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Technical Report

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IN
CESSFUL ENTREPRENEURSHIP

A Small Sample Survey

by
Rao, K.Dinker Rao, N.Dixit

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Title of the report PSYCHOLOGICAL AND ORGANISATIONAL FACTORS IN SUCCESSFUL ENTREPRENEURSHIP

Name of the Author T.V. RAO, K. DINKER RAO, N. DIXIT

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ABSTRACT (within 250 words)

This study on 16 small industry entrepreneurs (9 successful & 7 unsuccessful) focused on identifying some personal background, attitudinal, organisational andmanagerial variables that discriminate the successful group from the unsuccessful group. Success in entrepreneurship was identified through the records of a financing agency and were later confirmed at the end of the interviews that success was associated with survival of the enterprise and profit making and thereby repayment of loans. Of the background variables studied no clear patterns emerged differentiating the successful from the unsuccessful on age, education, urban exposure, father's education, and type of industry. There was a trend towards more successful entrepreneurs coming from families with business background and starting the industry during a period of industrial activity. An examination of career decision information given by the entrepreneurs was found to support the propositions made by Rao (1974). However, the sequential stages in the development of and entrepreneur did not emerge clearly. The two groups did not differ significantly on attitudinal dimensions like internal locus of control, adoption propensity, attitude to workers, interpersonal trust, consultation in decision making and compromise of value system, although trends in certain directions were observed. In terms of their organizational characteristics, successful entrepreneurs were found to score better on operations management, production function and finance function. They also showed tendencies to score better on several other organizational dimensions. More research in these directions with well defined criteria of success are likely to help identify potential entrepreneurs and design entrepreneurial development programmes.

Please indicate restrictions if any that the author wishes to place upon this note .....

Date April 26, 1975

N. Dixit
Signature of the Author

PSYCHOLOGICAL AND ORGANISATIONAL FACTORS IN SUCESSFUL ENTREPRENEURSHIP

A Small Sample Survey

1. INTRODUCTION

The need to develop small and medium scale enterprises and expand opportunities for self employment is too well known to be emphasised. To encourage these sectors, an elaborate programme of assistance has been evolved over time by the government and several other agencies in the country. The assistance available now includes - provision of financial resources, production infrastructure, supply of scarce raw materials, marketing assistance, developmental programmes through training etc. It has been increasingly realized in recent years that there are non-economic factors which influence the success of the programme of assistance to develop entrepreneurship.

Though the studies examining non-economic factors have conclusively brought forth the fact that mere provision of economic inputs may not by itself guarantee success in an entrepreneurial venture, importance of different non-economic factors remains still a subject for further research. McClelland & Winter (1969) in their experiment at the SIET Institute brought out the importance of motivation training in promoting entrepreneurship. Several other experiments conducted in India and abroad recently have also indicated the importance of such motivational and personality training in the promotion of successful entrepreneurship (Shah et al, 1974, McClelland & Winter, 1969, McClelland, 1972, Mcber and Company, 1973, Cochran, 1971). Other researches have indicated to some differences in the behavioural orientations of progressive and slow entrepreneurs. For example Hundal (1967, 1968, 1971) and Singh (1970, 1970a) found that n achievement, aspirations, modernization, attitudes to the business they are in, inventory tendency, non-hoarding tendency etc. contribute to success.

Impressed by the importance of the behavioural dimensions in the promotion of entrepreneurship some agencies in the state of Gujarat and Maharashtra have been offering package programmes on motivational personality training along with other training inputs on project planning, marketing, taxation management etc. (Programmes run by GIIC, GIDC, GSFC and GSIC jointly, and MSSIDC are in these directions).

Based on the different researches conducted in India and experience of studying the entrepreneurs Rao (1974) has developed a model for the development of an entrepreneur. In this model 9 propositions have been made outlining the different stages of development of an entrepreneur. Implications of the model for training and research have also been pointed out in that paper. Although most of the propositions were supported by research, it has not been tested out systematically on entrepreneurs. With this background, the present study of successful and unsuccessful entrepreneurs was undertaken. The study was mainly to test

the model presented by Rao (1974) and to investigate the various factors that differentiate the successful entrepreneurs from unsuccessful entrepreneurs in small industry. The criteria of success used is the repayment of loans to a financial corporation from which these entrepreneurs had taken loans before starting their enterprises. It is assumed that repayment of loans is associated partly with profit making and survival of the enterpirse. A list of 10 such successful and 10 unsuccessful entrepreneurs was obtained from the corporation. Three of the unsuccessful entrepreneurs could not be contacted as they were found to have closed down the factories and were difficult to locate. One of the successful entrepreneurs could not be interviewed as he could not spare time for interviews. Thus a total of 16 entrepreneurs (9 successful + 7 unsuccessful) were included for this study. Differences between the two sets of entrepreneurs was attempted to be studied on the following groups of variables.

1. Personal and organizational background variable,
2. Attitudinal variables, and
3. Organizational and managerial input variables (Behavioural)

The personal background variables studies include age, educational background, experience, exposure to urban living and family business background. The organizational background variables studies include year of establishing the industry, nature of the enterprise etc.

The attitudinal variables studied include internal locus of control, adoption tendencies, attitude to people, attitudes towards workers, use of others in decision-making and preparedness to compromise on value systems.

Organizational and Managerial input variables studied include planning variables including consideration of alternatives, information sources utilization and clarity of goals, operations management variables dealing with production, marketing, financing, procurement, control and personnel functions. For this the parts of the schedules developed by Shah et al (1974) were used.

The method of investigation was through personal interviews. The schedule used during the interviews is presented in appendix. It can be noted that questions 1 to 7 are related to birth, family background, education, exposure to urbanization etc. It is postulated that the decision to become an entrepreneur is not a sudden decision from the blue but could be influenced by many factors beginning from the birth of the individual. These factors may also contribute to his success or failure in the entrepreneurial venture. It is these background factors which form the basis of discussion in the next section.

The facts examined in the section 2 are relatively remote. There are a few considerations which have immediate relevance to an individual's decision to become entrepreneur. However, even at this stage the transformation is not a snap shot process. It is visualized that there are a number of stages through which an individual passes from his first decision to start an enterprise to the point when he actually

starts functioning as an entrepreneur. In this context hypothetical model was put forth by one of the authors (Rao, 1974), Section 3 - presents data testing this behaviouristic model of the development of entrepreneurs. The material for this section is drawn from answers to questions 8 to 17 in the schedule given in Appendix.

Entrepreneurs as a class are believed to have certain distinct attitudinal traits as compared with people in other occupations. Perhaps there could be such attitudinal differences which can account for the success or failure of entrepreneurs. In section 4 an attempt has been made to examine these differences, if any, between the successful and unsuccessful entrepreneurs in this small sample. Item 17 in the schedule gives the attitudinal questions used in this study.

Section 5 deals with the organizational and operational aspects of the enterprises. It examines whether there are operational factors which might have contributed to the success of the enterprise. Conclusions from this section, therefore, may have implication for the orientations that should be given to the entrepreneurs in the developmental programmes. Questions 18 to 21 in the schedule are explained in the respective sections.

A judicious selection of entrepreneurs for providing assistance is a pre-requisite for the success of the small industries development programme. Perhaps section 2 and 3 will be of use from their point of view. Since in the Indian context many entrepreneurs also need some formal professionalization before actually launching their project orientation by the training programme attains some significance. It is in this respect that section 4 and 5 will be of some help. The reader is however cautioned about the small size of the sample to draw any generalizations although statistical tests of significance have been worked out wherever appropriate.

2. BACKGROUND VARIABLES

Of the different background factors examined none of them showed any distinct association with success. The age of the entrepreneurs ranged from 30 years to 55 years. However, there were mixed age groups (relatively young and old) equally in both the successful groups with mean age difference of about 2.5 years. There were also no clearout patterns in relation to their education, exposure to urban area, and father's education. Although there are no clearcut differences in relation to the business background of the family, eight of the nine successful entrepreneurs (88%) come from business background as contrasted with four out of the seven (57%) unsuccessful entrepreneurs. In the only case of successful entrepreneur without any family business background his education was in commerce. While this clearly brings out the fact that persons from business families need not be successful entrepreneurs, this does indicate to a tendency that such a background does reinforce success. In the study by Shal et. al (1974) family business background was found to have significant association with entrepreneurial movements. The background details for both groups of entrepreneurs are presented in Table 1. It may be relevant to point out

Table 1: Personal Background data of the successful and Unsuccessful Groups of Entrepreneurs Studied (Nos. 1 to 9 form the successful group)

Sr.No.	Nature of industry	year of starting	Age (in years)	Education	Exposure to urban area (in years)	Father's education	Father's occupation	Years of job experience before establishing	
								In related field	In other fields
1	Machine Tools	1961	48	B.A.LL.B	18	Illiterate	Business	0	7
2	Machine Tools	1961	49	Non-matric	38	Illiterate	Business	17	0
3	Food	1954	44	Inter(Arts)	44	Matriculate	Business	7	0
4	Steel Fabrication	1968 (1943)	55	Primary	41	Illiterate	Business	5	0
5	Plastic Industry	1959	40	B.Com	14	Middle School	Farmer	0	0
6	Textile	1970	38	Inter(Com.)	31	Primary	Business	19	0
7	Ice cream	1973	47	Non-metric	47	Matriculate	Business	20	0
8	Radio/Electrical	1960	38	Inter(Sc.)	38	Matriculate	Business	12	0
9	Copper Engraving	1957	41	B.Sc.(Hons.)	41	Inter	Business	0	0
10	Copper Engraving	1959	45	B.Sc.	45	Inter	Business	7	0
11	Textile Ancilliary	1970	39	Homeopathic Diploma	39	Illiterate	Farmer	0	8
12	Gear(motor parts)	1971	30	B.Arch.	30	Illiterate	Business	0	2
13	Bricks	1969	37	S.S.C. trained teacher	20	Primary (Sanskrit)	Purohit	0	13
14	Plastic Industry	1967	51	Primary	33	Non-Matric	Govt.Service	0	24
15	Furniture	1967	44	Cambridge	44	Primary	Business	14	0
16	Ink	1969	45	B.Com.	45	Primary	Business	0	19

here Christopher's (1969) observations that younger age, formal education, urban background, and experience in industry were found to be associated with entrepreneurs. While these may be associated with entry to entrepreneurship they may not be the factors that can predict successful entrepreneurship. Except for age, the rest of the variables get partial support from the background data of the 16 entrepreneurs. Experience appears to be one factor that helped the successful entrepreneurs.

Two other organizational background factors examined are: the type of industry and the time of starting the enterprise. Though it is well within the hands of individual entrepreneurs to choose the industry where the risk is minimum and returns are almost ensured, it is possible that even when the decision is taken after taking into account all these considerations the selected industry may go through difficulties due to unforeseen changes in policy at the national level, international disturbances, and natural factors. It is hardly necessary to emphasize the importance of these factors in an economy like ours where the experience for economic forecasting is not easily available even for the policy makers, leave alone small entrepreneurs. Nevertheless, type of industry does not seem to be a significant factor that could have influenced the success or failure of enterprises in our sample.

The same is exemplified by the fact that there are instances where units belonging to the same industry come under both the categories - successful as also unsuccessful units.

On the other hand, it seems highly probable that the timing of starting the enterpirse has mattered in the success or failure of the units. Though some industries were more affected than the others, it is accepted that the period 1966-67 to 1970-71 experienced a general industrial recession in the country. It now becomes at once illuminating to note that all the units classified as unsuccessful were started after 1966. In contrast to this among the successful units only three were started after 1966. It should, however, be noted that of these one is the location of an established unit (4) and another is a sister concern of an established firm (7). There is another point which has implications to the relation of the sample rather than analysis. It can be recalled that the criterion for distinguishing the successful and unsuccessful entrepreneurs is based on their payment of loan instalments. Inspite of the fact that scheduling of instalment payments takes into account critical teething troubles, the gestation period, break even point etc., it has to be accepted that financial problems are more impruding (7) for younger firms than those which are already established. Thus, the unsuccessful units in our sample besides having started in a period of relatively less favourable industrial atmosphere, might not have grown out of the infant industry problems. Moreover, it is possible that successful units in our sample have already passed the stage where payment of instalments does not substantially eat into the profits of the unit.

3. ENTREPRENEURS: HOW THEY ARE THERE

In an earlier paper on the development of entrepreneurs, Rao (1974) presented some propositions dealing with how entrepreneurs become entrepreneurs. These propositions are examined in relation to the case histories of the 16 entrepreneurs of this study.

Need: In order to become an entrepreneur in one area or the other, one should have a need or motive which for him has the greatest probability of getting fulfilled if he becomes an entrepreneur.

In five of the 16 cases the ventures were made directly to satisfy some need or the other. The needs reflected include, need for independence and economic and extension motives. In the rest of the cases although there were no direct needs reflected, in all the cases the driving force appeared to be to overcome a crisis situation. The crisis situations were of different kinds. For example closure of the factory where he was working, economic crisis, failure in examinations, increased demands which are disproportionate, forced migration due to political pressures, failure of close relations to run business etc. were some of the precipitating factors that have driven these individuals into business.

Long term involvement: For a person to undertake entrepreneurial activity he should have been involved for a period of time at latent or manifest level in the entrepreneurial activity he is going to undertake or similar activities.

Long term involvement was measured in this study by getting the year of first thought and the year of actual starting of the entreprise. In many of the cases long term involvement came out very clearly. Except in two cases the time gap between first thoughts and actual starting of the industry was less than one year. Eight of them (50%) had at least 5 years time gap between their first thoughts and actual starting. In 11 of the 16 cases the time gap between first thoughts and firm decisions was more than one year. Average time gap for the group between first thoughts and firm decisions is 3 years, between firm decisions and actual starting is about 20 months and between first thoughts and actual starting is 4 years and 8 months. All these are indicative of long term involvement preceding the entry into entrepreneurship. In many cases the entrepreneurs studied indicated that their decisions to start their enterprises were preceeded by standing desires, explorations and seeking opportunities.

Resources: In order to become an entrepreneur in one area or the other; the person should have at his disposal certain personal, social and material resources or resource dispositions which he thinks are related to entering the success in that area of activity. Three types of resources were outlined: personal, social, and material.

In each of the cases studied there were at least two types of resource dispositions before the entrepreneur made firm decisions to start his own enterprise. In 13 of the 16 cases personal resources were present (ability, technical skills, material skills, etc.); in 12 of the 16 cases social resources were present (encouragement from friends, family, other groups etc.); and 11 of them had material resources (economic etc.). In all the cases firm decisions were preceeded by such resource identification and dispositions.

Socio-political system: In order for a person to become entrepreneur the socio-political system should be seen as reinforcing his needs to establish, develop, maintain or expand his business activity.

In seven of the sixteen cases sociopolitical system was consciously seen as reinforcing. Others seem to have taken it for granted. None of them saw it as coming on their way at the time of starting.

Additivity: Additivity of the above factors where it is stated that if one of them is strong, even if others are weak a person may plunge into business.

As it was difficult to quantify the strength of these, this cannot be directly tested. It was evident in many cases where the need dispositions were not present, crisis situations have forced them to think of entrepreneurial activities. As crisis situations or precipitating incidents have strong motivating powers in them, such cases of entrepreneurs render support to this proposition.

Professional socialization: In this proposition it was stated that it is possible to develop entrepreneurs through organized training programmes.

Although the entrepreneurs interviewed did not have any training under the title of entrepreneur development, all except one had some kind of training or other related to the development of their industry. In all except one cases such training preceded the actual starting of the industry.

Aquisition of resources: All the entrepreneurs studied have spent some time acquiring resources from one organisation or the other before starting their present business. The very fact that they were drawn from a financial corporation list has this bias built into it. The interviews revealed that such help from other organisations preceded their actual starting of the industry. In all the cases professional socialization preceeded acquisition of resources.

Thus the data from these interviews render support to the propositions made by Rao (1974) in his model. However, the sequential nature of the model does not seem to be valid in all the cases. Specially the second and third stages in the model (precipitating factors and professional socialization) seem to take up such a strong role as to induce a person to entrepreneurship in some cases rather than merely to help him start business after he is induced into it. In these cases professional socialization and crisis situations seem to tap some of his needs and push him to gather resources to become entrepreneurs. This indicates to the possibility that several of the small industry entrepreneurs are entrepreneurs by crisis rather than entrepreneurs by interest. If this is so McClellands (1961) hypothesis that entrepreneurs have high achievement motive, moderate risk-taking etc. is less likely to be true with such types of entrepreneurs. Data on large samples is required for further insights.

4. ATTITUDINAL VARIABLES

Theorists on entrepreneurship hypothesize that entrepreneurs as a class have certain distinct attitudes and personality characteristics. McClelland (1961) has presented enough evidence on characteristics. McClelland (1961) has presented enough evidence on characteristics associated with entrepreneurship like high need for achievement, moderate risk taking, tendency to take personal responsibility, openness to feedback etc.

Several other investigators on entrepreneurship pointed out the importance of personality factors in entrepreneurship. For example Hegan (1971) observed that the requirements for the transition to economic growth are (a) fairly widespread creative problem solving ability, and a tendency to use it, and (b) attitude towards manual-technical labour and the physical world such that creative energies are channeled into innovation in the technology of production. The creative personality according to him is characterized by high need achievement, order and autonomy. Kilby (1971) lists introduction of new product and technology as one of the integral parts of entrepreneurial activity. Some of the recent training programmes in India assume the importance of attitudinal and personality variables and use them as inputs for training entrepreneurs. However, there are no systematic studies conducted to identify, prove or disprove the characteristics that differentiate successful entrepreneurs from the unsuccessful.

What has been hypothesized about the entrepreneurial class in relation to common people should be in a way true about successful entrepreneurs vis-a-vis unsuccessful. If there are certain characteristics which distinguish the entrepreneurs from others, with respect to these characteristics the successful entrepreneurs should have an edge over the unsuccessful. Starting from this premise, the following hypotheses were tested in the present study:

1. Successful entrepreneurs have higher internal locus of control. Internal locus of control is a tendency in the individual to attribute success or failure to internal factors within his control than to external factors like fate, God etc.

2. Successful entrepreneurs have greater propensity to adopt to new techniques as and when they emerge as they are continuously looking for new things.

3. Successful entrepreneurs have positive attitudes to their workers and tend to believe that workers can be trusted and need not be pushed to work.

4. Successful entrepreneurs reflect better trust with people, in general, they meet and come across and have positive attitudes to them.

5. Successful entrepreneurs may show a tendency to take decisions individually more than the unsuccessful which reflects their confidence and autonomy.

6. However, successful entrepreneurs are prepared to compromise their value systems in cases of necessity.

Partly these hypotheses are based on earlier studies which hint at these possibilities and partly on the basis of hunches. In order to test the above hypotheses attitudes of the entrepreneurs were measured on a ten point scale separately for each of the hypotheses.

Mean scores of the two groups of entrepreneurs on the six dimensions are presented in Table. Both 't' test and Mann Whitney V values were worked out to test the significance of differences. None of the differences were statistically significant.

Table 2: Means, Standard Deviation, and Difference Between the Mean Attitude Scores of Successful and Unsuccessful Entrepreneurs

	Successful Mean	Successful SD	Unsuccessful Mean	Unsuccessful SD	Interpretation
1. Internal locus of	4.9	1.80	4.7	2.34	higher the score less the internal locus of control
2. Adoption propensity for innovations	3.3	1.80	3.3	1.89	higher the socre less the adoption propensity
3. Attitude towards workers	6.2	2.92	4.2	2.23	higher the score positive the attitude to workers
4. Interpersonal Trust: attitude towards people	4.7	2.71	6.2	2.45	higher the score less the trust
5. Consultation in decision making	4.5	2.53	4.7	3.35	higher the score more consultative
6. Compromise of one's value system	5.9	1.58	6.5	2.33	higher the score less the compromising

* The scores of the two groups are not significantly different as none of the 't' values and Mann-Whitney U values calculated were significant at .05 level.

Contrary to expectations the two groups of entrepreneurs emerge more or less similar with regard to the attitudes measured. This similarity is more clear in the case of internal locus of control; adoption of innovations and consultations in decision making.

Statistically there is no difference between the groups with respect to questions relating to interpersonal trust. However, in this case the average scores are slightly different and in a way conform to the hypothesis started earlier. The successful entrepreneurs not only evince greater trust in their workers by stating that there should be self realization if a worker has to do a good job, they also believe that people are generally trustworthy. However, there is a great variation in their attitudes. Thus, it can only be stated that the successful entrepreneurs tend to make greater compromise of their values as compared with unsuccessful entrepreneurs.

5. ORGANIZATIONAL FACTORS

Two major dimensions assessed in the organizational factors are 'Planning Orientation' and 'Operations Management'. Planning Orientation is defined as the behaviour of the entrepreneur involving scanning of the environment, generating and listing of alternatives and organized thinking before undertaking an activity in relation to clearly defined goals, choice of methods of achieving these goals and developing effective systems of management that monitor information on accomplishment of goals set from time to time (Shah et al. 1974). Operationally an entrepreneur high on planning orientation is expected to consider alternatives before he chooses the line of business, productline, location, machines and equipment, technology and processes, finance mix and the area of operation; utilize sources of information in relation to functions like production marketing, finance, personnel, procurement and control, and would process all these in goalsetting in relation to product line, product quality, sales, cost reduction, profit, diversification, expansion and labour relations.

Operations management has been defined operationally as the capacity of a person to effectively develop systems for effective operational control of production, marketing, finance, procurement, personnel functions and for monitoring accomplishment of goals. For the measurement of both these dimensions the schedules developed by Shah et. al (1974) were used.

As the appendix shows there are three major areas under planning orientation: Alternatives, Information Sources Utilization and Clarity of Goals. Under each area there are several variables. For examples whether the entrepreneur gave adequate thinking to the various alternatives while selecting his line of business, product-line, location of factory, technology and processes etc. were studied. One way of knowing for example, whether the entrepreneur did consider the alternative lines of business before he decided on the present one is by asking the question "Did you think of alternative lines of business before you choose the present one?". Such a question is highly loaded with social desirability and most of the entrepreneurs are likely to answer in the positive. To avoid such stereotyped responses and to get into depth the entrepreneurs were probed through questions like "How did you decide on this business?" "Why not others?" "What factors did you consider before you decided on this?" "What are the advantages with this and disadvantages with others?" etc. Through his answers to these questions the interviewer judged whether he did consider alternative lines of business before he entered the present one or not. If he did, he got a score of 1 for that variable and if he did not he got '0'. To the extent this score depended on the interviewers judgement the system is subjective. Such subjectivity at this level is probably unavoidable in studies of this kind. However, experiences of researchers (Shah, Gaikwad, Pareek, Gor, Shetty and Rao) using this schedule indicated a great amount of inter-interviewer agreements. Similar procedure was used for each of the variables studied under planning orientation and operations management. Details of the scoring system are given in Shal et. al (1974).

Using this system two separate total scores are available for each entrepreneur: one on Planning Orientation giving an index of planning, and the other on Operations Management giving an index of managerial efficacy. Three subscores are available under planning orientations and five subscores

on operations management. The scores on each of these areas are raised to 10 for purposes of ease of comparisons. Similarly overall scores on planning orientations and operations management were reduced and calculated for a maximum of 10 points.

For comparing the successful and unsuccessful entrepreneurs mean scores and standard deviations were calculated for the two groups with respect to each of the two main dimensions and the different areas under each dimension. These are presented in Table 3.

Table 3: Means and Standard Deviations of the Successful and Unsuccessful Groups of Entrepreneurs on Different Organizational Dimensions and Areas

		Successful entrepreneurs		Unsuccessful entrepreneurs	
		Means	Standard deviations	Means	Standard deviations
1	Planning orientation	5.33	1.19	4.50	1.41
1a	Alternatives	5.0	2.34	4.43	2.49
1b	Information sources & systems	5.0	4.34	4.80	2.10
1c	Coal-setting	5.62	2.28	5.00	2.50
2	Operational management**	7.59	1.50	4.76	0.80
2a	Production functions*	7.50	2.62	4.75	1.60
2b	Finance functions*	7.50	2.66	4.00	2.23
2c	Control functions	9.66	6.73	8.00	2.43
2d	Personnel	5.66	3.13	3.33	1.83
2e	Procurement functions*	8.90	3.14	5.71	2.71

*U - value significant at .05 level
**U - value significant at .01 level

Successful entrepreneurs have higher mean score in all the eight areas and also with regard to the main dimensions planning orientation and operations management. However there is a great variation in scores within the two groups as reflected by high standard deviations.

Though the mean socre of the successful group is higher, the difference between the means is not satistically significant for any except for 'Production Function', 'Finance Function' and the collective dimension 'Operations Management,' as Mann Whitney - 'u' values were found significant only in these cases.

Broadly it can be stated that successful entrepreneurs do better on operations management. This characteristic of the group can be attributed partly to their better performance with regard to production function and finance function.

Intra-area Comparisons: Variable-wise Analysis

As stated earlier, each dimension had several variables. It is possible that though the successful and unsuccessful entrepreneurs do not differ with regard to the total area scores, the individual variables may be able to differentiate the two groups. To examine this aspect, with regard to each variable, percentage of entrepreneurs scoring on each variable from among the successful and unsuccessful entrepreneur groups are compared. As the appendix reveals there are 20 variables under planning orientation and 17 variables under operations management. Analysis of both the groups of entrepreneur on these 37 variables revealed that only on eight of these variable percentages of successful entreprenuers differed significantly from the percentage of unsuccessful entrepreneurs. The details of the percentages of entrepreneurs from each group for each variable are presented in Table 4.

As the table reveals successful entrepreneurs tend to score more on goal setting behaviour in relation to quality, and profit, production scheduling, collections, payment to suppliers and limit utilization, and inventory for raw material. However, surprisingly successful entrepreneurs do not seem to have clear cut goals on labour relations as compared to unsuccessful group. Probably they go by situations or that they do not need it. (For example under operations management their labour relations scores are certainly better). While these conclusions are based on statistical tests of significance, table 4 reveals that there is a trend for successful entrepreneurs to score more on the variables technology and process alternatives, information sources on finances, goals related to cost reduction, cash budgeting, and management development. Surprisingly, unsuccessful entrepreneurs show tendencies to score more on line of business and goal setting in relation to diversification. As stated earlier most of the successful entrepreneurs came from business background. It may be interpreted that such background necessitates less thinking to be given for alternative business lines. Similarly unsuccessful entrepreneurs may have clear cut goals of diversification or no diversification due to their failure.

There are some variables on which the percentage of entrepreneurs is low, say below 50 per cent, both among the successful and unsuccessful groups (Quadrant I in Table 5). There is a second class of variable where the percentage is high i.e. above 50 per cent, among unsuccessful entrepreneurs and low, i.e., below 50 per cent, among the successful (Quadrant II in Table 5). In a third category the percentage is high among the successful and low among the unsuccessful entrepreneurs (Quadrant III in table 5). The last category of variables is that where both successful and unsuccessful groups have high percentage of socres (Quadrant IV in Table 5).

Table 4: Percentage of Entrepreneurs from Successful and Unsuccessful groups Scoring on each Variable

Sr. No.	Variables	Percentage of Entrepreneur's scoring from Successful group	Unsuccessful group	
	A. Planning Orientation			
1	Line of business	22.2	42.9	Consideration of alternatives
2	Product line	55.6	42.9	
3	Location	33.3	28.6	
4	Machines & equipments	66.7	71.4	
5	Technology of processes	55.6	14.3	
6	Finance	77.8	71.4	
7	Area of operation	44.4	57.1	
8	Production	55.6	71.4	Information sources utilization
9	Marketing	44.4	57.1	
10	Finance	44.4	14.3	
11	Personnel	33.3	42.9	
12	Procurement	66.7	57.1	
13	Product line	55.6	57.1	Goal setting
14	Production	66.7	57.1	
15	Quality	88.9	28.6*	
16	Cost reduction	55.6	28.6	
17	Profit	77.8	14.3*	
18	Diversification	55.6	71.4	
19	Expansion	44.4	28.6	
20	Labour relations	11.1	57.1*	
	B. Operations Management			
21	Production scheduling	66.7	14.3*	Production functions
22	Line Balancing	55.6	42.9	
23	Production performance	88.9	42.9*	
24	Maintenance	88.9	85.7	
25	Determination of fixed capital	77.8	75.4	Finance function
26	Working capitals	66.7	42.9	
27	Case budget	33.3	0	
28	Collection	77.8	28.6*	
29	Payment of suppliers	100.0	28.6**	
30	Limit utilization	100.0	57.1*	
31	Procurement function	88.9	57.1*	Procurement function
32	Product profitability	88.9	85.7	Control function
33	Standards of costs	88.9	85.7	
34	Capacity utilization	100.0	71.4	
35	Labour relations	88.9	71.4	Personnel
36	Incentives	22.2	0	
37	Management development	55.6	28.6	

*Percentage difference significant at .05 level

**Percentage difference significant at .01 level

Table 5: Classification of Subfactors According to Percentage of Scoring Entrepreneurs Among Successful and Unsuccessful Groups

Percentage of unsuccessful entrepreneurs scoring	Percentage of successful entrepreneurs scoring: 25	26–50	51–75	75
25	Incentives (36)	Finance (10) Cash Budgeting (27)	Technology and process Production Scheduling (21)	Profit (17) Q III
26–50	Line of business (1) Q I	Location (3) Personnel (11) Expansion (19)	Product line (2) Cost reduction (16) Line balancing (22) Determination of working capital (26) Management development (37)	Quality (15) Production performance (23) Collections (28) Payment to suppliers (29)
51–75	Labour relations (20)	Marketing (9)	Machinery & Equipment (4) Production (8) Procurement (12) Product line (13) Product (14) Diversification (18)	Finance (6) Determination of fixed capital (25) Limit utilization and payment to banks etc. (30) Procurement (31) Capacity utilization (7) Labour relations (35)
75	Q II		Q IV	Maintenance (24) Product profitability (32) Standard of costs (33)

Note: Number in the paranthesis indicates the number of the variable as listed in Table 4.

Variables in categories I and II influence the success of an enterprise much less. In this context it can be noted that a higher percentage among the unsuccessful entrepreneurs scoring with respect to category II has only remained in consequential. Category IV might have influenced the success of enterprises of the successful group. However, these variables by themselves may not have led to the failure of unsuccessful group. What has mattered in the success of one group and the failure of the others appears to be their performance on variables listed under the third Quadrant.

The entrepreneurs classified as unsuccessful may improve their position if they endeavour to fix certain targets both with regard to the quality of their products as also profits. They can do well to maintain a more systematic payments and also strive for an optimum combination of cash and credit deals with respect to their payments and collections. It may help them if they can schedule their production and have certain index of performance to know their position. Lastly part of their failure may be due to their failure to consider alternatives in 'technology and process'; but these failures cannot be remedied now.

Needless to state further variables identified should be stressed in the entrepreneurial development programmes.

Summary and Implications

This study on 16 small industry entrepreneurs (9 successful + 7 unsuccessful) focused on identifying some personal background, attitudinal, organizational and managerial variables that discriminate the successful group from the unsuccessful group. Success in entrepreneurship was identified through the records of a financing agency and were later confirmed at the end of the interviews that success was associated with survival of the enterprise and profit making and there by repayment of loans. Of the background variables studied no clear patterns emerged differentiating the successful from the unsuccessful on age, education, urban exposure, father's education, and type of industry. There was a trend towards more successful entrepreneurs coming from families with business background and starting the industry during a period of industrial activity. An examination of career decision information given by the entrepreneurs was found to support the propositions made by Rao (1974). However, the sequential stages in the development of and entrepreneur did not emerge clearly. The two groups did not differ significantly on attitudinal dimensions like internal locus of control, adoption propensity, attitude to workers, interpersonal trust, consultation in decision making and compromise of value system, although trends in certain directions were observed. In terms of their organizational characteristics, sucessful entrepreneurs were found to socre better on operations management, production function and finance function. They also showed tendencies to score better on several other organizational dimensions. More research in these directions with well defined criteria of success are likely to help identify potential entrepreneurs and design entrepreneurial development programmes.

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1 Factory name and address

2 Name of the entrepreneur

3 Age

4 Educational qualifications (degrees/diplomas etc.)

5 Place of birth and periods of living

6 Exposure to Rural areas ---------- years during----------

Exposure to semi-urban area ---------- years during----------

Exposure to urban area ---------- years during----------

6 Experience in Industry

Nature of job or designation	Organization	No. of years worked	salary

7 Family background:

Occupation of father:
Occupation of mother:
Education of father:
Education of mother:

8 a) When did you first think of establishing your own organization? Year---

b) What made you thing of this? Can you recollect and tell us what made you think of starting your own enterprise? (Who influenced you? Is there a specific event etc.).

c) Please rank the factors that influenced you to think of starting your own enterprise (realization of internal resources, extension of family business, fear of losing job etc.)

9 When did you make firm decision to start this organization? What factors influenced you to make the decision?

10 Describe the events that are related to your establishing this enterprise that took place since your 'first decision' to your 'firm decision'. (Record all events).

11 Why did you choose this particular line of business? What factors have influenced you? Please describe.

12 After you made your firm decision how did you go about starting this organization? (What attempts have you made? Where were you successful? Where did you fail? How did your plan get changed? (Please describe in details).

13 a) Have you taken any training programme before starting the enterprise? At what stage? (Before establishing this?).

b) Have you undertaken any business tours before starting the enterprise? What did you try to assess?

14 When you made your decision to start your industry? What potentialities did you think that you possessed which were assets for you in starting the industry? What more resources did you think you needed? (Explain the three kinds of resources).

15 How did you go about acquiring the resources you lacked?

16 In this process did you discover any new things which you lacked or any new strengths which you possessed but did not think them to be that essential?

17 People have different orientations to life. Out of your experiences in your life, by now you may have developed certain beliefs and values about life. Please answer the following questions and tell us something about your views of life.

Given below are pairs of statements arranged on a 10-point continum. These statements are opposite to each other and represent two extreme and contrasting life-orientations. Please indicate on each statement where you stand.

a) Some people believe that they can do things with their own efforts and achieve results. They don't believe in any supernatural powers to shape their results. They might believe in GOD but they don't believe in GOD's influence in their achievements. They state "whatever I achieved is because of my own efforts". There are people in other extreme, who believe that everything they achieved or can achieve is not because of their own abilities but because of GOD or LUCK or something not in their hands. If these two sets of people can be put on a 10-point continuum where do you stand?

Whatever I have achieved or can achieve is due to my own efforts and not due to luck or other factors.

I cannot achieve anything on my own unless luck, GOD or other factors not in my hand favour me.

1 2 3 4 5 6 7 8 9 10

I prefer adopting any new practice I come across as new practices are likely to be always good

I think old is gold and one should be extremely careful in adopting new practices as there is always disadvantage coupled with advantages

b) 1 2 3 4 5 6 7 8 9 10

Workers will not work unless they are pushed to do so.

Pushing never helps, there should be self-realization if a worker has to do a good job.

c) 1 2 3 4 5 6 7 8 9 10

I like to be on my own in all my decisions.

I prefer taking help from others in all decisions to guard myself against mistakes.

d) 1 2 3 4 5 6 7 8 9 10

People are generally trustworthy

Persons can never be trusted at their face value.

e) 1 2 3 4 5 6 7 8 9 10

I don't mind the means. The results are important. Values have to be sacrificed in the present day set up to achieve results.

I don't want to sacrifice my values for achieving results.

f) 1 2 3 4 5 6 7 8 9 10

18 PLANNING ORIENTATION

Consideration of Alternatives	Score	Composite score
1. Line of business		
2. Product line		
3. Location		
4. Machines and Equipment		
5. Technology and processes		
6. Finance		
7. Area of operation		
TOTAL:		

19 INFORMATION - SOURCES & SYSTEMS

Functions	Score	Composite score
1. Production		
2. Marketing		
3. Finance		
4. Personnel		
5. Procurement		
6. Control		
TOTAL:		

20 GOAL SETTING

Clarity of goals with reference to-

1. Product line
2. Production
3. Quality
4. Sales
5. Cost reduction
6. Profit
7. Diversification
8. Expansion
9. Labour relations

TOTAL:

21 OPERATION MANAGEMENT*

1. Production Function
   a. Producing scheduling
   b. Line balancing
   c. Production performance
   d. Maintenance

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*For enterprises which had not gone into production we ascertained the systems they propose to instal when they go into production and how they are hanging whatever operations were relevant to their current status of project implementation. We have also ascertained how persistent they are in overcoming the several obstacles they faced in implementation of of the project enterprise. What was their approach in generating alternatives to meet the situations as they arose.

	Score	Composite score
2. Marketing Functions		
e. Flow of Market Intelligence		
f. Sales		
3. Finance Function		
g. Determination of Fixed Capital		
h. Determination of Working Capital		
i. Cash Budget		
j. Collections		
k. Payment to suppliers		
l. Limit utilization - Repayment to Banks, etc.		
4. Procurement Function		
m. Inventory of Raw Material		
5. Control Function		
n. Product Profitability		
o. Standards of cost		
p. Determination of key index of efficiency		
q. Capacity utilization		
6. Personnel		
r. Labour Relations		
s. Incentives		
t. Expansion/Management Development		
TOTAL:		