

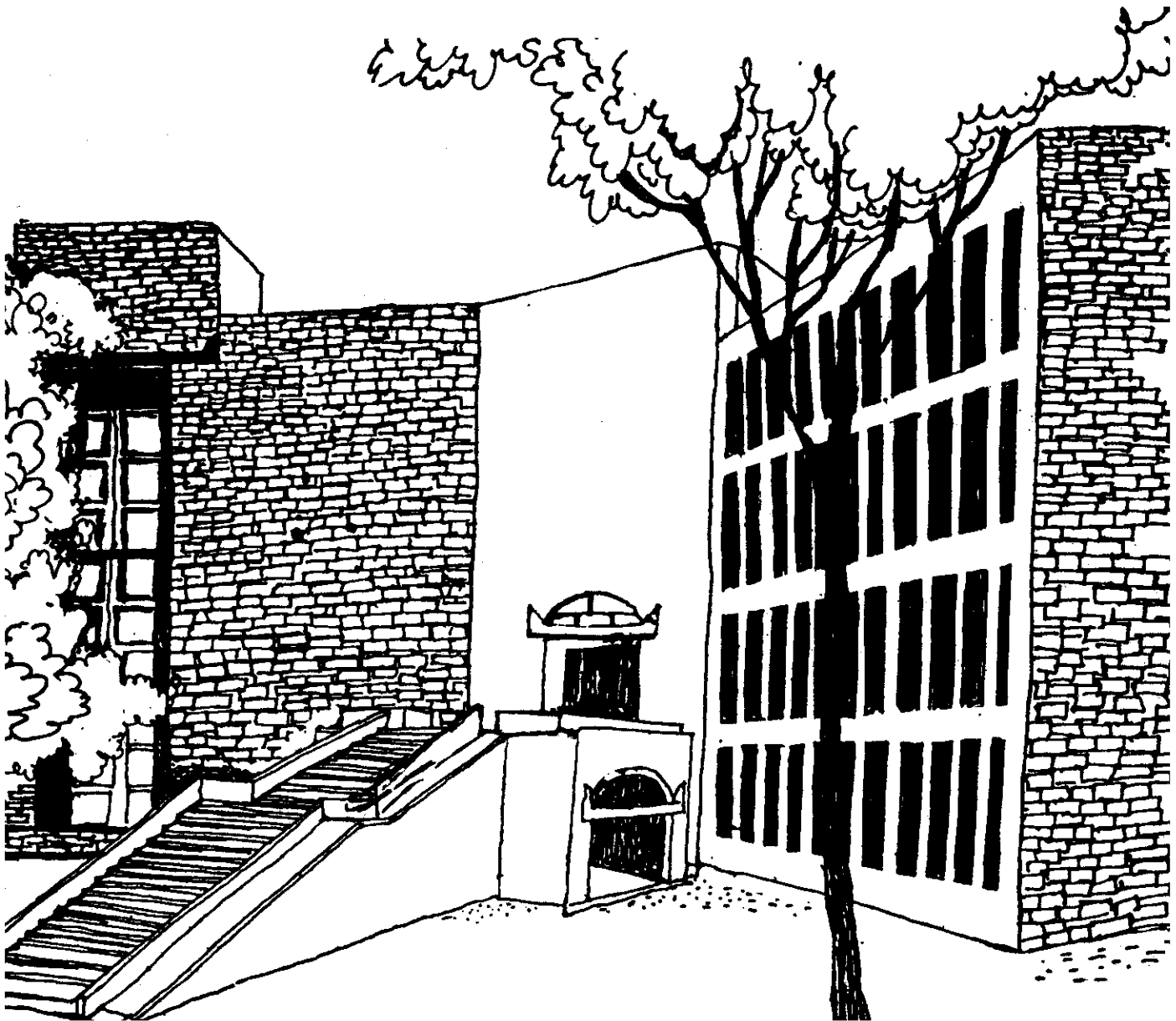


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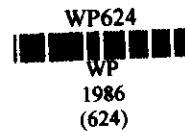
Working Paper



EMERGENCE OF PIONEERING--INNOVATIVE
ENTREPRENEURSHIP: A PSYCHOLOGICAL MODEL

By

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W P No. 624

August, 1986

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage.

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ACKNOWLEDGEMENT

I am indebted to Prof. P.N. Khandwala for his help and guidance. While I thank him for being the source of inspiration for this paper, I take the sole responsibility for the unsound logic and ill-conceived ideas in it, if any.

EMERGENCE OF PIONEERING-INNOVATIVE
ENTREPRENEURSHIP : A PSYCHOLOGICAL MODEL

Abstract

A review of literature on entrepreneurship reveals that most researchers adopt a uni-dimensional approach to explain the phenomenon. This approach, however, has failed to offer consistent explanation of the phenomenon, especially of pioneering-innovative (PI) entrepreneurship. This paper attempts to build a psychological model for the emergence of PI entrepreneurship so as to fill the existing theory-gap. It is a multi-dimensional model based on the following variables : (1) desire for autonomy, (2) optimism, (3) PI motive, (4) creative ability, (5) availability/adequacy of resources and opportunities, (6) achievement motive and (7) managerial skills. The sensitivity of these variables within the model is demonstrated and propositions are made about the critical variables required for the start-up and successful management of different types of ventures, namely, PI ventures, import-substitution ventures, imitative ventures and 'self-employment' ventures.

EMERGENCE OF PIONEERING-INNOVATIVE ENTREPRENEURSHIP : A PSYCHOLOGICAL MODEL

I. INTRODUCTION

Economic development is an overwhelming concern for all nations particularly for the less developed ones. Unlike in the past, it is now recognised as perhaps the most important function of any government. It is also taken for granted that economic development is achieved primarily through industrialization. It has been argued that the primary and tertiary sectors of the economy are constrained by biological time and hence there are severe limitations on increasing the productivity of these sectors. The secondary sector, however, operates on mechanical time and so has immense possibilities of increases in productivity (Averitt, 1975). While one may disagree with the philosophy, it is the experience of all developed nations that the primary impetus for their development came from the manufacturing sector. It is also important to note that the less developed nations are characterised by the predominance of agrarian societies. The plight of the less developed nations is usually expressed by the phrase 'Industrialise or perish'.

Thus, the concern for economic development has led to a concern for industrialization which in turn has stimulated a search for the factors that influence industrialization. Many researchers identify 'entrepreneurship' as the factor having the largest influence on industrialization. Though the concept of entrepreneurship is rather elusive and the search for the entrepreneur is similar to a 'hunt for

'Heffalump' (Kilby, 1971), it serves as a useful construct for explaining the birth and growth of organizations.

The present paper proposes to examine the literature on entrepreneurship and the applicability of its major theories to developing countries with a special focus on entrepreneurship in India. Research on entrepreneurship does not offer any conclusive evidence on what kind of factors - economic, social, psychological or skill and training, or what combination of these - contribute to the development of entrepreneurship. Studies have, at times, produced conflicting results; and apparently they do not emerge from a single paradigm. Perhaps a contingency approach to the study of entrepreneurship would lead to more concrete and reliable propositions which may serve as the basis for a sound development policy. Hence, it is also important to analyse the environmental influences on the innovative entrepreneur.

A word of clarification on the term 'innovative entrepreneur' should be added here. To those who accept the Schumpeterian definition of the entrepreneur, 'innovative entrepreneur' would surely sound redundant, for the entrepreneur is by definition an innovator. However, it may be noted that a large number of studies on entrepreneurship have gone 'beyond' the Schumpeterian definition. They feel that the phenomenon of organizational birth need not always be a consequence of hard core innovation. Further, the so-called 'non-innovative' entrepreneurs also have a role in the development of the economy while it is reasonable to accept this argument and the widened definition, we would still maintain that entrepreneurial breakthroughs can come

only through innovation. The function of the 'non-innovative' entrepreneurs is mainly to carry on with, and spread the innovation; and it is not unreasonable to call it an entrepreneurial function. This is why it becomes necessary to make a distinction between the innovative and the not-so-innovative entrepreneurs. The definitional problem will be discussed in greater detail in the next section.

II. DEFINING ENTREPRENEURSHIP

The entrepreneur has been variously defined as a risk taker, an organization builder, a decision maker, and an innovator. The term had its origin among the economists and had defied many an attempted definition. The tendency among many economists, therefore, was to treat entrepreneurship as part of a 'catch-all residual factor' (Kilby, 1971).

One of the earliest attempts to separate out the entrepreneurial factor from the residual was by J.B. Say (1803). Unlike Adam Smith, Say held that there is a distinction between the capitalist and the entrepreneur. Later on, J.S. Mill (1848) argued that, while the major functions of the entrepreneur are direction, control, superintendence, and risk-bearing, it is risk-bearing that distinguishes the entrepreneur from the manager. Mill did not seem to distinguish the entrepreneur from the capitalist. The Schumpeterian definition of entrepreneurship places less emphasis on risk, since Schumpeter believed that entrepreneurs, managers, and capitalists are all subject to the risk of failure. In his definition, the key word is innovation. However, the concept of innovation is differently

interpreted by him at two different times. In his early work (1934), the entrepreneur is the individual who carried out new combinations called 'enterprise'. In the later work (1947), anyone who does new things or does old things in a new way is an entrepreneur.

It is based on this latter concept of Schumpeter that Peterson (1981) defined entrepreneurship as "the process of unprogrammed innovative recombination of pre-existing elements of activity". Thus, entrepreneurship is not confined to business activities; nor is it confined to the starting of organizations. It should further be noted that entrepreneurship is viewed as a process rather than as a personality characteristic of individuals. An individual need not be entrepreneurial across all times and circumstances. Besides, it need not be restricted to individuals; persons who are not 'entrepreneurial' individually may show such talents in teams. Thus, many an innovation could depend substantially on the context rather than on the person.

Though the Schumpeterian definition is generally acknowledged to be the best, researchers have, for various reasons, opted for more restrictive definitions, many of which are person-oriented. The Weberian school, for instance, excludes the non-owner managers and defines the entrepreneur as the ultimate source of authority in an organization (Hartman, 1959). In McClelland's 1965 study, he considered only the following occupations entrepreneurial; salesman (except the sales clerk), management consultant, fund raiser, officer or a large company, and owner of business. Cole's definition (1959) is in the Weberian tradition; in his view, the entrepreneur is the

individual who undertakes "to initiate, maintain or aggrandise a profit oriented business unit for the production or distribution of economic goods and services".

Some of the Indian studies also have adopted similar definitions. According to Singh (1963), entrepreneurship involves the actual creation or extension of an organization or institution which gives rise to various growth-producing phenomena such as increases in productivity, technical change, saving and investment. Berna's definition (1960) is much simpler : for him the entrepreneur is a person (or a group of persons) responsible for the existence of a new industrial enterprise. Sharma (1980) has a broader concept but still keeps it restricted to the economic system when he defines an entrepreneur as "one who detects and evaluates a new situation in his environment and directs the making of such adjustments in the economic system as he deems necessary".

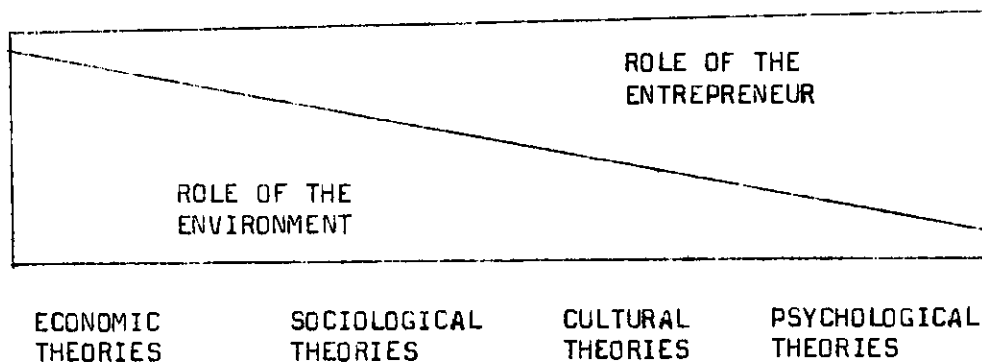
Since it is proposed to examine the concept of entrepreneurship in the context of economic development, the focus of this paper will be on entrepreneurship within the economic system, particularly on the entrepreneurial events which involve the creation or extension of an economic institution. These events, however, can be of different types. One of the most obvious distinctions is between the innovative events and the ordinary (not-so-innovative) events. While it is true that an innovative person need not remain so always, it has been observed that some persons/organizations are consistently more innovative than others. This is an indication that there may be a few relatively permanent personality traits that distinguish

the innovator from the ordinary. The search for these traits constitute a major portion of the literature on entrepreneurship. As we shall see in the next section, there is no conclusive evidence in favour of any one trait as causing entrepreneurship. The implication could be that there is need for a contingency theory based on the interaction between personality traits and environmental forces, to explain the phenomenon of innovative entrepreneurship.

III. THEORIES OF ENTREPRENEURSHIP

It may be interesting to examine the major theories of entrepreneurship with a view to identifying the relative emphasis they lay on the entrepreneurial person and/or the environment. Peterson (1981) classified research on entrepreneurship into four groups, ranging from the economists (who assign the largest role to the environment) to the psychologists (who assign the largest role to the entrepreneur). The four groups may be depicted on a continuum as shown in Figure-1.

Figure - 1



Traditional economists generally assumed that entrepreneurship is abundant in any community and would emerge when there are

sufficient economic incentives. The supply side economists postulated an unlimited aggregate demand for goods and services and hence did not visualize any restrictions on entrepreneurship. The demand siders, however, recognize that stagnation of aggregate demand for goods and services could pose a constraint on entrepreneurial activities and warn that a low standard of living does not automatically mean that there is greater entrepreneurial opportunity. The scope of entrepreneurship depends on the amount of disequilibrium in the economy and not on the level at which equilibrium is achieved. Obviously, the individual entrepreneur is largely unable to affect aggregate demand. The solution offered is investment by government which would act as a double-edged sword, simultaneously stimulating supply and demand (Keynes, 1936; Kirzner, 1982). The stage theorists also point out that individual entrepreneurs may not be able to provide the minimum effort to get an underdeveloped nation to the 'take-off stage'. Some of those theorists (e.g. Marx, 1936; Davis et.al., 1971) consider economic innovation as a consequence of institutional changes. Others (e.g. Rostow, 1964; Leibenstein, 1957) suggest that development is a maturational process which cannot be hastened beyond limits. Among economists, Schumpeter (1934) stands almost alone in assigning a significant role to the entrepreneur. He views profit opportunities as arising out of the temporary monopolies created through innovation.

The socio-cultural theories of entrepreneurship can be traced back to Weber's theory (1930) of the Protestant Ethic. He proposed that capitalism and consequently entrepreneurship was the outcome of

the religious imperatives (implied in Protestantism) of an occupational calling, rationality, and asceticism. Weber's theory has been criticised on the basis of contrary evidences (Fleming, 1979; Hagen, 1962; Tawney, 1947). An alternative hypothesis to Weber's would be that the Renaissance caused Protestantism on the religious front and capitalism on the economic front. The Renaissance and the Industrial Revolution rather point to the importance of the spirit of enquiry and the pursuit of knowledge in promoting innovation. It may be noted that a similar phase is observed in the evolution of Japanese industry. Elementary education in Japan was made compulsory in 1872, and in 1690 there was a reorientation of the educational policy, emphasizing extensive development of technical, scientific, medical, and industrial education. By 1907, Japan could achieve 97% school attendance (Bhattasali, 1971).

Other theories in the cultural strain are those of Cochran and LeVine. Cochran proposed that entrepreneurial supply depends on the status accorded to entrepreneurs by the culture of the nation (Cochran, 1964 and 1972; Cochran and Reina, 1962). LeVine's thesis is that if social mobility in a country is attainable through high performance, its people are likely to engage in entrepreneurial activities; however, if the social status is predetermined, or if mobility is possible only through loyalty, obedience and sycophancy, then people will prefer other occupations (LeVine, 1969).

Following Weber (1946 and 1958), many scholars have argued that the major impediment to the development of entrepreneurship in India

has been her religion and culture. Others point out that Indian religions are not more spiritualistic or less materialistic than other religions. Even the caste system is likened to kin groups found elsewhere (Morris, 1967). These are not to be conceived as obstacles that cannot be overcome by creating conducive economic and political environment.

Gadgil (1959) points out that India had a highly developed business set-up during the eighteenth century. During the nineteenth century when Western countries were going through the Industrial Revolution, India had the misfortune to be under colonial rule. It was argued that lack of economic opportunities, not religion and philosophy stifled the spirit of enterprise in India. The cultural explanation of India's backwardness is hotly discussed in the literature (see for example, Acharya, 1957; Bagchi, 1972; Goheen et.al. 1958; Lamb, 1955; Medhora, 1965; Pandit 1957 and 1962; Singer 1958, Tripathi 1981). Apparently there is no conclusive evidence in support of either position. However, the swing is away from cultural determinism. This is supported by evidences from other cultures as well. Peterson (1981) quotes a few studies to show that some cultures which were believed to be non-entrepreneurial could suddenly turn entrepreneurial on the removal of certain environmental obstacles. To take another obvious example, Buddhism which Weber (1958) considered an impediment to entrepreneurship in India has not obstructed Japan's development. Thus, a 'uni-factor approach' is inadequate for explaining entrepreneurship (Tripathi, 1981). It may be worthwhile to look into the combined effect of several factors.

While the psychological theories emphasize the role of the entrepreneurial individual, they, too, have a socio-cultural explanation for the emergence of such individuals. Hagen (1962), for instance, examines the history of a few entrepreneurial countries such as England, Japan, Russia, and Columbia, and offers a sociological explanation for the phenomenon. He says that the 'status withdrawal' faced by a community at some time in its history becomes instrumental in producing a large number of innovative individuals in that community later. He indicated that the time-lag between 'status withdrawal' and entrepreneurial behaviour was about 250-800 years. Hagen's theory attempts to explain the relatively stronger entrepreneurial behaviour in the deviant, displaced, and migrant groups. It may be a consolation to think that the large scale changes in the social structure of many developing countries might create a feeling of displacement in the higher classes, which might eventually turn them into entrepreneurs. It is, however, no consolation to think that one has to wait at least for 250 years to see the change !

McClelland (1961) proposed that the distinguishing trait of an entrepreneurial individual is the need for achievement (nAch). He designed tests for measuring nAch of a nation (using its literature) and of individuals (using projective stories) and also training programs for developing nAch in individuals (see also McClelland, 1965; McClelland and Winter, 1969; McClelland, et.al. 1976). While it was claimed that nAch could be developed in grown up individuals, the natural process of its development is through childrearing

practices. Mothers imbued with the ideological values of the Protestant Ethic are the major instrument for creating nAch in sons. So in the ultimate analysis the nAch theory becomes an extension of the cultural determinism of Weber, whose applicability to India has been discussed above. The case of nAch is no different. The two 'sources' of nAch in a society are identified by McClelland as popular stories and child-rearing practices. It is generally believed that child-rearing practice in India compared to those in the West are apt to make children dependant on and obedient to parents rather than to make them independunt, questioning and innovative. The popular stories of India are said to be highly moralistic. Many of these are derived from the two great epics, permeated by a spirit of philosophic indifference, resignation, and action without any desire for rewards. It may be noted that the philosophy behind India's greatest achievement of this century, Independance, was 'passive resistance'. The underlying theme of Indian life seems to be endurance, not achievement. However, the nAch score for India based on 21 stories from children's readers was as high as 2.71 against the average of 2.00 for 41 countries in 1950 (McClelland, 1961). Moreover, when Fraser (1961) measured 19 trainee mechanics in rural Orissa on achievement motivation, he found that 10 out of 19 had high scores, and 7 of those high scorers took up 'achievement-oriented' business activities in one year's time. Thus, the measured scores are apparently not in agreement with the presumption of low achievement motivation in Indian culture.

Does a person with high achievement motivation necessarily go into business? Fraser (1961) is often quoted as an evidence that he would. However, McClelland's own evidence (1961) is ambiguous. He proposed that high achievers from the lower status backgrounds may set up their own business, while those from the higher status backgrounds may go into high prestige professional occupations. There is also the question of what type of achievement the high nAch people would seek, whether in business or in other fields. As Khandwalla (1985) points out, the achievement motive is concerned with the achievement on all kinds of tasks including unique tasks and also more humdrum tasks. He identifies and measures another distinctive motive and calls it the PI motive (the pioneering-innovative motive) which is concerned with transformational tasks. Hence it is reasonable to say that the PI motive would be able to discriminate the innovative entrepreneur (or the Schumpeterian one) from the ordinary one, without necessarily requiring that he would operate in the business field. His entry into business would depend on other conditions.

Though the trait approach is the most dominant among psychological theories, there are two other approaches which deserve to be mentioned here : (1) the field theory approach, and (2) the role-theory approach (Christopher, 1971). Following Lewin, the proponents of the field theory approach hold that personality traits cannot be viewed in isolation of the social situation in which actions are performed. The research question posed by this group is as to where

the prospective entrepreneurs may be found. One consistent result of Indian research in this area is that the majority of prospective entrepreneurs have a business or industry background (Christopher, 1969; Patel, 1971; Sharma, 1980). The role theory approach (Cf. Aitken, 1965, Braybrooke, 1963-64), emphasizes the changes taking place in a person because of his entrepreneurial role. The possibility of such changes is a sufficient ground for questioning the validity of studying entrepreneurs with a view to identifying the characteristics of potential entrepreneurs.

It may be noted that research on entrepreneurial traits, which constitutes a major part of the literature on entrepreneurship, is inconclusive and at times contradictory. A comprehensive review of the trait research is available in Rao and Mehta (1978). It may be noted that some of the recent findings of trait research seem to challenge the validity of the trait theory itself. McClelland and Burnham (1976) admit that nAch is inadequate for explaining entrepreneurship. They propose that a high need for power along with a low need for affiliation and a high capacity to discipline oneself would be the psychological make-up of an entrepreneur. The latest of McClelland's experiments is once again to start from the scratch - to take a fresh look at what entrepreneurs do, without any preconceived notion as to what traits they possess - by examining critical incidents through what is called Behavioral Event Interviewing (Boyatzis, 1982). Other researchers are more prolific in identifying traits. Sexton and Bowman (1983), for instance, identify as many as twenty psychological characteristics that distinguish students with entrepreneurship

majors from those with non-business majors; there are eight characteristics on which they are different even from students with business majors. Hornday and Bunker (1970) identify twelve traits and group them into two according to importance. In a study of 685 students, Kourileky (1980) found that the most critical entrepreneurial traits are (1) persistence, (2) academic ability, and (3) creativity. In a survey conducted among the agencies promoting entrepreneurship in India, Rao (1979) found that they rated persistence as the second most important characteristic among a list of seventy-three. However, the claim of academic ability is not supported in the Indian context (Patel, 1971). The traditional belief that risk taking ability is crucial to entrepreneurship is questioned by Brockhaus (1980). In Schero's study (1982), tolerance of ambiguity emerges as a discriminating factor. Nandy (1973), in a study of two castes in Calcutta, has shown that the critical characteristics differed for the two. For the Mahisyas, the traditional business castes, the important variables were exposure, need for achievement, need for power, sense of efficacy, overall modernity, caste ties and high culture; whereas for the upper castes, need for achievement and caste ties were the only variables related to entrepreneurship. However, nAch which is found to be associated with entrepreneurship in both the groups loses its status if the confidence level is raised. At $p=.01$ the correlation is significant only for the upper castes. Besides, the design of the study is such that the performance of the role may vitiate the results. Entrepreneurs are defined as those who are doing their own business for the previous

five years; and non-entrepreneurs are those who have not started any business in the previous five years. It may also be noted that optimism which had been found to be critical by Atkinson and Feather (1966) was not relevant at all in Nandy's study. On a temporal dimension, Chandler and Radlich (1961) have shown that the personality types and behaviour characteristics of the American entrepreneur in the 1850s bear little resemblance to his counterpart in the 1950s.

The bewildering number and variety of traits and the absence of agreement among researchers regarding the criticality of one or the other make it probable that their relevance and importance could vary from situation to situation. This also raises the larger theoretical issue as to whether entrepreneurship is a function of strategic choices made by an individual or a group in a given context, or whether it is a function of the environment. The strategic choice model holds that the entrepreneur is capable of manipulating and controlling the environment by strategic choices (Chilo, 1972; Evan, 1976; Hirsch, 1975; Starbuck, 1976). The population ecology model, on the other hand, minimizes the role of the entrepreneur and holds that the survival of organizations depends on the degree to which they are compatible with the environment (Aldrich, 1979; Hannan and Freeman, 1977; Meyer, 1978; Pennings, 1980). According to the latter model, the basic process of organizations' relationship with the environment is selection, not adaptation. The major features of the two frameworks of entrepreneurial environment may be summarised as follows (see Pennings, 1982).

Strategic Choice Framework

1. Acts of the entrepreneur are primarily volitional.
2. The entrepreneur makes strategic choices to secure the best transactions with the environment.
3. The environment is a pool of resources which the entrepreneur selects and acquires to establish his ventures.
4. The entrepreneur masters fate and makes strategic choices to minimise threats and exploit opportunities.

Population-Ecology Framework

1. Acts of the entrepreneur are primarily deterministic.
2. The entrepreneur's choices are predicted and moulded by the industry.
3. The environment is a set of influences which selectively permit some ventures to survive.
4. The entrepreneur is a creature of the environment and an instrument of economic development.

The population-ecology model holds that entrepreneurial individuals have little part in the formation of organizations. They are available in sufficient numbers in any society (see also Gerschenkron, 1965). What makes the difference between the creation of organizations and the lack of it, is the appropriate mix of environmental factors. The role of the environment had been practically neglected by organizational researchers, probably because of the 'actor-observer bias' (Bruno and Tyebjee, 1982). The actors (entrepreneurs) may feel that they are controlled and restricted by external forces, while the observers (researchers) may feel that the actors are responsible for their deeds. Therefore, researchers have traditionally focussed on the special characteristics of the actors that would make the deeds possible. It may be useful then to take a critical look also at the role of the entrepreneurial environment. The truth will most probably lie

between the two extreme positions. Organizations are born out of the interaction between the entrepreneur and his environment. It is therefore, legitimate to enquire into the psychological make-up of the innovative entrepreneur and into the characteristics of the environment that provoke and promote innovations. This paper focuses on the first part and tries to develop a psychological model for the emergence of the pioneering-innovative entrepreneur.

IV. THE PSYCHOLOGICAL MAKE-UP OF THE INNOVATIVE ENTREPRENEUR

The innovative entrepreneur is a rare phenomenon especially in developing countries where opportunities for business creativity are limited. True to their nature, however, innovative entrepreneurs emerge from the most unexpected circumstances. In fact, their creativity lies in seeing opportunities where the common man sees none. There is a compelling presence in the field of their action. When the textile industry in India was facing recession and many people were complaining about the special concessions granted to the power looms at the cost of composite mills, someone thought of making use of the power looms for getting quality goods produced; he would also take advantage of the import restrictions on synthetic fibres, eventually to set up his own composite mill and to diversify into other related and unrelated activities. There are other entrepreneurs who, when technological collaboration was denied to them, mastered the technology by destructive testing of foreign products; there are still others who developed cheaper indigenous technologies of equal or better merit. During recessions,

when ordinary entrepreneurs would be clamouring for government protection and support prices, there are those who quietly work for improving the quality of their products and strengthening their marketing arrangements so that they can come out of the recession sturdier and healthier than most others. There are marketing innovations in which someone successfully promotes an otherwise inconspicuous product like undergarments, giving it a high-sounding brand name and advertising it profusely through the media. There are risk-reducing innovations where the entrepreneur charters a high cost machine and tries it before deciding to buy it, or makes trial runs of production on loan licenses in someone else's premises, or manufactures the same product in different locations under different company names so as to reduce the impact of labour troubles, power shortage, etc. Thus, innovations in business vary greatly among themselves in their area of occurrence, scope, value and impact. These innovations, big or small, are instrumental in sustaining industrial growth and economic development.

It is, therefore, useful and interesting to investigate into the psychological make up of the people behind innovations in business. In other words, one is seeking a new answer to the old question: What are the psychological characteristics of an innovative entrepreneur? As it is obvious from the review of trait research, it is not possible to identify a single trait that can discriminate between the innovative entrepreneur and the ordinary. Hence a multidimensional approach should be adopted.

Starting from a basic premise that performance is a function of motivation and ability, one may speculate about the kind of motivation and ability required to produce an innovative entrepreneur. The motives that readily come to mind in this connection are the achievement motive, the power motive, and the PI motive. Since our primary concern is with the innovative entrepreneur, the PI motive (Khandwalla, 1985) seems to be the most relevant, though the achievement and power motives may also be important to implement pioneering ventures and to mobilize the organization for them. On the dimension of ability, the most critical factor would obviously be the ability to innovate (Schumpeter, 1934); the entrepreneur should be able to generate creative ideas and exploit them commercially. In other words, he should be capable of divergent thinking (Guilford, 1967; Khandwalla, 1984). Classifying people on the basis of the high-low combinations of PI motive and creative ability in them, there emerge four categories of performers as represented in Figure-2.

Figure - 2

| | | PI Motive | |
|------------------|------|---|---|
| | | High | Low |
| Creative Ability | High | (1) Pioneering - Innovative (PI) Entrepreneurs | (3) Idea Banks |
| | Low | (2) Import-Substitution (IS) Entrepreneurs | (4) Potential Employees/ Imitative Entre- preneurs |

So, it is proposed that an innovative entrepreneur is one who is high on both PI motive and creative ability. Persons high on PI motive but low on creative ability are likely to set up import substitution ventures. They would thus be pioneering and innovative in a relative sense, in their own country and so would be satisfying their high PI motive, without being hampered by their low creative ability. In the opposite case, where PI motive is low with high creative ability the person is likely to remain an idea bank. Such persons will be able to operate innovatively through others in a congenial group. By and large they would serve as employees of other creative entrepreneurs. Even if resources and opportunities for imitative ventures are available, they would not go in for such ventures because they consider it an insult to their creative mind to imitate someone. So the chances of setting up imitative ventures are paradoxically higher when both the dimensions are low rather than when creative ability alone is high. The 'low-on-both' group would normally tend to be employed, but in case the resources and opportunities are available, a few of them would undertake imitative ventures. These few are normally those who have a high desire for autonomy and in some cases have failed to get or retain employment for one reason or the other.

The conditions specified for the fourth group to become imitative entrepreneurs should not lead one into believing that the other groups are not influenced by any such conditions. There is no reason to believe that a high PI motive and a high ability for divergent thinking will automatically lead to the start up of PI ventures in

business. Opportunities for exercising PI motive and creative ability are abundant in business and non-business fields and in employment and 'entrepreneurial' situations. Research on the link between achievement motivation and start-up of new business ventures reported in the previous section is not conclusive; the overall finding is that there is no unqualified and unconditional link between the two. The case of PI motive/creative ability cannot be different for reasons stated above. So it is necessary to look for other factors/conditions that might direct the PI/creative persons into setting up new ventures in business.

As far as the social psychology of the entrepreneur is concerned, there are two aspects to the start-up of a new business venture : (1) the desire for being the master of oneself, which is known in the literature as the desire for independence/autonomy; (2) the attractiveness of business to the individual in comparison with other professions. The latter includes the social status of business, the mobility that can be achieved through business, the resources available in the environment and so forth. In the model shortly to be discussed, it is proposed to group these under the factor 'availability/adequacy of resources and opportunities' (see Figure-3). So the hypothesis is that a person with a high desire for autonomy is likely to start his own venture, and if business is sufficiently attractive to him, the new venture will be a business unit. There is some empirical support for this position. Studies of proprietors of business units have shown that most of them had a high

*desire for autonomy, independence or self-reliance (Collins and Moore, 1970; McClelland, 1961; McClelland et.al. 1976; Stanworth and Curran, 1971).

The exercise of a person's desire for autonomy may be inhibited by his attitude towards his own capabilities and the 'munificence' of the environment. In other words, one has to be an optimist to be able to embark on new and risky ventures. It is an ancient truism as well as an empirically tested fact that hope of success is a necessary condition for action (Birney, et.al. 1969; Stotland, 1969). So it is proposed that optimism is critical for entrepreneurship which requires a lot of self-initiated actions compared to employment under others, inspite of some contrary evidences provided by McClelland (1961) who found that optimism promotes efficiency in employment rather than entrepreneurship and Nandy (1973) who observed that optimism was largely irrelevant for entrepreneurship).

A tentative profile therefore, of a person who would start a PI venture is that he has high desire for autonomy and optimism in addition to PI motive and creative ability. But starting a PI venture is not enough for PI entrepreneurship. It has to be successfully organised and managed. This is where managerial skills and probably the achievement motive become critical. The PI motive relates to the new venture as a whole, but the achievement motive should rule the steps towards the final goal. In other words, the creative idea should be broken up into several concrete and operational steps of achievement so that the changes from one step to another is small and incremental,

but the totality is discontinuous and novel. Thus at each step, the entrepreneur would be taking moderate and calculated risk and building the subsequent step on the basis of objective knowledge of the result (feedback) from the previous step. So the PI motive is obviously not a substitute for the achievement motive. Neither does the former reduce the importance of the latter. They should, in fact, complement each other. The emergence of achievement motive as a powerful entrepreneurial motive in many studies of successful entrepreneurs and the absence of any necessary link between the achievement motive and the starting of new ventures may thus be reconciled in the hypothesised model shown in Figure-3.

The model for the emergence of the PI entrepreneur is, therefore, built around the following variables :

1. Desire for autonomy
2. Optimism (Hope of success/fear of failure)
3. PI motive
4. Creative ability (Divergent thinking ability)
5. Availability/adequacy of resources and opportunities
6. Achievement motive
7. Managerial/organizational skills.

The probability of successful PI ventures, import-substitution ventures and imitative ventures can be affected by manipulating the relevant variable(s). It should be noted that the probability of 0.50 assigned at each node in the model is arbitrary and is meant only to illustrate the impact of the variables on the outcomes. The resultant 'proportions' are summarised in figure-4.

FIGURE - 3

A HYPOTHESISED MODEL OF THE EMERGENCE OF ENTREPRENEURIAL BUSINESS VENTURES
(With an Arbitrary Probability of 0.5 at each node)

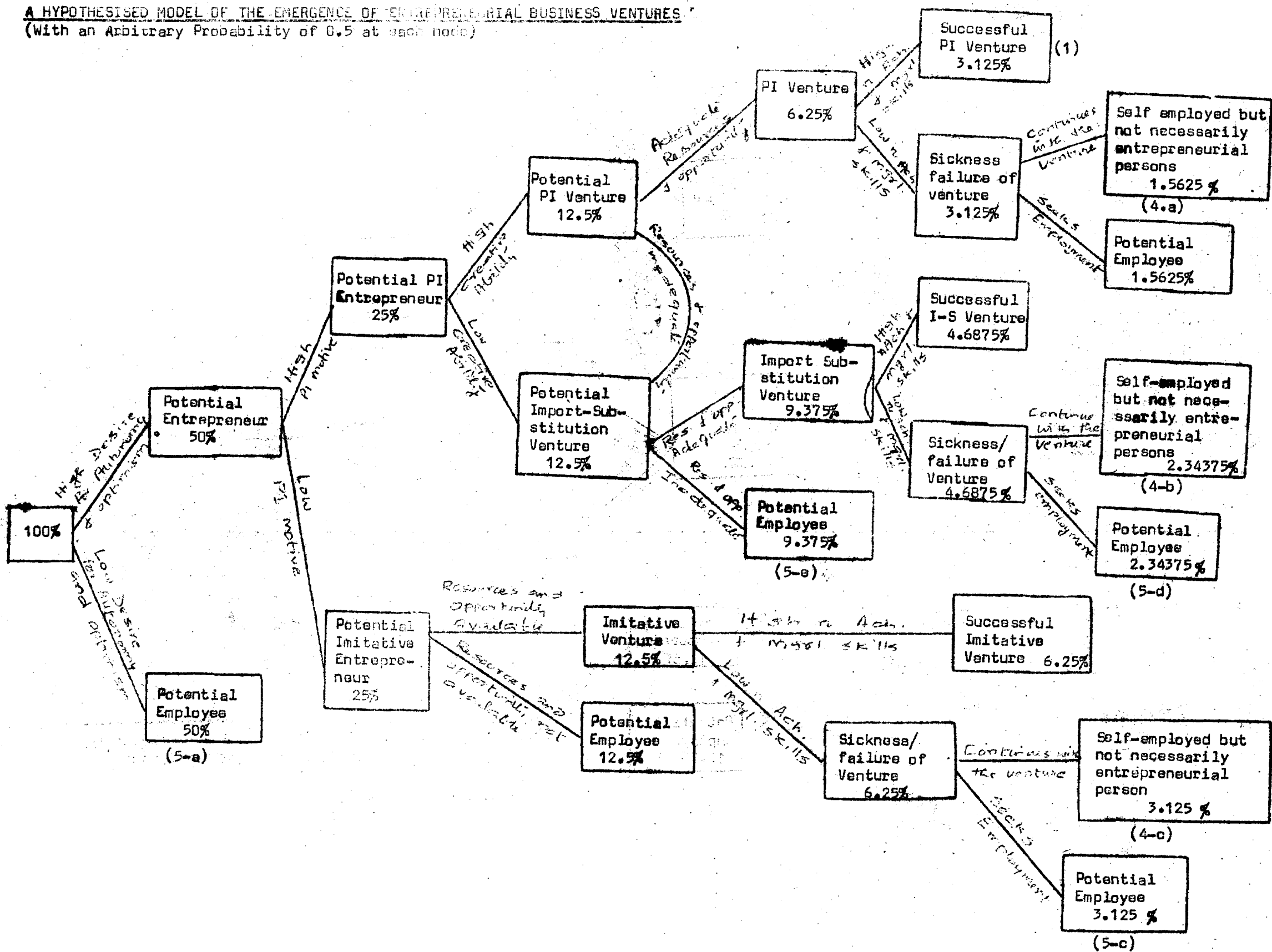


Figure - 4

PROPORTIONS OF ENTREPRENEURS AND EMPLOYMENT SEEKERS
BASED ON THE MODEL PROPOSED IN FIG.3

| <u>Category</u> | <u>Approx. %</u> |
|--|------------------|
| Persons engaged in successful PI ventures (1) | 3 |
| Persons engaged in successful IS ventures (2) | 5 |
| Persons engaged in successful imitative ventures (3) | 6 |
| Self-employed but not 'entrepreneurial' persons (4a+4b+4c) (4) | 7 |
| Potential employees/Employment Seekers (5a+5b+5c+5d+5e+5f) (5) | 79 |
| Total | <u>100</u> |

It is no surprise that PI entrepreneurs constitute hardly 3% of the population and that a large majority (over 79%) are employment seekers. The remaining 18% are distributed among IS entrepreneurs, imitative entrepreneurs, and self-employed but not 'entrepreneurial' persons. This appears to be a realistic picture of the population at large. However, in developing countries the percentage of employment seekers may be much larger, with substantial reductions in the number of entrepreneurial persons, especially of PI persons. This is because the traditional, moralistic, and conformity-oriented culture and environment of many developing nations is not conducive for developing such traits as desire for autonomy, PI motive, achievement motive, and divergent thinking abilities in their people. The proportions of people falling in various categories under such pessimistic assumptions are shown in Figure-5, where the probabilities

Figure - 5

PROPORTIONS OF ENTREPRENEURS AND EMPLOYMENT SEEKERS
WHEN THE PROBABILITIES IN FIG. 3 ARE ALTERED
TO 0.25 and 0.75

| <u>Category</u> | | <u>Approx. %</u> |
|--|-------|------------------|
| Persons engaged in successful PI ventures | (1) | 0.10 |
| Persons engaged in successful IS ventures | (2) | 0.35 |
| Persons engaged in successful imitative ventures | (3) | 1.17 |
| Self-employed but not 'entrepreneurial' persons (4a+4b+4c) | (4) | 1.23 |
| Potential Employees/Employment Seekers (5a+5b+5c+5d+5e+5f) | (5) | 97.15 |
| | Total | <u>100.00</u> |

used are 0.25 and 0.75. The impact of the change is tremendous especially on the PI ventures. The reduction in this category is as large as thirty times. The only category that has gained in the process is that of employment seekers. They have gone up from 79% to 97%. This is perhaps a truer picture of what is happening in underdeveloped countries. There is an obvious need to direct the developmental efforts towards increasing the proportion of people with PI motive, creative thinking, desire for autonomy, achievement motive, managerial skills, etc. Unfortunately, however, the efforts of many governmental programmes for entrepreneurial development are directed mainly towards the 'resources and opportunities' aspect of the environment. While this will surely increase the chances of the entrepreneurial person entering business, it is largely unable to increase the number of such persons. Hence the need for changing

the focus of development policies and programmes, so as to give far greater importance to appropriate cultural values and educational systems.

CONCLUSION

The foregoing discussion on the psychological make up of the innovative entrepreneur may be summarised in three propositions :

Proposition - 1 :

Desire for autonomy, optimism, and availability of resources and opportunity are critical to the start-up of any type of entrepreneurial ventures. For the start-up of innovative ventures, there is an additional requirement of PI motive and creative ability.

Proposition - 2 :

Achievement motivation and managerial skills are critical to the successful management of any type of entrepreneurial ventures; they are unlikely to be critical to the start-up of ventures as they are commonly believed to be.

Proposition - 3 :

Though the developmental efforts aimed at increasing the resources and opportunities will increase the chances of an innovative person entering business, these are insufficient for increasing the number of such persons; the latter would depend largely on the changes in the formative environment of the people reflected in the cultural values, child-rearing practices and educational systems of a nation.

The review of research on the psychological traits of entrepreneurs has brought out the inadequacy of the existing theories to

explain the phenomenon, especially of pioneering innovative entrepreneurship. There is clearly a need for a new theory, which should seek the explanation to entrepreneurship in terms of more than one factor. The psychological model proposed in this paper attempts to partly fill this theory-gap. The other part of the explanation should be sought in the formative and immediate environments of the pioneering-innovative entrepreneur. Research on entrepreneurship, especially on the entrepreneurial environment will have significant policy implications for development administration.

* * *

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