‘innovativeness’, ‘optimism’, ‘decision making’, ‘problem solving’ and ‘forecasting ability’ since their mean difference are significant at five per cent level. The higher discriminant power is noticed in the case of ‘problem solving’ and ‘decision making’ since their wilks lambda are 0.1072 and 0.1177 respectively. The significant factors are included to estimate the two group discriminant function. The estimated functions is:

$$Z = 0.6026 - 0.0361 X_1 + 0.0445 X_2 + 0.1088 X_3 + 0.1396 X_5 + 0.1788 X_7 + 0.0773 X_{12}$$

The relative contribution of each discriminant factor in TDS is estimated by the products of discriminant coefficient and the mean difference of the respective factors. The results are given in Table 4.37.

Table 4.37

Relative contribution of Discriminant factors in Total Discriminant sores (TDS)

S. No	Factors	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Coordination (X ₁)	-0.0361	-0.3328	0.0121	6.71
2	Innovativeness (X ₂)	0.0445	0.2980	0.0133	7.38
3	Optimism (X ₃)	0.1088	0.1838	0.0199	11.04
4	Decision making (X ₅)	0.1396	0.3343	0.0467	25.90
5	Problem solving (X ₇)	0.1788	0.3401	0.0608	33.72
6	Forecasting ability (X ₁₂)	0.0773	0.3562	0.0275	15.25
	Total			0.1803	100.00
Per cent of cases currently classified: 68.84					

The higher discriminant coefficients are noticed in the case of ‘problem solving’ and ‘decision making’ since their respective coefficient are 0.1788 and 0.1396 respectively. It shows the higher influence of the above said two factors in discriminant functions. The higher relative contributions in total discriminant scores is noticed in the case of ‘problem solving’ and ‘decision making’ since their relative contribution are 33.72 and 25.90 per cent respectively. The estimated two groups discriminant analysis correctly classifies the cases to an extent of 68.84 per cent.

The analysis reveals that the important discriminant factors among the semi-urban and rural college students are ‘problem solving’ and ‘decision making’ which are higher among the semi-urban college students than among the rural college students.

4.36 IMPACT OF FACTORS LEADING TO ENTREPRENEURIAL TRAITS ON THE LEVEL OF ENTREPRENEURIAL TRAITS AMONG THE COLLEGE STUDENTS

The factors leading to entrepreneurial traits among the college students may have its own influence on the level of entrepreneurial traits among the college students. It is essential to examine the impact of factors on the level of entrepreneurial traits. The multiple regression analysis has been administered for this purpose. The fitted regression model is:

$$y = a + b_1 X_1 + b_2 X_2 + \dots + b_{12} X_{12} + e$$

Whereas y – score on entrepreneurial traits among the students

- | | | |
|-------|---|--|
| X_1 | - | Score on coordination among the students |
| X_2 | - | Score on innovativeness among the students |
| X_3 | - | Score on optimism among the students |

X_4	-	Score on informativeness among the students
X_5	-	Score on decision making among the students
X_6	-	Score on hard work among the students
X_7	-	Score on problem solving among the students
X_8	-	Score on confidence among the students
X_9	-	Score on enterprising among the students
X_{10}	-	Score on punctuality among the students
X_{11}	-	Score on sincerity among the students
X_{12}	-	Score on forecasting ability among the students
b_1, b_2, \dots, b_{12}	-	Regression coefficient of independent variables
a	-	intercept and
e	-	error term

The impact of factors on the level of entrepreneurial traits among the urban, semi-urban, rural college students have been examined separately and also for pooled data. The results are given in Table 4.38.

Table 4.38

**Impact of Factors leading to Entrepreneurial Traits on the level of
Entrepreneurial Traits among the College Students**

S.No	Factors leading to Entrepreneurial Traits	Mean score among the students			Pooled Data
		Urban	Semi – urban	Rural	
1	Coordination	-0.0459	-0.0733	0.1449*	0.0227
2	Innovativeness	0.1987*	0.1039	0.0997	0.1042
3	Optimism	0.1404*	0.1541*	0.1664*	0.1331*
4	Informativeness	0.1229*	0.0988	0.0446	0.0736
5	Decision making	0.1138	0.1024	0.0773	0.0918

S.No	Factors leading to Entrepreneurial Traits	Mean score among the students			Pooled Data
		Urban	Semi – urban	Rural	
6	Hard work	0.1339*	0.1396*	0.1505*	0.1309*
7	Problem solving	0.1709*	0.0538	0.0441	0.0736
8	Confident	0.1311*	0.0911	0.0577	0.0838
9	Enterprising	0.1298*	0.1237*	0.1667*	0.1503*
10	Punctuality	0.0587	0.1019	0.0456	0.0229
11	Sincerity	0.0991	0.0733	0.0338	0.551
12	Forecasting ability	0.1208*	0.1334*	0.0996	0.1171
	Constant	1.2899	0.8582	0.5884	0.7179
	R₂	0.7919	0.7504	0.7143	0.8042
	F statistics	8.9814*	8.3445*	7.8996*	9.1173*

* Significant at five per cent level

Among the urban college students, the significantly influencing factors on the level of entrepreneurial traits are their innovativeness, optimism, informativeness, hard work, problem solving, confidence, enterprising and forecasting ability since their regression coefficient are significant at five per cent level. A unit increase in the above said factors results in an increase in their level of entrepreneurial traits by 0.1987, 0.1404, 0.1229, 0.1339, 0.1709, 0.1311, 0.1298 and 0.1208 units respectively. The changes in the level of factors among the urban college students explain the changes in their entrepreneurial traits to an extent of 79.19 per cent since its R_2 is 0. 7919.

Among the semi-urban college students unit increase in the level of optimism, hard work, enterprising and forecasting ability result in an increase in the level of entrepreneurial traits by 0.1541, 0.1396, 0.1237 and 0.1334 units respectively. The

changes in the level of factors among the urban college students explain the changes in their entrepreneurial traits to an extent of 75.04 per cent since its R_2 is 0.7504.

Among the rural college students, a unit increase in the level of coordination, optimism, hard work and enterprising results in an increase in the level of entrepreneurial traits by 0.1449, 0.1664, 0.1505 and 0.1667 units respectively. The changes in the level of factors among the urban college students explain the changes in their entrepreneurial traits to an extent of 71.43 per cent since its R_2 is 0.7143.

The analysis of pooled data reveals the importance of 'optimism', 'hard work' and 'enterprising' factors in the determination of their entrepreneurial traits among the college students. The changes in the level of factors leading to entrepreneurial traits explain the changes in the level of entrepreneurial traits among the college students to an extent of 80.42 per cent since its R_2 is 0.8042.

4.37 CONCLUSION

The profile of the students undergoing college education in the Arts and Science courses in the urban, semi-urban and rural colleges and their entrepreneurial traits have been dealt with in this chapter. The factors leading to entrepreneurial traits, the association between the profile variables and the factors leading to entrepreneurial traits revealed the significantly associating profile variables with the entrepreneurial traits. The discriminant factor analysis helped to identify the factors which discriminate the urban, semi-urban and rural college students. The impact of factors on entrepreneurial traits of the urban, semi-urban and rural college students has shown the degree of influence of the factors on the entrepreneurial traits of the college students.

CHAPTER - V

ACHIEVEMENT MOTIVATION AND ENTREPRENEURIAL TRAITS AMONG THE COLLEGE STUDENTS

- 5.0 Introduction
- 5.1 Academic motivation among the college students
- 5.2 Variables relating to academic motivation and its reliability
- 5.3 Level of academic motivation among the college students
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- 5.20 Reliability and validity of variables relating to general interests and sports (GIS)
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- 5.28 Discriminant cams among the urban and rural college students
- 5.29 Discriminant components of achievement motivation (CAM) among the semi-urban and rural students.
- 5.30 Impact of achievement motivation on the entrepreneurial traits among the students
- 5.31 Conclusion

CHAPTER - V

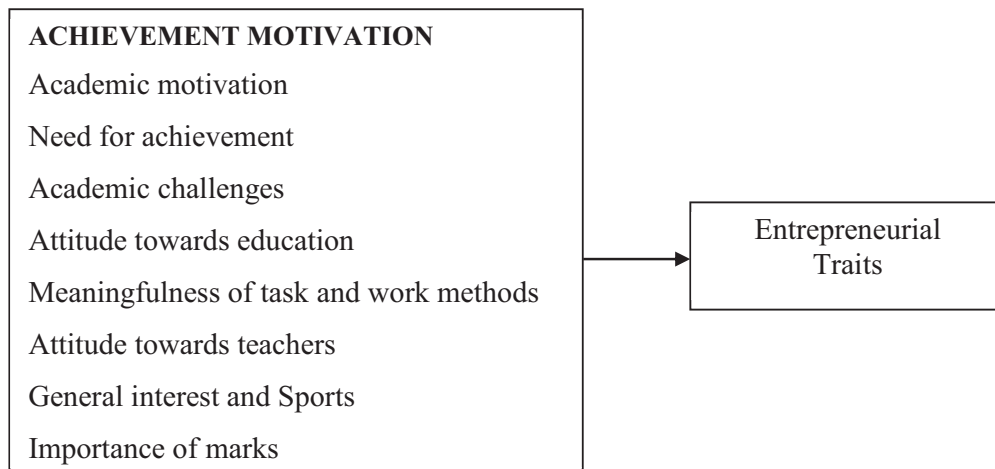
ACHIEVEMENT MOTIVATION AND ENTREPRENEURIAL TRAITS AMONG THE COLLEGE STUDENTS

5.0 INTRODUCTION

The achievement motivation among the college students may have its own influence on the entrepreneurial traits of students and also on their entrepreneurial motivation. Hence it is essential to measure the achievement motivation among the students initially. In the present study, the achievement motivation among the college students is measured under eight components namely academic motivation, need for achievement, academic challenges, attitude towards education, meaningfulness of task and work methods, attitude towards teachers, general interests and sports and importance of marks. The eight components of achievement motivation (CAM) are drawn from the review of previous studies. The linkage between the achievement motivation and entrepreneurial traits among the college students have also been discussed in this chapter. The linkage is presented in the following figure 5.1.

Figure 5.1

Linkage between Achievement Motivation and Entrepreneurial Traits



5.1 ACADEMIC MOTIVATION AMONG THE COLLEGE STUDENTS

The academic motivation is one of the important aspects each student has to possess. The success of the student depends upon the academic motivation they are having. The factors which are responsible for the academic motivation may lead a person towards entrepreneurship. Hence, the present study has made an attempt to study the academic motivation with the help of five variables. The college students are asked to rate these variables at five point scale according to their order of acceptance. The mean score of each variable in academic motivation among the urban, semi-urban and rural college students have been computed along with its 'F' statistics. The results are given in Table 5.1.

Table 5.1

Respondents view about Academic Motivation

S. No	Respondents view about Academic Motivation	Mean score among Respondents			F Statistics
		Urban	Semi-urban	Rural	
1	I feel unhappy if I miss the class	3.7882	3.2533	3.2667	2.5886
2	I pay attention to the work in the class	3.8991	3.0345	3.0117	3.4541*
3	I mind much if I reach late to the class	3.9029	3.1176	3.2029	3.2667*
4	I love to read more and more to enrich the knowledge	3.8554	3.2091	3.1441	3.3992*
5	I spend more time in the library	3.8331	3.1103	2.8556	3.5447*

*Significant at five per cent

The highly viewed variable in academic motivation by the urban and semi-urban students are 'I mind much if I reach late to the class' and 'I feel unhappy if I miss the class' since their mean scores are 3.9029 and 3.2533 respectively. Among the

rural college students, it is 'I feel unhappy if I miss the classes since its mean score is 3.2667. Regarding the respondents view about academic motivation, significant difference among three group of students have been noticed in four out of five variables in academic motivation since its 'F' statistics are significant at five per cent level.

5.2 VARIABLES RELATING TO ACADEMIC MOTIVATION AND ITS RELIABILITY

The reliability and validity of the variables included in the academic motivation have been tested with the help of confirmatory factor analysis. The overall reliability of variables in academic motivation has been estimated with the help of cronbach alpha. The results are given in Table 5.2.

Table 5.2

Reliability and validity of variables relating to Academic Motivation

S. No	Variables in Academic Motivation	Standardized factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I pay attention to the work in the class	0.9148	4.1786*	0.8249	0.7909	56.87
2	I spend more time in the library	0.8337	3.4582*			
3	I love to read more and more to enrich the knowledge	0.8042	3.1173*			
4	I feel unhappy if I miss the class	0.7509	2.8919*			
5	I mind much if I reach late in the class	0.6881	2.5889*			

*Significant at five per cent level

The standardized factor loading of the variables in academic motivation varies from 0.6881 to 0.9148 which reveals the content validity. The significance of 't' statistics of the standardized factor loading of the academic motivation reveals the convergent validity. It is also supported by the composite reliability and average variance extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively. The five variables included in the academic motivation explain it to an extent of 82.49 per cent since its cronbach alpha is 0.8249.

5.3 LEVEL OF ACADEMIC MOTIVATION AMONG THE COLLEGE STUDENTS

The level of academic motivation among the college students is measured by the mean score of the variables in it. It is denoted by SOAM. In the present study, the SOAM is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their SOAM is illustrated in Table 5.3.

Table 5.3

Score on Academic Motivation (SOAM) among the College Students

S.No	Score on Academic Motivation	Number of Students			Total
		Urban	Semi-urban	Rural	
1	Less than 2.0	10	23	38	71
2	2.0 - 3.0	23	73	46	142
3	3.1- 4.0	58	136	39	233
4	Above 4.0	57	62	11	130
	Total	148	294	134	576

Source : Primary data

The important SOAM among the students are 3.1 to 4.0 and 2.0 to 3.0 which constitutes 40.45 and 24.65 per cent to the total respectively. The important SOAM

among the urban and semi-urban college students is 3.1 to 4.0 which constitute 39.19 and 46.26 per cent to its total respectively. Among the rural college students, it is 2.0 to 3.0 which constitutes 34.33 per cent to its total.

The analysis reveals that the level of academic motivation among the urban and semi-urban college students is higher than the level of academic motivation among the rural college students.

5.4 NEED FOR ACHIEVEMENT (NFA) AMONG THE COLLEGE STUDENTS

One of the important factors determining the entrepreneurial motivation is the need for achievement. The need for achievement among the college students in the present study is measured with the help of four variables. The mean score of the variable in NFA among the three groups of college students and their respective 'F' statistics are computed and shown in Table 5.4.

Table 5.4

Students view about Need for Achievement (NFA)

S. No	Variables in Need for Achievement	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	I set standards for myself and then strive to achieve them	3.8897	3.2545	3.0441	3.2696*
2	I wish to specialize and become top most in the field of my likings	3.9029	3.3084	3.1179	3.4541*
3	I like to experiment and create new things and surprise people	3.7376	3.4117	3.1038	3.0732*
4	I work hard for hours together to be successful in whatever I undertake	3.8508	3.2089	3.0544	3.2881*

*Significant at five per cent level

The highly viewed variables in NFA among the urban and semi-urban college students is ‘I wish to specialize and become top most in the field of my likings’ and ‘I like to experiment and create new things and surprise people’ since their respective mean scores are 3.9029 and 3.4117 respectively. Among the rural college students, it is ‘I wish to specialize and become top most in the field of my likings’ since its mean score is 3.1179. Regarding the need for achievement, significant difference among the three group of college students have been noticed in all the four variables since their respective ‘F’ statistics are significant at five per cent level.

5.5 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO NEED FOR ACHIEVEMENT

Before summarizing the scores of the variables in NFA, it is imperative to examine the reliability and validity of variables in it. The confirmatory factor analysis has been administered for this purpose. The overall reliability of the variables in NFA is estimated with the help of Cronbach Alpha. The results are presented in Table 5.5.

Table 5.5

Reliability and validity of variables relating to need for Achievement

S. No	Variables in Need for Achievement	Standardised factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I set standards for myself and then strive to achieve them	0.8173	3.1782*	0.7606	0.7417	52.63
2	I wish to specialize and become top most in the field of my likings	0.7233	2.8586*			
3	I like to experiment and create new things and surprise people	0.6509	2.3982*			
4	I work hard for hours together to be successful in whatever I undertake	0.6175	2.1774*			

*Significant at five per cent level

The standardized factor loading of the variables in NFA are greater than 0.60 which reveals that content validity of the factor. The significance of 't' statistics of the variables in NFA shows the convergent validity. It is also proved by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The variables included in NFA explain it to an extent of 76.06 per cent since its cronbach alpha is 0.7606.

5.6 LEVEL OF NEED FOR ACHIEVEMENT AMONG THE STUDENTS

The level of need for achievement among the college students is measured by the mean score of the variables in NFA. It is denoted by SONFA. In the present study, the SONFA is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their SONFA is given in Table 5.6.

Table 5.6

Score on Need for Achievement (SONFA) among the students

S. No	Score on Need for Achievement	Number of students			Total
		Urban	Semi-urban	Rural	
1	Less than 2.0	10	35	20	65
2	2.0-3.0	12	72	78	162
3	3.1- 4.0	68	133	26	227
4	Above 4.0	58	54	10	122
	Total	148	294	134	576

Source : Primary data

The important SONFA among the college students in the present study are 3.1 to 4.0 and 2.0 to 3.0 which constitutes 39.41 and 28.13 per cent to the total respectively. The important SONFA among the urban and semi-urban college students

is 3.1 to 4.0 which constitute 45.95 and 45.24 per cent to its total respectively. Among the rural college students the important SONFA is 2.0 to 3.0 which constitutes 58.21 per cent to the total.

The analysis reveals that the scores on need for achievement is higher among the urban and semi-urban college students than the rural college students.

5.7 ACADEMIC CHALLENGE AMONG THE STUDENTS

It shows the students view about the challenges faced by the students in their academic career. Since the view on academic challenge among the students may have its own influence on the achievement motivation, it is included as one of the achievement motivation variable in this study. It is measured with the help of two variables. The mean score of each variable in academic challenge among the urban, semi-urban and rural college students have been computed separately along with its 'F' statistics. The results are shown in Table 5.7.

Table 5.7

Students view about the Academic Challenge (AC)

S. No	Variables in Academic Challenge	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	I have a tendency to find solution to problems which others unable to succeed.	3.9969	3.2153	3.1109	3.6564*
2	I aspire to get excellent results in all academic competitions	3.8438	3.4541	3.0996	3.5901*

*Significant at five per cent level

The highly viewed variable in academic challenge by the urban and rural students are 'I have a tendency to find solutions to problems which others unable to succeed' since their mean scores are 3.9969 and 3.1109 respectively. Among the semi-urban college students the highly viewed variable in academic challenge, is 'I aspire to get excellent results in all academic competitions' since its mean score is 3.4541. There is a significant difference among the three groups of college students regarding their views about the academic challenge since their respective 'F' statistics are significant at five per cent level.

5.8 VARIABLES IN ACADEMIC CHALLENGE AND ITS RELIABILITY

The variables included in the academic challenge have been examined for its reliability and validity. The confirmatory factor analysis has been administered to examine the reliability and validity of the variables included in the academic challenge. The cronbach alpha is computed to reveal the overall reliability of the variables in academic challenge. The results are shown in Table 5.8.

Table 5.8

Reliability and Validity variables in Academic Challenge

S. No	Variables in academic challenge	Standardized factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I aspire to get excellent results in all academic competitions	0.8048	3.2344*	0.7545	0.7219	52.11
2	I have a tendency to find solution to problems which others unable to succeed.	0.7117	2.6517*			

*Significant at five per cent level

The content validity is proved since the factor loading of the variables in academic challenge are greater than 0.60. The convergent validity is confirmed since the 't' statistics of the standardized factor loading of the variables in academic challenge are significant at five per cent level and the composite reliability and average variance extracted by the factor are higher than its standard minimum of 0.50 and 50.00 per cent respectively. The variables included in the academic challenge explain its reliability to an extent of 75.45 per cent since its cronbach alpha is 0.7545.

5.9 LEVEL OF ACADEMIC CHALLENGE AMONG THE STUDENTS

The level of academic challenge among the college students is measured by the mean score of the variables in academic challenge. It is denoted by SOAC. The SOAC among the college students in the present study is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of college students on the basis of their academic challenge is given in Table 5.9.

Table 5.9

Score on Academic Challenge (SOAC) among the Students

S.No	Score on Academic Challenge	Number of students			Total
		Urban	Semi-urban	Rural	
1	Less than 2.0	17	37	26	80
2	2.0 - 3.0	17	53	53	123
3	3.1 - 4.0	52	136	42	230
4	Above 4.0	62	68	13	143
	Total	148	294	134	576

Source : Primary data

The important SOAC among the college students is 3.1 to 4.0 and above 4.0 which constitutes 39.93 and 24.83 per cent to the total respectively. The important SOAC among the urban college students is above 4.0 which constitute 41.89 per cent to its total. Among the semi-urban college students it is 3.1 to 4.0 which constitutes 46.26 per cent to its total whereas among the rural college students the important SOAC is 2.0 to 3.0 which constitutes 39.55 per cent to the total.

The analysis reveals that the level of academic challenge among the urban college students is higher than the semi-urban college students whereas among the semi-urban college students the level of academic challenge is higher than the rural college students.

5.10 ATTITUDE TOWARDS EDUCATION AMONG THE STUDENTS

The student's attitude towards education is one of the factors influencing the achievement motivation which in turn may have its own impact on the entrepreneurial motivation among the students. Hence it is included as one of the variables of achievement motivation. It is measured with the help of five variables. The mean scores of all the five variables towards attitude towards education among the three groups of college students and their respective 'F' statistics are computed and presented in Table 5.10.

Table 5.10**Students view about Attitude towards Education**

S. No	Variables in attitude towards education	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	I like my studies.	3.7991	3.5081	3.3996	2.4509*
2	I like to attend the class regularly.	3.8284	3.3994	3.0884	3.6579*
3	I prefer to enrich my knowledge.	3.9099	3.4045	3.0226	3.7345*
4	Education plays a vital role in my life.	3.9344	3.3891	3.1773	3.7011*
5	Education gives a status in the society.	3.9909	3.3224	3.0667	3.8583*

*Significant at five per cent level

The highly viewed variable as regards the attitude towards education among the urban college students are ‘education gives a status in the society’ and ‘education plays a vital role in my life’ since their mean scores are 3.9909 and 3.9344 respectively whereas among the semi-urban college students the highly viewed variable are ‘I like my studies’ and ‘I prefer to enrich my knowledge’ since their mean scores are 3.5081 and 3.4045 respectively. Among the rural college students the highly viewed variable are ‘I like my studies’ and ‘education plays a vital role in my life’ since their mean scores are 3.3996 and 3.1773 respectively.

Regarding the college students view about the attitude towards education, significant difference among the three groups of students have been noticed in all the five variables since their respective ‘F’ statistics are significant at five per cent level.

5.11 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO ATTITUDE TOWARD EDUCATION

Before summarizing the scores of the variables relating to attitude towards education, it is imperative to examine its reliability and validity. The confirmatory factor analysis has been applied to examine the reliability and validity of variables in it. The overall reliability has been tested with the help of cronbach alpha. The results are shown in Table 5.11.

Table 5.11

Reliability and validity variables relating to Attitude towards Education (ATE)

S. No	Variables in Attitude towards Education	Standardized factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I like to attend the class regularly.	0.8914	3.8183*	0.7949	0.7709	54.48
2	Education plays a vital role in my life.	0.8025	3.4091*			
3	Education gives a status in the society.	0.7906	3.3884*			
4	I like my studies.	0.7143	3.9139*			
5	I prefer to enrich my knowledge.	0.6824	2.6879*			

*Significant at five per cent level

The standardized factor loading of the variables relating to attitude towards education are greater than 0.60 which reveals the content validity. The significance of 't' statistics of the standardized factor loading of the variables relating to attitude towards education reveals the convergent validity. It is also proved by the composite reliability and average variance extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively. The five variables included in the attitude towards education explain it to an extent of 79.49 per cent since its cronbach alpha is 0.7949.

5.12 LEVEL OF ATTITUDE TOWARD EDUCATION AMONG THE STUDENTS

The level of attitude towards education among the college students is measured with the help of the mean scores of the variables. It is denoted by SOATE. In the present study, the SOATE is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their SOATE is illustrated in Table 5.12.

Table 5.12

Score on Attitude towards Education (SOATE) among the students

S. No	Score on Attitude towards Education	Number of students			Total
		Urban	Semi-urban	Rural	
1	Less than 2.0	9	37	27	73
2	2.0-3.0	30	43	42	115
3	3.1-4.0	65	165	49	279
4	Above 4.0	44	49	16	109
	Total	148	294	134	576

Source : Primary data

The important SOATE among the college students are 3.1 to 4.0 and 2.0 to 3.0 which constitutes 43.58 and 21.18 per cent to the total respectively. The important SOATE among the urban college students is above 4.0 which constitute 43.92 per cent to its total whereas among semi-urban college students, it is 3.1 to 4.0 which constitutes 56.12 per cent to its total. Among the rural college students the important SOATE is 2.0 to 3.0 which constitute 36.57 per cent to its total.

The analysis reveals that the level of attitude towards education among the urban college students is higher than the level of attitude towards education among the semi-urban and rural students.

5.13 MEANINGFULNESS OF TASK AND WORK METHODS (MTWM) AMONG STUDENTS

The students understanding and involvement in the task and work methods in their education may influence their achievement motivation which may lead to entrepreneurial motivation. Hence, it is included as one of the variable in the achievement motivation. It is measured with the help of seven variables. The mean scores of each variable in meaningfulness of task and work methods among the three groups of students and their respective 'F' statistics have been computed and shown in Table 5.13.

Table 5.13

Meaningfulness of Task and Work methods (MTWM) among the students

S. No	Variables in Meaningfulness of Task and Work methods	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	I do task which is result oriented.	3.7376	3.3042	3.0244	3.1173*
2	The present course of my study will help me to prosper in my life.	3.8117	3.3911	3.1775	3.0044*
3	I feel very much frustrated if I do not get a chance to compete in the field of my choice.	3.8024	3.2545	3.0969	3.2673*
4	I regularly take down notes in the class and complete my assignments.	3.9179	3.1889	3.1088	3.4541*
5	I do a lot of preparation at home for the next day's work in the class.	3.9208	3.2673	3.1177	3.5949*
6	I study according to time schedule.	3.9345	3.3117	3.2604	3.4083*
7	I follow the work method which is results oriented.	3.9909	3.2609	3.1803	3.6617*

*Significant at five per cent level

The highly viewed variables in the meaningfulness of task and work methods by the urban and semi-urban college students are 'I follow the work method which is result oriented' and 'the present course of study will help me to prosper in life' since their mean scores are 3.9909 and 3.3911 respectively. Among the rural college students

the highly viewed variable is ‘I study according to time schedule’ since its mean score is 3.2604. Regarding the students view about the variables in meaningfulness of task and work methods, significant difference among the three group of students have been noticed in the case of all seven variables in it since their respective ‘F’ statistics are significant at five per cent level.

5.14 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO MEANINGFULNESS OF TASK AND WORK METHODS

The score of seven variables in the ‘meaningfulness of task and work methods’ have been included for confirmatory factor analysis in order to examine its reliability and validity. The overall reliability of variables relating to meaningfulness of task and work methods has been tested with the help of cronbach alpha. The results are illustrated in Table 5.14.

Table 5.14

Reliability and Validity of variables relating to Meaningfulness of Task and Work Methods (MTWM)

S. No	Variables in Meaningfulness of Task and Work Methods	Standardized factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I regularly take down notes in the class and complete my assignments	0.8548	3.7341*	0.7667	0.7413	52.17
2	I study according to time schedule.	0.8011	3.6173*			
3	I do a lot of preparation at home for the next day’s work in the class.	0.7883	3.5969*			
4	I do task which is result oriented.	0.7549	3.3894*			
5	I follow the work method which is results oriented.	0.7317	3.1108*			
6	I frustrated if I do not get a chance to compete in the field of my choice.	0.7076	2.8991*			
7	The present course of my study will help me to prosper in my life.	0.6539	2.5887*			

*Significant at five per cent level

The standardized factor loading of the variables relating to meaningfulness of task and work methods varies from 0.6539 to 0.8548 which reveals the content validity. The significance of 't' statistics of the standardized factor loading of the variables in meaningfulness of task and work methods reveals the convergent validity. It is also proved by the composite reliability and average variance extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively. The seven variables included in the meaningfulness of task and work methods explain it to an extent of 76.67 per cent since its cronbach alpha is 0.7667.

5.15 LEVEL OF MEANINGFULNESS OF TASK AND WORK METHODS AMONG THE STUDENTS

The level of meaningfulness of task and work methods among the students is measured by the mean scores of the variables relating to meaningfulness of task and work methods. It is denoted by SOMETW. In the present study, the SOMETW is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their SOMETW is illustrated in Table 5.15.

Table 5.15
Score on Meaningfulness of Task and Work Methods (SOMETW)
among the students

S.No	Score on Meaningfulness of task and work Methods	Number of students			Total
		Urban	Semi-urban	Rural	
1	Less than 2.0	11	35	22	68
2	2.0-3.0	23	68	38	129
3	3.1-4.0	61	128	53	242
4	Above 4.0	53	63	21	137
	Total	148	294	134	576

Source : Primary data

The important SOMETW among the students is 3.1 to 4.0 and above 4.0 which constitutes 42.01 and 23.78 per cent to the total respectively. The important SOMETW among the urban and semi-urban college students is 3.1 to 4.0 which constitute 41.21 and 43.54 per cent to its total respectively. Among the rural college students, it is also 3.1 to 4.0 which constitute 39.55 per cent to its total. The analysis infers that the majority (42.01 per cent) of the student's level of meaningfulness of task and work methods among the urban semi-urban and rural college students is 3.1 to 4.0. It is higher among the urban college students than among the semi-urban and rural college students.

5.16 ATTITUDE TOWARDS TEACHERS (ATT) AMONG THE STUDENTS

The attitude towards teachers among the college students is included as one of the important variable which can influence the achievement motivation and mould the behaviour of the college students in the future. The level of attitude towards teacher (ATT) among the students is measured with the help of five variables. The students are asked to rate these five variables at five point scale. The mean score of each variable and their respective 'F' statistics have been computed and presented in Table 5.16.

Table 5.16

Attitude towards Teachers (ATT) among the Students

S.No	Variables in Attitude towards Teachers	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	Teachers are competent in their work	3.6563	3.5117	3.8199	0.5162
2	I prefer to follow the instruction of my teachers	3.5089	3.3917	3.6694	0.3887
3	I try to avoid creating nuisance in the class	3.3997	3.4546	3.7917	0.7966
4	I try to answer the question asked by the teachers.	3.8817	3.5881	3.8082	0.9173
5	I like to listen to the teachers.	3.7341	3.5044	3.4541	1.5089

*Significant at five per cent level

The highly viewed variable relating to attitude towards teachers by the urban and semi-urban college students is ‘I try to answer the question asked by the teacher’ since its mean scores are 3.8817 and 3.5881 respectively. Among the rural college students the highly viewed variable relating to attitude towards teachers ‘teachers are competent in their work’ since its mean score is 3.8199.

Regarding the attitude towards teachers, no significant difference has been noticed among urban, semi-urban and rural college students.

5.17 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO ATTITUDE TOWARDS TEACHERS (ATT)

It is imperative to examine the reliability and validity of variables in attitude towards teachers before summarizing the score of the variables. The confirmatory factor analysis has been administered for this purpose. The cronbach alpha is computed to reveal the overall reliability. The results are illustrated in Table 5.17.

Table 5.17

Reliability and Validity of Variables relating to Attitude towards Teachers (ATT)

S. No	Variables in Attitude towards Teachers	Standardized factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I try to avoid creating nuisance in the class	0.9033	4.0965*	0.8107	0.7822	57.34
2	I like to listen to the teachers.	0.8179	3.6882*			
3	My teachers are competent in their work	0.7908	3.3969*			
4	I try to answer the question ask by the teachers.	0.7514	3.1173*			
5	I prefer to follow the instruction of my teachers	0.6979	2.8183*			

*Significant at five per cent level

The standardized factor loading of the variables relating to attitude towards teachers are greater than 0.60 which shows the content validity. The significance of 't' statistics of the standardized factor loading of the variables relating to attitude towards teachers reveals the convergent validity. It is also confirmed by the composite reliability and average variance extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively. The five variables included in the 'attitude towards teachers' explain it to an extent of 81.09 per cent since its cronbach alpha is 0.8109.

5.18 LEVEL OF ATTITUDE TOWARDS TEACHERS AMONG THE STUDENTS

The level of attitude towards teachers among the students is measured with the help of mean score of the variables in it. It is denoted by SOATT. In the present study, the SOATT is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their SOATT is given in Table 5.18.

Table 5.18

Score on Attitude Towards Teachers (SOATT) among the Students

S. No	Score on Attitude Towards Teachers	Number of students			Total
		Urban	Semi-urban	Rural	
1	Less than 2.0	20	52	13	85
2	2.0-3.0	32	59	26	117
3	3.1-4.0	53	126	58	237
4	Above 4.0	43	57	37	137
	Total	148	294	134	576

Source : Primary data

The important SOATT among the students are 3.1 to 4.0 and above 4.0 which constitutes 41.15 and 23.78 per cent to the total respectively. The important SOATT

among the urban and semi-urban college students are 3.1 to 4.0 which constitute 35.81 and 42.86 per cent to its total respectively. Among the rural college students the important SOATT is 3.1 to 4.0 which constitute 43.28 per cent to its total. The analysis reveals that the level of attitude towards teachers is higher among the rural college students than among the urban and semi-urban college students.

5.19 GENERAL INTERESTS AND SPORTS (GIS) AMONG THE STUDENTS

The general interests and sports among the students have been included as one of the important variable in the achievement motivation among the students. The level of general interests and sports (GIS) among the students is measured with the help of six variables. The mean score of each variable among the three groups of students and their respective 'F' statistics have been computed and presented in Table 5.19.

Table 5.19

General Interests and Sports (GIS) among the Students

S. No	Variables in GIS	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	I balance the studies and play.	3.3911	3.8891	3.9088	3.1145*
2	I participate in the sports and games.	3.2088	3.7973	3.8584	3.2082*
3	I like to read newspapers and magazine	3.8911	3.1337	3.0454	3.5881*
4	I like to view TV channels which provide worldly information.	3.9044	3.6634	3.5089	0.9676
5	I spend more time to view entertainment channels.	3.8991	3.5849	3.6682	0.7301
6	Interested in attending the co-curricular activities.	3.5145	3.7337	3.8991	0.9343

*Significant at five per cent level

The highly viewed variable in general interests and sports by the urban and semi-urban college students are 'I like to view TV channels which provide worldly information' and 'I balance the studies and play' since their mean scores are 3.9044 and

3.8891 respectively. Among the rural college students, it is also ‘I balance the studies and play’ since its mean score is 3.9088. Regarding the college students view on variables relating to general interests and sports, significant difference among the three group of students have been noticed in the case of three out of six variables in general interests and sports since their respective ‘F’ statistics are significant at five per cent level.

5.20 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO GENERAL INTERESTS AND SPORTS (GIS)

The score of the variables relating to general interests and sports have been included for confirmatory factor analysis in order to examine the reliability and validity of variables. The cronbach alpha is computed to examine the overall reliability. The results are shown in Table 5.20.

Table 5.20

Reliability and Validity of variables relating to General Interests and Sports

S. No	Variables in General Interests and Sports	Standardized factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	Interested in attending the co-curricular activities.	0.9033	4.1082*	0.8143	0.7829	54.92
2	I like to view TV channels which provide worldly information.	0.8644	3.6884*			
3	I spend more time to view entertainment channels.	0.8021	3.3919*			
4	I balance the studies and play.	0.7667	3.1391*			
5	I like to read newspapers and magazine	0.7209	2.7309*			
6	I participate in the sports and games.	0.6557	2.3991*			

*Significant at five per cent level

The six variables included in the general interests and sports explain it to an extent of 81.43 per cent since its cronbach alpha is 0.8143. The standardized factor loading of the variables in general interests and sports are greater than 0.60 which reveals the content validity. The convergent validity is proved by the composite reliability and average variance extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively. It is also supported by the ‘t’ statistics of the standardized factor loading of the variables in general interests and sports since these are significant at five per cent level.

5.21 LEVEL OF GENERAL INTERESTS AND SPORTS AMONG THE STUDENTS

The level of general interests and sports among the students is measured by the mean score of the variables. It is denoted by SOGIS. In the present study, the SOGIS is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their SOGIS is given in Table 5.21.

Table 5.21

Score on General Interests and Sports (SOGIS) among the Students

S. No	Score on General Interests and Sports	Number of students			Total
		Urban	Semi-urban	Rural	
1	Less than 2.0	15	42	26	83
2	2.0-3.0	29	41	29	99
3	3.1- 4.0	63	142	41	246
4	Above 4.0	41	69	38	148
	Total	148	294	134	576

Source : Primary data

The important SOGIS among the students is 3.1 to 4.0 and above 4.0 which constitutes 42.71 and 25.69 per cent to the total respectively. The important SOGIS among the urban, semi-urban and rural college students is 3.01 to 4.00 which constitute 42.57, 48.30 and 30.60 per cent to its total respectively.

The analysis reveals that the level of general interests and sports among the semi-urban college students are more than the urban and rural college students.

5.22 STUDENT'S VIEW ABOUT THE IMPORTANCE OF MARKS (IOM)

It shows the importance given to the marks among the students. Since, the importance given to the marks have its own influence on the achievement motivation and entrepreneurial motivation, it is included as one of the variable in the present study. The importance of marks given by the students in the present study is measured with the help of three variables. The mean score of each variable in importance of marks (IOM) among the three groups of students have been computed along with its 'F' statistics. The results are given in Table 5.22.

Table 5.22

Importance of Marks (IOM) among the Students

S.No	Variables in Importance of Marks	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	I work hard to score more marks	3.8189	3.4089	3.1124	3.4518*
2	Mark determines the future carrier options	3.9024	3.3117	3.0929	3.6867*
3	Mark gives a status in the academic circle.	3.9144	3.2902	3.0147	3.5909*

*Significant at five per cent level

Among the urban college students the highly viewed variable in ‘importance of marks’ is ‘marks gives a status in the academic circle’ since its mean score is 3.9144. Among the semi-urban and rural college students the highly viewed variable are ‘I work hard to score more marks’ since their mean score are 3.4089 and 3.1124 respectively. Regarding the students’ view on variables relating to ‘importance of marks’ significant difference among the three group of students have been noticed in the case of all the three variables included in the importance of marks since their respective ‘F’ statistics are significant at five per cent level.

5.23 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO IMPORTANCE OF MARKS (IOM)

The mean score of the variables in the importance of marks has been included to examine the reliability and validity of the variables. The confirmatory factor analysis has been administered for this purpose. The overall reliability has been tested with the help of cronbach alpha. The results are given in Table 5.23.

Table 5.23

Reliability and Validity of variables relating to the Importance of Marks

S. No	Variables in Importance of Marks	Standardized factor loading	‘t’ Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	Mark determines the future carrier options	0.8184	3.5089*	0.7336	0.7049	50.94
2	Mark gives a status in the academic circle.	0.7503	2.7169*			
3	I work hard to score more marks.	0.6592	2.4573*			

*Significant at five per cent level

The standardized factor loading of the variables in importance of marks varies from 0.6592 to 0.8184 which reveals the content validity of the factor. the significance of 't' statistics of the standardized factor loading of the variables in importance of marks indicates the convergent validity. It is also proved by the composite reliability and average threshold of 0.50 and 50.00 per cent respectively. The included three variables in importance of marks explain it to an extent of 73.36 per cent since its cronbach alpha is 0.7336.

5.24 LEVEL OF IMPORTANCE GIVEN TO MARKS AMONG THE STUDENTS

The level of importance given to the marks among the students is measured by the mean score of the variables. It is denoted by SOIOM. In the present study, the SOIOM is classified into less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their SOIOM is given in Table 5.24.

Table 5.24

Score on Importance given to Marks (SOIOM) among the Students

S. No	Score on Importance given to Marks	Number of students			Total
		Urban	Semi-urban	Rural	
1	Less than 2.0	13	50	26	89
2	2.0-3.0	26	70	52	148
3	3.1-4.0	72	123	37	232
4	Above 4.0	37	51	19	107
	Total	148	294	134	576

Source : Primary data

The important SOIOM among the students are 3.1 to 4.0 and 2.0 to 3.0 which constitutes 40.28 and 25.69 per cent to the total respectively. The important SOIOM among the urban and semi-urban college students is 3.1 to 4.0 which constitutes 48.65

and 41.84 per cent to its total respectively. Among the rural college students the important SOIOM is 2.0 to 3.0 which constitute 38.81 per cent to its total. The analysis reveals that the level of importance given on marks among the urban students is higher than the semi-urban and rural college students.

5.25 STUDENTS ACHIEVEMENT MOTIVATION

The level of students' achievement motivation is measured with the help of 37 variables under eight dimensions. The mean score of each dimension among the urban, semi-urban and rural college students have been computed separately. The one way analysis of variance has been executed to find out the significant difference among the three groups of students towards each dimension. The results are given in Table 5.25.

Table 5.25

Students view about the Achievement Motivation

S.No	Components of Achievement Motivation	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	Score on academic motivation	3.8557	3.1449	3.0962	3.3991*
2	Score on need for achievement	3.8452	3.2559	3.0801	3.4208*
3	Score on academic challenge	3.9204	3.3347	3.1053	3.5173*
4	Score on attitude towards education	3.8925	3.4047	3.1509	3.4676*
5	Score on meaningfulness of task and work methods	3.8737	3.2752	3.1379	3.2182*
6	Score on attitude towards teachers	3.6361	3.4901	3.7087	0.7389
7	Score on general interests and sports	3.6348	3.6337	3.6481	0.4551
8	Score on importance of marks	3.8786	3.3369	3.0733	3.1173*
	Score on achievement motivation	3.8026	3.3684	3.2086	3.0965*

*Significant at five per cent level

Among the urban college students the highly viewed dimensions of achievement motivation are 'academic challenge' and 'attitude towards education' since their mean scores are 3.9204 and 3.8925 respectively.

The highly viewed dimensions of achievement motivation among the semi-urban college students are 'general interests and sports' and 'attitude towards teachers' since their mean scores are 3.6337 and 3.4901 respectively.

As regards the rural college students the highly viewed dimensions of achievement motivation are 'attitude towards teachers' and 'general interests and sports' since their mean scores are 3.7087 and 3.6481 respectively.

Regarding the students view towards the various dimensions of achievement motivation, significant difference among the three group of students have been noticed in the case of six out of eight dimensions since their 'F' statistics are significant at five per cent level.

The overall achievement motivation among the urban college students is higher than the overall achievement motivation among the semi-urban and rural students. There is a significant difference among the three group of students have also been noticed regarding their view on achievement motivation since its 'F' statistics is significant at five per cent level.

5.26 ASSOCIATION BETWEEN THE PROFILE OF STUDENTS AND THEIR LEVEL OF ACHIEVEMENT MOTIVATION

The profile of the students may be associated with their level of achievement motivation. The present study has made an attempt to examine this association between profile variables and achievement motivation with the help of one way analysis of variance. The profile variables included for this purpose are gender, age, place of college, branch of study, social group, religion, type of family, size of family, monthly family income, father's occupation and mother's occupation. The results are shown in Table 5.26.

Table 5.26
Level of Achievement Motivation and the Profile of the Students

S.No	Profile variables	F statistics								
		Academic motivation	Need for achievement	Academic challenge	Attitude towards education	Meaningfulness of task and work methods	Attitude towards teachers	General interest and sports	Importance of marks	Achievement motivation
1	Gender	3.6671	3.2378	3.0178	3.1792	3.1007	3.2672	3.3341	2.5676	2.4172
2	Age	3.4542*	3.6082*	3.2773*	3.6561*	2.4541	2.0996	2.5884	2.6082	3.4541*
3	Place of College	2.4505	2.1779	2.8991	2.0892	2.8667	2.9414	3.1787*	3.2868*	2.9146
4	Branch of Study	3.1771	3.2609	3.1184	3.3996	3.2676	3.3881	3.4541	3.9142*	3.0945
5	Social Group	2.4332	2.2779	2.5082	2.5085	2.7172*	2.0896	2.2661	2.8182*	2.5011
6	Religion	2.5117	2.4546	2.6567*	2.1331	2.8996*	2.2676	2.1889	2.0917	2.2114
7	Type of family	3.2666	3.8182*	3.4546	3.3894	3.2676	3.3884	3.6771	3.3991	3.4546
8	Size of family	3.0079*	3.1174*	2.6564	2.8667	3.7173*	3.8229*	3.9091*	3.7673*	3.4089*
9	Monthly family income	2.4547*	2.5869*	2.6089*	2.5845*	2.6566*	2.6089*	2.3886*	2.0917	2.0173
10	Fathers occupation	2.3997*	2.7331*	2.9141*	2.9098*	2.7339*	2.7374*	2.5919*	2.1224	2.1791
11	Mothers occupation	2.6084*	2.8089*	2.7676*	2.8182*	2.8117*	2.9098*	2.5889*	2.4773*	2.5044*

*Significant at five per cent level

As regards academic motivation, the significantly associating profile variables are age, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables with the need for achievement variables are age, type of family, size of family, monthly family income, father's occupation and mother's occupation whereas in the case of academic challenge, the associating profile variables are age, religion, monthly family income, father's occupation and mother's occupation. since their respective 'F' statistics are significant at five per cent level. Regarding the attitude towards education, the significantly associating profile variables are age, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

Regarding meaningfulness of task and work method, the significantly associating profile variables are social group, religion, size of family, monthly family income, father's occupation and mother's occupation. Whereas in the case of attitude towards teachers, the significantly associating profile variables are size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables as regards the general interest and sports, are place of college, size of family, monthly family income, father's occupation and mother's occupation. Whereas regarding the importance of marks, the associating profile variables are place of college, branch of study, social group, size of family and mother's occupation since their respective 'F' statistics are significant at five per cent level.

Regarding the achievement motivation, the significantly associating profile variables are age, size of family and mother's occupation since their respective 'F' statistics are significant at five per cent level.

5.27 DISCRIMINANT COMPONENTS OF ACHIEVEMENT MOTIVATION (CAM) AMONG THE URBAN AND SEMI-URBAN COLLEGE STUDENTS

The level of achievement motivation among the urban college students differ from the semi-urban college students. So it is imperative to identify the important discriminant factor which differentiates the urban and semi-urban college students. For the purpose of discriminant factor analysis initially, the mean difference and its statistical significance have been computed. The discriminant power has been estimated with the help of wilks lambda. The results are given in Table 5.27.

Table 5.27

Mean difference and Discriminant power of components of Achievement Motivation among Urban and Semi urban College Students

S. No	Component of Achievement Motivation (CAM)	Mean score among students		Mean difference	't' Statistics	Wilks lambda
		Urban	Semi urban			
1	Academic Motivation (X_1)	3.8557	3.1449	0.7108	2.8569*	0.1173
2	Need for achievement (X_2)	3.8452	3.2559	0.5893	2.2236*	0.1504
3	Academic challenge (X_3)	3.4204	3.3347	0.5857	2.1186*	0.1669
4	Attitude towards education (X_4)	3.8925	3.4047	0.4878	1.4559	0.2456
5	Meaningfulness of task and work methods (X_5)	3.8737	3.2752	0.5985	2.3944*	0.1771
6	Attitude towards teachers (X_6)	3.6361	3.4901	0.1460	0.3949	0.4179
7	General interests and sports (X_7)	3.6348	3.6337	0.0011	0.1887	0.5887
8	Importance of marks (X_8)	3.8786	3.3369	0.5417	2.0396*	0.1338

*Significant at five per cent level

The significant mean differences are noticed in the case of academic motivation, need for achievement, academic challenge, meaningfulness of task and work methods and importance of marks since their respective mean differences are significant at five per cent level.

The higher mean difference is noticed in the case of ‘academic motivation’ and ‘meaningfulness of task and works methods’ since their mean differences are 0.7108 and 0.5985 respectively.

The higher discriminant power is noticed in the case of ‘academic motivation’ and ‘importance of marks’ since their respective wilks lambda are 0.1173 and 0.1338 respectively.

The significant CAMs are included to estimate the two group discriminant analysis. The unstandardised procedure has been followed to estimate the two group discriminant function. The estimated function is:

$$Z = 0.6917 + 0.1739 X_1 + 0.1031 X_2 + 0.1294 X_3 + 0.1337 X_5 + 0.1084 X_8$$

The relative contribution of discriminant CAMs in total discriminant score is computed by the product of discriminant coefficient and the mean difference of the respective CAM. The results are shown in Table 5.28.

Table 5.28**Relative contribution of Discriminant CAM in Total Discriminant Score (TDS)**

S.No	Component of Achievement Motivation (CAM)	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Academic Motivation (X_1)	0.1739	0.7180	0.1236	30.98
2	Need for achievement (X_2)	0.1031	0.5893	0.0608	15.24
3	Academic challenge (X_3)	0.1294	0.5857	0.0758	19.00
4	Meaningfulness of task and work methods (X_5)	0.1337	0.5985	0.0800	20.06
5	Importance of marks (X_8)	0.1084	0.5417	0.0587	14.72
	Total			0.3989	100.00
Per cent of cases currently classified : 74.88					

The higher discriminant coefficients are identified in the case of ‘academic motivation’ and ‘meaningfulness of task and work methods’ since their discriminant coefficients are 0.1739 and 0.1337 respectively. It shows the higher significance of above said two CAMs in discriminant function.

The highest relative contribution in total discriminant score is noticed in the case of above said two CMAs since their relative contribution are 30.98 and 20.06 per cent respectively. The estimated two group discriminant analysis currently classified the cases to an extent of 74.88 per cent.

The analysis reveals that the important discriminant CAMs among the urban and semi-urban college students are ‘academic motivation’ and ‘meaningfulness of task and work methods’ which are higher among the urban college students than among the semi urban students.

5.28 DISCRIMINANT CAMs AMONG THE URBAN AND RURAL COLLEGE STUDENTS

It is imperative to identify the important discriminant CAMs among the urban and rural college students. The score on eight CAMs have been included for the analysis. The mean difference and its statistical significance have been computed initially. The discriminant power of CAMs has been estimated with the help of Wilks lambda. The results are given in Table 5.29.

Table 5.29
Mean difference and discriminant Power of CAM among
Urban and Rural students

S. No	Component of Achievement Motivation (CAM)	Mean score among students		Mean difference	't' Statistics	Wilks Lambda
		Urban	Rural			
1	Academic Motivation (X_1)	3.8557	3.0962	0.7595	3.1447*	0.1362
2	Need for achievement (X_2)	3.8452	3.0801	0.7651	3.2889*	0.1504
3	Academic challenge (X_3)	3.4204	3.1053	0.8151	3.9084*	0.1173
4	Attitude towards education (X_4)	3.8925	3.1509	0.7416	2.9906*	0.1662
5	Meaningfulness of task and work methods (X_5)	3.8737	3.1379	0.7358	2.9092*	0.1704
6	Attitude towards teachers (X_6)	3.6361	3.7087	-0.0726	0.4177	0.4669
7	General interests and sports (X_7)	3.6348	3.6481	-0.0133	0.3218	0.4082
8	Importance of marks (X_8)	3.8786	3.0733	0.8053	3.8182*	0.1089

*Significant at five per cent level

The higher mean differences are noticed in the case of 'academic challenge' and 'importance of marks' since their mean differences are 0.8151 and 0.8053 respectively,

the significant mean differences are identified in the case of six CAMs out of eight CAMs since their respective 't' statistics are significant at five per cent level.

The higher discriminant power is noticed in the case of 'importance of marks' and 'academic challenge' since their respective wilks lambda are 0.1089 and 0.1173.

The significant CAMs have been included to estimate the two group discriminant function. The unstandardised procedure has been followed to estimate the function. The estimated functions are:

$$Z = 1.2641 + 0.1196 X_1 + 0.1532 X_2 + 0.1779 X_3 + 0.1491 X_4 + 0.0996 X_5 + 0.1024 X_8$$

The relative contribution of discriminant CAMs in the total discriminant score is estimated by the product of discriminant coefficient and the mean difference of the respective CAMs. The results are shown in Table 5.30.

Table 5.30

Relative contribution of discriminant CAM in Total Discriminant Score (TDS)

S. No	Component of Achievement Motivation (CAM)	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Academic Motivation (X_1)	0.1196	0.7595	0.0908	14.66
2	Need for achievement (X_2)	0.1532	0.7651	0.1172	18.92
3	Academic challenge (X_3)	0.1779	0.8151	0.1450	23.41
4	Attitude towards education (X_4)	0.1491	0.7416	0.1106	17.86
5	Meaningfulness of task and work methods (X_5)	0.0996	0.7358	0.0733	11.83
6	Importance of marks (X_8)	0.1024	0.8053	0.0825	13.32
	Total			0.6194	100.00
Per cent of cases currently classified : 76.44					

The higher discriminant coefficients are noticed in the case of ‘academic challenge’ and ‘need for achievement’ since their discriminant coefficients are 0.1779 and 0.1532 respectively. It shows the higher influence of the above said two CAMs in discriminant function.

The highest relative contribution of discriminant CMA in TDS is noticed in the case of ‘academic challenge’ and ‘need for achievement’ since their relative contribution are 23.41 and 18.92 per cent respectively. The estimated two group discriminant function currently classifies the cases to an extent of 76.44 percent.

The analysis reveals that the important discriminant CAMs among the urban and rural college students are ‘academic challenge’ and ‘need for achievement’ which are higher among the urban college students than among the rural college students.

5.29 DISCRIMINANT COMPONENTS OF ACHIEVEMENT MOTIVATION (CAM) AMONG THE SEMI-URBAN AND RURAL STUDENTS

The level of achievement motivation among the semi-urban college students may differ from the rural college students. It is essential to analyse the important discriminant CAM among the two groups of college students. Initially, the mean difference for all the eight components of achievement motivation and their respective statistical significance has been computed. The discriminant power of each CAM has been estimated with the help of Wilks lambda. The results are given in Table 5.31.

Table 5.31

**Mean difference and Discriminant Power of Achievement Motivation among
Semi-urban and Rural students**

S. No	Component of Achievement Motivation (CAM)	Mean score among students		Mean difference	't' Statistics	Wilks lambda
		Semi urban	Rural			
1	Academic Motivation (X_1)	3.8557	3.0962	0.7595	3.0542*	0.1663
2	Need for achievement (X_2)	3.8452	3.0801	0.7651	3.2673*	0.1504
3	Academic challenge (X_3)	3.9204	3.1053	0.8151	3.8084*	0.1667
4	Attitude towards education (X_4)	3.8925	3.1509	0.7416	2.9911*	0.1391
5	Meaningfulness of task and work methods (X_5)	3.8737	3.1379	0.7358	2.7334*	0.1492
6	Attitude towards teachers (X_6)	3.6361	3.7087	-0.0726	-0.7919	0.4919
7	General interests and sports (X_7)	3.6348	3.6481	-0.0133	-0.3994	0.4033
8	Importance of marks (X_8)	3.8786	3.0733	0.8053	3.6696*	0.1399

*Significant at five per cent level

The significant mean differences are identified in the case of 'academic motivation', 'need for achievement', 'academic challenge', 'attitude towards education', 'meaningfulness of task and work methods' since their respective 't' statistics are significant at five per cent level.

The higher mean difference is noticed in the case of 'academic challenge' and 'importance of marks' since their mean differences are 0.8151 and 0.8053 respectively.

The significant CAM are included to estimate the two group discriminant function. The estimated functions are:

$$Z = 0.4092 + 0.1688 X_1 + 0.1792 X_2 + 0.2042 X_3 + 0.1984 X_4 + 0.0947 X_5 + 0.0459 X_8$$

The relative contribution of discriminant CAM in total discriminant score is estimated by the product of discriminant coefficient and the mean difference of the respective CAM. The results are shown in Table 5.32.

Table 5.32

Relative contribution of discriminant CAM in Total Discriminant Score (TDS)

S.No	Component of Achievement Motivation (CAM)	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Academic Motivation (X_1)	0.1688	0.7595	0.1282	18.78
2	Need for achievement (X_2)	0.1792	0.7651	0.1371	20.08
3	Academic challenge (X_3)	0.2042	0.8151	0.1664	24.37
4	Attitude towards education (X_4)	0.1948	0.7416	0.1445	21.16
5	Meaningfulness of task and work methods (X_5)	0.0947	0.7358	0.0697	10.21
6	Importance of marks (X_8)	0.0459	0.8053	0.0369	5.40
	Total			0.6828	100.00
Per cent of cases currently classified : 81.08					

The higher discriminant coefficients are noticed in the case of ‘academic challenges’ and ‘attitude towards education’ since their discriminant coefficients are 0.2042 and 0.1948 respectively. It shows the higher significance of the above said two CAMs in discriminant function.

The highest relative contribution of CAM in TDS is noticed in the case of ‘academic challenge’ and ‘attitude towards education’ since their relative contribution

are 24.37 and 21.16 per cent respectively. The estimated two group discriminant analysis currently classified the cases to an extent of 81.08 percent.

The analysis reveals that the important discriminant factor relating to achievement motivation among the semi-urban and rural college students are ‘academic challenge’ and ‘attitude towards education’ which are higher among the semi-urban college students than the rural college students.

5.30 IMPACT OF ACHIEVEMENT MOTIVATION ON THE ENTREPRENEURIAL TRAITS AMONG THE STUDENTS

The achievement motivation among the college students may have been its own influence on the entrepreneurial traits among the students. It is imperative to examine the relative importance of each of the components of achievement motivation (CAM) in the determination of entrepreneurial traits among the students. The multiple regression analysis has been applied for this purpose. The fitted regression model is:

$$Y = a + b_1x_1 + b_2x_2 + \dots + b_8x_8 + e$$

Whereas y – score on entrepreneurial traits among the students

- X_1 - Score on academic motivation among the students
- X_2 - Score on need for achievement among the students
- X_3 - Score on academic challenge among the students
- X_4 - Score on attitude towards education among the students
- X_5 - Score on meaningfulness of task and work methods among the students
- X_6 - Score on attitude towards teachers among the students
- X_7 - Score on general interests and sports among the students

- X_8 - Score on importance of marks among the students
- b_1, b_2, \dots, b_8 - Regression coefficient of independent variables
- a - intercept and
- e - error term

The impact of achievement motivation on the entrepreneurial traits among the three group of students and also for pooled data have been computed separately. The results are shown in Table 5.33.

Table 5.33

Impact of Achievement Motivation on Entrepreneurial Traits

S.No	Factors	Regression coefficient among students			Pooled Data
		Urban	Semi – urban	Rural	
1	Academic Motivation	0.1496*	0.1033	0.0739	0.0991
2	Need for achievement	0.1778*	0.1594*	0.1436*	0.1506*
3	Academic challenge	0.1884*	0.1881*	0.1509*	0.1632*
4	Attitude towards education	0.1629*	0.1997*	0.1493*	0.1517*
5	Meaningfulness of task and work methods	0.1133	0.0989	0.0594	0.0996
6	Attitude towards teachers	0.1011	0.1534*	0.1491*	0.1338*
7	General interests and sports	0.1994*	-0.0491	0.0669	0.0779
8	Importance of marks	-0.0885	0.1024	0.1541*	0.0886
	Constant	0.9096	-0.4917	0.6293	0.8217
	R²	0.7684	0.7242	0.7191	0.8086
	F statistics	8.3991*	7.9048*	7.8942*	8.8917

* Significant at five per cent level.

The significantly influencing achievement motivation variables on the entrepreneurial traits among the urban college students are their level of academic

motivation, need for achievement, academic challenge, attitude towards education and general interests and sports since these regression coefficients are significant at five per cent level. A unit increase in the above said achievement motivation results in an increase in entrepreneurial traits by 0.1496, 0.1778, 0.1884, 0.1629 and 0.1994 units respectively. The changes in level of achievement motivation among the urban college students explain the changes in the entrepreneurial traits to an extent of 76.84 per cent since its R^2 is 0.7684.

Among the semi-urban college students, a unit increase in the level on need for achievement, academic challenge, attitude towards education and attitude towards teacher result in an increase in their entrepreneurial traits by 0.1594, 0.1881, 0.1997 and 0.1534 units respectively. The changes in the level of achievement motivation explain the changes in their entrepreneurial traits to extent of 72.42 per cent since its R^2 is 0.7242 whereas among the rural college students, it is explained to an extent of 71.91 per cent. A unit increase in the level of need for achievement, academic challenges, attitude towards education, attitude towards teachers and importance of marks result in an increase in the entrepreneurial traits by 0.1436, 0.1509, 0.1493, 0.1491 and 0.1541 units respectively.

The analysis of pooled data reveals the relative influence of ‘need for achievement’, ‘academic challenges’, ‘attitude towards education’ and ‘attitude towards teachers’ on the entrepreneurial traits among the students.

In total, the change in the achievement motivation explains the changes in entrepreneurial traits to an extent of 80.86 per cent since the R^2 is 0.8086.

5.31 CONCLUSION

The achievement motivation and entrepreneurial traits among the college students exhibits the views of the urban, semi-urban and rural college students about the various components of achievement motivation. The reliability and validity of the variables included in the various components were tested with the help of confirmatory factor analysis and cronbach alpha. One way analysis was applied to find out the significant difference among the three groups of students regarding the various dimensions of achievement motivation. The association between the profile variables of the students and the level of achievement motivation highlighted the significantly associating profile variables with the achievement motivation. The discriminant factor analysis was applied to find out the factors which discriminate the urban, semi-urban and rural college students regarding the achievement motivation. The multiple regression analysis was used to analyse the impact of the achievement motivation on the entrepreneurial traits.

CHAPTER - VI

ENTREPRENEURIAL MOTIVATION AND ITS DETERMINANTS

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CHAPTER - VI

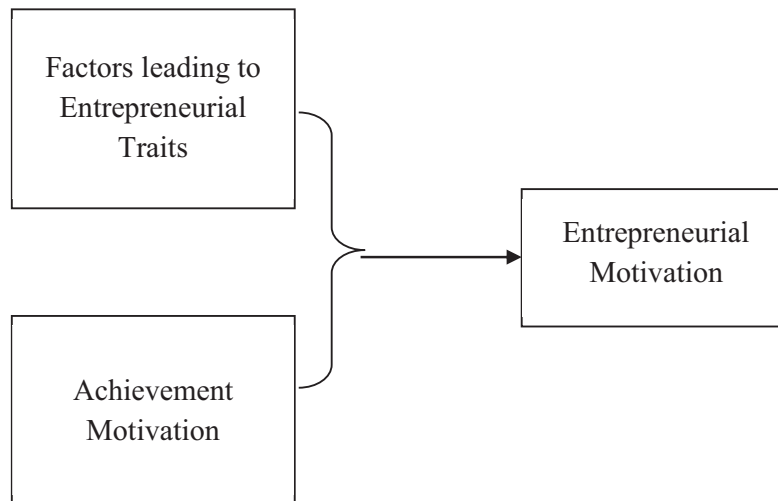
ENTREPRENEURIAL MOTIVATION AND ITS DETERMINANTS

6.0 INTRODUCTION

The entrepreneurial motivation among the students is the most important factors leading to entrepreneurship among the students. Since it is an inner feeling and the mindset of the students, it is measured with the help of several (38) variables which are drawn from the various previous studies. The determinants of entrepreneurial motivation among the students are too many, but the present study combines the factors leading to entrepreneurial traits and achievement motivation. The linkage between the above said three concepts are discussed in the present chapter. This linkage is presented in the Figure 6.1.

Figure 6.1

Linkage between Entrepreneurial Motivation and its Determinants



6.1 ENTREPRENEURIAL MOTIVATION AMONG THE STUDENTS

The score of 38 variables in entrepreneurial motivation have been included for Exploratory Factor Analysis (EFA) in order to narrate the important components of entrepreneurial motivation. Initially, the validity of data for EFA is tested with the help of KMO measure of sampling adequately and Bartlett's test of sphericity. Both these tests satisfy the validity of data for EFA. The result of EFA is given in Table 6.1.

Table 6.1

Important Components of Entrepreneurial Motivation

S.No	Components of Entrepreneurial Motivation	No. of variables	Eigen Value	Per cent variation explained	Cumulative per cent of variation explained
1	Confidence	7	6.8184	17.94	17.94
2	Problem Solving ability	7	6.0229	15.84	33.78
3	Opportunity Seeking	6	4.9173	12.94	46.72
4	Independency	5	3.8864	10.23	56.95
5	Planning Skill	5	3.0991	8.16	65.11
6	Managerial skills	4	2.5084	6.60	71.71
7	Social interaction	4	2.3343	6.14	77.85
	KMO measures of sampling adequacy: 0.7982			Bartlett's test of sphericity Chi Square value: 96.04*	

*Significant at five per cent level

The 38 variables included under entrepreneurial motivation are confined to seven important factors namely confidence, problem solving ability, opportunity seeking, independency, planning skills, managerial skills, and social interaction. All these seven factors explain the 38 variables included for this purpose to an extent of 77.85 per cent. The important factors narrated by EFA are confidence and problem

solving ability since its Eigen values are 6.8184 and 6.0229 respectively. The per cent of variation explained by these factors are 17.94 and 15.84 per cent respectively. The next important factors identified by EFA are opportunity seeking and independency since its Eigen values are 4.9173 and 3.8864 respectively. The per cent of variations explained by two factors are 12.94 and 10.23 per cent respectively.

The last three factors identified by the EFA are planning skills, managerial skills and social interaction since the Eigen values are 3.0991, 2.5084 and 2.3343 respectively. The per cent of variation explained by these factors are 8.16, 6.60 and 6.14 per cent respectively. The analysis reveals that there are seven important components of entrepreneurial motivation among the students. It is taken for further discussion.

6.2 STUDENTS VIEW RELATING TO CONFIDENCE

The confidence factor consists of seven variables. It is essential to examine the students' views about the variables included in the component 'confidence' in order to exhibit their level of confidence. The mean score on each variable in 'confidence' among the urban, semi-urban and rural college students have been computed separately. The one way analysis of variance has been executed to examine the significant difference among the three groups of students regarding their views relating to 'confidence'. The results are shown in Table 6.2.

Table 6.2**Students view relating to Confidence**

S.No	Variables in Confidence	Mean score among students			F Statistics
		Urban	Semi Urban	Rural	
1	I thrive on facing challenges	3.8185	3.3969	3.0345	3.3595*
2	I remain to stick to my approach even while doing something for the first time	3.9092	3.2144	3.1596	3.4096*
3	I take decision even if I am not sure	3.9244	3.2091	3.1302	3.7172*
4	I don't feel completely comfortable within myself at all times	3.9317	3.2696	3.1441	3.8092*
5	I try to get the maximum return from my limited resumes	3.8676	3.2339	3.1884	3.2969*
6	I keep my income into consideration	3.8557	3.3085	3.0997	3.4188*
7	I start my work with full confidence that I will succeed	3.8345	3.2676	3.1226	3.4646*

*Significant at five per cent level

The highly viewed variable by the urban and semi-urban college students are 'I don't feel completely comfortable with myself at all times' and 'I thrive on facing challenges' since their mean scores are 3.9317 and 3,3969 respectively.

Among the rural college students, the highly viewed variable is 'I try to get maximum return from my limited resources' since its mean score is 3.1884.

Regarding the student's views about the variables relating to confidence, significant difference among the three groups of students have been noticed in all the seven variables included in the 'confidence' since their respective F statistics are significant at five per cent level.

6.3 RELIABILITY AND VALIDITY OF VARIABLES INCLUDED IN CONFIDENCE

The scores of seven variables in the component ‘confidence’ have been included for Confirmatory Factor Analysis (CFA) in order to examine the reliability and validity of variables. The overall reliability has been examined with the help of cronbach alpha. The result of CFA and the cronbach alpha are shown in Table 6.3.

Table 6.3

Reliability and Validity of variables included in confidence

S. No	Variables in Confidence	Standardized factor	F Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I remain to stick to my approach even while doing something right for the first time	0.9173	4.1788*	0.8098	0.7817	56.44
2	I try to get the maximum return from my limited resources	0.8244	3.6088*			
3	I start my work with full confidence that I will succeed	0.8019	3.5991*			
4	I take decision even if I am not sure	0.7933	3.4887*			
5	I thrive on facing challenge	0.7546	3.1776*			
6	I don't feel completely comfortable with myself at all times	0.7173	2.8218*			
7	I keep my income in to consideration	0.6509	2.3919*			

*Significant at five per cent level

The standardized factor loading of the variables included in ‘confidence’ varies from 0.6509 to 0.9173 which indicates the content validity. The significance of ‘F’ statistics of the standardized factor loading of the variables in ‘confidence’ reveals the convergent validity. It is also proved by the composite reliability and average variance

extracted since these are greater than its minimum threshold of 0.80 and 50.00 per cent respectively. The cronbach alpha (0.8098) shows that the included seven variables in ‘confidence’ explain it to and extent of 80.98 per cent. The analysis reveals the reliability and validity of variables included under the component ‘confidence’.

6.4 LEVEL OF CONFIDENCE AMONG THE STUDENTS

The level of confidence among the students is measured by the mean score of the seven variables relating to ‘confidence’. It is denoted by SOC. In the present study, the SOC is confined to less than 2.0, 2.0 to 3.0, 3.0 to 4.0 and above 4.0. The distribution of students on the basis of their SOC is given in Table 6.4.

Table 6.4

Level of confidence among Students

S.No	Scores on Confidence	Number of Students in			Total
		Urban	Semi Urban	Rural	
1	Less than 2.0	9	64	22	95
2	2.0-3.0	28	65	32	125
3	3.1-4.0	67	119	59	245
4	Above 4.0	44	46	21	111
	Total	148	294	134	576

Source : Primary data

The significant levels of confidence among the students are 3.1 to 4.0 and 2.0 to 3.0 which constitutes 37.85 and 26.39 per cent respectively. The most important level of confidence among the urban and semi-urban college students is 3.1 to 4.0 which constitutes 45.27 and 40.48 per cent to its total respectively. Among the rural college students the most important level of confidence is 2.0 to 3.0 which constitute 44.03 per cent to its total. The analysis reveals that the level of confidence among the urban

college students is higher than the level of confidence among the semi-urban and rural college students.

6.5 PROBLEM SOLVING ABILITY AMONG THE STUDENTS

The problem solving ability among the students is measured with the help of seven variables. The mean score of all the seven variables in problem solving ability among the urban, semi-urban and rural college students have been computed separately in order to analyse their views. The one way analysis of variance has been administered to find out the significant difference among the three groups of students regarding their level of problem solving ability. The results are given in Table 6.5.

Table 6.5

Problem Solving ability among the Students

S.No	Variables in Problem Solving	Mean score among students			F Statistics
		Urban	Semi Urban	Rural	
1	I always try to find new solutions to overcome problems	3.8183	3.5817	3.2673	3.2676*
2	I apply alternative approaches to solve the problem	3.9024	3.4092	3.3896	3.1782*
3	I take problems as a challenge	3.8684	3.3997	3.2109	3.0994*
4	Facing problems makes me stronger in decision making	3.8548	3.2909	3.3414	2.7318
5	While dealing with problems, I tend to get struck	3.9196	3.3083	3.2558	3.2676*
6	I am good at tackling with several problem at a time	3.8734	3.2149	3.0884	3.4519*
7	I try to solve the problems in new ways and means	3.9081	3.3884	3.1777	3.6173*

*Significant at five per cent level

The highly viewed variables in problem solving ability among the urban and semi-urban college students are ‘while dealing with a problem, I tend to get struck’ and ‘I always try to find a new solution to overcome problems’ since its mean score are 3.9196 and 3.5817 respectively. Among the rural college students the highly viewed

variable is 'I apply alternative approaches to solve the problem', since its mean score is 3.3896. Regarding the students view about the variables in problem solving, significant difference among three group of students have been noticed in the case of six out of seven variables since their respective 'F' statistics are significant at five per cent level.

6.6 RELIABILITY AND VALIDITY OF VARIABLES IN PROBLEM SOLVING ABILITY

Before summarizing the variables in problem solving ability, it is imperative to examine the reliability and validity of same. The confirmatory factor analysis has been administered for this purpose. The cronbach alpha has been computed to find out the overall reliability of variables in problem solving ability. The results are given in Table 6.6.

Table 6.6

Reliability and Validity of variables in problem solving ability

S. No	Variables in Confidence	Standardized factor loading	F Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	Facing problems makes me stronger in decision making	0.8917	3.9418*	0.7919	0.7702	54.02
2	I take problem as a challenge	0.8244	3.6818*			
3	I try to solve the problems in new ways and means	0.7991	3.4408*			
4	I apply alternative approaches to solve the problems	0.7808	3.3919*			
5	I am good at tackling with several problem at a time	0.7045	3.0144*			
6	I always try to find new solutions to overcome problems	0.6911	2.8949*			
7	While dealing with a problem, I tend to get struck	0.6433	2.3949*			

*Significant at five per cent level

The standardized factor loading of the variables in problem solving ability varies from 0.6433 to 0.8917 which reveals the content validity. The 'F' statistics of the standardized factor loading of the variables in problem solving ability are significant at five per cent level which conveys the convergent validity. It is also supported by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The seven variables included in problem solving ability explain it to an extent of 79.19 per cent since its cronbach alpha is 0.7919.

6.7 LEVEL OF PROBLEM SOLVING ABILITY AMONG THE STUDENTS

Level of problem solving ability among the students is computed by the mean score of the variables. In the present study, the level of problem solving ability is confined to less than 2.0, 2.0- 3.0, 3.1-4.0 and above 4.0. The distribution of students on the basis of their level of problem solving ability is illustrated in Table 6.7.

Table 6.7

Level of Problem Solving Ability among the Students

S.No	Level of Problem Solving Ability	Number of Students			Total
		Urban	Semi Urban	Rural	
1	Less than 2.0	10	45	22	77
2	2.0-3.0	24	76	56	156
3	3.1-4.0	63	129	29	221
4	Above 4.0	51	44	27	122
	Total	148	294	134	576

Source : Primary data

The important level of problem solving ability among the students is 3.1 to 4.0 and 2.0 to 3.0 which constitutes 38.37 and 27.08 per cent to the total respectively. The most important problem solving ability among the urban and semi urban college

students is 3.1 to 4.0 which constitutes 42.57 and 43.88 per cent to its total respectively. Among the rural college students the important level of problem solving ability is 2.0 to 3.0 which constitutes 41.79 per cent to its total. The analysis reveals that the level of problem solving ability among the semi-urban college students is higher than the urban and rural college students.

6.8 OPPORTUNITY SEEKING AMONG THE STUDENTS

The opportunity seeking among the students is measured with the help of six variables identified by the exploratory factor analysis. The mean score of each variable in opportunity seeking among the urban, semi-urban and rural students have been computed separately in order to exhibit their views about the opportunity seeking among the students. One way analysis of variance has been used to find out the significant difference among the three groups of students. The results are given in Table 6.8.

Table 6.8

Variables in Opportunity Seeking among the Students

S.No	Variables in Opportunity seeking	Mean score among students			F Statistics
		Urban	Semi Urban	Rural	
1	I look for new opportunities like a watch dog	3.9197	3.1884	3.0918	3.4592*
2	I try to find ways to do things for less cost	3.8668	3.2917	3.1447	3.2996*
3	I welcome challenges and opportunities	3.9245	3.2886	3.2086	3.1881*
4	I take the advantage of opportunities as and when that arise	3.9009	3.3969	3.1045	3.2089*
5	I derive satisfaction after facing challenges	3.8544	3.5041	3.1146	3.2267*
6	I prefer to do task that I know-well	3.8039	3.6065	3.2046	3.1979*

*Significant at five per cent level

The Table 6.8 shows the mean score of the variables in opportunity seeking among the students. The important variable in opportunity seeking by the urban and rural college students is 'I welcome challenges and opportunities' since its mean scores are 3.9245 and 3.2086 respectively. Among the semi-urban college students the important variable in opportunity seeking is 'I prefer to do tasks that I know well' since its mean score is 3.6065.

Regarding the students view about opportunity seeking, significant difference among the three groups of students has been noticed in the case of all the six variables. Since their respective 'F' statistics are significant at five per cent level.

6.9 RELIABILITY AND VALIDITY OF VARIABLES RELATING TO OPPORTUNITY SEEKING

In order to examine the reliability and validity of variables included in the 'opportunity seeking' confirmatory factor analysis is administered. The overall reliability of the variables have been examined with the help of cronbach alpha. The results of the confirmatory factor analysis and the cronbach alpha is presented in Table 6.9.

Table 6.9**Reliability and Validity of variables relating to Opportunity Seeking**

S.No	Variables in Opportunity Seeking	Standardized factor loading	F Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I prefer to do task that I know well	0.8582	3.6961*	0.7814	0.7602	53.39
2	I derive satisfaction after facing challenges	0.8019	3.3994*			
3	I welcome challenges and opportunities	0.7842	3.1446*			
4	I take the advantage of opportunities as and when that arise	0.7509	2.9961*			
5	I look for new opportunities like a watch dog	0.7172	2.6504*			
6	I try to find ways to do things for less cost	0.6673	2.3989*			

*Significant at five per cent level

The six variables included in ‘opportunity seeking’ explain it to an extent of 78.14 per cent since its cronbach alpha is 0.7814. The content validity is proved since the standardized factor loading of the variables in opportunity seeking are greater than 0.60. The convergent validity is proved since the ‘F’ statistics of the standardized factor loading of the variables in opportunity seeking are significant at five per cent level. It is also confirmed by the composite reliability and average variance extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively.

6.10 LEVEL OF OPPORTUNITY SEEKING AMONG THE STUDENTS

The level of opportunity seeking among the students is measured by the mean score of the variables in it. In the present study, the level of opportunity seeking among the students is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of level of opportunity seeking is illustrated in Table 6.10.

Table 6.10

Level of Opportunity Seeking among the Students

S.No	Level of Opportunity Seeking	Number of Students in			Total
		Urban	Semi Urban	Rural	
1	Less than 2.0	21	20	39	80
2	2.0-3.0	27	53	42	122
3	3.1-4.0	41	178	36	255
4	Above 4.0	59	43	17	119
	Total	148	294	134	576

*Significant at five per cent level

The important levels of opportunity seeking among the students are 3.1 to 4.0 and 2.0 to 3.0 which constitutes 44.27 and 21.18 per cent to the total respectively. The most important levels of opportunity seeking among the urban and semi-urban college students are 'above 4.00' and '3.1 to 4.0' which constitutes 39.86 and 60.54 per cent to its total.

Among the rural college students the most important level of opportunity seeking is 2.0-3.0 which constitute 31.34 per cent to the total.

The analysis reveals that the level of opportunity seeking among the urban students are higher than the semi-urban and rural college students.

6.11 STUDENTS VIEW ABOUT INDEPENDENCY

The independency is identified as one of the important components of entrepreneurial motivation. It consists of five variables. The mean of all five variables among the urban, semi-urban and rural college students have been computed separately in order to exhibit their views about independency. The one way analysis of variance has been executed to find out the significant difference among the three groups of students. The results are given in Table 6.11.

Table 6.11

Students' View about the Variables in Independency

S.No	Variables in Independency	Mean score among students			F Statistics
		Urban	Semi Urban	Rural	
1	I don't depend on others for directing	3.7378	3.3094	3.0142	3.1997*
2	When I am confused, I seek others advice	3.8244	3.1909	3.0496	3.2647*
3	I don't let my work interfered by others	3.8691	3.3144	3.2908	3.0233*
4	I find myself quite resourceful to tide over tight situation	3.9089	3.2088	3.2144	3.3099
5	I stick with my decision even if other disagree with me	3.9244	3.2291	3.1703	3.5144*

*Significant at five per cent level

The highly viewed variable relating to 'independency' by the urban and semi-urban college students is 'I stick with my decision even if others disagree with me' and 'I don't let my work interfered by others' since their mean scores are 3.9244 and 3.3144 respectively.

Among the rural college students the highly viewed variable is ‘I don’t let my work interfered by others’ since its mean score is 3.2908.

Regarding the students views about the variables included in ‘independency’, significant difference among the three groups of students have been noticed in the case of all the five variables included in ‘independency’ since their respective ‘F’ statistics are significant at five per cent level.

6.12 RELIABILITY AND VALIDITY OF VARIABLES IN INDEPENDENCY

The variables under ‘independency’ have been included to examine its reliability and validity. The confirmatory factor analysis has been executed to examine it. The overall reliability has been estimated with the help of cronbach alpha. The results are given in Table 6.12.

Table 6.12

Reliability and Validity of variables in Independency

S.No	Variables in independency	Standardized factor loading	F Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I don’t let my work interfered by others	0.8642	3.6089*	0.7829	0.7601	53.04
2	I stick with my decision even if other disagree with me	0.8299	3.4331*			
3	I find myself quite	0.7608	2.9909*			
4	I don’t depend on others for directing	0.7344	2.6339*			
5	When I am confused, I seek others advice	0.6591	2.3996*			

*Significant at five per cent level

The standardized factor loading of the variables in independency are greater than 0.60 which reveals the content validity. The significance of 'F' statistics of the standardized factor loading shows the convergent validity. It is also proved by the composite reliability and average variance extracted since these are greater than the standard minimum threshold of 0.50 and 50.00 per cent respectively. The five variables included in independency explain it to an extent of 78.29 per cent since its cronbach alpha is 0.7829.

6.13 LEVEL OF INDEPENDENCY AMONG THE STUDENTS

The level of independency among the students is computed by the mean score of the variables in it. In the present study, the level of independency among the students is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their level of independency is given in Table 6.13.

Table 6.13

Level of Independency among the Students

S.No	Level of Independency	Number of Students			Total
		Urban	Semi Urban	Rural	
1	Less than 2.0	20	24	29	73
2	2.0-3.0	26	55	41	122
3	3.1-4.0	53	163	43	259
4	Above 4.0	49	52	21	122
	Total	148	294	134	576

Source : Primary data

The important levels of independency among the students are 3.1 to 4.0 and above 4.0 which constitutes 44.97 and 21.18 per cent to the total respectively. The important level of independency among the urban and semi-urban and rural college students is 3.1 to 4.0 which constitutes 35.81, 55.44 and 32.09 per cent to its total

respectively. The analysis reveals that the level of independency among the urban students is higher than the semi-urban and rural college students.

6.14 PLANNING SKILLS AMONG THE STUDENTS

The planning skills among the students are identified as one of the important components of entrepreneurial motivation. It consists of five variables. The mean score of each variable in planning skills among the urban, semi-urban and rural college students have been computed separately in order to exhibit the views of the students about the planning skills along with its 'F' statistics. The results are given in Table 6.14.

Table 6.14

Variables in planning skills among the students

S.No	Variables in Planning Skills	Mean score among students			F Statistics
		Urban	Semi Urban	Rural	
1	I have my plan for ten years	3.8184	3.4543	3.6025	0.6543
2	I devote most of my time to my work	3.7308	3.5081	3.4417	0.8844
3	I work for long hours to complete my work	3.7676	3.5152	3.3994	0.9698
4	I begin day with a list of things to be done	3.8049	3.4916	3.2507	3.1492*
5	I prepare a plan before actually working on a project	3.7991	3.4504	3.3043	1.9098

*Significant at five per cent level

The highly viewed planning skills variable by the urban and semi-urban college students are 'I have my plan for ten years' and 'I work for long hours to complete my work' since their mean scores are 3.8184 and 3.5152 respectively.

Among the rural college students the highly viewed planning skills variable is ‘I have my plan for ten years’ since its mean score is 3.6025. Regarding the students’ views about the planning skills, significant difference among the three groups of students have been noticed in the case of variable ‘I begin my day with a list of things to be done’ since their respective ‘F’ statistics is significant at five per cent level.

6.15 RELIABILITY AND VALIDITY OF VARIABLES IN PLANNING SKILLS

The variables in planning skills have been included for confirmatory factor analysis in order to examine its reliability and validity. The overall reliability has been tested with the help of cronbach alpha. The result of the confirmatory factor analysis and respective cronbach alpha are shown in Table 6.15.

Table 6.15

Reliability and Validity of variables in Planning Skills

S. No.	Variables in Planning Skills	Standardized factor loading	F Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I prepare a plan before actually working on a project	0.9024	4.0896*	0.8149	0.7842	56.46
2	I begin day with a list of things to be done	0.8449	3.7371*			
3	I have my plan for ten years	0.7886	3.4541*			
4	I work for long hours to complete my work	0.7117	2.8149*			
5	I devote most of my time to my work	0.6564	2.4334*			

*Significant at five per cent level

The five variables included in planning skills explain the reliability and validity to the extent of 81.49 per cent since its cronbach alpha is 0.8149. The standardized factor loading of the variables in planning skills are greater than 0.60 which reveals the

content validity. The convergent validity is proved since the 'F' statistics of the standardized factor loading of the variables are significant at five per cent level. The composite reliability and average variance extracted are greater than 0.50 and 50.00 which also supports the convergent validity.

6.16 LEVEL OF PLANNING SKILLS AMONG THE STUDENTS

The levels of planning skills among the students are derived by the mean scores of the variables. In the present study, the levels of planning skills is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of their levels of planning skills is illustrated in Table 6.16.

Table 6.16

Level of Planning Skills among the Students

S.No	Level of Planning Skills	Number of Students in			Total
		Urban	Semi Urban	Rural	
1	Less than 2.0	18	50	29	97
2	2.0-3.0	29	67	38	134
3	3.1-4.0	56	128	46	230
4	Above 4.0	45	49	21	115
	Total	148	294	134	576

Source : Primary data

The important levels of planning skills among the students are 3.1 to 4.0 and 2.0 to 3.0 which constitutes 38.54 and 24.65 per cent to the total respectively. The important levels of planning skills among the urban and semi-urban college students is 3.1 to 4.0 which constitutes 37.84 and 43.54 per cent to its total respectively. Among the rural college students the important levels of planning skills is 3.1 to 4.0 which constitutes 34.33 per cent to its total.

The analysis reveals that the level of planning skills among the semi-urban college students is higher than the urban and rural college students.

6.17 MANAGERIAL SKILLS AMONG THE STUDENTS

The EFA has identified the managerial skills as one of the important components of the entrepreneurial motivation among the students. It consist of four variables. The mean score of each variable in managerial skills among the three group of students have been computed along with its 'F' statistics. The results are presented in Table 6.17.

Table 6.17

Variables in Managerial Skills among the Students

S.No	Variables in Managerial Skills	Mean score among students			F Statistics
		Urban	Semi Urban	Rural	
1	I think of many new ideas	3.8088	3.2889	3.0445	3.4082*
2	I think over how to improve my working	3.9117	3.1773	3.0171	3.5996*
3	I do my work systematically and logically	3.9204	3.2668	3.1789	3.4589*
4	I do my level best to satisfy others through my work	3.8914	3.5149	3.2345	3.1782*

*Significant at five per cent level

The highly viewed variables in managerial skills by the urban and semi-urban college students are 'I do my work systematically and logically' and 'I do my level best to satisfy others through my work' since their mean sores are 3.9204 and 3.5149 respectively. Among the rural college students the highly viewed variable is 'I do my level best to satisfy others through my work' since its mean sores is 3.2345.

Regarding the students' views about managerial skills, significant difference among the three groups of students have been noticed in the case of all four variables since their respective 'F' statistics are significant at five per cent level.

6.18 RELIABILITY AND VALIDITY OF VARIABLES IN MANAGERIAL SKILLS

The managerial skills among the students consist of four variables. The score of each variable in managerial skills among the students have been included to examine the reliability and validity. The confirmatory factor analysis has been administered for this purpose. The cronbach alpha is computed to examine the overall reliability. The results are given in Table 6.18.

Table 6.18

Reliability and Validity of variables in Managerial Skills

S.No	Variables in Managerial Skills	Standardized factor loading	F Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I do my level best to satisfy others through my work	0.8703	3.7321*	0.7818	0.7509	53.01
2	I do my work systematically and logically	0.7917	3.3919*			
3	I think of many new ideas	0.7029	2.8616*			
4	I think over how to improve my working	0.6334	2.4517*			

*Significant at five per cent level

The standardized factor loading of the variables in managerial skills are varying from 0.6334 to 0.8703 which shows the content validity of the factor. The significance of 'F' statistics of the standardized factor loading of the variables in it shows convergent validity. It is also supported by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50

and 50.00 per cent respectively. The four variables included in managerial skills explain it to an extent of 78.18 per cent since its cronbach alpha is 0.7818.

6.19 LEVEL OF MANAGERIAL SKILLS AMONG THE STUDENTS

The level of managerial skills among the students is measured by the mean score of the variables. In the present study, the level of managerial skills among the students is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis on their level of managerial skills is given in Table 6.19.

Table 6.19

Levels of Managerial Skills among Students

S.No	Levels of Managerial Skills	Number of Students			Total
		Urban	Semi Urban	Rural	
1	Less than 2.0	13	46	28	87
2	2.0-3.0	21	63	39	123
3	3.1-4.0	63	126	46	235
4	Above 4.0	51	59	21	131
	Total	148	294	134	576

Source : Primary data

The important levels of managerial skills among the students are 3.1 to 4.0 and above 4.0 which constitutes 40.80 and 22.74 per cent to the total respectively. The important levels of managerial skills among the urban and semi-urban college students are 3.1 to 4.0 which constitutes 42.57 and 42.86 per cent to its total respectively. Among the rural college students the important level of managerial skills is also 2.0 to 3.0 which constitutes 34.33 per cent to its total respectively.

The analysis reveals that the level of managerial skills among the urban college students is higher than the semi-urban and rural college students.

6.20 SOCIAL INTERACTION AMONG THE STUDENTS

The social interaction is noted as one of the important components of entrepreneurial motivation by the EFA. It consists of four variables. The mean score of each variable in social interaction among the three groups of students have been computed separately in order to exhibit the level of social interaction among the students. The one way analysis of variance has been executed to find out the significant difference among the three groups of students regarding their level on each variable in social interaction.

Table 6.20

Variables in Social Interaction among the Students

S.No	Variables in Social Interaction	Mean score among students			F Statistics
		Urban	Semi Urban	Rural	
1	I have strong desire for social interaction	3.7389	3.9676	3.8182	0.4547
2	I persuade people to do what I want	3.6082	3.9221	3.7974	0.9676
3	I like to work with others	3.5911	3.7308	3.9091	1.7378
4	I am always in search of people who can help me in my work	3.4332	3.9973	3.9733	2.0239

*Significant at five per cent level

The Table 6.20 shows the mean score of each variable in social interaction among the three group students along with their 'F' statistics. The highly viewed variable in social interaction by the urban and semi-urban college students are 'I have

strong desire for social interaction’ and ‘I am always in search of people who can help me in my work’ since this means score are 3.7389 and 3.9973 respectively. Among the rural college students the highly viewed variable is ‘I am always in search of people who can help me in my work’ since its mean score is 3.9733.

Regarding the level of social interaction the significant difference among the three groups of students have not been noticed in all four variables since the respective ‘F’ statistics are not significant at five per cent level.

6.21 RELIABILITY AND VALIDITY OF VARIABLES IN SOCIAL INTERACTION

The score of the variables in social interaction have been included to examine the reliability and validity of variables. In order to examine the same, the confirmatory factor analysis has been administered for this purpose. The overall reliability has been estimated with the help of cronbach alpha. The results are shown in Table 6.21.

Table 6.21

Reliability and Validity of variables in Social Interaction

S.No	Variables in Social Interaction	Standardized factor loading	F Statistics	Cronbach alpha	Composite reliability	Average variance extracted
1	I like to work with others	0.9143	4.0389*	0.8089	0.7817	56.46
2	I persuade people to do what I want	0.8089	3.3187*			
3	I am always in search of people who can help me in my work	0.7293	2.9149*			
4	I have strong desire for social interaction	0.6739	2.7382*			

*Significant at five per cent level

The standardized factor loading of variables in social interaction varies from 0.6739 to 0.9143 which reveals the content validity. The significance of 'F' statistics of the standardized factor loading of the variables in social interaction reveals the convergent validity. It is also supported by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The four variables included in social interaction explain it to an extent of 80.89 per cent since its cronbach alpha is 0.8089.

6.22 LEVEL OF SOCIAL INTERACTION AMONG THE STUDENTS

The level of social interaction among the students has been measured by the mean score of the variables. In the present study the level of social interaction among the students is confined to less than 2.0, 2.0 to 3.0, 3.1 to 4.0 and above 4.0. The distribution of students on the basis of the level of social interaction is illustrated in Table 6.22.

Table 6.22

Level of Social Interaction among the Students

S.No	Level of Social Interaction	Number of Students			Total
		Urban	Semi Urban	Rural	
1	Less than 2.0	25	38	22	85
2	2.0-3.0	36	43	21	100
3	3.1-4.0	58	126	53	237
4	Above 4.0	29	87	38	154
	Total	148	294	134	576

Source : Primary data

The important levels of social interaction among the students are 3.1 to 4.0 and above 4.0 which constitutes 41.15 and 26.74 per cent to the total respectively. The important level of social interaction among the urban and semi-urban college students

is 3.1 to 4.0 which constitutes 39.19 and 42.86 per cent to its total respectively. Among the rural college students the level of social interaction is 3.1 to 4.0 which constitutes 39.55 per cent to the total.

The analysis reveals that the level of social interaction among the semi-urban students is higher than the rural and urban college students.

6.23 LEVEL OF ENTREPRENEURIAL MOTIVATION AMONG THE STUDENTS

The level of entrepreneurial motivation among the students was measured with the help of its seven components namely confidence, problem solving ability, opportunity seeking, independency, planning skills, managerial skills and social interaction. The mean score of each component of entrepreneurial motivation among the three groups of students have been computed along with its 'F' statistics. The results are given in Table 6.23.

Table 6.23

Students level in Entrepreneurial Motivation (EM)

S.No	Components of Entrepreneurial Motivation	Mean score among students			F Statistics
		Urban	Semi Urban	Rural	
1	Confidence	3.8745	3.2714	3.1256	3.2997*
2	Problem solving ability	3.8779	3.3704	3.2473	3.1044*
3	Opportunity seeking	3.8783	3.3794	3.1448	3.3991*
4	Independency	3.8529	3.2505	3.1478	3.3048*
5	Planning Skills	3.7842	3.4839	3.3997	1.0994
6	Managerial Skills	3.8331	3.3119	3.1188	3.2088*
7	Social Interaction	3.5929	3.9044	3.8745	1.2173
	Overall	3.8270	3.4028	3.2682	3.0117*

*Significant at five per cent level

The highly existing components of entrepreneurial motivation among the urban college students are opportunity seeking and problem solving ability since their mean scores are 3.8783 and 3.8779 respectively. Among the semi-urban college students, these are social interaction and planning skills since their mean score are 3.9044 and 3.4839 respectively. Among the rural college students the highly existing components of entrepreneurial motivation are social interaction and planning skills since their mean score are 3.8745 and 3.3997 respectively.

Regarding the existence of entrepreneurial motivation, significant difference among the three groups of students have been noticed in the case of five out of seven entrepreneurial motivation components since their respective 'F' statistics are significant at five per cent level.

6.24 ASSOCIATION BETWEEN PROFILE OF STUDENTS AND THEIR ENTREPRENEURIAL MOTIVATION

The profile of the students may be associated with their level of entrepreneurial motivation. The present study has made an attempt to examine the association between the profile variable and the entrepreneurial motivation with the help of one way analysis of variance. The profile variables included for this purpose are gender, age, place of college, branch of study, social groups, religion, type of family, size of family, monthly family income, father's occupation and mother's occupation. The results are given in Table 6.24.

Table 6.24

Association between Profile of Students and their Level of Entrepreneurial Motivation

Sl.No	Profile Variables	F Statistics						
		Confidence	Problem solving ability	Opportunity seeking	Independency	Planning Skills	Managerial Skills	Social Interaction
1	Gender	3.1771	3.0896	3.3009	3.1782	3.2667	3.3994	3.6929
2	Age	2.9141	2.7341	2.8109	2.6224	3.1782*	3.0991*	2.3373
3	Place of College	2.0886	2.5087	2.6337	2.8182	3.6509*	2.6644	2.5881
4	Branch of study	3.1174	3.6609	3.8017	3.5172	3.3891	3.5892	3.6563
5	Social group	2.8869*	2.9192*	2.0445	2.8674*	2.5442	2.4089	2.7339*
6	Religion	2.5411	2.0996	2.3334	2.4516	2.4911	2.5011	2.8862*
7	Type of family	3.1774	3.3996	3.5676	3.7337	3.0914	3.2549	3.6163
8	Size of family	2.0891	2.5117	2.8212	2.6026	2.9969	3.0942*	3.1459*
9	Monthly family income	2.8142*	2.9042*	2.9343*	2.5646*	2.6564*	2.8368*	2.7684*
10	Father's occupation	2.7143*	2.9094*	2.8085*	2.5644*	2.0544	2.2099	2.5866*
11	Mother's Occupation	2.6568*	2.1172	2.0884	2.8664*	2.4596*	2.5881*	2.6682*

*Significant at five per cent level

Regarding the entrepreneurial motivation component 'confidence', the significantly associating profile variables are social group, monthly family income, father's and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables regarding the entrepreneurial motivation component 'problem solving ability' among the students are social group, monthly family income and father's occupation whereas regarding the 'opportunity seeking' component of entrepreneurial motivation, the associating profile variables are monthly family income and father's occupation since their respective 'F' statistics are significant at five per cent level.

Regarding the entrepreneurial motivation component 'independency', the significantly associating profile variables are social group, monthly income, father's and mother's occupation since their respective 'F' statistics are significant at five per cent level.

The significantly associating profile variables regarding the entrepreneurial motivation component 'planning skills' are age, place of college, monthly family income and mother's occupation whereas regarding the entrepreneurial motivation component 'managerial skills', the associating profile variables are age, size of family, monthly family income and mother's occupation since their respective 'F' statistics are significant at five per cent level.

Regarding the entrepreneurial motivation component 'social interaction' the significantly associating profile variables are social group, religion, size of family,

monthly family income, father's and mother's occupation since their respective 'F' statistics are significant at five per cent level.

6.25 DISCRIMINANT COMPONENT OF ENTREPRENEURIAL MOTIVATION AMONG THE URBAN AND SEMI-URBAN COLLEGE STUDENTS

Regarding the entrepreneurial motivation the urban college students may be differing from the semi-urban college students. It is imperative to identify the important discriminant component of entrepreneurial motivation among the two group of students. Initially, the mean difference and its statistical significance have been computed. The discriminant power of entrepreneurial motivation has been computed with the help of wilks lambda. The results are presented in Table 6.25.

Table 6.25

Mean Difference and Discriminate Power of Entrepreneurial Motivation among Urban and Semi- urban Students

Sl. No	Components of Entrepreneurial Motivation	Mean score among students		Mean Difference	't' Statistics	Wilks lambda
		Urban	Semi Urban			
1	Confidence (X ₁)	3.8745	3.2714	0.6031	3.0886*	1.1084
2	Problem solving ability (X ₂)	3.8779	3.3704	0.5075	2.5969*	0.1337
3	Opportunity seeking (X ₃)	3.8783	3.3794	0.4989	1.8084	0.2177
4	Independency (X ₄)	3.8529	3.2505	0.6024	2.9197*	0.1766
5	Planning Skills (X ₅)	3.7842	3.4839	0.3003	1.3637	0.2866
6	Managerial Skills (X ₆)	3.8331	3.3119	0.5212	2.7313*	0.1544
7	Social Interaction (X ₇)	3.5929	3.9044	-0.3115	-0.7331	0.3996

* Significant at five per cent level

The significant mean differences are noticed in the case of confidence, problem solving ability, independence and managerial skills since they are significant at five per cent level. The higher mean differences are noticed in the case of ‘confidence’ and ‘independency’ since their mean difference is 0.6031 and 0.6024 respectively. The higher discriminant power is noticed in the case of ‘confidence’ and ‘problem solving ability’ since their wilks lambda are 0.1084 and 0.1337 respectively. The significant entrepreneurial motivation has been included to estimate the two group discriminant function. The unstandardised procedure has been followed to estimate the function. The estimated function is:

$$Z = 0.541 x_1 + 0.1732 x_2 + 0.1448 x_4 + 0.1676 x_6$$

The relative contribution of each discriminant entrepreneurial motivation in total discriminant score is computed by the product of discriminant coefficient and the mean difference of the respective entrepreneurial motivation. The results are shown in Table 6.26.

Table 6.26

Relative contribution of Entrepreneurial Motivation in Total Discriminant score

Sl. No	Components of Entrepreneurial Motivation	Discriminant Coefficient	Mean Difference	Product	Relative contribution in TDS
1	Confidence (X ₁)	0.1817	0.6031	0.1096	29.45
2	Problem solving ability (X ₂)	0.1732	0.5075	0.0879	23.62
3	Independency (X ₄)	0.1448	0.6024	0.0872	23.44
4	Managerial skills (X ₆)	0.1676	0.5212	0.0874	23.49
	Total			0.3721	100.00
Per cent of cases currently classified : 76.69					

* Significant at five per cent level

The higher discriminant coefficients are noticed in the case of ‘confidence’ and ‘managerial skills’ since their discriminant coefficients are 0.1817 and 0.1676 respectively. It shows the higher influencer of above said two components of entrepreneurial motivation in discriminant function. The highest relative contribution of components of entrepreneurial motivation in total discriminant score is noticed in the case of ‘confidence’ and ‘problem solving ability’ since their relative contribution are 29.45 and 23.62 per cent respectively. The estimated two group discriminant function currently classifies the cases to an extent of 76.69 per cent.

The analysis reveals that the important discriminant components of entrepreneurial motivation among the urban and semi-urban college students are their level of ‘confidence’ and ‘problem solving ability’ which are higher among the urban college students than among the semi-urban college students.

6.26 DISCRIMINANT COMPONENTS OF ENTREPRENEURIAL MOTIVATION AMONG THE URBAN AND RURAL COLLEGE STUDENTS

The level of entrepreneurial motivation among the urban and rural college students may differ from each other. So it is essential to analyse and to exhibit the important discriminant components of entrepreneurial motivation among the two groups of students. The mean difference and its statistical significance have been computed. The discriminant power of each components of entrepreneurial motivation has been computed with the help of cronbach alpha. The results are illustrated in Table 6.27.

Table 6.27

**Mean difference and Discriminant Power of Entrepreneurial Motivation among
Urban and Rural College Students**

Sl. No	Components of Entrepreneurial Motivation	Mean Score among students		Mean Difference	't' Statistics	Wilks lambda
		Urban	Rural			
1	Confidence (X ₁)	3.8745	3.1256	0.7489	3.6634*	0.1082
2	Problem solving ability (X ₂)	3.8779	3.2473	0.6306	2.6089*	0.1733
3	Opportunity seeking (X ₃)	3.8783	3.1448	0.7335	3.5889*	0.1581
4	Independency (X ₄)	3.8529	3.1478	0.7051	3.1171*	0.1394
5	Planning Skills (X ₅)	3.7842	3.3997	0.3845	1.8084	0.2693
6	Managerial Skills (X ₆)	3.8331	3.1188	0.7143	3.6049*	0.1389
7	Social Interaction (X ₇)	3.5929	3.8745	-0.2816	-1.3945	0.2976

*Significant at five per cent level

The significant mean differences are noticed in the case of confidence, problem solving ability, opportunity seeking, independency and managerial skills since their respective mean difference are significant at five per cent level. The higher mean differences are noticed in the case of 'confidence' and 'opportunity seeking' since their mean differences are 0.7489 and 0.7335 respectively.

The higher Discriminant powers is noticed in the case of 'confidence' and 'managerial skills' since their respective Wilks lambda are 0.1082 and 0.1389.

The significant components of entrepreneurial motivation are included to estimate the two group discriminant function. The unstandardised procedure has been followed to estimate the function. The estimated functions is:

$$Z = 0.9899 + 0.1669 x_1 + 0.1402 x_2 + 0.1641 x_3 + 0.1528 x_4 + 0.1349 x_6$$

The relative contribution of each discriminant components of entrepreneurial motivation in total discriminant score is computed by the product of discriminant coefficient and their mean difference. The results are shown in Table 6.28.

Table 6.28

Relative Contribution of Entrepreneurial Motivation in Total Discriminant Score

Sl. No	Components of Entrepreneurial Motivation	Discriminant Coefficient	Mean Difference	Product	Relative contribution in TDS
1	Confidence (X_1)	0.1669	0.7489	0.1249	23.22
2	Problem solving ability (X_2)	0.1402	0.6306	0.0884	16.44
3	Opportunity seeking (X_3)	0.1641	0.7335	0.1204	22.39
4	Independency (X_4)	0.1528	0.7051	0.1077	20.03
5	Managerial skills (X_6)	0.1349	0.7143	0.0964	17.92
	Total			0.5378	100.00
Percent of cases currently classified : 71.97					

The higher discriminant coefficients are identified in the case of confidence and opportunity seeking since their discriminant coefficients is 0.1669 and 0.1641 respectively. It shows the higher influence of the above said two components of entrepreneurial motivation in the discriminant function.

The highest relative contribution in total discriminant score is made by the above said two components of entrepreneurial motivation since their relative contributions are 23.22 and 22.39 per cent respectively. The estimated two group discriminant function currently classified the cases to an extent of 71.97 per cent.

The analysis reveals that the important discriminant components of entrepreneurial motivation among the urban and rural college students are ‘confidence’ and ‘opportunity seeking’ which are higher among the urban college students than among the rural college students.

6.27 DISCRIMINANT COMPONENT OF ENTREPRENEURIAL MOTIVATION AMONG THE SEMI-URBAN AND RURAL COLLEGE STUDENTS

It is significant to identify the important discriminant components of entrepreneurial motivation among the semi-urban and rural college students. The mean difference on each components of entrepreneurial motivation among the two groups of students and its statistical significance has been computed initially. The discriminant power of each components of entrepreneurial motivation has been computed with the help of Wilks lambda. The results are given in Table 6.29.

Table 6.29

Mean difference and Discriminant power of Entrepreneurial Motivation among Semi-urban and Rural College Students

Sl. No	Components of Entrepreneurial Motivation	Mean score among students		Mean Difference	‘t’ Statistics	Wilks lambda
		Semi Urban	Rural			
1	Confidence (X_1)	3.2714	3.1256	0.1458	2.0117*	0.1419
2	Problem solving ability (X_2)	3.3704	3.2473	0.1231	1.8011	0.2109
3	Opportunity seeking (X_3)	3.3794	3.1448	0.2346	2.6418*	0.1043
4	Independency (X_4)	3.2505	3.1478	0.1027	1.4192	0.2694
5	Planning Skills (X_5)	3.4839	3.3997	0.0842	1.0393	0.3109
6	Managerial Skills (X_6)	3.3119	3.1188	0.1931	2.3917*	0.1297
7	Social Interaction (X_7)	3.9044	3.8745	0.0299	0.7318	0.4549

*Significant at five per cent level

The significant mean differences are noticed in the case of confidence, opportunity seeking and managerial skills since their mean differences are significant at five per cent level. The higher mean differences are noticed in the case of ‘opportunity seeking’ and ‘managerial skills’ since their mean differences are 0.2346 and 0.1931 respectively.

The higher discriminate power is identified in the case of ‘opportunity seeking’ and ‘managerial skills’ since their respective Wilks lambda are 0.1043 and 0.1297.

The significant components of entrepreneurial motivation have been included to estimate the two group discriminant function. The unstandardised procedure has been followed to estimate the function. The estimated functions is:

$$Z = 0.3497 + 0.1042 X_1 + 0.1827 X_3 + 0.1949 X_6$$

The relative contribution of discriminant components of entrepreneurial motivation in total discriminant score is estimated by the product of discriminant coefficient and their mean difference. The results are shown in Table 6.30.

Table 6.30

Relative contribution of Entrepreneurial Motivation in Total Discriminant Score

Sl. No	Significant Components of Entrepreneurial Motivation	Discriminant Coefficient	Mean Difference	Product	Relative contribution in TDS
1	Confidence (X_1)	0.1042	0.1458	0.0152	15.89
2	Opportunity seeking (X_3)	0.1827	0.2346	0.0428	44.78
3	Managerial skills (X_6)	0.1949	0.1931	0.0376	39.33
	Total			0.0956	100.00
Per cent of cases currently classified : 73.28					

The important components of entrepreneurial motivation among the significant entrepreneurial motivation is ‘managerial ability’ since its discriminant coefficient is 0.1949. it shows that the above said component of entrepreneurial motivation has more influence in the discriminant function.

The highest relative contribution of important components of entrepreneurial motivation in total discriminant score is noticed in the case of ‘opportunity seeking’ and ‘managerial skills’ since their relative contribution are 44.78 and 39.33 per cent respectively. The estimated two group discriminant analysis currently estimates the cases to an extent of 73.28 per cent.

The analysis reveals that the important discriminant components of entrepreneurial motivation among the semi-urban and rural college students are ‘opportunity seeking’ and ‘managerial skills’ which are higher among the semi-urban college students than among the rural college students.

6.28 IMPACT OF FACTORS LEADING TO ENTREPRENEURIAL TRAITS ON ENTREPRENEURIAL MOTIVATION

The factors leading to entrepreneurial traits among the students may have its own influence on the entrepreneurial motivation among the students. It is important to examine the impact of each factor on the entrepreneurial motivation among the students. The multiple regression analysis has been applied for this purpose. The fixed regression model is:

$$Y = a + b_1x_1 + b_2x_2 + \dots + b_{12}x_{12} + e$$

Whereas y – score on entrepreneurial motivation among the students

X_1	-	Score on coordination among the students
X_2	-	Score on innovativeness among the students
X_3	-	Score on optimism among the students
X_4	-	Score on informativeness among the students
X_5	-	Score on decision making skill among the students
X_6	-	Score on hard work among the students
X_7	-	Score on problem solving skills among the students
X_8	-	Score on confidence among the students
X_9	-	Score on enterprising among the students
X_{10}	-	Score on punctuality among the students
X_{11}	-	Score on sincerity among the students
X_{12}	-	Score on forecasting ability among the students
b_1, b_2, \dots, b_{12}	-	Regression coefficient of independent variables
a	-	intercept and
e	-	error term

The impact has been measured among the urban, semi-urban and rural college students and also for the pooled data. The results are illustrated in Table 6.31.

Table 6.31

**Impact of Factors Leading to Entrepreneurial Traits on
Entrepreneurial Motivation**

Sl.No	Factors Leading to Entrepreneurial Traits	Regression Coefficient among students			
		Urban	Semi-urban	Rural	Pooled Data
1	Coordination	0.1847*	0.1309*	0.1511*	0.1602*
2	Innovativeness	0.2102*	0.0447	0.1033	0.0917
3	Optimism	0.1641*	0.0991	0.0594	0.0788
4	Informativeness	0.1229*	-0.0497	-0.0774	0.0334
5	Decision making skills	0.1007	0.1392*	0.1991*	0.1517*
6	Hard work	0.0949	0.1447*	0.2173*	0.1494*
7	Problem solving skills	0.1391*	0.0779	0.1589*	0.1207*
8	Confidence	0.1508*	0.1411*	0.1634*	0.1491*
9	Enterprising	0.1617*	0.0337	0.1509*	0.1294*
10	Punctuality	0.0446	0.1022	0.0734	0.0649
11	Sincerity	0.0571	0.0776	0.0411	0.0391
12	Forecasting ability	0.0669	0.0441	0.0279	0.0492
	Constant	0.9383	0.5891	0.3894	0.6991
	R2	0.7919	0.7337	0.7049	0.7994
	F Statistics	8.5614*	7.9319*	7.3244*	8.6541*

The significantly and positively influencing factors on entrepreneurial motivation among the urban college students are coordination, innovativeness, optimism, informativeness, problem solving skills, confidence and enterprising since their respective regression coefficients are significant at five per cent level. Unit increase in the above said factors results in an increase in their entrepreneurial motivation by 0.1847, 0.2102, 0.1641, 0.1229, 0.1391, 0.1508 and 0.1617 units respectively. The changes in the factors influencing entrepreneurial traits among the

students explain their entrepreneurial motivation to an extent of 79.19 per cent since their R² is 0.7919.

Among the semi-urban college students, a unit increase in the level on coordination, decision making skills, hard work, and confidence results in an increase in their entrepreneurial motivation by 0.1309, 0.1392, 0.1447 and 0.1411 units respectively. The R² (0.7337) reveals that the changes in the entrepreneurial motivation among the semi-urban college students to an extent of 73.37 per cent.

Among the rural college students, it is explained to an extent of 70.49 per cent since its R² is 0.7049. The significantly influencing factors are coordination, decision making skills, hard work, problem solving skills, confidence and enterprising.

The analysis of pooled data reveals the importance of coordination, decision making skills, hard work, problem solving skills, confidence and enterprising in the determination of entrepreneurial motivation among the students to an extent of 79.94 per cent since its R² is 0.7994.

6.29 IMPACT OF ACHIEVEMENT MOTIVATION ON THE ENTREPRENEURIAL MOTIVATION AMONG THE STUDENTS

The achievement motivation among the students may have its own influence on their entrepreneurial motivation. So it is essential to examine the impact of achievement motivation on entrepreneurial motivation. The multiple regression analysis has been administrated for this purpose. The fitted regression model is:

$$Y = a + b_1x_1 + b_2x_2 + \dots + b_8x_8 + a$$

Whereas y – score on entrepreneurial motivation among the students

- X_1 - Score on achievement motivation among the students
- X_2 - Score on need for achievement among the students
- X_3 - Score on academic challenge among the students
- X_4 - Score on attitude towards education among the students
- X_5 - Score on meaningfulness of task and work methods among the students
- X_6 - Score on attitude towards teachers among the students
- X_7 - Score on general interests and sports among the students
- X_8 - Score on importance of marks among the students
- b_1, b_2, \dots, b_8 - regression coefficient of independent variables
- a - constant and
- e - error term

The impact of achievement motivation on the entrepreneurial motivation among the students has been examined among the three groups of students and also for pooled data separately. The results are shown in Table 6.32.

Table 6.32

**Impact of Achievement Motivation on Entrepreneurial Motivation
among Students**

Sl.No	Components of Achievement Motivation	Regression Coefficient among students			
		Urban	Semi-urban	Rural	Pooled Data
1	Academic Motivation	0.1817*	0.1249*	0.1309*	0.1417*
2	Need for achievement	0.0994	0.1644*	0.1211*	0.1297*
3	Academic challenge	0.1446*	0.1241*	0.1473*	0.1309*
4	Attitude towards education	0.1293*	0.1039	0.0849	0.0911
5	Meaningfulness of tasks and work methods	0.0817	0.0244	0.0139	0.0739
6	Attitude towards teachers	0.1519*	0.1011	0.0944	0.1239*
7	General interests and sports	0.0453	-0.0245	-0.0149	-0.0144
8	Importance of marks	0.1099	-0.0966	0.0242	0.0233
	Constant	0.7989	0.5944	0.2991	0.5894
	R2	0.8123	0.7866	0.7332	0.8334
	F Statistics	8.6939*	8.2544*	7.9088*	8.9976*

Among the urban college students, the significantly influencing components of achievement motivation among the students are their academic motivation, academic challenge, attitude towards education and attitude towards teachers since their respective regression coefficient are significant at five per cent level. A unit increase in the above said factors results in an increase in their entrepreneurial motivation by 0.1817, 0.1446, 0.1239 and 0.1519 units respectively. The changes in the level on above said components of achievement motivation explain the entrepreneurial motivation to an extent of 81.23 per cent since its R2 is 0.8123 whereas among the semi-urban college students, the changes in the achievement motivation will have its impact to an extent of 78.66 per cent. A unit increase in the level on academic

motivation, need for achievement and academic challenges among the semi urban college student results in an increase in their entrepreneurial motivation by 0.1249, 0.1644 and 0.1241 units respectively.

Among the rural college students, the significantly influencing components of achievement motivation on the entrepreneurial motivation are academic motivation, need for achievement and academic challenge. A unit increase in the level on above said components results in an increase in entrepreneurial motivation by 0.1309, 0.1211 and 0.1473 units respectively.

The analysis of pooled data reveals the relative importance of academic motivation, need for achievement, academic challenges and attitude towards teachers in the determination of their entrepreneurial motivation.

6.30 CONCLUSION

In this chapter a detailed analysis of entrepreneurial motivation and its determinants is given. Seven important factors influencing the entrepreneurial motivation have been identified by applying exploratory factor analysis. The reliability and validity tests have been applied to find out the reliability and validity of the variables identified under each factor. The application of one way analysis of variance highlighted the association between the profile of the students and their entrepreneurial motivation. The discriminant factor analysis exposed the discriminant components of entrepreneurial motivation among the urban, semi-urban and rural college students. The multiple regression analysis revealed the influence of the entrepreneurial traits on the entrepreneurial motivation. The evidences of impact of achievement motivation on entrepreneurial motivation have been identified with the help of multiple regression analysis.

CHAPTER - VII

SUMMARY OF FINDINGS AND SUGGESTIONS

- 7.0 Introduction
- 7.1 Summary of findings
- 7.2 Findings relating to achievement motivation
- 7.3 Findings relating to entrepreneurial motivation
- 7.4 Suggestions
- 7.5 Conclusion

CHAPTER - VII

SUMMARY OF FINDINGS AND SUGGESTIONS

7.0 INTRODUCTION

The college education provides innumerable avenues and career opportunities to the students. The present study is an attempt to assess the entrepreneurial traits and achievement motivation among the arts and science college students in Thoothukudi district. The major objectives of the present study are; (i) to study the socio economic background of the final year college students (ii) to ascertain the entrepreneurial traits and to analyse the same among the urban, semi-urban and rural college students (iii) to examine the achievement motivation and entrepreneurial motivation (iv) to study the relationship between the personal profile variables and the entrepreneurial traits and achievement motivation of the college students (v) and to assess the impact of entrepreneurial traits and achievement motivation on entrepreneurial motivation.

In order to fulfill the objective of the study, the colleges in Thoothukudi District have been classified in to urban, semi-urban and rural. In total there are 19 Arts and Science colleges in Thoothukudi District and 5766 students are undergoing Arts and Science courses. The present study covers ten per cent of the population as sample. Proportionate random sampling method was applied for the selection of the sample units. Interview schedule had been prepared to collect the relevant data from the students. Before preparing the interview schedule earlier studies were reviewed and opinions were collected from the experts in the field to identify the appropriate variables for the study. Pilot study was also conducted to test the appropriateness of the questions included for the study. The data had been collected from the students giving

representation to the colleges located in the urban, semi-urban and rural colleges. In order to process the collected data, appropriate statistical tools have been used.

The analysis consists of three parts. In the first part the background of students and their entrepreneurial traits have been analysed. This part also deals with the association between the personal profile of the students and their entrepreneurial traits. Various components of achievement motivation and their association with the personal profile of the students have been dealt with in the second part. The application of discriminant factor analysis highlighted the achievement motivation factors which discriminate the urban, semi-urban and rural college students. In the final part of the analysis the significant factors leading to entrepreneurial motivation and their association with the personal profile of the students have been presented. The discriminant components of entrepreneurial motivation among the urban, semi-urban and rural college students have been identified. The application of multiple regression analysis traced the impact of the entrepreneurial traits and achievement motivation on entrepreneurial motivation among the urban, semi-urban and rural college students.

Based on the analysis inferences were drawn and the findings emerged out of the study are listed below.

7.1 SUMMARY OF FINDINGS

7.1.1 Findings relating to Socio-economic Conditions of the students

- Majority (51.04 per cent) of the college students are studying in semi-urban colleges in the study area.
- It is found that most (58.85 per cent) of the college students are girl students. Among them majority (51.33 per cent) of the students are studying in the semi-urban colleges.

- It is observed that majority (76.22 per cent) of the students belong to the age group of 19 to 21 years. Among them most (53.76 per cent) of the students are studying in the semi-urban colleges.
- It is found that most (55.21 per cent) of the students are coming to the colleges from the semi-urban areas. Among them majority (58.49 per cent) of the students are studying in the semi-urban colleges. Only 14.78 per cent of the semi-urban students are going to the colleges situated in the urban areas. Among the students living in the rural areas, majority (49.23 per cent) of them are studying in the rural colleges and only 18.46 per cent of the rural area students are going to the urban colleges.
- It is identified that majority (58.78 per cent) of the college students studying in the urban colleges are undergoing science courses, whereas among the semi-urban college students majority (53.06 per cent) of them are studying arts courses and in the rural colleges 52.99 per cent of the students are undergoing arts courses.
- It is observed that most (37.33 per cent) of the students are coming under the backward class community. The most dominating social class among the urban, semi-urban and rural college students are forward class, backward class and SC/ST which constitute 37.84, 44.56 and 56.71 per cent respectively.
- It is found that most (63.37 per cent) of the students belongs to Hindu religion. The dominant religion among the urban, semi-urban and rural college students are Christians and Hindus which constitute 43.92, 71.77 and 67.16 per cent respectively.

- It is identified that most (81.25 per cent) of the students belongs to nuclear family system. Among them 87.16, 93.88 per cent of the students are studying in urban and semi-urban colleges. Among the rural college students 52.99 per cent of the students are coming from joint family system.
- It is observed that most (66.67 per cent) of the college students family size is 5 to 6 members. Among the urban college students majority (51.35 per cent) of them are having below 4 members in their family. The most dominating size of the family is 5-6 members among the semi-urban and rural college students which constitute 85.37 and 50.75 per cent respectively.
- It is found that majority (40.45 per cent) of the college students' family income ranges from ₹20,001 to 30,000. The dominant family monthly income group among the semi-urban and rural college students is ₹10,000-20,000 which constitutes 47.28, 45.54 per cent respectively. Among the urban college students the dominating family monthly income group is ₹ 20,000 – 30,000.
- It is identified that majority (36.28 per cent) of the college students father's occupation is private employment. Among the urban college students most (32.43 per cent) of the college students fathers are government employees. Among the semi-urban college students most (47.96 per cent) of the college students fathers are private sector employees and 66.42 per cent of the college students fathers are farmers.

- It is found that most (81.94 per cent) of the college students' mothers are house wife. Irrespective of the category the college students' mothers are house wives.

7.1.2 Findings relating to Entrepreneurial traits

- The analysis of entrepreneurial traits among the college students reveals that the urban college students are having more self confidence and creativity since their mean scores are 3.8891, 3.8587 respectively. Among the semi-urban and rural college students the highly viewed entrepreneurial variables are hard work and creativity since their mean scores are more in each category. Among the three groups of college students significant difference exists regarding risk taking, hard work, ability to take decision, self-confidence, capacity to solve problem, leadership, creativity and ability to foresee future since their 'F' statistics are significant at five per cent level.
- The scores of the entrepreneurial traits among the college students reveals that the urban college students are having more than 4.0 whereas these scores are 3.1- 4.0 among the semi-urban and rural college students.
- The association between the profile variables of the college students and the scores of the entrepreneurial traits shows that the profile variables social group, monthly family income, father's occupation and mother's occupation are significantly associating with the entrepreneurial traits of the college students since their 'F' statistics are significant at five per cent level.

7.1.3 Findings relating to factors leading to Entrepreneurial Traits among the students

- It is identified that the important factors leading to entrepreneurial traits among the college students are coordination, innovativeness, optimism, informativeness, decision making, hard work, problem solving, confidence, enterprising, personality, sincerity and forecasting ability. Among the various factors the dominant factors which leads to entrepreneurial traits are coordination, innovativeness and optimism since their Eigen values are 7.8974, 4.9175 and 4.5609 respectively.
- It is observed that the highly viewed factors leading to entrepreneurial traits among the urban college students are enterprising and innovativeness since their mean scores are 3.9692 and 3.9197 respectively.
- Among the semi-urban college students, the highly viewed factors leading to entrepreneurial traits are hard work and decision making since their mean score are 3.8991 and 3.8684 respectively.
- Among the rural college students the highly viewed factors leading to entrepreneurial traits are hard work and coordination since their mean scores are 3.9677 and 3.9197 respectively.
- Among the urban, semi-urban and rural college students significant difference has been noticed in the case of coordination, innovativeness, optimism, hard work, problem solving, enterprising and forecasting ability as their 'F' statistics are significant at five per cent level.

- Regarding the association between profile of college students and their views relating to the factors leading to entrepreneurial traits, the significantly associating profile variables with the ‘coordination’ and ‘innovativeness’ factors are age, place of college, social group, size of family, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- The significantly associating profile variables with the college students view about ‘optimism’ and ‘informativeness’ are social group, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- Regarding the college students view about ‘decision making’ factor, the significantly association profile variables are branch of study, size of family, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- The significantly associating profile variables regarding the college students view about ‘hard work’ are age, branch of study, size of family, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- Regarding the view about ‘problem solving factor’, the significantly associating profile variables are age, place of college, social group, size of family, monthly family income, father’s occupation and mother’s

occupation since their respective 'F' statistics are significant at five per cent level.

- The significantly associating profile variables with the entrepreneurial traits factor 'confidence' are place of college, social group, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly associating profile variables regarding the entrepreneurial traits factor 'enterprising' are age, social group, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- Regarding the significantly associating profile variables with the entrepreneurial traits 'punctuality' are age, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly associating profile variables with the entrepreneurial traits factor 'sincerity' are social group, religion, type of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- Regarding the view about entrepreneurial traits 'forecasting ability', the significantly associating profile variables are age, place of college, social group, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

7.1.4 Discriminant factors of Entrepreneurial Traits among the urban and semi-urban College students

- It is observed that the discriminant factor among the urban and semi-urban college students regarding the entrepreneurial traits, significant mean difference is noticed in the case of coordination, innovativeness, optimism, informativeness, hard work, problem solving, enterprising and forecasting ability since their respective 't' statistics are statically significant at five per cent level.
- Higher mean differences are noticed in the case of 'hard work' and 'enterprising' since their mean differences are 0.5953, 0.5847 respectively. The higher discriminant power is noticed in the case of the entrepreneurial traits factors 'enterprising' and 'innovativeness' among the urban and semi-urban college students since their wilks lambda are 0.1045 and 0.1173 respectively. The higher discriminant coefficients are noticed in the case of the entrepreneurial traits 'informativeness' and 'enterprising'. It shows the higher influence of the above said two factors in the discriminant function. The analysis reveals that the dominant discriminant factors among the urban and semi-urban s college students are enterprising and infromativness, which are higher among the urban college students than among the semi-urban college students.

7.1.5 Discriminant factors of Entrepreneurial Traits among the Urban and Rural Students

- Significant mean differences are noticed in the case of coordination, innovativeness, optimism, informativeness, hard work, problem solving skills, enterprising and forecasting ability since their respective 't' statistics are significant at five per cent level. The higher mean differences are found in the case of 'innovativeness' and 'problem solving' since their mean difference are 0.8736 and 0.8476 respectively. The higher discriminant power is noticed in the case of 'problem solving skill' and 'forecasting ability' since their Wilks lambda are 0.1082 and 0.1173 respectively.
- As regards the relative contribution of discriminant factors in the total discriminant scores, the analysis reveals that the important discriminant factors among the urban and rural college students are 'innovativeness' and 'problem solving skills' which are higher among the urban students than among the rural college students.

7.1.6 Discriminant factors of Entrepreneurial Traits among the Semi-urban and Rural Students

- Significant mean differences are noticed in the case of coordination, innovativeness, optimism, decision making, problem solving and forecasting ability since their respective 't' statistics are significant at five per cent level. The higher mean differences are noticed in the case of 'forecasting ability' and 'problem solving' since their mean differences are 0.3562 and 0.3401 respectively.

- The higher discriminant coefficients are noticed in the case of ‘problem solving skills’ and ‘decision making skills’ since their respective coefficient are 0.1788 and 0.1396 respectively. The analysis reveals that the dominant discriminant factors among the semi-urban and rural college students are ‘problem solving skills’ and ‘decision making’ which are higher among the semi-urban college students than among the rural college students.

7.1.7 Impact of factors leading to Entrepreneurial Traits on the level of Entrepreneurial Traits among the students

- It is inferred that the significantly influencing factors leading to entrepreneurial traits on the level of entrepreneurial traits among the urban college students are their innovativeness, optimism, infromativeness, hard work, problem solving skills, confidence, enterprising and forecasting ability since their regression coefficient are significant at five per cent level.
- Among the semi-urban college students the significantly influencing factors leading to entrepreneurial traits on the level of entrepreneurial traits are optimism, hard work, enterprising and forecasting ability since their respective regression coefficients are significant at five per cent level.
- Among the rural college students the significantly influencing factors leading to entrepreneurial traits on the level of entrepreneurial traits are coordination, optimism, hard work and enterprising since their respective regression coefficients are significant at five per cent level.

- The analysis of Pooled data reveals the importance of ‘optimism’, ‘hard work’ and ‘enterprising’ in the determination of their level of entrepreneurial traits among the college students.

7.2 FINDINGS RELATING TO ACHIEVEMENT MOTIVATION

- Eight factors were identified as the important components of achievement motivation among the college students. They are academic motivation, need for achievement, academic challenge, attitude towards education, meaningfulness of task and work methods, attitude towards teachers, general interests and sports and importance of marks. The variables included under each component were tested using the confirmatory factor analysis for its reliability and validity. The overall reliability of the variables has been estimated with the help of cronbach alpha.
- It is observed that the highly viewed components of achievement motivation by the urban college students are ‘academic challenge’ and ‘attitude towards education’ since their mean score are 3.9204 and 3.8925 respectively.
- As regards the semi-urban college students, the highly viewed components of achievement motivation are ‘general interests and sports’ and ‘attitude towards teachers’ since their mean score are 3.6337 and 3.4901 respectively.

- Among the rural college students the highly viewed components of achievement motivation are ‘attitude towards teachers’ and ‘general interests and sports’ since their mean score are 3.7087 and 3.6481 respectively.
- Significant difference has been noticed among the three groups of college students in respect of achievement motivation. They are academic motivation, need for achievement, academic challenge, attitude towards education, meaningfulness of task and work methods and importance of marks since their ‘F’ statistics are significant at five per cent level.
- The overall achievement motivation among the urban college students is higher than the semi-urban and rural college students.

7.2.1 Association between profile of students and their views on components leading to Achievement Motivation.

- Regarding the academic motivation, the significantly associating profile variables are age, size of the family, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- The significantly associating profile variables with the ‘need for achievement’ are age, type of family, size of the family, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.

- In the case of academic challenge, the associating profile variables are age, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- Regarding the attitude towards education, the significantly associating profile variables are age, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly association profile variables regarding the 'meaningfulness task and work methods' are social group, religion, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly associating profile variables regarding the 'attitude towards teachers' are size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- Regarding the general interest and sports, the significantly associating profile variables are place of college, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

- The significantly associating profile variables regarding the ‘importance of marks’, are place of college, branch of study, social group, size of family, and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- Regarding the view of the overall achievement motivation, the significantly associating profile variables are age, size of family and mothers occupation.

7.2.2 Discriminant factors of Achievement motivation among the Urban and Semi-urban students

- It is observed that discriminant power of achievement motivation among the urban and semi-urban college students significant mean difference are noticed in the case of academic motivation, need for achievement, academic challenge, meaningfulness of task and work methods and importance of marks as their ‘t’ statistics are significant at five per cent level.
- The higher discriminant coefficient is identified in the case of academic motivation since its discriminant coefficient is 0.1739. The analysis reveals that the important discriminant achievement motivation component among the urban and semi-urban college students is ‘academic motivation’ which is higher among the urban students than the semi-urban students.

7.2.3 Discriminant factors of Achievement Motivation among the urban and rural students

- It is identified that discriminant power of achievement motivation among the urban and rural college students significant mean difference are noticed in the case of academic motivation, need for achievement, academic challenge, attitude towards education, meaningfulness of task and work methods and importance of marks since their 't' statistics are significant at five per cent level.
- The higher discriminant coefficient is identified in the case of 'academic challenge' since its discriminant coefficient is 0.1779. The analysis reveals that the important discriminant achievement motivation component among the urban and rural students is 'academic challenge' which is higher among the urban students than the rural students.

7.2.4 Discriminant factors of Achievement Motivation among the Semi-urban and Rural students

- It is found that discriminant power of component of achievement motivation among the semi-urban and rural college students significant mean difference is noticed in the case of academic motivation, need for achievement, academic challenge, attitude towards education, meaningfulness of task and work methods and importance of marks since their 't' statistics are significant at five per cent level.
- The higher discriminant coefficient is identified in the case of 'academic challenge' since its discriminant coefficient is 0.2042. The analysis reveals that the important discriminant achievement motivation

component among the semi-urban and rural students is ‘academic challenge’ which is higher among the semi-urban college students than the rural college students.

7.2.5 Impact of Achievement Motivation on the Entrepreneurial Traits among the students

- Among the urban college students it is observed that the significantly influencing ‘achievement motivation’ variables on the entrepreneurial traits are general interest and sports, academic challenge, need for achievement, attitude towards education and academic motivation since their regression coefficients are significant at five per cent level.
- The dominantly influencing achievement motivation variable on the entrepreneurial traits among the urban college students is ‘general interest’.
- Among the semi-urban college students the significantly influencing achievement motivation’ variables on ‘entrepreneurial traits’ are attitude towards education, academic challenge, need for achievement and attitude towards teachers since their regression coefficients are significant at five per cent level.
- The dominantly influencing achievement motivation variable on the entrepreneurial traits among the semi-urban college students is ‘attitude towards education’.

- Among the rural college students the significantly influencing achievement motivation variables on the entrepreneurial traits are important of marks, academic challenge, attitude towards education attitude towards teachers and need for achievement since their regression coefficients are significant at five per cent level.
- The dominantly influencing achievement motivation variable on the entrepreneurial traits among the rural college students is ‘importance of marks’.
- The analysis of pooled data reveals that the significantly influencing achievement motivation variables on entrepreneurial traits among the students are academic challenges, attitude towards education, need for achievement and attitude towards teachers.

7.3 FINDINGS RELATING TO ENTREPRENEURIAL MOTIVATION

- The important entrepreneurial motivation factors identified by the Exploratory Factor Analysis among the students are confidence, problem solving ability, opportunity seeking, independency, planning, managerial skills and social interaction.
- It is observed that the highly viewed entrepreneurial motivation factors by the urban students are ‘opportunity seeking’ and ‘problem solving ability’ since their mean score are 3.8783 and 3.8779 respectively.
- Among the semi-urban college students the highly viewed entrepreneurial motivation factors are ‘social interaction’ and ‘planning skills’ since their mean scores are 3.9044 and 3.4839 respectively.

- The highly viewed entrepreneurial motivation factors among the rural college students are ‘social interaction’ and ‘planning skills’ since their mean scores are 3.8745 and 3.3997 respectively.
- Among the three groups of college students significant difference has been noticed in the case of confidence, problem solving ability, opportunity seeking, independency and managerial skills since their ‘F’ statistics are significant at five per cent level.
- The overall entrepreneurial motivation among the urban college students is higher than the semi-urban and rural college students.

7.3.1 Association between profile of students and their views on components leading to Entrepreneurial Motivation

- The significantly associating profile variables with the entrepreneurial motivation component ‘confidence’ are social group, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- The significantly associating profile variables with the entrepreneurial motivation component ‘problem solving ability’ are social group, monthly family income and father’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- In the case of ‘opportunity seeking’ component of entrepreneurial motivation, the significantly associating profile variables are monthly family income and father’s occupation since their respective ‘F’ statistics are significant at five per cent level.

- The significantly associating profile variables regarding the component ‘independency’ of entrepreneurial motivation are social group, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- In the case of ‘planning skills’ component of entrepreneurial motivation, the significantly associating profile variables are age, place of college, monthly family income and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- The significantly associating profile variables regarding the ‘managerial skills’ component of entrepreneurial motivation are age, size of family, monthly family income and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.
- Regarding the ‘social interaction’ component of entrepreneurial motivation, the significantly associating profile variables are social group, religion, size of family, monthly family income, father’s occupation and mother’s occupation since their respective ‘F’ statistics are significant at five per cent level.

7.3.2 Discriminant factors of Entrepreneurial Motivation among the Urban and Semi-urban college students

- It is observed that discriminant power of entrepreneurial motivation among the urban and semi-urban college students significant mean difference are noticed in the case of confidence, problem solving ability, independency and managerial skills since their ‘t’ statistics are significant at five per cent level.

- Among the urban and semi-urban college students higher discriminant coefficient are noticed in the case of ‘confidence’ and ‘problem solving ability’ components of entrepreneurial motivation. It is higher among the urban college students than the semi-urban college students.

7.3.3 Discriminant factors of Entrepreneurial Motivation among the Urban and Rural college students

- As regards the discriminant power of entrepreneurial motivation among the urban and rural college students significant mean differences are noticed in the case of confidence, problem solving ability, opportunity seeking, independency and managerial skills since their ‘t’ statistics are significant at five per cent level.
- Among the urban and rural college students higher discriminant coefficient are noticed in the case of ‘confidence’ and ‘opportunity seeking’ components of entrepreneurial motivation. It is higher among the urban college students than the rural college students.

7.3.4 Discriminant factors of Entrepreneurial Motivation among the Semi-urban and Rural students

- Regarding the discriminant power of entrepreneurial motivation among the semi-urban and rural college students significant mean differences are noticed in the case of confidence, opportunity seeking and managerial skills since their ‘t’ statistics are significant at five per cent level.

- Among the semi-urban and rural college students higher discriminant coefficient are noticed in the case of ‘managerial skills’ and ‘opportunity seeking’ components of entrepreneurial motivation. It is higher among the semi-urban college students than the rural college students.

7.3.5 Impact of Entrepreneurial Traits on Entrepreneurial Motivation

- The analysis reveals that the significantly influencing factors leading to entrepreneurial traits on entrepreneurial motivation among the urban college students are ‘innovativeness’ and ‘coordination’ since their regression coefficient are 0.2102 and 0.1847 respectively at five per cent significance level.
- Among the semi-urban college students the significantly influencing factors leading to entrepreneurial traits on entrepreneurial motivation are ‘hard work’ and ‘confidence’ since their regression coefficients are 0.1447 and 0.1411 respectively at five per cent significance level.
- As regards the rural college students the significantly influencing factors leading to entrepreneurial traits on entrepreneurial motivation are ‘hard work’ and ‘decision making skills’ since their regression coefficients are 0.2173 and 0.1991 respectively at five per cent significance level.
- The analysis of pooled data reveals that the significantly influencing factors leading to entrepreneurial traits on entrepreneurial motivation among the college students are coordination, decision making skills, hard work, confidence, enterprising and problem solving skills since their regression coefficients are significant at five per cent level.

7.3.6 Impact of Achievement Motivation on Entrepreneurial Motivation

- It is evident from the analysis that the significantly influencing components leading to achievement motivation on entrepreneurial motivation among the urban college students are ‘academic motivation’ and attitude towards teachers since their regression coefficient are 0.1817 and 0.1519 respectively at five per cent significance level.
- Among the semi-urban college students the significantly influencing components leading to achievement motivation on entrepreneurial motivation are ‘achievement motivation’ and ‘academic motivation’ since their regression coefficients are 0.1644 and 0.1249 respectively at five per cent significance level.
- As regards the rural college students the significantly influencing components leading to achievement motivation on entrepreneurial motivation are ‘academic challenge’ and ‘academic motivation’ since their regression coefficients are 0.1473 and 0.1309 respectively at five per cent significance level.
- The analysis of pooled data reveals that the significantly influencing components leading to achievement motivation on entrepreneurial motivation among the college students are academic motivation, need for achievement, academic challenge and attitude towards teachers since their regression coefficients are significant at five per cent level.

7.4 SUGGESTIONS

7.4.1 Suggestions to the Students

- The study reveals that the 'self confidence' is comparatively less among the semi-urban and rural college students. In order to improve the self confidence the semi-urban and rural college students must try to take part in the class room and college level activities. This will help the students to gain confidence to face any situation.
- The entrepreneurial traits like the ability to take decisions and to face risk are less among the semi-urban and rural college students. These competencies can be developed by involving themselves in organizing seminars and conferences at the regional or state level programmes. The initiatives taken by them will give lot of opportunities for developing the decision making competencies and to face the risk boldly.
- The urban college students though they are having higher level of self confidence compared to the semi-urban and rural college students, they are having lesser mean scores as regards 'hard work', and so the urban college students should realize the importance of hard work for achieving greater things.
- The discriminant analysis reveals that the discriminant coefficient as regards the informativeness and enterprising factors which leads to entrepreneurial traits is more among the urban college students than the semi-urban college students. This high lights the need to improve the thirst for seeking information and to take initiatives to do things differently. Information seeking initiatives can be developed through

searching information through web sites, referring books and journals etc.

- Discriminant analysis reveals that the important discriminant factors among urban and rural college students are ‘innovativeness’ and ‘problem solving’ which are higher among the urban college students than the rural students. The rural college students must develop their creative and innovative thinking and learn the ways and means to solve the problems effectively by taking part in the inter departmental or inter college competitions.
- The dominant discriminant factors among the semi-urban and rural college students are ‘problem solving’ and ‘decision making’ which are higher among the semi-urban college students than rural college students. So rural college students need to improve the problem solving and decision making skills.
- As the scores on achievement motivation among the semi-urban and rural college students are less compared to the urban college students, the semi-urban and rural college students must realize the need to this need and set some goals to achieve greater things in their life.

7.4.2 Suggestions to the Educational Institution

- As the semi-urban and rural college students are lacking in the innovative thinking and problem solving, the semi-urban and rural colleges may induce the students to organize programmes and competitions. While organizing programmes and participating in the

competitions the students can display their innovativeness and they can sharpen their problem solving abilities.

- The colleges must organize programmes to show the students the different ways and means available to achieve greater things in their life. For this purpose the college may invite people who have achieved greater things. This will inspire the students to think big in their life.
- The college can create 'Innovation Centre' and motivate the students to register their innovative or creative ideas. The students should be guided and nurtured properly to develop a product or process using their creative ideas. The college may honour the students during the college day for their creative and innovative ideas by giving certificates or prizes. This will motivate other students to come forward and do something.
- The college can motivate the students to write the information about the achievers daily in the black board in front of each department under the caption 'Achiever of the Day'. This will help the students to know about the achievers and their achievements and in turn this practice will inspire the students to become the achievers in future. Through this, achievement motivation can be inculcated to the students.
- In order to instill the entrepreneurial motivation among the college students, the colleges may open a separate 'Entrepreneurship Development Cell' guided by a trained staff to motivate the students to develop the entrepreneurial traits and to give information about the entrepreneurial opportunities available in the locality.

- The college students may be asked to conduct surveys about the entrepreneurial opportunities and resource mapping. The collected information can be documented in the 'Entrepreneurship Development Cell'. This will encourage the students to identify the new business ideas.
- Students may be encouraged to visit the cottage and small scale industries to during their college days. The industrial visit will expose the students to know the various business opportunities in the locality.

7.4.3 Suggestions to the University

- The university while modifying the syllabus can introduce a paper on Entrepreneurship Development and Training with practical exposure in the fourth and sixth semester for all the arts and science courses like Environmental Science.
- During the summer vacation of the second year the students must be asked to undergo internship training in the business establishment connected to their course.
- Survey based practical assignment may be given to the students for the entrepreneurship related papers.
- The university may insist all the affiliated colleges to create a 'Entrepreneurship Development Centre' to motivate the students and for initiating entrepreneurship related programmes at the college level.
- During the sixth semester along with the paper they must be guided to prepare the project report for a potential business opportunity.

- The colleges may be asked to apply for the central government Rajeev Gandhi Udayami Mithra programme and Business Incubator programme. Through these programme the prospective young entrepreneurs can be motivated further and be guided to start the business establishment after the completion of the college studies.
- The affiliated colleges must be instructed to organize programmes in collaboration with the DIC, KVIC, SISI and Handicraft board.

7.4.4 Suggestions to the Government

- The government must ask all the universities to monitor the activities of the Entrepreneurship Development Cell created at the college level just like the NSS programme.
- The government should ask the institutions supporting the entrepreneurship to organize orientation programmes in the colleges to create awareness about the need for choosing entrepreneurship as their career.
- The government should give necessary assistance for the colleges to create the Entrepreneurship Development Cell.
- The government can initiate special assistance programmes to nurture the students who are having creative and innovative ideas to transform their ideas in to a product or a process.
- Government may initiate special scholarship programme for motivating the students to nurture their creative and innovative ideas.

7.5 CONCLUSION

As there are emerging needs in the field of education, there is a need for an appropriate curriculum to satisfy the demands of the students. Today most of the students pursue higher education in order to acquire jobs. If education can be offered with entrepreneurship orientation it would wipe out the rush for jobs, as students would take up self-employment careers. Such an option would help the family and the society indirectly. The researcher was able to identify the entrepreneurial traits of the college students and their achievement motivation. Further the study analysed the impact of entrepreneurial traits and achievement motivation on the entrepreneurial motivation. The findings and the suggestions highlights the steps to be taken to create the awareness about the need for promoting entrepreneurship as the career. The researcher will be amply rewarded if the planners or the policy makers consider some of the suggestions given based on the findings of the study. The role of the government, universities, educational institutions and the students becomes a paramount importance for the development of entrepreneurial inclination among the students. Any step in this direction will pave the way to scale new height and lead the country towards prosperity.

SCOPE FOR FUTURE STUDIES

1. A study on the entrepreneurial characteristics among University students with special reference to Tamil Nadu.
2. A study on the entrepreneurial inclination among the vocational education students in Higher Secondary in Tamil Nadu.
3. A study on the role of colleges in promoting entrepreneurship in Tamil Nadu.
4. A study on the determinants of entrepreneurial intentions among the college students in Tamil Nadu.

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APPENDIX - I

A STUDY ON ENTREPRENEURIAL TRAITS AND ACHIEVEMENT MOTIVATION AMONG COLLEGE STUDENTS IN THOOTHUKUDI DISTRICT

INTERVIEW SCHEDULE

1. Name of the student :
2. Gender
a) Male ☐ b) Female ☐
3. Name of the college :
4. Area where the college situated
a) Urban ☐ b) Semi urban ☐ c) Rural ☐
5. Age
a) Below 18 ☐ b) 19 to 21 ☐ c) 22 and above ☐
6. Branch of study
a) Arts ☐ b) Science ☐
7. Social group
a) FC ☐ b) BC ☐ c) MBC ☐
d) SC/ST ☐
8. Religion
a) Hindu ☐ b) Muslim ☐ c) Christian ☐
d) Other ☐
9. Type of family
a) Joint ☐ b) Nuclear ☐
10. Place of residence
a) Urban ☐ b) Semi urban ☐ c) Rural ☐
11. Size of the family
a) Below 4 ☐ b) 5 to 6 ☐ c) Above 6 ☐
12. Monthly family income
a) Less than 10,000 ☐ b) 10,000-20,000 ☐ c) 21,000-30,000 ☐
d) 31,000-40,000 ☐ e) 41,000-50,000 ☐ f) Above 50,000 ☐
13. Fathers' occupation
a) Government employee ☐ b) Private employed ☐ c) Business ☐
d) Farmer ☐ e) Professional ☐ f) Other ☐

14. Mothers' occupation

- a) Government employee ☐ b) Private employed ☐ c) Business ☐
 d) Farmer ☐ e) Professional ☐ f) Other ☐

15. ENTREPRENEURIAL TRAITS

Please '✓' in the appropriate box according to your practices.

A-Always F-Frequently S-Sometime R-Rarely N-Never

S.No	Particulars	A	F	S	R	N
1.	Risk Taking					
2.	Hard Work					
3.	Ability to take decision					
4.	Self Confidence					
5.	Capacity to Solve Problem					
6.	Leadership					
7.	Creativity					
8.	Ability to Foresee future					

FACTORS LEADING ENTREPRENEURIAL TRAITS

S.No	Particulars	A	F	S	R	N
1.	Creative in writing assignments					
2.	I like teachers who are more creative in their approach					
3.	Loving newness					
4.	Finding new ways of answering questions					
5.	Willing to do new things and to accept new ideas					
6.	Interested in writing assignments on innovative topics					
7.	My new ideas mostly got the approval of my friends					
8.	Interested in taking quick decisions					
9.	While shopping choice of dress is mine					
10.	Taking decisions even when outcome is not sure					
11.	Not depending on others to decide					
12.	Friends approaching me for solving their problems					

S.No	Particulars	A	F	S	R	N
13.	Taking decisions firmly					
14.	Taking decision after analyzing the pros and cons					
15.	Mentally and physically fit to do hard work					
16.	Submission of assignments and home work in time					
17.	Use to attend the examination with full preparation					
18.	I spend more time to score good marks					
19.	Willing to study long hours					
20.	Won't put off things					
21.	Spend holidays usefully					
22.	Registering success always					
23.	Doing regular and continuous preparation for exams					
24.	Capable of deciding on my higher studies					
25.	Have alternative plans for future studies					
26.	Preparation for the future carrier planning					
27.	Planning things in advance					
28.	Failures never deter me from trying further					
29.	Withstand Physical and mental stress					
30.	Don't keep problems pending					
31.	Flexibility in solving problem					
32.	Realising and overcoming the problems					
33.	Facing problem boldly					
34.	Courageous to meet the unknown					
35.	Moving friendly with others					
36.	Getting help from others					
37.	Accepting other with open minded					
38.	Helping others					
39.	Interested in working with others					
40.	Holding a positive attitude when things go wrong					
41.	Facing the exams without fear					
42.	Bold enough to visit unknown places independently					

S.No	Particulars	A	F	S	R	N
43.	When I take a job, I am always confident that I can carry it out					
44.	Always going in for excellence					
45.	Prepared to travel long distance without advance booking of tickets					
46.	Taking more effort to complete a task					
47.	Like to scale new heights					
48.	Never look back					
49.	Accepting the task without hesitation					
50.	Guiding other in their work					
51.	Talk openly and give straight answers					
52.	Maintaining physical and emotional balance					
53.	After a failure, I am able to pick myself up and proceed further					
54.	Taking right decision at the right time					
55.	Taking initiation for doing things					
56.	Accommodating others to carryout task					
57.	Capable of encouraging others					
58.	Appreciating others					
59.	Inspiring others					
60.	Giving positive feedback					
61.	Taking new initiatives					
62.	Taking efforts to encourage others					
63.	Love classes giving scope for thinking differently					
64.	Always consult teachers on subjects to learn more					
65.	Attending different courses besides regular course					
66.	Excelling in the academic activities					
67.	Winning prizes in the competitions					
68.	Not hesitating to clarify doubts					
69.	Reading dailies regularly					
70.	Having the habit of extra-reading					

16. ACHIEVEMENT MOTIVATION

ACADEMIC MOTIVATION

S.No	Particulars	A	F	S	R	N
1.	I feel unhappy if I miss the class.					
2.	I pay attention to the work in the class.					
3.	I mind much if I reach late in the class					
4.	I love to read more and more to enrich the knowledge					
5.	I spend more time in the library					

NEED FOR ACHIEVEMENT

S.No	Particulars	A	F	S	R	N
1.	I set standards for myself and then strive to achieve them					
2.	I wish to specialize and become top most in the field of my likings.					
3.	I like to experiment and create new things and surprise people					
4.	I work hard for hours together to be successful in whatever I undertake					

ACADEMIC CHALLENGE

S.No	Particulars	A	F	S	R	N
1.	I have a tendency to find solution to problems which others unable to succeed.					
2.	I aspire to get excellent results in all academic competitions					

ATTITUDE TOWARDS EDUCATION

S.No	Particulars	A	F	S	R	N
1.	I like my studies.					
2.	I like to attend the class regularly.					
3.	I prefer to enrich my knowledge.					
4.	Education plays a vital role in my life.					
5.	Education gives a status in the society.					

MEANINGFULNESS OF TASK AND WORK METHODS

S.No	Particulars	A	F	S	R	N
1.	I do task which is result oriented.					
2.	That the present course of my study will help me to prosper in my life.					
3.	I feel very much frustrated if I do not get a chance to compete in the field of my choice.					
4.	I regularly take down notes in the class and complete my assignments.					
5.	I do a lot of preparation at home for the next day's work in the class.					
6.	I study according to time schedule.					
7.	I follow the work method which is results oriented.					

ATTITUDES TOWARDS TEACHERS

S.No	Particulars	A	F	S	R	N
1.	My teachers are competent in their work					
2.	I prefer to follow the instruction of my teachers					
3.	I try to avoid creating nuisance in the class					
4.	I try to answer the question ask by the teachers.					
5.	I like to listen to the teachers.					

GENERAL INTERESTS AND SPORTS

S.No	Particulars	A	F	S	R	N
1.	I balance the studies and then play.					
2.	I participate in the sports and games.					
3.	I like to read newspapers and magazine					
4.	I like to view TV channels which provide worldly information.					
5.	I spend more time to view entertainment channels.					
6.	Interested in attending the co-curricular activities.					

IMPORTANCE OF MARKS

S.No	Particulars	A	F	S	R	N
1.	I prefer for the examination instead of attending entertainments.					
2.	Mark determines the future carrier options					
3.	Mark gives a status in the academic circle.					

17. ENTREPRENEURIAL MOTIVATION

S.No	Particulars	A	F	S	R	N
1.	I always try to find a new solution to overcome problems.					
2.	I apply alternative approaches to solve the problems.					
3.	I think of many new ideas					
4.	I look for new opportunities like a watch-dog					
5.	I try to find ways to do things for less cost.					
6.	I take decisions even if I am not sure of outcome.					
7.	I welcome challenges and opportunities.					
8.	I take the advantages of opportunities as and when that arise.					
9.	I stick with my decision even if others disagree with me.					
10.	I have strong desire for social interaction					
11.	I remain stick to my approach even while doing something right for the first time.					
12.	I have my plan for ten years.					
13.	I devote the most of my time to my work.					
14.	I work for long hours to complete my work.					
15.	I start my work with full confidence that I will succeed					
16.	I persuade people to do what I want.					
17.	I take problems as challenges					

S.No	Particulars	A	F	S	R	N
18.	Continuous problem facing makes me weaker indecision-making					
19.	I try to get the maximum return from my limited resources.					
20.	I keep my income into consideration.					
21.	While dealing with a problem, I tend to get struck.					
22.	I thrive on facing challenges.					
23.	I do not depend on other for directions					
24.	When I am confused, I seek others advice.					
25.	I prefer to do tasks that I know-well					
26.	I do not let my work interfered by others.					
27.	I think over how to improve my working					
28.	I do my work systematically and logically.					
29.	I derive satisfaction after facing a challenges					
30.	I begin my day with a list of things to be done.					
31.	I like to work with others					
32.	I am always in search of people who can help me in my work.					
33.	I do my level best to satisfy others through my work.					
34.	I am not good at tackling with several problems at a time					
35.	I find myself quite resourceful to tide over tight situations.					
36.	I prepare a plan before actually working on a project.					
37.	I try to solve problems by newer ways and means.					
38.	I do not feel completely comfortable with myself at all times.					



Appendix - II

APPENDIX - II

LIST OF PUBLICATIONS

S.No	Title of the paper	Name of the Journal	Publishers
1	A Study on Factors Leading to Entrepreneurial Traits among College Students in Thoothukudi District	International Journal of Engineering Research & Management Technology ISSN : 2348-4039 Impact Factor : 0.86	International Journal of Engineering Research & Management Technology
2	A Study on Discriminant Factors Leading to Achievement Motivation among Urban, Semi-Urban and Rural College Students in Thoothukudi District	Intercontinental Journal of Human Resource Research Review ISSN : 2320-9704 Impact Factor : 0.615	Intercontinental Management Research Review

A STUDY ON FACTORS LEADING TO ENTREPRENEURIAL TRAITS AMONG COLLEGE STUDENTS IN THOOTHUKUDI DISTRICT

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Abstract

The academic field of entrepreneurship has evolved dramatically over the last three decades. It has become clear that entrepreneurship can be taught. Business educators and professionals have evolved beyond the myth that entrepreneurs are born, not made. Additional support for this view comes from the literature review of entrepreneurship, and small-business management education. Most of the empirical studies surveyed indicated that entrepreneurship can be taught, or at least encouraged. In this backdrop the researcher has chosen this topic to study the factors leading to entrepreneurial traits among the urban, semi-urban and rural college students in Thoothukudi District.

Key Words: Entrepreneurship, entrepreneurial traits, small-business management

Introduction

The entrepreneur is one of the most important inputs in the economic development of a country or of regions within the country. Entrepreneurial competence makes all the difference in the rate of economic growth. Entrepreneurial talent exists in all sections of the society. A high level of entrepreneurship is found in developed economy. The growth of entrepreneur is high, but sustained entrepreneurship is still comparatively a scare factor in India.

The academic field of entrepreneurship has evolved dramatically over the last three decades. It has become clear that entrepreneurship can be taught. Business educators and professionals have evolved beyond the myth that entrepreneurs are born, not made. Additional support for this view comes from the literature review of entrepreneurship, and small-business management education. Most of the empirical studies surveyed indicated that entrepreneurship can be taught, or at least encouraged. Entrepreneurial talents can be nurtured by motivating people and making them capable of perceiving and exploiting business opportunities. Realising the importance of entrepreneurship development the planners and policy makers have formulated Entrepreneur Development Programmes (EDP) for various target groups of population in the country.

All the individuals are having certain qualities which help them to accomplish their task in a desired manner. In this paper the researcher is interested to analyse the factors leading to entrepreneurial traits among the urban, semi-urban and rural college students.

Objectives

- To study the entrepreneurial traits among the college students
- To analyses the factors leading to entrepreneurial traits among the final year students.
- To summarize the findings and suggestions based on the analysis of the study.

Scope of the study

The main aim of the study is to assess the entrepreneurial traits of college students in Thoothukudi district. This study was conducted among the outgoing under graduate arts and science college students of Thoothukudi district. For the purpose of analysis the college students are categorized into three groups namely urban, semi-urban and rural college students.

Sampling

The study attempts to measure the entrepreneurial traits of college students in Thoothukudi district. Hence it is decided to select sample respondents from final year undergraduate students of arts and science colleges in Thoothukudi district. Stratified proportionate random sampling method was used to select the sample respondents from the population. The arts and science colleges were stratified in to three categories such as urban, semi-urban and rural on the basis of place where the college is situated. From among the final year undergraduate arts and science students ten per cent of the students were selected from each category at random as detailed in Table 1

Table 1
Population and Sample of Respondents

S.No	Place of College	Final year undergraduate Arts and Science college students	Sample Respondents
1	Urban	1,484	148
2	Semi-urban	2,942	294
3	Rural	1,340	134
	Total	5,766	576

Methodology

The present study was based on both primary and secondary data. Interview schedule was used to collect the primary data from the sample respondents. A well structured interview schedule was prepared after consulting the experts in the field. Before finalizing the interview schedule, a pilot study was made and with that response, final interview schedule was prepared to collect the information required for the study. The relevant secondary data were collected from the books, journals, magazines, and published materials. The information available in the website was also collected for the study.

Factors leading to Entrepreneurial Traits among the Respondents

There are too many variables influencing the entrepreneurial traits of the respondents. The present study confines these in to 70 variables. The respondents are asked to rate these variables at five point scale according to the order of importance attached with these variables as a factor leading to determine their entrepreneurial traits. The scores of the variables are taken for Exploratory Factor Analysis (EFA) in order to narrate the variable into factors. Initially, the validity of data for EFA have been tested with the help of Kaiser - Meyer - Olkin measure of sampling adequacy and Bartlett's test of sphericity. Both these two tests satisfy the validity of data for EFA. The EFA results in 12 factors. The Eigen value and per cent of variation explained by each factor is shown in Table 2.

TABLE 2
Factors leading to Entrepreneurial Traits among the College Students

S.No	Factors	Number of variables	Eigen value	Per cent of variation explained	Cumulative per cent of variation explained
1	Co-ordination	12	7.8974	11.28	11.28
2	Innovativeness	8	4.9175	7.03	18.31
3	Optimism	9	4.5609	6.52	24.83
4	Informativeness	7	3.8865	5.55	30.38
5	Decision making	7	3.7091	5.30	35.68
6	Hard work	7	3.6945	5.28	40.96
7	Problem solving	5	2.9808	4.25	45.21
8	Confidence	5	2.8227	4.03	49.24
9	Enterprising	3	2.2965	3.28	52.52
10	Personality	3	2.1173	3.02	55.54

11	Sincerity	2	1.8986	2.71	58.25
12	Forecasting ability	2	1.7345	2.47	60.72
	Total	70			
	KMO measures of sampling adequacy: 0.7379		Bartlett's test of sphericity: Chi square value: 80.79*		

*Significant at five per cent level

The first three important factors are co-ordination, innovativeness and optimism since their Eigen values are 7.8974, 4.9175 and 4.5609 respectively. The per cent of variation explained by these factors are 11.28, 7.03 and 6.52 per cent respectively. The next three factors identified by the EFA are informativeness, decision making and hard work since their Eigen values are 3.8865, 3.7091 and 3.6945 respectively. The per cent of variation explained by these three factors are 5.55, 5.30 and 5.28 per cent, respectively.

The next three factors identified by the EFA are problem solving, confidence and enterprising since their Eigen values are 2.9808, 2.8227 and 2.2965 respectively. The per cent of variation explained by these three factors are 4.25, 4.03 and 3.28 per cent respectively. The last three factors identified by the factor analysis are personality, sincerity and forecasting ability since their Eigen values are 2.1173, 1.8986 and 1.7345 respectively. The per cent of variation explained by these three factors are 3.02, 2.71 and 2.47 per cent respectively. All the 12 factors explain the 70 variables to an extent of 60.72 per cent. The analysis result in 12 factors leading to entrepreneurial traits among the respondents.

Reliability and validity of variables in Coordination

In total, there are twelve variables included in coordination. It is important to examine the reliability and validity of variables in coordination. The confirmatory factors analysis (CFA) has been administered for their purpose. The reliability has been tested with the help of Cronbach alpha. The results are given in Table 3.

TABLE 3
Reliability and Validity of variables in Coordination

S.No	Variables relating to Coordination	Standardised factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Capable of encouraging others	0.8988	3.9969*	0.8088	0.7819	55.96
2	Inspiring others	0.8504	3.8118*			
3	Moving friendly with others	0.8099	3.5961*			
4	Guiding other in their work	0.7842	3.4509*			
5	Accommodating others to carryout task	0.7596	3.3896*			
6	Getting helps from others	0.7417	3.2483*			
7	Helping others	0.7226	3.0971*			
8	Accepting others with open minded	0.6909	2.9661*			
9	Appreciating others	0.68170	2.8089*			
10	Taking effort to encourage others	0.6549	2.5969*			
11	Interested in	0.6308	2.3117*			

	working with others					
12	Like challenges giving scope for thinking differently	0.6211	2.1084*			

*Significant at five per cent level

The standardised factor loading of the variables in coordination are greater than 0.60 which shows the content validity. The significance of 't' statistics of the standardized factor loading of the variables in coordination reveals the convergent validity. It is also proved by the composite reliability and average variance extracted since these are greater than it's minimum threshold of 0.50 and 50.00 per cent respectively. The twelve variables included in coordination explain it to an extent of 80.88 per cent since its Cronbach alpha is 0.8088.

Reliability and Validity of variables Relating to Innovativeness

In total there are eight variables in innovativeness which are identified by the explanatory factor analysis. Before summarising the scores of the variables in innovativeness, it is imperative to examine the reliability and validity with the help of confirmatory factor analysis. The overall reliability of the variables in innovativeness has been tested with the help of Cronbach alpha. The results are present in Table 4

TABLE 4
Reliability and Validity of variables in Innovativeness

S.No	Variables relating to innovativeness	Standardised factor loading	't' Statistics	Cronbach alpha	Composite reliability	Average variables Extracted
1	Willing to do new things and to accept new ideas	0.9097	1.2144*	0.8117	0.7906	56.04
2	My new ideas mostly got the approval of my friends	0.8649	3.9676*			
3	Like to scale new heights	0.8208	3.7121*			
4	Loving newness	0.8011	3.5676*			
5	Taking new initiatives	0.7845	3.3918*			
6	Finding new ways of answering questions	0.7309	3.0172*			
7	Interested in writing assignments on innovative topics	0.6776	2.6917*			
8	Taking right decision at the right time	0.6344	2.3894*			

*Significant at five per cent level

The standardised factor loading of the variables in innovativeness varies from 0.6344 to 0.9097 which shows the content validity of the factor. The convergent validity of the factor is proved since the 't' statistics of the standardised factor loading to the variables in innovativeness are significant at five per cent level. It is also

supported by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The eight variables included in innovativeness explain it to an extent of 81.17 per cent since its cronbach alpha is 0.8117.

Reliability and Validity of variables in Optimism

The optimism factor consists of nine variables which are noted by the exploratory factor analysis. It is extracted to confirm the reliability and validity of variables in optimism factor summarizing the score of the variable in it. The confirmatory factor analysis has been administered for this purpose. The Cronbach alpha has been computed to examine its overall reliability. The results are given in Table 5.

TABLE 5
Reliability and Validity of variables in optimism

S.No	Variables relating to optimism	Standardised factor loading	't' Statistics	cronbach alpha	Composite reliability	Average variables Extracted
1	Facing problem boldly	0.8454	3.8661*	0.7804	0.7646	53.91
2	Facing exams without fear	0.8166	3.7104*			
3	Giving positive feedback	0.8082	3.6891*			
4	Failure never deter me from trying further	0.7671	3.3896*			
5	Courageous to meet the unknown	0.7339	3.1144*			
6	Registering successes always	0.7024	2.8041*			
7	Holding positive attitude when things go wrong	0.6817	2.6098*			
8	Withstand physical and mental stress	0.6546	2.4542*			
9	After failure, I am able to pick myself up and proceed further	0.6417	2.3969*			

* Significant at five per cent level

The nine variables included in the 'optimism' factor explain it to an extent of 78.04 per cent since its cronbach alpha in 0.7804. The content validity of the factor is proved since the standardised factor loading of the variables in it are greater than 0.60. The convergent validity is proved since the 't' statistics of the standardised factor loading of the variables in optimism are significant at five per cent level. It also supported by the composite reliability and average variance extracted since they are greater than it's minimum threshold of 0.50 and 50.00 per cent respectively.

Reliability and Validity of variables Relating to Informativeness

The scores of the seven variables in informativeness have been included for confirmatory factor analysis in order to examine the reliability and validity of variables in informativeness. The cronbach alpha has been computed in order to reveal the overall reliability of the variables in informativeness. The results are illustrated in Table 6.

TABLE 1.6
Reliability and Validity of variables Relating to Informativeness

S.No	Variables relating to Informativeness	Standardised factor loading	't' Statistics	cronbach alpha	Composite reliability	Average variables Extracted
1	Excelling in the academic activities	0.8709	3.8144*	0.7696	0.7708	54.91
2	Not hesitating to clarify doubts	0.8224	3.4173*			
3	Having the habit of extra reading	0.7968	3.2676*			
4	Always consult teachers on subjects to learn more	0.7544	3.9096*			
5	Winning prizes in the competitions	0.7192	3.7318*			
6	Attending different courses besides regular course	0.6683	2.5969*			
7	Reading dailies regularly	0.6408	2.3814*			

* Significant at five per cent level

The standardised factor loading of variables in informativeness varies from 0.6408 to 0.8709 which reveals the content validity of the factor. The significance of 't' statistics of the standardised factor loading of the variables in informativeness are revealing the convergent validity. It is also proved by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The included seven variables in informativeness explain it to an extent of 76.96 per cent since its cronbach alpha is 0.7696.

Reliability and Validity of variables Relating to Decision Making

Seven variables are included in the decision making factor. It is essential to examine the reliability and validity of variables in decision making factor. In order to examine its reliability and validity the confirmatory factor analysis has been executed for this purpose. The cronbach alpha has been computed in order to reveal the overall reliability. The results are presented in Table 7.

TABLE 7
Reliability and Validity of variables Relating to Decision Making

S.No	Variables relating to Decision Making	Standardised factor loading	't' Statistics	cronbach alpha	Composite reliability	Average variables Extracted
1	Taking decisions even when outcome is not sure	0.9046	4.1733*	0.8022	0.7811	56.04
2	Interested in taking quick decisions	0.8371	3.4588*			
3	Capable of deciding on my higher studies	0.8044	3.2173*			
4	Not depending on	0.7679	3.0146*			

	others to decide					
5	While shopping, choice of dress is mine	0.7238	3.8447*			
6	Never looks back	0.6691	2.5973*			
7	I like teachers who are more creative in their approach	0.6407	2.3961*			

* Significant at five per cent level

The seven variables included in decision making factor explain it to an extent of 80.22 per cent since its cronbach alpha is 0.8022. The standardised factor loading of the variables in decision making factor are greater than 0.60 which reveals the content validity. The significance of 't' statistic of the standardised factor loading of variables in decision making factor reveal the content validity. It is also proved by the composite reliability and average variable extracted since they are greater than its minimum threshold 0.50 and 50.00 per cent respectively.

Reliability and Validity of Variables Relating to Hard work

The hard work factor consists of seven variables which are noticed by the exploratory factor analysis. The scores of the variables in hard work have been included for confirmatory factor analysis in order to examine the reliability and validity of variables in it. The overall reliability has been extracted with the help of cronbach alpha. The variables are shown in Table 8.

TABLE 8
Reliability and Validity of Variables in Hard work

S.No	Variables relating to hard work	Standardised factor loading	't' Statistic	cronbach alpha	Composite reliability	Average variables Extracted
1	Taking more effort to complete a task	0.8227	4.7447*	0.7811	0.7642	52.86
2	I spend more time to score good marks	0.8018	3.6117*			
3	Won't put off things	0.7667	3.4091*			
4	Prepared to travel long distance without advance booking of tickets	0.7508	3.3898*			
5	Doing regular and continuous preparation for exams	0.7345	3.1172*			
6	Willing to study long hours	0.6917	2.8661*			
7	Mentally and physically fit to do hard work	0.6682	2.4886*			

* Significant at five per cent level

Seven variables are included in hard work factor which explain it to the extent of 78.11 per cent since its cronbach alpha is 0.7811. The standardised factor loading of the variables in hard work are greater than 0.60 which shows the content validity. The significance of 't' statistic of the standardised factor loading of variables

in hard work reveal the composite reliability and average variable extracted since these are greater than its minimum threshold 0.50 and 50.00 per cent respectively.

Reliability and Validity of variables Relating to Problem Solving Skills

The exploratory factor analysis identified five variables in problem solving skills factor. The scores of the variables in problem solving skills are included for confirmatory factor analysis in order to examine the reliability and validity of variables in it. The overall reliability in the factors has been tested with the help of cronbach alpha. The results are illustrated in Table 9.

TABLE 9
Reliability and Validity of variables Relating to Problem Solving Skills

S.No	Variables relating to problem solving skills	Standardised factor loading	't' Statistics	cronbach alpha	Composite reliability	Average variables Extracted
1	Having alternative plan for future studies	0.8545	3.8414*	0.7749	0.7502	52.17
2	Taking decisions after analysing the pros and cons	0.8017	3.3886*			
3	Friends approach me for solving their problems	0.7595	3.1965*			
4	Flexibility in solving problems	0.7344	2.9969*			
5	Realising and overcoming the problems	0.6849	2.8082*			

* Significant at five per cent level

The standardised factor loading of variables in problem solving skills are varying from 0.6849 to 0.8545 which reveals the content validity. The standardised factor loading of the variables in this factor reveals the content validity. It is supported by the composite reliability and average variance extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively. The included variables in problem solving factor explain it to an extent of 77.49 per cent since its cronbach alpha is 0.7749.

Reliability and Validity of variables Relating to Confidence

The 'confidence' factor consists of five variables which were identified by the exploratory factor analysis. Before summarising the scores of variables in confidence, it is essential to examine its reliability and validity. The confirmatory factor analysis has been administered for this purpose. The overall reliability has been estimated with the help of cronbach alpha. The variables are illustrated in Table 10.

TABLE 10
Reliability and Validity of variables Relating to Confidence

S.No	Variables relating to confident	Standardised factor loading	't' Statistics	cronbach alpha	Composite reliability	Average variables Extracted
1	Taking initiation for doing things	0.9117	4.0868*	0.8021	0.7844	55.92
2	Always going in for	0.8408	3.3969*			

	excellence					
3	Accepting the task without hesitation	0.7668	2.9117*			
4	Bold enough to visit unknown places independently	0.7349	2.6919*			
5	When I take a job, I am always confident that I can carry it out	0.6546	2.3891*			

* Significant at five per cent level

The five variables included in confidence factor explain the reliability and validity of the variables to an extent of 80.21 per cent since its cronbach alpha is 0.8021. The standardised factor loading of the variables in confidence factor reveals the content validity. The significance of 't' statistic of the standardised factor loading of the variables shows its content validity. It is also proved by the composite reliability and average variable extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively.

Reliability and validity of variables Relating to Enterprising

The exploratory factor analysis identified the variables included in the enterprising factor. The scores of the variables in enterprising are included for confirmatory factor analysis in order to confirm the reliability and validity of variables in it. The overall reliability has been estimated with the help of cronbach alpha. The results are shown in the Table 11.

TABLE 11
Reliability and Validity of variables Relating to Enterprising

S.No	Variables relating to Enterprising	Standardised factor loading	't' Statistic	cronbach alpha	Composite reliability	Average variables Extracted
1	Talk openly and give straight answers	0.8491	3.7331*	0.8091	0.7842	53.45
2	Creative in writing assignments	0.7608	3.3844*			
3	Maintaining physical and emotional balance	0.6886	2.5969*			

* Significant at five per cent level

The standardised factor loading of variables in enterprising factor is varying from 0.6886 to 0.8491 which reveals the content validity. The significance of 't' statistics of the standardised factor loading reveals the convergent validity. It is also supported by the composite reliability and average variance extracted since these are greater than its standard minimum threshold of 0.50 and 50.00 per cent respectively. The variables included in enterprising factor explain its reliability and validity to an extent of 80.91 per cent since its cronbach alpha is 0.8091.

Reliability and Validity of variables Relating to Punctuality

The punctuality factor consists of three variables. It is informative to examine the reliability and validity of variables in punctuality factor before summarising the scores of the variables in it. The confirmatory factor analysis has been administrated for this purpose. The overall reliability has been estimated with the help of cronbach alpha. The results are shown in Table 12.

TABLE 12
Reliability and Validity of variables Relating to Punctuality

S.No	Variables relating to punctuality	Standardised factor loading	't' Statistics	cronbach alpha	Composite reliability	Average variables Extracted
1	Submission of assignments and home work in time	0.8117	3.2673*	0.7242	0.7041	51.49
2	Taking right decision at right time	0.7228	2.8868*			
3	Don't keep problems pending	0.6089	2.0917*			

* Significant at five per cent level

The three variables included in punctuality factor explain to an extent of 72.42 per cent since its cronbach alpha is 0.7242. The standardised factor loading of the variables in punctuality factor are greater than 0.60 which shows the content validity. The significance of 't' statistics of the standardised factor loading in punctuality factor shows the convergent validity. It is also supported by the composite reliability and average variable extracted since these are greater than its minimum threshold of 0.50 and 50.00 per cent respectively.

Variables in Sincerity Factor and its reliability

The sincerity factor consists of two variables in it. Before summarising the scores of the variables in sincerity factor, it is essential to examine the reliability and validity of variables in sincerity factor. The confirmatory factor analysis has been administrated for this purpose. The overall reliability has been tested with the help of cronbach alpha. The results are presented in Table 13.

TABLE 13
Reliability and Validity of variables Relating to Sincerity

S.No	Variables relating to sincerity	Standardised factor loading	't' Statistics	cronbach alpha	Composite reliability	Average variables Extracted
1	Use to attend the examination with full preparation	0.8099	3.1738*	0.7394	0.7102	52.76
2	Spend holidays usefully	0.6593	2.3969*			

* Significant at five per cent level

The standardised factor loading of variables in sincerity factor varies from 0.6593 to 0.8099 which shows the content validity. The convergent validity is proved since the 't' statistics of the standardised factor loading of the variables in sincerity factor are significant at five per cent level. It is also proved by the composite validity and average variance extracted since these are greater than 0.50 and 50.00 per cent respectively. The included two variables in sincerity factor explain it to an extent of 73.94 per cent since its cronbach alpha is 0.7394.

Variables Relating to Forecasting ability factor and its reliability

The forecasting ability factor included two variables in it. Before summarising the scores of the variables in it, it is necessary to examine the reliability and validity of variables in forecasting ability factor with the help of confirmatory factor analysis. The overall reliability has been tested with the help of cronbach alpha. The results are given in Table 14.

TABLE 14
Reliability and validity of variables in Forecasting ability

S.No	Variables in forecasting ability	Standardised factor loading	't' Statistics	cronbach alpha	Composite reliability	Average variables Extracted
1	Planning things in advance	0.8644	3.4962*	0.7889	0.7642	52.91
2	Preparation for future carrier planning	0.7279	2.5969*			

* Significant at five per cent level

The two variables included in forecasting ability factor explain to an extent of 78.89 per cent since its cronbach alpha is 0.7889. The standardised factor loading of the variables in forecasting ability factor are greater than 0.60 which shows its content validity. The significance of 't' statistics of the standardised factor loading shows the overall convergent validity. It is also proved by the composite reliability and average variable extracted since they are greater than its minimum threshold of 0.50 and 50.00 per cent respectively.

Respondents view about the Factors leading to Entrepreneurial Traits

The respondents view about the factors leading to entrepreneurial traits are examined with the help of 12 factors namely coordination, innovativeness, optimism, informativeness, decision making skill, hard work, problem solving, confidence, enterprising, punctuality, sincerity and forecasting ability. The scores of the above said factors have been computed by the mean score of the variables in each factor. The mean score of each factor among the groups of respondents have been computed along with its 'F' statistics. The results are given in Table 15.

TABLE 15
Respondents view about the Factors leading to Entrepreneurial Traits

S.No	Factors	Mean score of the Respondents			F statistics
		Urban	Semi urban	Rural	
1	Coordination	3.0889	3.5869	3.9197	3.6557*
2	Innovativeness	3.9197	3.3441	3.0461	3.3841*
3	Optimism	3.8082	3.4509	3.2671	3.0991*
4	Informativeness	3.6889	3.1703	3.3089	2.9969
5	Decision making	3.7172	3.8684	3.5341	2.0441
6	Hard work	3.3038	3.8991	3.9677	3.1172*
7	Problem solving	3.8917	3.3842	3.0441	3.4509*
8	Confidence	3.8084	3.6674	3.5084	1.8967
9	Enterprising	3.9692	3.3845	3.2171	3.2676*
10	Punctuality	3.1171	3.2671	3.3089	1.0946
11	Sincerity	3.8844	3.6649	3.7334	0.9697
12	Forecasting ability	3.8911	3.5344	3.1782	3.2673*

* Significant at five per cent level

The highly viewed factors leading to entrepreneurial traits by the urban college students are enterprising and innovativeness since their mean sores are 3.9692 and 3.9197 respectively. Among the semi-urban college students, the highly viewed factors leading to entrepreneurial traits are hard work and decision making skills since their mean score are 3.8991 and 3.8684 respectively. Among the rural college students, the highly viewed

factors leading to entrepreneurial traits are hard work and coordination since their mean scores are 3.9677 and 3.9197 respectively

Regarding the respondents view about the factors leading to entrepreneurial traits, significant difference among the three groups of respondents have been noticed in the case of seven out of 12 factors since their respective 'F' statistics are significant at five per cent level.

Findings

- It is identified that the important factors leading to entrepreneurial traits among the students are coordination, innovativeness, optimism, informativeness, decision making, hard work, problem solving, confidence, enterprising, personality, sincerity and forecasting ability. Among the various factors the dominant factors which leads to entrepreneurial traits are coordination, innovativeness and optimism since their Eigen values are 7.8974, 4.9175 and 4.5609 respectively.
- It is observed that the highly viewed factors leading to entrepreneurial traits among the urban college students are enterprising and innovativeness since their mean scores are 3.9692 and 3.9197 respectively.
- Among the semi-urban college students, the highly viewed factors leading to entrepreneurial traits are hard work and decision making since their mean score are 3.8991 and 3.8684 respectively.
- Among the rural college students the highly viewed factors leading to entrepreneurial traits are hard work and coordination since their mean scores are 3.9677 and 3.9197 respectively.
- Among the urban, semi-urban and rural college students significant difference has been noticed in the case of coordination, innovativeness, optimism, hard work, problem solving, enterprising and forecasting ability as their 'F' statistics are significant at five per cent level.
- Regarding the association between profile of college students and the respondents view on the factors leading to entrepreneurial traits, the significantly associating profile variables with the coordination and innovativeness factors are age, place of college, social group, size of family, monthly family income, fathers occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly associating profile variables with the respondents view on optimism and informativeness are social group, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- Regarding the respondents view on decision making factor, the significantly association profile variables are branch of study, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly associating profile variables regarding the respondents view of hard work are age, branch of study, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- Regarding the view on problem solving factor, the significantly associating profile variables are age, place of college, social group, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly associating profile variables with the entrepreneurial traits factor 'confidence' are place of college, social group, size of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly associating profile variables regarding the factor 'enterprising' are age, social group, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.

- Regarding the significantly associating profile variables with the entrepreneurial traits 'punctuality' are age, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- The significantly associating profile variables with the factor 'sincerity' are social group, religion, type of family, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level.
- Regarding the view on forecasting ability, the significantly associating profile variables are age, place of college, social group, religion, monthly family income, father's occupation and mother's occupation since their respective 'F' statistics are significant at five per cent level..

Suggestion

- The urban college students though they are having higher level of self confidence compared to the semi-urban and rural college students, they are having lesser mean scores as regards 'hard work', and so the urban college students should realize the importance of hard work for achieving greater things.
- As the semi-urban and rural college students are lacking in the innovative thinking and problem solving, the semi-urban and rural colleges may induce the students to organize programmes and competitions. While organizing programmes and participating in the competitions the students can display their innovativeness and they can sharpen their problem solving abilities.
- The college can create Innovation Centre and motivate the students to register their innovative or creative ideas. The students should be guided and nurtured properly to develop a product or process using their creative ideas. The college may honour the students during the college day for their creative and innovative ideas by giving certificates or prizes. This will motivate other students to come forward and do something.

Conclusion

The present study concluded that the factors leading to entrepreneurial traits are differing among the urban, semi-urban, and rural college students. As the factors leading to entrepreneurial traits differ the entrepreneurship development programmes should be designed in such away to accommodate the different target groups to make the programme successful.

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A STUDY ON DISCRIMINANT FACTORS LEADING TO ACHIEVEMENT MOTIVATION AMONG URBAN, SEMI-URBAN AND RURAL COLLEGE STUDENTS IN THOOTHUKUDI DISTRICT

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ABSTRACT

Achievement motivation is the most important characteristic of an entrepreneur. In fact, this achievement motivation helps a person to surmount the obstacles, suppress anxieties, repair misfortunes and device plans for success. The academic field of entrepreneurship has evolved dramatically over the last three decades. It has become clear that entrepreneurship can be taught. Business educators and professionals have evolved beyond the myth that entrepreneurs are born, not made. Additional support for this view comes from the literature reviews relating to entrepreneurship, and small-business management education. Most of the empirical studies surveyed indicated that entrepreneurship can be taught, or at least encouraged. In this backdrop the researcher has chosen this topic to study the achievement motivation factors discriminating the urban, semi-urban and rural college students in Thoothukudi District.

Key words: Entrepreneurship, Achievement Motivation, Discriminant factors

Introduction

The factors that motivate an individual keep changing as one climbs the ladder of age and maturity. And also, achievement of one goal sets the ball rolling for another one to be achieved. Thus, to be motivated is a constant need. There are times when one faces a period of de-motivation and everything seems bleak. It is then that they need to find what would motivate them back into action. For every individual there is a variable driving force. In fact, it is not just a single factor, but a combination of factors that lead people to achieve their goals. The fact is that with routine monotony steps in and then everything seems like stagnant waters. It feels like there is nothing new. Breaking this cycle of monotony has helped many bounce back with enthusiasm.

The entrepreneur is one of the most important inputs in the economic development of a country or of regions within the country. Entrepreneurial competence makes all the difference in the rate of economic growth. Entrepreneurial talent exists in all sections of the society. A high level of entrepreneurship is found in developed economy. The growth of entrepreneur is high, but entrepreneurship is still comparatively a scare factor in India.

Achievement motivation is the most important characteristic of an entrepreneur. In fact, this achievement motivation helps him to surmount the obstacles, suppress anxieties, repair misfortunes and device plans for success. The academic field of entrepreneurship has evolved dramatically over the last three decades. It has become clear that entrepreneurship can be taught. Business educators and professionals have evolved beyond the myth that entrepreneurs are born, not made. Additional support for this view comes from the literature review relating to entrepreneurship, and small-business



management education. Most of the empirical studies surveyed indicated that entrepreneurship can be taught, or at least encouraged. Entrepreneurial talents can be nurtured by motivating people and making them capable of perceiving and exploiting business opportunities. Realising the importance of entrepreneurship development the planners and policy makers have formulated Entrepreneur Development Programmes (EDP) for various target groups of population in the country.

All the individuals are having certain qualities which help them to accomplish their task in a desired manner. In this paper the researcher is interested to analyse the factors leading to achievement motivation among the urban, semi-urban and rural college students.

Objectives

- To examine the factors leading to achievement motivation among urban and semi-urban and rural college students.
- To identify the discriminant factors leading to achievement motivation among urban and semi-urban and rural college students.
- To summarize the findings and suggestions based on the analysis and interpretations of the study.

Scope of the study

The main aim of the study is to assess the achievement motivation of college students in Thoothukudi district and to identify the achievement motivation factors discriminating the urban, semi-urban and rural college students. This study was conducted among the outgoing under graduate arts and science college students of Thoothukudi district.

Sampling

The study attempts to measure the achievement motivation of college students in Thoothukudi district. Hence it is decided to select sample respondents from final year undergraduate students of arts and science colleges in Thoothukudi district. Stratified proportionate random sampling method was used to select the sample respondents from the population. The arts and science colleges were stratified in to three categories such as urban, semi-urban and rural on the basis of place where the college is situated. From among the final year undergraduate arts and science students ten per cent of the students were selected from each category at random as detailed in Table 1

Table 1

Population and Sample respondents

S.No	Place of College	Final year undergraduate Arts and Science students	Sample Respondents
1	Urban	1,484	148
2	Semi-urban	2,942	294
3	Rural	1,340	134
	Total	5,766	576

Methodology

The present study was based on both primary and secondary data. Interview schedule was used to collect the primary data from the sample respondents. A well structured interview schedule was prepared



after consulting the experts in the field. Before finalizing the interview schedule, a pilot study was made and with that response, final interview schedule was prepared to collect the information required for the study. The relevant secondary data were collected from the books, journals, magazines, and published materials. The information available in the website was also collected for the study.

Students achievement motivation

The level of students' achievement motivation is measured with the help of 37 variables under eight dimensions. The mean score of each dimension among the urban, semi-urban and rural college students have been computed separately. The one way analysis of variance has been executed to find out the significant difference among the three groups of students towards each dimension. The results are given in Table 2.

Table 2
Students view about the Achievement Motivation

S. No	Components of Achievement Motivation	Mean score among students			F Statistics
		Urban	Semi-urban	Rural	
1	Score on academic motivation	3.8557	3.1449	3.0962	3.3991*
2	Score on need for achievement	3.8452	3.2559	3.0801	3.4208*
3	Score on academic challenge	3.9204	3.3347	3.1053	3.5173*
4	Score on attitude towards education	3.8925	3.4047	3.1509	3.4676*
5	Score on meaningfulness of task and work methods	3.8737	3.2752	3.1379	3.2182*
6	Score on attitude towards teachers	3.6361	3.4901	3.7087	0.7389
7	Score on general interests and sports	3.6348	3.6337	3.6481	0.4551
8	Score on importance of marks	3.8786	3.3369	3.0733	3.1173*
	Score on achievement motivation	3.8026	3.3684	3.2086	3.0965*

*Significant at five per cent level

Among the urban college students the highly viewed dimensions of achievement motivation are 'academic challenge' and 'attitude towards education' since their mean scores are 3.9204 and 3.8925 respectively.

The highly viewed dimensions of achievement motivation among the semi-urban college students are 'general interests and sports' and 'attitude towards teachers' since their mean scores are 3.6337 and 3.4901 respectively.



As regards the rural college students the highly viewed dimensions of achievement motivation are 'attitude towards teachers' and 'general interests and sports' since their mean scores are 3.7087 and 3.6481 respectively.

Regarding the students view towards the various dimensions of achievement motivation, significant difference among the three group of students have been noticed in the case of six out of eight dimensions since their 'F' statistics are significant at five per cent level.

The overall achievement motivation among the urban college students is higher than the overall achievement motivation among the semi-urban and rural students. There is a significant difference among the three group of students have also been noticed regarding their view on achievement motivation since its 'F' statistics is significant at five per cent level.

Discriminant components of Achievement Motivation (CAM) among the Urban and Semi-urban College Students.

The level of achievement motivation among the urban college students differ from the semi-urban college students. So it is imperative to identify the important discriminant factor which differentiates the urban and semi-urban college students. For the purpose of discriminant factor analysis initially, the mean difference and its statistical significance have been computed. The discriminant power has been estimated with the help of wilks lambda. The results are given in Table 3.

Table 3

Mean difference and Discriminant power of component of Achievement Motivation among Urban and Semi urban College Students

S. No	Component of Achievement Motivation (CAM)	Mean score among students		Mean difference	't' Statistics	Wilks lambda
		Urban	Semi urban			
1	Academic Motivation (X1)	3.8557	3.1449	0.7108	2.8569*	0.1173
2	Need for achievement (X2)	3.8452	3.2559	0.5893	2.2236*	0.1504
3	Academic challenge (X3)	3.4204	3.3347	0.5857	2.1186*	0.1669
4	Attitude towards education (X4)	3.8925	3.4047	0.4878	1.4559	0.2456
5	Meaningfulness of task and work methods (X5)	3.8737	3.2752	0.5985	2.3944*	0.1771
6	Attitude towards teachers (X6)	3.6361	3.4901	0.1460	0.3949	0.4179
7	General interests and sports (X7)	3.6348	3.6337	0.0011	0.1887	0.5887
8	Importance of marks (X8)	3.8786	3.3369	0.5417	2.0396*	0.1338

*Significant at five per cent level



The significant mean differences are noticed in the case of academic motivation, need for achievement, academic challenge, meaningfulness of task and work methods and importance of marks since their respective mean differences are significant at five per cent level.

The higher mean difference is noticed in the case of 'academic motivation' and 'meaningfulness of task and works methods' since their mean differences are 0.7108 and 0.5985 respectively.

The higher discriminant power is noticed in the case of 'academic motivation' and 'importance of marks' since their respective wilks lambda are 0.1173 and 0.1338 respectively.

The significant CAMs are included to estimate the two group discriminant analysis. The unstandardised procedure has been followed to estimate the two group discriminant function. The estimated function is:

$$Z = 0.6917 + 0.1739 X_1 + 0.1031 X_2 + 0.1294 X_3 + 0.1337 X_5 + 0.1084 X_8$$

The relative contribution of discriminant CAMs in total discriminant score is computed by the product of discriminant coefficient and the mean difference of the respective CAM. The results are shown in Table 4.

Table 4

Relative contribution of Discriminant CMA in Total Discriminant Score (TDS)

S.No	CAM	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Academic Motivation (X1)	0.1739	0.7180	0.1236	30.98
2	Need for achievement (X2)	0.1031	0.5893	0.0608	15.24
3	Academic challenge (X3)	0.1294	0.5857	0.0758	19.00
4	Meaningfulness of task and work methods (X5)	0.1337	0.5985	0.0800	20.06
5	Importance of marks (X8)	0.1084	0.5417	0.0587	14.72
	Total			0.3989	100.00
Per cent of cases currently classified : 74.88					

The higher discriminant coefficients are identified in the case of 'academic motivation' and 'meaningfulness of task and work methods' since their discriminant coefficients are 0.1739 and 0.1337 respectively. It shows the higher significance of above said two CAMs in discriminant function.

The highest relative contribution in total discriminant score is noticed in the case of above said two CMAs since their relative contribution are 30.98 and 20.06 per cent respectively. The estimated two group discriminant analysis currently classified the cases to an extent of 74.88 per cent.

The analysis reveals that the important discriminant CAMs among the urban and semi-urban college students are 'academic motivation' and 'meaningfulness of task and work methods' which are higher among the urban college students than among the semi urban students.



Discriminant CAMs among the urban and Rural college Students

It is imperative to identify the important discriminant CAMs among the urban and rural college students. The score on eight CAMs have been included for the analysis. The mean difference and its statistical significance have been computed initially. The discriminant power of CAMs has been estimated with the help of Wilks lambda. The results are given in Table 5.

Table 5

Mean difference and Discriminant Power of CAM among Urban and Rural students

S. No	Component of Achievement Motivation (CAM)	Mean score among students		Mean difference	't' Statistics	Wilks Lambda
		Urban	Rural			
1	Academic Motivation (X1)	3.8557	3.0962	0.7595	3.1447*	0.1362
2	Need for achievement (X2)	3.8452	3.0801	0.7651	3.2889*	0.1504
3	Academic challenge (X3)	3.4204	3.1053	0.8151	3.9084*	0.1173
4	Attitude towards education (X4)	3.8925	3.1509	0.7416	2.9906*	0.1662
5	Meaningfulness of task and work methods (X5)	3.8737	3.1379	0.7358	2.9092*	0.1704
6	Attitude towards teachers (X6)	3.6361	3.7087	-0.0726	0.4177	0.4669
7	General interests and sports (X7)	3.6348	3.6481	-0.0133	0.3218	0.4082
8	Importance of marks (X8)	3.8786	3.0733	0.8053	3.8182*	0.1089

*Significant at five per cent level

The higher mean differences are noticed in the case of 'academic challenge' and 'importance of marks' since their mean differences are 0.8151 and 0.8053 respectively, the significant mean differences are identified in the case of six CAMs out of eight CAMs since their respective 't' statistics are significant at five per cent level.

The higher discriminant power is noticed in the case of 'importance of marks' and 'academic challenge' since their respective wilks lambda are 0.1089 and 0.1173.

The significant CAMs have been included to estimate the two group discriminant function. The unstandardised procedure has been followed to estimate the function. The estimated functions are:

$$Z = 1.2641 + 0.1196 X1 + 0.1532 X2 + 0.1779 X3 + 0.1491 X4 + 0.0996 X5 + 0.1024 X8$$

The relative contribution of discriminant CAMs in the total discriminant score is estimated by the product of discriminant coefficient and the mean difference of the respective CAMs. The results are shown in Table 6.



Table 6

Relative contribution of discriminant CMA in Total Discriminant Score (TDS)

S.No	CAM	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Academic Motivation (X1)	0.1196	0.7595	0.0908	14.66
2	Need for achievement (X2)	0.1532	0.7651	0.1172	18.92
3	Academic challenge (X3)	0.1779	0.8151	0.1450	23.41
4	Attitude towards education (X4)	0.1491	0.7416	0.1106	17.86
5	Meaningfulness of task and work methods (X5)	0.0996	0.7358	0.0733	11.83
6	Importance of marks (X8)	0.1024	0.8053	0.0825	13.32
	Total			0.6194	100.00
Per cent of cases currently classified : 76.44					

The higher discriminant coefficients are noticed in the case of 'academic challenge' and 'need for achievement' since their discriminant coefficients are 0.1779 and 0.1532 respectively. It shows the higher influence of the above said two CAMs in discriminant function.

The highest relative contribution of discriminant CMA in TDS is noticed in the case of 'academic challenge' and 'need for achievement' since their relative contribution are 23.41 and 18.92 per cent respectively. The estimated two group discriminant function currently classifies the cases to an extent of 76.44 percent.

The analysis reveals that the important discriminant CAMs among the urban and rural college students are 'academic challenge' and 'need for achievement' which are higher among the urban college students than among the rural college students.

Discriminant components of Achievement Motivation (CAM) among the Semi-urban and Rural students.

The level of achievement motivation among the semi-urban college students may differ from the rural college students. It is essential to analyse the important discriminant CAM among the two groups of college students. Initially, the mean difference for all the eight components of achievement motivation and their respective statistical significance has been computed. The discriminant power of each CAM has been estimated with the help of Wilks lambda . The results are given in Table 7.



Table 7

Mean difference and Discriminant Power of Achievement Motivation among
Semi-urban and Rural students

S. No	Component of Achievement Motivation (CAM)	Mean score among students		Mean difference	't' Statistics	Wilks lambda
		Semi urban	rural			
1	Academic Motivation (X1)	3.8557	3.0962	0.7595	3.0542*	0.1663
2	Need for achievement (X2)	3.8452	3.0801	0.7651	3.2673*	0.1504
3	Academic challenge (X3)	3.9204	3.1053	0.8151	3.8084*	0.1667
4	Attitude towards education (X4)	3.8925	3.1509	0.7416	2.9911*	0.1391
5	Meaningfulness of task and work methods (X5)	3.8737	3.1379	0.7358	2.7334*	0.1492
6	Attitude towards teachers (X6)	3.6361	3.7087	-0.0726	-0.7919	0.4919
7	General interests and sports (X7)	3.6348	3.6481	-0.0133	-0.3994	0.4033
8	Importance of marks (X8)	3.8786	3.0733	0.8053	3.6696*	0.1399

*Significant at five per cent level

The significant mean differences are identified in the case of 'academic motivation', 'need for achievement', 'academic challenge', 'attitude towards education', 'meaningfulness of task and work methods' since their respective 't' statistics are significant at five per cent level.

The higher mean difference is noticed in the case of 'academic challenge' and 'important of marks' since their mean differences are 0.8151 and 0.8053 respectively.

The significant CAM are included to estimate the two group discriminant function. The estimated functions are:

$$Z = 0.4092 + 0.1688 X1 + 0.1792 X2 + 0.2042 X3 + 0.1984 X4 + 0.0947 X5 + 0.0459 X8$$

The relative contribution of discriminant CAM in total discriminant score is estimated by the product of discriminant coefficient and the mean difference of the respective CAM. The results are shown in Table 8



Table 8

Relative contribution of discriminant CMA in Total Discriminant Score (TDS)

S.No	CAM	Discriminant coefficient	Mean difference	Product	Relative contribution in TDS
1	Academic Motivation (X1)	0.1688	0.7595	0.1282	18.78
2	Need for achievement (X2)	0.1792	0.7651	0.1371	20.08
3	Academic challenge (X3)	0.2042	0.8151	0.1664	24.37
4	Attitude towards education (X4)	0.1948	0.7416	0.1445	21.16
5	Meaningfulness of task and work methods (X5)	0.0947	0.7358	0.0697	10.21
6	Importance of marks (X8)	0.0459	0.8053	0.0369	5.40
	Total			0.6828	100.00
Per cent of cases currently classified : 81.08					

The higher discriminant coefficients are noticed in the case of 'academic challenges' and 'attitude towards education' since their discriminant coefficients are 0.2042 and 0.1948 respectively. It shows the higher significance of the above said two CAMs in discriminant function.

The highest relative contribution of CAM in TDS is noticed in the case of 'academic challenge' and 'attitude towards education' since their relative contribution are 24.37 and 21.16 per cent respectively. The estimated two group discriminant analysis currently classified the cases to an extent of 81.08 percent.

The analysis reveals that the important discriminant factor relating to achievement motivation among the semi-urban and rural college students are 'academic challenge' and 'attitude towards education' which are higher among the semi-urban college students than the rural college students.

FINDINGS

Findings relating to Achievement Motivation

- It is observed that the highly viewed components of achievement motivation by the urban college students are 'academic challenge' and 'attitude towards education' since their mean score are 3.9204 and 3.8925 respectively.
- As regards the semi-urban college students, the highly viewed components of achievement motivation are 'general interests and sports' and 'attitude towards teachers' since their mean score are 3.6337 and 3.4901 respectively.
- Among the rural college students the highly viewed components of achievement motivation are 'attitude towards teachers' and 'general interests and sports' since their mean score are 3.7087 and 3.6481 respectively.



- Significant difference has been noticed among the three groups of college students in respect of achievement motivation. They are academic motivation, need for achievement, academic challenge, attitude towards education, meaningfulness of task and work methods and importance of marks since their 'F' statistics are significant at five per cent level.
- The overall achievement motivation among the urban college students is higher than the semi-urban and rural college students.

Discriminant factors of Achievement motivation among the urban and semi- urban students

- It is observed that discriminant power of achievement motivation among the urban and semi-urban group of respondents significant mean difference are noticed in the case of academic motivation, need for achievement, academic challenge, meaningfulness of task and work methods and importance of marks as their 't' statistics are significant at five per cent level.
- The higher discriminant coefficient is identified in the case of academic motivation since its discriminant coefficient is 0.1739. The analysis reveals that the important discriminant achievement motivation component among the urban and semi-urban respondents is 'academic motivation' which is higher among the urban students than the semi-urban students.

Discriminant factors of Achievement Motivation among the urban and rural students

- It is identified that discriminant power of achievement motivation among the urban and rural group of respondents significant mean difference are noticed in the case of academic motivation, need for achievement, academic challenge, attitude towards education, meaningfulness of task and work methods and importance of marks since their 't' statistics are significant at five per cent level.
- The higher discriminant coefficient is identified in the case of academic challenge since its discriminant coefficient is 0.1779. The analysis reveals that the important discriminant achievement motivation component among the urban and rural students is 'academic challenge' which is higher among the urban students than the rural students.

Discriminant factors of Achievement motivation among the semi-urban and rural students

- It is found that discriminant power of component of achievement motivation among the semi-urban and rural group of respondents significant mean difference is noticed in the case of academic motivation, need for achievement, academic challenge, attitude towards education, meaningfulness of task and work methods and importance of marks since their 't' statistics are significant at five per cent level.
- The higher discriminant coefficient is identified in the case of academic challenge since its discriminant coefficient is 0.2042. The analysis reveals that the important discriminant achievement motivation component among the semi-urban and rural students is 'academic challenge' which is higher among the semi-urban students than the rural students.

Suggestion

- ❖ While comparing urban and semi-urban college students the semi-urban college students are not giving much important to enrich their knowledge, so the teachers should give more attention to the semi-urban students.



- ❖ While comparing urban and rural college students the rural college students are not interested to get excellent results in academic competition, so the teachers should make them to realize the important of results in every activity.
- ❖ While comparing semi-urban and rural college students the rural college students are incapable to find a solution to problems, so the teachers should improve analytical skill of rural students by offering some practical exposure.

Conclusion

The present study concluded that the factors leading to achievement motivation are differing among the urban, semi-urban, and rural college students. It reveals the motivation the students are getting in their respective colleges. The environment in which the students are undergoing their education will also play a vital role in the achievement motivation of the students.

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