

Research Article

Performance of Entrepreneurs' Involvement of Industrial Estates in Southern Districts of Tamilnadu - A Study

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Abstract

The promotion of indigenous entrepreneurship is a major objective in any developing country and industrial estates are recognized as one of the most promising ways of achieving this objective. One of the important objectives of the Government in its industrialization process are decentralization of industries and the balanced regional development. Government policies are aimed at diverting the industries from large concentration centers to relatively less developed or depressed areas and facilitating the establishment of industries in these areas. The small-scale industrial sector which plays a pivotal role in the Indian economy in terms of employment and growth has recorded a high rate of growth since independent in spite of stiff competition from the large scale sector and not so encouraging support from the Government. The enterprise involvement indicates the level of participation by the respondents in the enterprising. The enterprise involvement by the respondents is assessed by ten important aspects, namely source of inspiration, help during setting up stage, managing various function, major decision, time spent towards unit related work, satisfaction, training, pride in being an entrepreneur, membership and future plans.

Keywords: Performers; Entrepreneurship; Industries; Involvement and personal traits

Introduction

The principal objective of industrial estate programme is to achieve the promotion of small scale industries by providing facilities, assistance and guidance at every stage of establishment, operation and management. It aids in the expansion, diversification and modernization of existing small industries sector. It enables the small industry to become a sector of industrial activity. Finally the simulation of local entrepreneurship is possible through the development of small industries in concentrated location such as industrial estates.

The availability of standard factory on rent or hire purchase, common service facilities such a tool room maintenance and repair workshops and testing laboratories are major inducements to ensure industrial operation.

Industrial estates make possible the expansion; diversification and modernization of the existing small scale industries. Expansion is possible as this provides organized and well developed space for the existing industry, the provision of technical and managerial counseling in the estates, evaluation diversification and modernization.

The promotion of indigenous entrepreneurship is a major objective in any developing country and industrial estates are recognised as one of the most promising ways of achieving this objective. It is a major inducement to small entrepreneurs with the limited financial means since it provides factories on hire purchase basis or rental basis. Their existence is an another adjunct to entrepreneurship, since industrial extension services without assistance to people with little or no technical and managerial knowledge will not motivate people to take up an industrial occupation.

In this sense an industrial estate is a promotional instrument and not a real estate operation. Further, it is not a substitute or an overall development programme for small scale industries.

One of the important objectives of the Government in its industrialization process are decentralization of industries and the balanced regional development. Government policies are aimed at diverting the industries from large concentration centres to relatively less developed or depressed areas and facilitating the establishment of industries in these areas. Government carries out these policies through programmes of incentives of which the establishment of an industrial estate is an important one. Industrial estates are constructed in backward and rural areas based on these objectives. The programme thus enables the community development through employment opportunities, with the help of local entrepreneurship etc [1,2].

Involvement

The small-scale industrial sector which plays a pivotal role in the Indian economy in terms of employment and growth has recorded a high rate of growth since independent in spite of stiff competition from the large scale sector and not so encouraging support from the Government. This is evident by the number of registered units which went up from 16,000 in 1950 to 36,000 units in 1961 and 58.57 lakhs units in 2006-07. During the last decade alone, the small-scale sector has progressed from the production of simple consumer goods to the manufacture of many sophisticated and precision products like electronic control systems, micro-wave components, electro-medical equipment, T.V. sets and the like. But not this is really a tough period for the entrepreneurs to survive because of uncontrollable variables causing unforeseen situations like changing roles of Government, threats from multinational corporations and other internal variables.

In Tamil Nadu, Tamilnadu Small Industries Development Corporation Ltd., (TNSIDCO) has established a large number of industrial estates throughout the district. However, despite these

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efforts, many units in these estates are not functioning well. Hence, an attempt has been made to survey the operational performance of industrial estates in selected districts of Tamil Nadu. This study aims at identifying the factors influencing the operational performance of industrial estates and the perception of entrepreneurs towards the functions of the industrial estates for its development in the concerned district [3].

The enterprise involvement indicates the level of participation by the respondents in the enterprising. The enterprise involvement by the respondents is assessed by ten important aspects, namely source of inspiration, help during setting up stage, managing various function, major decision, time spent towards unit related work, satisfaction, training, pride in being an entrepreneur, membership and future plans developed by Kalyani and Chandralekha [4]. The variables are rated on a five-point scale. The scores of each enterprise involvement variable are used to prepare the Enterprise Involvement Index.

Data Source

The study is based on both primary data. Primary data have been collected from the selected entrepreneurs in the southern districts (Madurai, Theni, Dindigul, Virudhunagar, Ramanathapuram and Sivaganga) of Tamil Nadu with the help of an interview schedule. Secondary data have been obtained from the books, journals, web sites and unpublished records.

Period of the study

The primary data relating to the entrepreneurs of has been collected during 2014–2015.

Framework of analysis

The't' test is applied to find out the significant difference between two means of any variables in the study.

The F-test is applied in the present study to find out the significant difference among the samples regarding the particular variable and when the variables are in interval and the number of sample is more than two groups.

The entrepreneurs are classified into good and poor performers on the basis of their average return on involvement as 8.62 per cent. The involvement is highly essential for the performance of the entrepreneurs and the performance also acts as a motivation to involvement among the entrepreneurs. There is a cyclical relationship between these two aspects. In order to analyses the association between the performance of the entrepreneurs and their involvement, the mean score of each involvement variables is calculated. The 'F' statistics is computed to find out the significant difference among the different group of entrepreneurs. The resultant mean score of the variables and their respective 'F' statistics are presented in Table 1.

From Table 1, it has been inferred that the most involved aspects among the good and poor performance are future plans and membership since their mean scores are 3.7121 and 3.1115 respectively. The mean scores of overall involvement among them are 3.1345 and 2.4510 respectively. The significant difference among the good and poor entrepreneurs are noticed in few enterprise involvement variables namely sources of inspiration, helping during setting up stage, managing various functions, time spent towards unit related work, pride in being an entrepreneur and future plans since their respective 'F' statistics are significant at 5 per cent level. The higher mean differences regarding the involvement variables among the good and poor performers are

Enterprise involvement variables	Averag	F-Statistics	
	Good performer	Poor performer	
Sources of Inspiration	3.0124	1.8212	2.6075 [*]
Help during setting up stage	2.5624	3.0514	1.2025
Managing various functions	3.2121	1.6812	2.0079 [*]
Major decisions	2.7016	1.8861	1.4072
Time spent towards unit related work	3.3517	2.5681	1.7096*
Satisfaction	3.4217	3.0527	0.8011
Training	2.5082	2.5151	0.6091
Pride in being an Entrepreneur	3.5011	2.0517	1.6227 [*]
Membership	3.5012	3.1115	0.4121
Future plans	3.7121	1.8654	2.2416 [*]
Overall Involvement	3.1345	2.4510	1.8011 [*]
*Significant at 5 percent level			

Table 1: Involvement among the entrepreneurs.

Enterprise	No. of Res	No. of Respondents		
Involvement Index	Good Performer	Poor Performer		
Up to 20	10 (8.07)	32 (31.68)	42 (18.67)	
21-40	31 (25.00)	30 (29.70)	61 (27.12)	
41-60	39 (31.45)	16 (15.84)	55 (24.44)	
61-80	30 (24.19)	17 (16.84)	47 (20.88)	
Above 80	14 (11.29)	6 (5.94)	20 (8.89)	
Total	124 (100.00)	101 (100.00)	225 (100)	

Table 2: Distribution of entrepreneurs according to involvement index.

source of inspiration and future plans, whereas the mean difference is 1.1603 and 1.8467 respectively. It reveals that the good performer has more source of inspiration and excellence in future plans whereas the poor performers are very weak in the above said two aspects.

Distribution of entrepreneurs according to involvement index

The distribution of entrepreneurs regarding their involvement index is shown in Table 2. From Table 2 it has been inferred that around 27.12 per cent of the total entrepreneurs have a high involvement index of 21-40. It is followed by 24.44 per cent of them who have an involvement index of 41-60. Only 8.89 per cent of entrepreneurs have an involvement index of above 80. Among the good performers (124), who have involvement index of less than 40 constitute 33.07 per cent. While among the poor performers (101) it is 61.38 per cent. At the same time the number of good performers who have involvement index of above 60 constitute 35.48 percent whereas among the poor performer, it is 22.78 per cent.

Correlation between profile of the entrepreneurs and their involvement

The correlation between the profile variables of the entrepreneurs and their involvement is analyzed with the help of Karl Pearson coefficient. The included profile variables are age, education, sex, caste, nature of family, marital status, family size, earning members per family, occupational background, material possession, monthly income, family income and personal traits. The score on the above said variables along with involvement index of the entrepreneurs is taken into account. The correlation between these variables is calculated separately among the good and poor performers and also among total entrepreneurs. The calculated correlation coefficient with its statistical significance is shown in Table 3.

From Table 3, it is evident that there is significant relationship

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Profile variables	Correlation	Pooled	
	Good Performer	Poor Performer	Performer
Age	-0.3110 [*]	-0.1292	-2.2172 [*]
Education	0.3512 [*]	0.0189	0.1761 [*]
Sex	0.1017	0.1235⁺	0.1141
Caste	0.0821	0.0524	0.0619
Nature of Family	0.1117	0.0189	0.0789
Marital Status	0.0192	-0.0817	0.0821
Family Size	-0.2172*	-0.1821 [*]	-0.2131 [*]
Earning members per family	0.1931	0.0813	0.1325*
Occupational background	0.2795 [*]	0.1019	0.1893 [*]
Material Possession	0.0715	-0.0773	0.0123
Monthly Income	0.0196	-0.0721	0.0381
Family Income	0.2134 [*]	0.1208 [*]	0.1939 [*]
Personal Traits	0.3017 [*]	0.2019 [*]	0.1837*
Significant at 5 percent level			

Table 3: Correlation between enterprise involvement index and profile variables.

between the profile variables and involvement index is noticed with respect to age, education, family size, earning members per family, occupational background, family income and personal traits of the good performers since the related correlation coefficients are significant at 5 percent level. Among the correlation coefficients the age and family size are negatively correlated with the involvement index. It shows that the increase in the age and family size is related with a fall in involvement. Among the poor performers the significantly correlated profile variables with the involvement index are sex, family size, family income and personal traits since the correlation coefficients are significant at 5 percent level. The correlation analysis for the pooled entrepreneurs reveals that there is a significant relationship between involvement and the profile variables namely age, education, family size, earning members per family, occupational background, family income and personal traits. The only variables namely age and family sizes are negatively correlated.

Impact of Profile Variables on Involvement

The impact study is essential for some policy implication to enrich involvement among the entrepreneurs. The score of independent (profile variables) and dependent variables (involvement index) is included for the analysis. The multiple regression analysis is used to find out the impact of profile variables on involvement. The fitted regression model is:

 $Y = a X_1^{\ b1} X_2^{\ b2} X_3^{\ b3} X_4^{\ b4} X_5^{\ b5} X_6^{\ b6} X_7^{\ b7} X_8^{\ b8} X_9^{\ b9} X_{10}^{\ b10} X_{11}^{\ b11} X_{12}^{\ b12} X_{13} b^{13}. e$

This is converted into log form:

 $\log Y = \log a + b_1 \log X_1 + b_2 \log X_2 + b_3 \log X_3 + b_4 \log X_4 + b_5 \log X_5 + b_4 \log X_5 + b_5 \log X_5 + b_4 \log X_5 + b_5 \log X_5 \log X_5 + b_5 \log X_5 \log X_5$

 $\begin{array}{l} b_6 \log X_6 + b_7 \log X_7 + b_8 \log X_8 + b_9 \log X_9 + b_{10} \log X_{10} + b_{11} log X_{11+} b_{12} \\ \log X_{12} + b_{13} \log X_{13} + e \end{array}$

Where,

Y=Entrepreneurship index of the respondents,

 X_1 =Age of the respondents,

X₂=Education of the respondents,

X₃=Sex of the respondents,

X₄=Caste of the respondents,

X₅=Nature of family belonged by the respondents,

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 X_6 =Marital status of the respondents, X_7 =Family size of the respondents, X_8 =Earning member per family of the respondents, X_9 =Occupational background of the respondents, X_{10} =Material Possession of the respondents, X_{11} =Monthly income of the respondents, X_{12} =Family income of the respondents, X_{13} =Personal index of the respondents,

a=Intercept,

e=Error term.

b₁ to b₁₃ Regression coefficients of the independent variables.

The regression analysis is carried out among the good performers, poor performers and for both. The resultant regression coefficients of profile variables on involvement are shown in Table 4.

From Table 4, it has been observed that the significantly influencing profile variables on involvement among the good performers are age, education, earning members per family, occupational background and personal traits. That is an unit of increase in education, earning members per family, occupational background and personal traits of the good performers enhances the involvement by 0.0709, 0.1134, 0.1888 and 0.2089 units respectively. At the same time, an unit of increase in age and family size of the good performers leads to a decline in involvement by 0.1851 and 0.1234 unit respectively.

Among the poor performers, the significantly influencing variables are age, sex, family size, material possession and personal traits. The given independent of variables that explain the change in involvement among the poor performers is to the extent of 45.32 per cent only.

The regression analysis for the pooled performer reveals that an unit of increase in education, earning members per family, occupational background and personal traits of the entrepreneurs enhances their involvement by 0.0734, 0.0453, 0.1109 and 0.1405 unit respectively.

An unit of increase in age and family size results in the decrease

Profile Variables	Regression	Pooled	
	Good Performer	Poor Performer	Performer
Age	-0.1851 [*]	-0.1251 [*]	-0.1134 [*]
Education	0.0709*	0.0721	0.0734 [*]
Sex	0.0134	0.0296*	0.0543
Caste	0.0771	0.0054	-0.0335
Nature of Family	-0.0863	0.0712	0.0121
Marital Status	-0.1143	-0.0241	-0.0818
Family Size	-0.1234 [*]	-0.2124 [*]	-0.1405
Earning members per family	0.1134 [*]	0.0913	0.0453 [*]
Occupational background	0.1888 [*]	0.0911	0.1109 [*]
Material Possession	0.0208	-0.0561 [*]	0.0099
Monthly Income	0.0718	0.0921	0.0609
Family Income	0.0431	0.0523	0.0283
Personal Traits	0.2089*	0.1151 [*]	0.1405*
Constant	2.6598	1.8451	2.7124
R ²	0.4878	0.4532	0.6341
F-Statistic	18.6121 ⁻	16.0891	18.1411 [*]
*Significant at 5 percent level			

Table 4: Impact of profile variables on enterprise involvement index.

of involvement by 0.1134 and 0.1405 unit respectively. The coefficient of determination conveys that the independent variables influence involvement to the extent of 63.41 per cent. The fitted regression model is viable since its 'F' statistics is significant at 5 per cent level.

Factors Discriminating Good and Poor Performers

The entrepreneurs are classified into good and poor performers on the basis of their mean returns on investment. Fourteen profile variables including the involvement index are taken into account to identify the most important factors to discriminate between the good and poor performers among the entrepreneurs. The scale value of the discriminate values is taken and the discriminant function analysis test was applied. The Mahanobolis D² statistics was calculated to measure the variation between two groups of entrepreneurs.

From Table 5, it has been observed that the value of D^2 and F ratio calculated are 2.0012 and 8.7543 respectively. The F ratio was found to be significant at 5 per cent level. Hence the variation between good and poor performers is significant. This implies that fourteen variables together are useful in discriminating good and poor performer. Of the mean difference obtained in among the fourteen variables, the significant difference is found in case of thirteen variables.

The calculated discriminant scores Z_1 and Z_2 for good performers are 2.854 and 1.127 respectively. The critical values of discriminate score (2) for these two groups were 2.1. Based on these scores, the discriminate function can be used to predict whether the entrepreneur belongs to poor performer or good performer. If the value of the discriminant score is more than 2.1, it indicates a good performer while a score less than 2.1 indicates a poor performer.

Constraints faced by the Entrepreneurs in the Industrial Estates

Perception towards problems in industrial estates

Management of resources both human and non-human is a crucial factor in enterprising. The successful entrepreneur has to take into consideration the family circumstances, and environmental constraints in order to establish their hold in the field of enterprise which they choose to enter. The problems encountered by the entrepreneurs are at multidimensional. The mindset of the entrepreneurs' influences them to have varied perception of the problems in industrial estates.

Variables	Mean Difference	Discriminant Function Coefficient	Product	Percentage	
Enterprise Involvement Index	3.84* (6.3211)	2.0321	8.3085	53.68	
Personal Traits	2.28* (9.251)	1.2871	3.1818	19.37	
Education	3.07* (8.381)	0.6543	2.2125	13.62	
Earning Members per family	2.06* (6.5121)	1.0062	2.0850	12.07	
Occupational Background	1.83* (8.012)	0.8241	1.7108	10.29	
Family Income	1.56* (6.2916)	0.2471	0.4928	2.70	
Sex	0.31* (1.589)	0.1321	0.0809	0.49	
Material Possession	1.38 (0.721)	0.0085	0.0043	0.090	
Monthly Income	1.18* (5.229)	0.0006	0.0803	0.46	
Nature of Family	0.31* (1.5800)	-0.0805	-0.0281	-0.14	
Marital Status	1.15* (3.132)	-0.2211	-0.3046	-1.4240	
Caste	1.55* (4.8127)	-0.1088	-0.4218	-2.10	
Family Size	2.49* (7.8537)	-0.1388	-0.5111	-2.77	
Age	2.08* (5.266)	-0.3868	-1.0275	-5.58	
Significant at 5 per cent level. D ² =2.0012, F=8.7543.					

Table 5: Factors discriminating good and poor performers.

Perception in Enterprises	Number	Percentage
Highly Problematic	56	24.88
Problematic	42	18.67
Moderate	48	21.33
Interesting	45	20.00
Challenging	34	15.12
Total	225	100.00

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 Table 6: Perception towards problems in enterprising among the entrepreneurs.

The profile of entrepreneurs may have significant impact on individual perception. The views of entrepreneurs on different angles are summarised in Table 6.

From Table 6, it has been observed that a majority (24.88 per cent) of the entrepreneurs viewed that enterprising is highly problematic, followed by 21.33 per cent who viewed it as moderate. However 20.00 per cent of the entrepreneurs felt that the enterprising is interesting. Further 15.12 per cent found it challenging.

The entrepreneurs viewed as either problematic or highly problematic are considered as problem perceived entrepreneurs whereas the others who viewed it as moderate, interesting and challenging are considered as non-problem perceived entrepreneurs for further analysis.

Problems encountered by the entrepreneurs

For the study, the problems encountered by the entrepreneurs are confined to thirteen problems namely poor infrastructure, shortage of finance, acute competition, lack of collateral security, lack of time, lack of family support, lack of network, limited demand, poor information flow, higher credit sales, lack of innovations, defective marketing arrangement and high cost of capital.

The above said problems rated by the entrepreneurs on a five pointscale namely highly serious, serious, moderate, not serious and not at all serious. They have the score value of 5,4,3,2 and 1 respectively. The average score of each problem in enterprising was separately calculated among the problem perceived and non-problem perceived entrepreneurs are shown in Table 7.

Table 7 reveals that among the entrepreneurs of non-problem perceived outlook the most seriously viewed problems are lack of innovation and lack of network since the mean scores are 3.1007 and 3.0511 respectively. The less non-problem perceived problems are higher credit sales and poor infrastructure since the mean scores are 0.8220 and 1.0714 respectively. Among the problem perceived entrepreneurs, the highly perceived problems are shortage of finance and acute competition since the mean scores are 4.1525 and 4.0607 respectively whereas the less problem perceived problems are limited demand and lack of network since the mean scores are 1.7254 and 2.0518 respectively. In aggregate, the important problems perceived by the entrepreneurs are high cost of capital, lack of innovation and shortage of finance since the average scores are 3.9142, 3.0652 and 3.0468 respectively.

The significant difference between the non-problem perceived and problem perceived entrepreneurs regarding different aspects of problems in enterprising was analyses by the 't' statistic and the results are shown in Table 8.

From Table 8, it has been observed that the significant difference among two groups of entrepreneurs (non-problem perceived and problem perceived) is noticed in a few problems namely shortage of

Nature of Problems	Average Score			
	Non-Problem Perceived	Problem Perceived	Pooled	
Poor infrastructure	1.0714	2.7131	1.7215	
Shortage of finance	2.2015	4.1525	3.0468	
Acute competition	2.6158	4.0607	2.8071	
Lack of collateral security	1.1214	3.7071	2.2492	
Lack of time	1.3456	2.8559	2.0063	
Lack of family support	2.2017	3.0071	2.5050	
Lack of net work	3.0511	2.0518	2.5227	
Limited demand	1.8135	1.7254	1.7740	
Poor information flow	2.6018	2.3045	2.4653	
Higher credit sales	0.8220	2.6534	1.6123	
Lack of innovation	3.1007	2.8034	3.0652	
Defective Marketing Arrangement	1.1121	4.0551	2.3241	
High cost of capital	1.1032	4.0550	3.9142	
Overall Average	2.0098	2.8546	2.3152	

Table 7: Problems encountered by the entrepreneurs.

Problems in Enterprising	Average	Average Score	
	Non-Problem Perceived	Problem Perceived	
Poor infrastructure	1.0714	2.7131	1.4207
Shortage of finance	2.2015	4.1525	1.8561*
Acute competition	2.6158	4.0607	0.7064
Lack of collateral security	1.1214	3.7071	2.0161*
Lack of time	1.3456	2.8559	1.7172*
Lack of family support	2.2017	3.0071	1.3321
Lack of net work	3.0511	2.0518	1.4172
Limited demand	1.8135	1.7254	0.3031
Poor information flow	2.6018	2.3045	0.5071
Higher credit sales	0.8220	2.6534	2.0513*
Lack of innovation	3.1007	2.8034	0.6064
Defective Marketing Arrangement	1.1121	4.0551	0.3104
High cost of capital	1.1032	4.0550	2.2934*
Overall Average	2.0098	2.8546	1.6041*

 Table 8: Significant difference of problems perceptions among entrepreneurs.

finance, lack of collateral security, lack of time, higher credit sales and higher cost of capital since the respective't' values are 1.8561, 2.0161, 1.7172, 2.0513 and 2.2934 respectively. The mean of overall perception towards all problems together among the non-problem perceived entrepreneurs and problem perceived entrepreneurs are 2.0179 and 2.8541 respectively. The't' statistic indicates that there is a significant difference among the above said group of entrepreneurs regarding their problems perceptions.

Problem perception among their good and poor performer

The problems in enterprising may be perceived by entrepreneurs (good and poor performer) in different ways. In order to analyze the perception on the various problems perceived by the entrepreneurs in industrial estates, the mean score on the perception of each problem in enterprising among the good and poor performers is analyzed separately. The't' test is applied to know the significant difference between two means in each aspect of the problems in enterprising. The results are summarized in Table 9.

Table 9 reveals that the highly perceived problems among the good performers in enterprising are lack of innovation and higher credit sales since the mean scores are 2.7081 and 2.6111 respectively, whereas among the poor performers the problems are shortage of finance and high cost of capital since the mean scores are 4.0735 and 4.0135 respectively. The less perceived problems among the good performers are limited demand and lack of network since the mean scores are 0.6321 and 0.7558 respectively. Among the poor performers, they are limited demand and lack of family support since the mean scores are 1.2076 and 1.7031 respectively. The mean scores on the perception of overall problems among the good and poor performers are 1.5703 and 2.8695 respectively. There is significant difference between good and poor performers regarding poor infrastructure, shortage of finance, acute competition, lack of collateral security, lack of networking, poor information flow, defective marketing arrangements and high cost of capital since the 't' statistic are significant at 5 per cent level. The 't' statistic on the problem perception on all items together also reveals that there is a significant difference among the good and poor performers.

Correlation between profile of the entrepreneurs and problem perception

The relationship between the profile variables of the entrepreneurs and their overall problem perception is analyzed with the help of Karl Pearson coefficient of correlation. The overall score on problem perception among the entrepreneurs and their score on profile variables are included for the correlation analysis. The resultant correlated coefficient is shown in Table 10.

From Table 10, it has been inferred that among the good performers, negatively correlated profile variables with the overall problem perception are education, earning members per family, occupational background, monthly income, family income, personal traits and enterprise involvement index since the correlation coefficients are significant at 5 per cent level whereas in poor performer it is increase in education, occupational background, monthly income, family income, family income, personal traits and enterprise involvement index . The correlation analysis for the pooled data reveals that there is a significant negative correlation between problem perception and the profile variables namely education, earning members per family, occupational background, family income, personal traits and enterprise involvement index among the entrepreneurs.

Problems in	Average	Average Score		
Enterprising	Good Performer	Poor Performer		
Poor infrastructure	1.1132	3.2015	2.3091*	
Shortage of finance	1.5083	4.0735	3.0186*	
Acute competition	2.0124	3.8512	1.7071*	
Lack of collateral security	1.7531	3.7121	2.5242*	
Lack of time	2.2051	2.5024	0.7150	
Lack of family support	1.1011	1.7031	0.5217	
Lack of net work	0.7558	2.2004	1.7046*	
Limited demand	0.6321	1.2076	0.8293	
Poor information flow	1.0768	2.8117	2.1017*	
Higher credit sales	2.6111	2.3041	0.5071	
Lack of innovation	2.7081	3.3057	0.6081	
Defective Marketing Arrangement	1.2192	2.3018	1.6138*	
High cost of capital	2.0114	4.0135	3.0708*	
Overall Average	1.5703	2.8695	2.1338*	
*Significant at 5 per cent leve	el.	· · · · ·		

 Table 9: Significant difference of problems and perceptions among good and poor performers.

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Profile Variables	Coefficient of Correlation			
	Good Performer	Poor Performer	Pooled	
Age	0.0371	0.1374*	0.0607	
Education	-0.3124*	-0.2082*	-0.2153*	
Sex	0.1081	0.1107	0.0179	
Caste	0.0174	0.1076	0.0117	
Nature of Family	0.2118	0.1029	0.0174	
Marital Status	0.0174	0.0611	0.0883	
Family Size	0.0603	0.1204	0.1087	
Earning members per family	-0.3078*	0.1072	-0.2162*	
Occupational background	-0.2515*	-0.2118*	-0.1007*	
Material Possession	0.0161	0.0104	0.0753	
Monthly Income	-0.1805*	-0.1807*	-0.0124	
Family Income	-0.2056*	-0.0822	-0.1623*	
Personal Traits	-0.2306*	-0.0814	-0.1508*	
Enterprise involvement index	-0.3030	-0.1042*	-0.2072*	
*Significant at 5 per cent level				

 Table 10: Correlation between profile and perception of problems among the entrepreneurs.

Impact of profile variables on problem perception

An attempt has been made to analyze the impact of profile variables on perceptions of problem in enterprising with the help of multiple regression analysis. The dependent variables in the analysis is the sum of the score on the problem perceptions on various aspects of problems in enterprising. The score on profile variables is taken as the score of independent variables.

The regression analysis is done among good performer, poor performer also for the pooled entrepreneurs. The resultant regression coefficient of the profile variables on problem perception is presented in Table 11.

Table 11 reveals that among the good performers the significantly influencing variables on the problem perception are family size, earning members per family, family income, personality traits and enterprise involvement index. A unit increase in the family size results in an increase in problem perception by 0.1514 units. At the same time, the one unit increase in the earning members per family, family income, personal traits and enterprise involvement index among the entrepreneurs decreases the problem perception by 0.0041, 0.1524, 0.1332 and 0.2151 respectively. The regression analysis for the pooled entrepreneurs reveals that the significantly influencing variables are age, education, family-size, occupational background, personal traits and enterprise involvement. The profile variables influence the change in problem perception to the extent of 69.27 per cent.

Factors discriminating the non-problem perceived and problem perceived entrepreneurs

An attempt has been made to identify the variables discriminating the non-problem perceived entrepreneurs and problem perceived entrepreneurs. Fourteen profile variables were considered to analyze their effect on problem perception among the entrepreneurs. The score of independent variables was used in the discriminant analysis for the purpose of finding relative importance of fourteen variables with regard to their power to discriminate between non-problem perceived and problem perceived entrepreneurs. Fisher's discriminant function analysis test was applied. In total, 275 entrepreneurs are treated, as non-problem perceived entrepreneurs and the remaining 175 are treated as problem perceived entrepreneurs. The mahanobolis D² statistic was calculated to measure the distance between the two groups of entrepreneurs. The 'F' statistic was used and the two groups were different from each other. The resultant discriminant function coefficient, mean difference of the discriminant variables and their relative importance in discriminant function are computed and shown in Table 12.

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From Table 12, it has been observed that the values of D^2 and F-ratio calculated were 2.5718 and 11.5259 respectively. The F-ratio is found to be significant at 5 per cent level. Hence the distance between two groups of entrepreneurs is significant. This implies that fourteen variables together were useful in discriminating the two groups of entrepreneurs. Among the mean differences obtained in fourteen variables, the significant difference was found in the case of twelve variables. The ranking of the percentage distance measured by important factor revealed that the first three ranks compared personal traits 20.89 per cent, enterprise involvement index 17.82 per cent and education 14.81 per cent were found individually contributing more than the average distance in terms of discrimination as compared to other variables in discriminating two group of entrepreneurs. The calculated discriminant score 'Z' and 'Z^{2'} for non-problem perceived and problem

Profile Variables	Regression Coefficient			
	Good Performer	Poor Performer	Pooled	
Constant	0.7381	0.1318	0.0331	
Age	0.0127	0.1237*	0.0412*	
Education	-0.0613	-0.1081*	-0.0517*	
Sex	0.0121	0.0312	0.0407	
Caste	0.0856	0.0112	0.0321	
Nature of Family	0.0082	0.0146	0.0654	
Marital Status	0.0527	0.0627	0.0304	
Family Size	0.1514*	0.0812	0.0119*	
Earning members per family	-0.0041*	0.0127	-0.0145	
Occupational background	-0.0184	-0.2811*	-0.1267*	
Material Possession	0.0318	0.0139	0.0207	
Monthly Income	-0.0257	-0.0309*	-0.0128	
Family Income	-0.1524*	-0.0128	0.0829	
Personal Traits	-0.1332*	-0.0914	-0.0835*	
Enterprise involvement index	-0.2151*	-0.2187	-0.1028*	
R ²	0.4227	-0.1058	0.6927	
F-Statistics	13.4049*	16.2518*	18.6420*	
*Significant at 5 per cent level				

Table 11: Impact of profile variables on perception of problem in enterprise.

Variables	Mean Difference di	Discriminant Function Coefficient Li	Product	Percentage	
Personal traits	2.39* (6.458)	1.6128	4.1745	20.89	
Enterprise involvement index	2.47* (4.207)	1.3027	3.5371	17.82	
Education	3.02* (7.0017)	0.8592	3.0177	14.81	
Occupational background	3.18* (4.295)	0.7077	2.5077	12.78	
Family Income	2.01* (8.103)	1.1027	2.3829	12.00	
Earning members per family	2.11* (6.511)	1.0729	2.2609	11.68	
Age	1.75* (4.027)	0.8057	1.5534	8.10	
Material Possession	1.58 (1.567)	0.6172	1.1086	6.01	
Monthly Income	2.33* (5.217)	0.2366	0.7268	4.03	
Family size	2.10* (7.712)	0.1078	0.3301	2.16	
Nature of Family	1.85* (5.819)	-0.0257	-0.0557	-0.23	
Sex	0.38* (6.027)	-0.8197	-0.2685	-1.77	
Caste	1.68 (1.107)	-0.3241	-0.6442	-3.62	
Marital Status	2.02* (4.812)	-0.4082	-1.0357	-5.06	
D2=2 5718: F=11 5259* *Significant at 5 per cent level					

 Table 12: Factors that discriminant the problem perception.

perceived entrepreneurs were 1.1724 and 3.0703 respectively. The critical values of discriminant score (Z) for these groups were 2.0653. Based on these scores, the discriminant function can be used to predict whether an entrepreneur would belong to non-problem perceived and problem perceived entrepreneurs. If the value of discriminant score of a given entrepreneurs is less than 2.0653, it could be predicted that they would be non-problem perceived entrepreneurs and greater than 2.0653 would indicate a problem perceived entrepreneur.

Summary

The principal objective of industrial estate programme is to achieve the promotion of small scale industries by providing facilities, assistance and guidance at every stage of establishment, operation and management. There is significant relationship between the profile variables and involvement index is noticed with respect to age, education, family size, earning members per family, occupational background, family income and personal traits of the good performers since the related correlation coefficients are significant at 5 percent level. Among the correlation coefficients the age and family size are negatively correlated with the involvement index. The regression analysis for the pooled performer reveals that an unit of increase in education, earning members per family, occupational background and personal traits of the entrepreneurs enhances their involvement by 0.0734, 0.0453, 0.1109 and 0.1405 unit respectively. The calculated discriminant scores Z₁ and Z₂ for good performers are 2.854 and 1.127 respectively. The critical values of discriminate score (2) for these two groups were 2.1. Based on these scores, the discriminate function can be used to predict whether the entrepreneur belongs to poor performer or good performer. If the value of the discriminant score is more than 2.1, it indicates a good performer while a score less than 2.1 indicates a poor performer.

Suggestions

The essence of the study is that entrepreneur's background. i.e., nativity, father's profession and his experience, have little to do with

his success. It is the inner drive, need for achievement (nurtured and developed through child rearing practices), and the conductive entrepreneurial climate, which will ultimately lead to the promotion, development and success of the entrepreneur. The study reveals that entrepreneurs are not born but they are made through different and arduous training.

In order to raise the performance level, there is a need to cultivate managerial skills besides entrepreneurial skills, keeping in line with the increased growth in the size of the organization.

An entrepreneurs club may be organized in each region with the following objectives. a) to interact with other members, b) to get technical knowledge, c) people from draft trade, d) to develop entrepreneurial culture, and e) to promote professional, industrial, economical, financial, technical and co-operative members.

The major aspects of improvement as far as the study area is concerned are that security in the estate premises should be beefed up. The erratic power supply should be regulated to have uninterrupted flow of electricity for the units to work. The water supply for industrial use should be augmented. Proper upkeep and maintenance of the industrial estates should be adopted. A canteen should be established and subsidized food items should be supplied to labourer. The harassment of the entrepreneurs by petty bureaucracy on trivial issues should be done away with. The road facility inside the industrial estate premises should be taken care of.

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