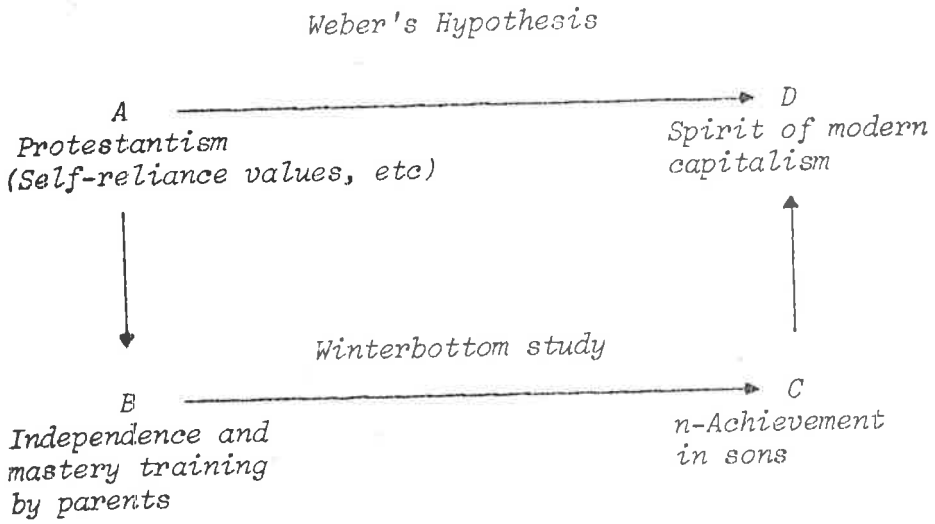

FIGURE 2.1 WEBER'S THESIS AND McCLELLAND'S MODIFICATION

Source: McClelland, 1961, p.47.

Winterbottom (1953, 1958) tested hypotheses pertaining to n-Achievement and early parent-child relations. She found that the mothers of children with high levels of n-Achievement consistently expected evidence of independence and mastery at an earlier age than did mothers of sons with lower n-Achievement. Significant differences in n-Achievement in five-year-olds were associated with differences in maternal attitudes. Winterbottom asked mothers to state at what age they expected their sons to be able to do certain tasks, such as:

1. To be willing to try things on his own without depending on his mother for help.
2. To be active and energetic in climbing, jumping and sports.
3. To try hard things for himself without asking for help.
4. To be able to lead other children and assert himself in children's groups.
5. To make his own friends among children of his own age group.

6. To do well in school on his own.

7. To have interests and hobbies of his own. To be able to entertain himself.

8. To do well in competition with other children. To try hard to come out on top in games and sports.

9. To make decisions like choosing his own clothes, deciding to spend his money by himself, what books to read or what movies to see.

10. To know his way around the neighbourhood so that he can play where he wishes without getting lost.

(adapted from Winterbottom, 1958)

Winterbottom's studies have stimulated many attempts to generalize her initial findings in several ways. Rosen (1959) investigated differences in achievement motivation across a range of ethnic and social groups (see pp. 124-127 above) and the preliminary stage of his study was to determine the mean age of independence training for each group. His data, in Table 2.4, showed that Jews expected earliest self-reliance from their children, followed, in order, by Protestants, Negroes, Greeks, French-Canadian and Italians (the latter two groups being Roman Catholic).

Rosen and D'Andrade (1959), from observations of parent-child interaction in the homes of 40 families (20 containing a son in the highest quartile of the n-Achievement distribution, and 20 with a son in the lowest quartile) concluded that both the mothers and fathers of high n-Achievement boys set higher standards of excellence than did the parents of low n-Achievement boys. Both parents of the high n-Achievement boys demonstrated more warmth and affection towards their sons than did the parents

TABLE 2.4 MEAN AGE OF INDEPENDENCE TRAINING BY ETHNICITY AND SOCIAL CLASS

Ethnicity	Social Class				
	1-11-111	IV	V	$\bar{x}$	N
French-Canadian	8.00	7.69	8.08	7.99	62
Italian	6.79	7.89	8.47	8.03	74
Greek	6.33	8.14	7.52	7.67	47
Jew	6.37	7.29	6.90	6.83	57
Negro	6.64	6.98	7.39	7.23	65
Protestant	5.82	7.44	7.03	6.87	122
$\bar{x}$	6.31	7.64	7.59		427

Ethnicity: $F = 8.55$ $p < .01$
Social Class: $F = 21.48$ $p < .001$
Ethnicity X Class: $F = 6.25$ $p < .01$

Source: Rosen, 1959, p.51.

of the less motivated boys. The mothers with high n-Achievement sons also exhibited more authoritarianism towards their sons, as well as affection. The fathers of the high achievers, on the other hand, demonstrated less dominating behavior than their wives and the fathers of the low achievers. Such a finding concurs with conclusions reached in many other studies - that familial authoritarianism (particularly deriving from the father) is not conducive to high n-Achievement in children. However, Collins and Moore (1970) have associated the tendency to enter entrepreneurial activities with rather unhappy childhood experiences, characterized by paternal brutality, parental indifference and emotional remoteness. Such influences, according to Collins and Moore (1970), create a reaction by the child which leads to independence and self-reliance, and he consequently seeks situations in which others are not able to

exercise authority over him. Such a proposition conflicts with the findings of Rosen and D'Andrade (1959), McClelland (1961) and others. All agree that high levels of n-Achievement and the tendency to enter entrepreneurial pursuits are closely associated. However, contention exists over the source of achievement motivation. The weight of evidence is on the side of those who have concluded that extremes in child raising practices are likely to lead to lower n-Achievement in children. Particular extremes cited include paternal domination, indulgent attitudes, low standards of excellence and excessively early achievement demands. The ideal situation involves

> reasonably high standards of excellence imposed at a time when the sons can attain them, a willingness to let him attain them without interference, and real emotional pleasure in his achievements short of overprotection and indulgence. (McClelland, 1961, p.356)

There are several further propositions in the research literature about n-Achievement and its relation to certain other factors which are noteworthy. Cortes (1960) obtained data showing that n-Achievement is significantly and positively associated with mesomorphic physiques. While no causal relationship was stated or directly implied, it may well be that a strong physique is an environmental factor which makes it easier to develop a strong achievement motive. The question of whether first-born children have or do not have significantly higher n-Achievement than do those born later has been extensively explored. There is considerable, but by no means unanimous, agreement that first-borns develop higher achievement motivation than do their siblings. Supporting evidence has come from Atkinson and Miller

(1956), Sampson (1962), and Bartlett and Smith (1966). On the other hand, Farley (1967) has reported negative results with respect to ordinal position and achievement motivation. He has support from Munz, Smouse and Letchworth (1968).

There are numerous studies relating the achievement motive to social class, but the results are often confusing because the classification criteria for 'social class' vary considerably from one study to another. Rosen (1956, 1959) has shown that middle class individuals have significantly higher n-Achievement than do those from both the lower and upper social strata (see Table 2.2 above). Douvan (1958) has agreed with Rosen by using achievement-roused conditions. Douvan (1958) and studies by LeShan (1952), Miller and Swanson (1958), Fraser (1959) and Mischel (1960) all suggest that children tend to be conditioned by the nature of the occupations of their fathers, and that middle class families work for longer range goals, are willing to work for delayed rewards and practice longer range planning and budgeting. Such parental interests and activities are presumably transferred to their children and tend to develop into higher levels of achievement motivation.

There are a large number of studies which generally support the basic McClelland (1961) thesis. The Weberian argument has presented just one of a series of complementary social and ideological strands which formed a configuration of values and, merging with expanding technological capacity and commercial opportunity, provided solid support for capitalist pursuits. Without the reservations about empirical validity which he had

for Weber's thesis, McClelland (1961) has accepted certain other studies that have indicated, with some persuasion, that economic development and high levels of achievement motivation are both historically and contemporaneously closely related.

Berlew (1956) has demonstrated a strong relationship between the modal level of n-Achievement and economic growth in ancient Greece. Following accepted practice, Berlew considered three time periods in Greek history - the period of growth (900 B.C. to 475 B.C.), the period of climax (475 B.C. to 362 B.C.) and the period of decline (362 B.C. to 100 B.C.). For each period he assessed both n-Achievement and economic activity. He measured the former by analyzing achievement oriented imagery in selected literature from a variety of categories and from a wide cross section of popular and famous writers, whose work was assumed to be representative of the modal level of achievement motivation in the whole society. Economic achievement was determined by calculating the area covered by Greek trade. The economic life of the Greek city-states was organised predominantly around agriculture and sea trade and the principal exports were wines and olive oil, both of which were transported in earthenware jars of a distinctive pattern. Many thousands of these jars have been discovered in regions all around the Mediterranean basin, and, fortunately, most are dated, at least within the century of their manufacture and use. From data collected on the location of these vase remains, Berlew has calculated the extent of the Grecian trading area. His contention here is that, for Greece, whose prosperity depended so greatly on maritime commerce, extensiveness of trade area is a plausible index of economic

development and activity. Berlew's findings are tabulated as follows:

TABLE 2.5 GRECIAN TRADING AREA AND MODAL N-ACHIEVEMENT TRENDS

	Growth Period	*Climax Period*	*Decline Period*
Modal n-Achievement	*4.74*	*2.71*	*1.35*
Trading Area (sq.miles)	*1.2 million*	*3.4 million*	*1.9 million*

Source: data from Berlew, 1956.

Berlew's conclusions were that the high level of n-Achievement during the growth period stimulated economic activity during the climax period, and the down-turn in n-Achievement in the climax period led to the sharp decrease in the extent of trading in the period of decline. Despite many methodological faults, Berlew's results are statistically very significant and most striking.

In a near replication of Berlew's (1956) study, Cortes (1960) identified three periods of economic activity in Spain from 1200 A.D. to 1730 A.D., one of growth, one of climax and the third being characterized by economic decline. To measure the modal level of n-Achievement Cortes followed the method used by Berlew. The assessment of economic activity was based on shipping cleared from Spain for the New World in thousands of tons per year. The results of this study were nearly identical to those of Berlew (1956) and confirmed the connection between achievement motivation and economic growth in a different time period and for a totally different culture (see Figure 2.2).

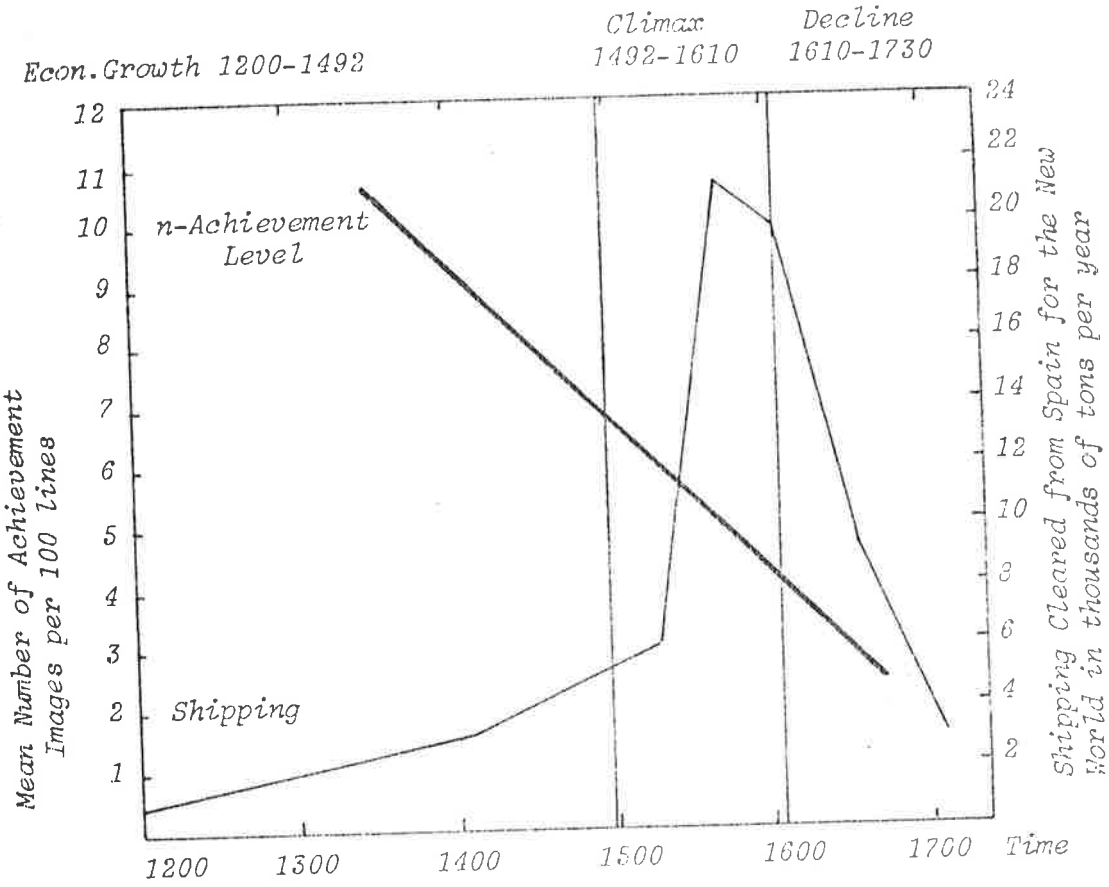

FIGURE 2.2 AVERAGE N-ACHIEVEMENT LEVEL IN LITERATURE AT MIDPOINTS OF PERIODS OF ECONOMIC GROWTH, CLIMAX AND DECLINE IN MEDIEVAL SPAIN

Source: Cortes, 1960

In a more ambitious study, Bradburn and Berlew (1961) have shown the relation between both increases and decreases in levels of n-Achievement and fluctuations in economic activity in England, over a period of more than four centuries. Achievement imagery was measured in similar fashion to that used in the earlier study by Berlew (1956) and by Cortes (1960), by using approximately 50 authors and 150 pages of comparable text to represent each half century. Difficulty was experienced by the researchers in assembling reliable indexes of economic development, and with more-or-less continual growth in economic prosperity in England

from around 1600 A.D. it was decided to use relative rates of growth. For this purpose Bradburn and Berlew used data on coal imports through London, since coal provided power for many basic industries, and the figures derived followed quite closely whatever other evidence was available on fluctuations in economic growth. It was concluded by the researchers that there was a clear and positive connection between the two phenomena - variations in the mean level of n-Achievement preceded like variations in the index of economic growth rate by about 50 years (see Figure 2.3).

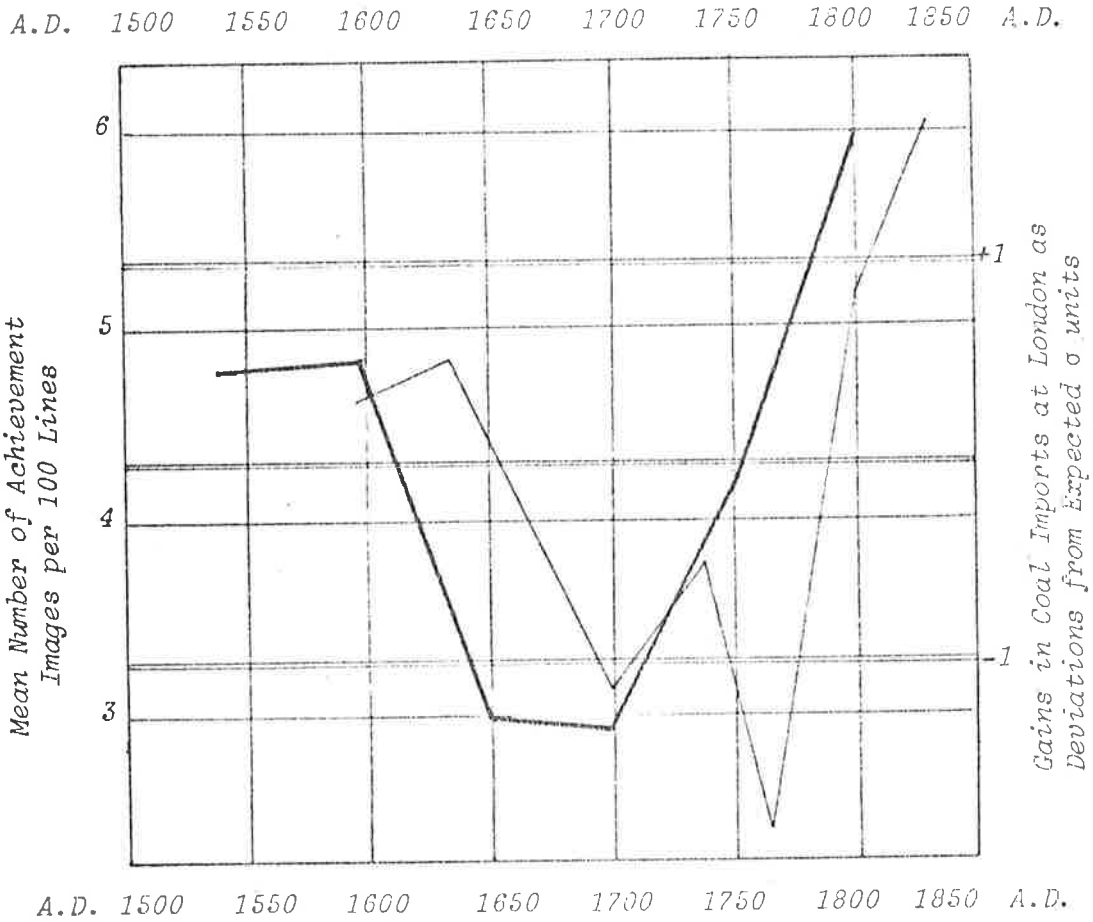

FIGURE 2.3 *AVERAGE N-ACHIEVEMENT LEVELS IN ENGLISH LITERATURE (1550-1800) COMPARED WITH RATES OF GAIN IN COAL IMPORTS AT LONDON 50 YEARS LATER.*

Source: *adapted from Bradburn and Berlew, 1961*

McClelland (1961) has indicated that there is strong support for Weber's thesis in the findings of Bradburn and Berlew (1961). The period 1500-1625 A.D., characterized by high levels of n-Achievement, was exactly the time when Protestantism, including both Puritanism and Calvinism, was growing most rapidly in both numbers and fervour in England and Scotland. The rise in n-Achievement from 1700 A.D. was accompanied by the religious revival, led by the Wesley brothers, that culminated in the foundation of the nonconformist Methodist Church. During these periods in English history, at least, the rise of Protestantism and levels of n-Achievement are closely related. Further, McClelland (1961) has found that among the nonconformist Protestant writers, achievement imagery was significantly higher than for Catholic or Anglican authors.

A study by Hagen (1961) provided data which indicated that during the Industrial Revolution in Britain (in 1800 A.D.), the nonconformist Protestants formed approximately 6% of the total population of England, Wales and Scotland, and yet produced 34% of the innovating entrepreneurs from 1725 to 1850 A.D.

In the United States, De Charms and Moeller (1962) have shown that, for the period 1800 to 1950 A.D., an index of achievement imagery (based on every third page of four school and college reading textbooks, typical of each twenty year period) and a measure of economic growth (the number of patents granted for every million of population) were related in both time and degree, in much the same way as previously discussed studies have indicated.

In the massive studies undertaken by McClelland (1961) the attempt was made to determine the influence of n-Achievement on economic development throughout many countries. Needing data, available for all countries, from which to assess the level of n-Achievement, McClelland decided to use children's stories as typically found in school readers for lower-class-primary pupils. Such stories were acceptable to McClelland because (1) they were the nearest modern equivalent to folk tales; (2) they were widely published in school readers for many years; (3) they were short, simple and imaginative, frequently depicting imaginary situations, both fantastic and realistic; (4) they tended to reflect the real motives and values of society in their themes and mode of narration; (5) the same stories were read by all or most children in a country, not only those from a particular social class, and (6) by having stories used a generation ago, it was possible to test the hypothesis that n-Achievement levels in them would predict subsequent economic development.

McClelland selected 21 stories for each of two periods (around 1925 A.D. and around 1950 A.D.) from practically every country which was not situated within the tropics and for which an adequate sample of books could be found. The collected stories (totalling in excess of 1300) were carefully coded for certain value categories, coding reliability coefficients in excess of .90 being demanded for each of the major motivation variables of achievement, power and affiliation. Achievement oriented stories for each country were tallied to produce national scores.

Obtaining a measure of economic development, which could be

applied to many countries at the same time, was an even more difficult task than measuring n-Achievement. After much consideration, McClelland decided upon two economic counts. The first, from Clark (1957), used internationnal units of real income, which were described as "the quantity of goods exchangeable in the U.S.A. for one dollar over the average of the decade 1925-1934" (Clark, 1957, p.18). It was then possible to calculate how much it would cost in various national currencies to purchase the same goods and services as $1 in the United States at this time, and express per capita income in any country in terms of the resulting standard international unit. Thus, all currencies could be translated into a scale having the same meaning. Because of several aspects of this procedure which caused doubts about its efficacy, McClelland also adopted electric power produced as a further index. Kilowatt-hours of electric power have universal meaning; they avoid certain biases that influence other measures of technological development. Some anomalies were found by McClelland in the use of this index, but by averaging in Clark's estimates of economic growth these were largely neutralized.

Armed with data for 1925 and 1950 on n-Achievement levels, national income in international units per capita and electricity produced in kilowatt-hours per capita, McClelland tested the hypothesis that the 1925 A.D. measures of achievement motivation would correlate significantly with subsequent economic growth (i.e. between 1925 and 1950 A.D.). The proposition was that high levels of n-Achievement would be associated with subsequent above average economic growth and lower n-Achievement levels would

relate significantly with below average economic growth.

McClelland's (1961) findings are presented in Tables 2.6 and 2.7.

TABLE 2.6 ESTIMATES ON NATIONAL ECONOMIC DEVELOPMENT BETWEEN 1925 AND 1950 COMPARED WITH N-ACHIEVEMENT LEVEL IN CHILDREN'S READERS IN 1925.

Country	1925 n-Ach level	National Income*	Electricity +	Average gain/loss in S.D. units
		Gain or loss over expected values in SD units		
		(SD = 79)	(SD = 247.5)	
Sweden	2.19	+2.35	+3.17	+2.76
United States	1.90	+1.28	+1.86	+1.57
New Zealand	1.48	+ .63	+1.86	+1.25
Canada	2.67	- .04	+1.73	+ .85
Great Britain	2.10	-1.71	+1.65	- .02
Australia	2.81	+ .61	+1.13	+ .87
Finland	1.24	+1.10	+ .74	+ .92
South Africa	1.05	+ .70	+ .69	+ .70
Ireland	3.19	+..14	+ .33	+ .24
Denmark	2.00	-1.23	+ .14	- .55
Netherlands	.29	- .78	- .10	- .44
Austria	1.57	-1.02	- .12	- .57
Hungary	1.29	- .47	- .26	- .37
Chile	1.29	+ .27	- .43	- .08
Greece	.38	-1.28	- .52	- .90
France	.81	- .92	- .55	- .74
Argentina	1.86	- .50	- .61	- .16
Spain	.81	-1.93	- .63	-1.28
Belgium	1.00	+1.57	- .75	+ .41
Germany	1.39	- .51	- .79	- .65

* National Income in International Units per capita

\+ Electricity Produced in Kilowatt-Hours per capita

Source: adapted from McClelland, 1961, pp.90-91.

Worthy of note is the fact that all countries in the top segment of the foregoing Table are Protestant, with the single exception of Ireland. All countries in the lower segment are Catholic except Greece, Netherlands and Germany (the latter two being approximately half Protestant and half Catholic).

The correlations between the n-Achievement levels in year 1925 and the two measures of economic development between years 1925 and 1950 are:

TABLE 2.7 CORRELATIONS OF READER n-ACHIEVEMENT SCORES WITH DEVIATIONS FROM EXPECTED ECONOMIC GAINS

n-Achievement level by year	*Natl Income 1925-1950*	*Kwhours 1929-1950*	*Both combined*
1925	*.25*	*.53* $p < .01$ *pd*	*.46* $p < .02$ *pd*
pd = predicted direction			

Source: adapted from McClelland, 1961, p.92.

Further confirmation of McClelland's argument was produced when he compared year 1950 n-Achievement levels with economic growth (measured by electrical output again) between years 1952 and 1958. Although this is a short time span, the findings are impressive. The correlation of year 1950 n-Achievement scores with deviations from expected gains in electrical output was .43 with $p < .01$ (see Table 2.8).

According to McClelland (1966, pp.81-83):

> In a century dominated by economic determinism, in both Communist and Western thought, it is startling to find concrete evidence for psychological determinism, for psychological developments as preceding and presumably causing economic changes.

There is massive evidence that national levels of n-Achievement and rates of economic growth are significantly correlated. McClelland and many other researchers have sought to identify "the mechanism by which the concentration of a particular type

of human motive in a population leads to a complex social phenomenon like economic growth" (*ibid.*, p.84). In testing the proposition that the link between n-Achievement levels and economic growth is entrepreneurial activity, there is much convincing experimental data, but this has yet to be thoroughly

TABLE 2.8 RATE OF GROWTH IN ELECTRICAL OUTPUT (1952-1958) AND NATIONAL N-ACHIEVEMENT LEVELS IN 1950

Deviations from expected growth rate in standard score units						
National n-Ach levels 1950			*Above expectation*	*National n-Ach levels 1950*		*Below expectation*
High n-Ach	3.62	*Turkey*	+1.38			
	2.71	*India*	+1.12			
	2.38	*Australia*	+ .42			
	2.33	*Israel*	+1.18			
	2.33	*Spain*	+ .01			
	2.29	*Pakistan*	+2.75			
	2.29	*Greece*	+1.18	3.38	*Argentina*	- .56
	2.29	*Canada*	+ .06	2.71	*Lebanon*	- .67
	2.24	*Bulgaria*	+1.37	2.38	*France*	- .24
	2.24	*United States*	+ .47	2.33	*South Africa*	- .06
	2.14	*West Germany*	+ .53	2.29	*Ireland*	- .41
	2.10	*U.S.S.R.*	+1.62	2.14	*Tunisia*	-1.87
	2.10	*Portugal*	+ .76	2.10	*Syria*	- .25
Low n-Ach	1.95	*Iraq*	+ .29	2.05	*New Zealand*	- .29
	1.86	*Austria*	+ .35	1.86	*Uruguay*	- .75
	1.67	*United Kingdom*	+ .17	1.81	*Hungary*	- .62
	1.57	*Mexico*	+ .13	1.71	*Norway*	- .77
	.86	*Poland*	+1.26	1.62	*Sweden*	- .64
				1.52	*Finland*	- .08
				1.48	*Netherlands*	- .15
				1.33	*Italy*	- .57
				1.29	*Japan*	- .04
				1.20	*Switzerland*	-1.92
				1.13	*Chile*	-1.81
				1.05	*Denmark*	- .89
				.57	*Algeria*	- .83
				.43	*Belgium*	-1.65

Source: *adapted from McClelland, 1961, p.100.*

examined in real-life situations. It has been shown that high n-Achievement leads people to behave in most of the ways thought necessary if they are to fulfil the entrepreneurial role successfully, as it has been defined by economists, historians and sociologists.

There follows an analysis of the behavior of the entrepreneurial type - the individual with high achievement motivation.

2.414 *Entrepreneurial (High n-Achievement) Behavior*

While there is some measure of agreement about the significance of the entrepreneur's role in economic growth, there is much disagreement about the definition of the term 'entrepreneur'. Appendix K lists some of the definitions found in the literature. Not only do these definitions contain different points of emphasis, but there are also a number of contradictions. Some writers regard entrepreneurship as a function pertaining only to business while others do not so limit their definitions. Some authors regard entrepreneurial activity as being present only when a new firm is being started. To others, risk-taking is the key criterion. With the possible exception of some agreement on the importance of innovation, there is little consensus in definition.

Both Cole and Schumpeter saw innovation as the prime entrepreneurial characteristic. Cole (1946, p.37) wrote of the entrepreneur as "the central figure in modern economic history, and, to my way of thinking, the central figure in economics", specifically citing "the spirit of adventure and the element of innovation"

(p.33) and restless innovation (p.31) as essential features. Aitken (1965, p.10), in a discussion of the influence of Schumpeter's ideas, stated that "the concept of innovation ... continues to serve as the central element in any definition of entrepreneurship ...".

The ability to be innovative is not confined to the act of creating new business ventures, since a paid labourer or salaried executive can exhibit a degree of innovation. Collins, Moore and Unwalla (1964b, p.19)

> would like to make a distinction between the independent or innovating entrepreneur and the bureaucratic entrepreneur. While the functions performed may be the same, once the business has been established, nonetheless there is a world of difference between the creation of a business enterprise and climbing a hierarchical ladder within an already well-established structure.

Accordingly, these researchers were

> concerned with men who start business enterprises ... the innovative entrepreneur who has developed an ongoing business activity where none existed before. (Collins, Moore and Unwalla 1964b, p.20)

Harbison and Myers (1959) have taken a wider view which agrees fundamentally with that of Cole (1954, p.11) who wrote of entrepreneurship as

> the purposeful activity (including an integrated sequence of decisions) of an individual, or group of associated individuals, undertaken to initiate, maintain or aggrandize a profit-oriented business unit for the production or distribution of economic goods and services.

Stepanek (1960, p.5) has suggested that to establish and maintain a new enterprise, the entrepreneur-manager must, of necessity,

perform the following functions:

> The undertaking and managing of risk and the handling of economic undertaking,
> Planning and innovation,
> Co-ordination, administration, and control,
> Routine supervision.
> These findings are not always of equal importance. Risk-taking and innovation are paramount for establishing or diversifying a company.

By contrast, Penrose (1966, pp.31-32) has distinguished between entrepreneurial services and managerial services within the one firm. She explained that

> the term 'entrepreneur' ... is used in a functional sense to refer to individuals or groups within the firm providing entrepreneurial services, whatever their position or occupational classification may be. Entrepreneurial services are those contributions to the operations of a firm which relate to the introduction and acceptance on behalf of the firm of new ideas, particularly with respect to products, location, and significant changes in technology, to the acquisition of new managerial personnel, to fundamental changes in the administrative organization of the firm, to the raising of capital, and to the making of plans for expansion, including the choice of method of expansion. Entrepreneurial services are contrasted with managerial services, which relate to the execution of entrepreneurial ideas and proposals and to the supervision of existing operations. The same individuals may, and more often than not probably do, provide both types of service to the firm.

Redlich (1954), following this distinction, made a tripartite division of the entrepreneurial function into capitalist (supplier of funds and other non-human resources for the firm), manager (supervisor and co-ordinator of productive activities), and entrepreneur (planner, innovator and ultimate decision-maker in an enterprise).

Hoselitz (1952, p.98) has succinctly summed up the confusion as follows:

> A study of economists' opinions on entrepreneurship leads to strange and sometimes contradictory results. Some writers have identified entrepreneurship with the function of uncertainty-bearing, others with the co-ordination of productive resources, others with the introduction of innovations, and still others with the provision of capital.

Despite the controversy over the precise nature of the entrepreneur's role in business activity, much is known about entrepreneurial behavior in general. A great deal of the empirical research in this area has yet to be validated in the business situation, but, in this section, reviews of available research literature are offered.

2.4141 *Risk Taking*

This feature of persons with high n-Achievement has widespread acceptance from theorists and writers, including Schumpeter (1934), Sawyer (1954), Sutton (1954), Meier and Baldwin (1957) and Lazarsfeld (1959). They agree substantially with McClelland (1966, pp.85-86):

> ... one of the defining characteristics of an entrepreneur is taking risks and/or innovating ... Knowledge, judgment, and skill enter into his decision-making; and if his choice is justified by future developments, he can certainly feel a sense of personal achievement ... Therefore, if people with high n-Achievement are to behave in an entrepreneurial way, they must seek out and perform in situations in which there is some moderate risk of failure -- a risk which can, presumably, be reduced by increased effort or skill.

It has been shown empirically that persons with high levels of n-Achievement have a decided preference for tasks of moderate

difficulty. On a continuum from no-risk situations, where actions are prescribed by tradition (as for example in bureaucratic, religious or ceremonial protocol) or specialized technology, to situations where the outcome is completely unpredictable (being due, largely or totally, to chance) the person with high n-Achievement is typically somewhere in the middle range, since his preference is for situations of moderate risk. He prefers to be called upon to make decisions, the outcomes of which are determined, more definitely by his skill, than would be the case towards either end of the risk continuum. In situations studied to ascertain the existence of entrepreneurial behavior,

> if there has been no significant uncertainty, if the action called for involves applying a known procedure, however, complicated, to produce a known and predictable result, then entrepreneurship cannot be said to be involved. (McClelland, 1961, p.210)

The foregoing propositions concerning the relationship between level of achievement motivation and preferred degree of risk-taking have been empirically tested by McClelland, and widely replicated. McClelland (1958), under laboratory conditions, and using students in ring-toss games, has demonstrated that subjects with high n-Achievement prefer situations with moderate uncertainty, where their skill and ability can be used to affect the outcome. Such persons generally preferred to stand at a moderate distance from the peg because, for them, this choice provided both a challenge and a chance to achieve.

The low n-Achievement subjects showed no such preference, and threw more often from either very near the peg or from further

away than did the high n-Achievement subjects. McClelland concluded that high n-Achievement subjects wanted the opportunity to use and demonstrate their skill, and consequently satisfy their need to achieve. The others would either be more successful, but derive less achievement satisfaction (by being too close to the peg), or be less successful, and attribute scores to luck or chance (because they were throwing from too far away).

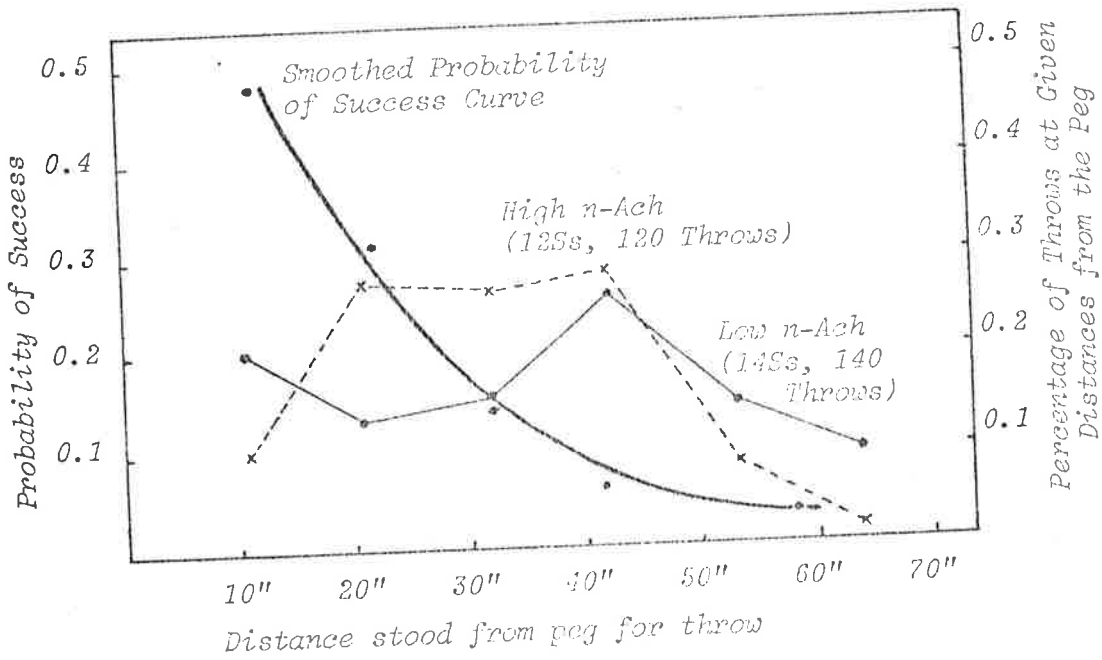

FIGURE 2.4 *PERCENTAGE OF THROWS MADE BY 5-YEAR-OLDS WITH HIGH AND LOW N-ACHIEVEMENT AT DIFFERENT DISTANCES FROM THE PEG, AND SMOOTHED CURVE OF PROBABILITY OF SUCCESS AT THOSE DISTANCES.*

Source: *McClelland, 1958, p.314*

The McClelland (1958) study was replicated by Atkinson and Litwin (1960) to test hypotheses based on the assumptions that (a) n-Achievement is a positive disposition to approach success and that (b) what has been called Test Anxiety is a disposition to avoid failure. According to the theory underlying this and related studies, when a person's motive to achieve success is stronger than his motive to avoid failure, the result of the

conflict is always positive and the person will approach success. A person so motivated will be attracted to tasks of intermediate difficulty - where the subjective probability of success is .50, and his positive motivation is strongest. If the desire to avoid failure (a disposition to become anxious about failure under achievement stress) is stronger, then the consequence of the approach-avoidance conflict will be avoidance motivation. Such avoidance motivation will be at maximum strength when tasks are at intermediate difficulty. Such a person will find all achievement type tasks unpleasant.

The specific hypotheses tested in the Atkinson and Litwin (1960) study were: subjects in whom success motivation is stronger than avoidance-of-failure motivation (a) more often choose tasks of intermediate difficulty, (b) work longer on achievement type tasks, and (c) perform better on such tasks than persons with lower achievement motivation. Their subjects were classified as high or low on n-Achievement and Test Anxiety, and, following the assumptions stated above, the group classified as high n-Achievement and low Test Anxiety was expected to be more strongly motivated to approach success than to avoid failure. The results showed that all four groups of subjects preferred throwing from intermediate distances. However, subjects high in n-Achievement and low in Test Anxiety had the strongest preference for this range, while the low n-Achievement/high Test Anxiety group showed the least preference for it. The two other groups had intermediate preferences, as expected. The results of the Atkinson and Litwin (1960) study are shown in Figure 2.5.

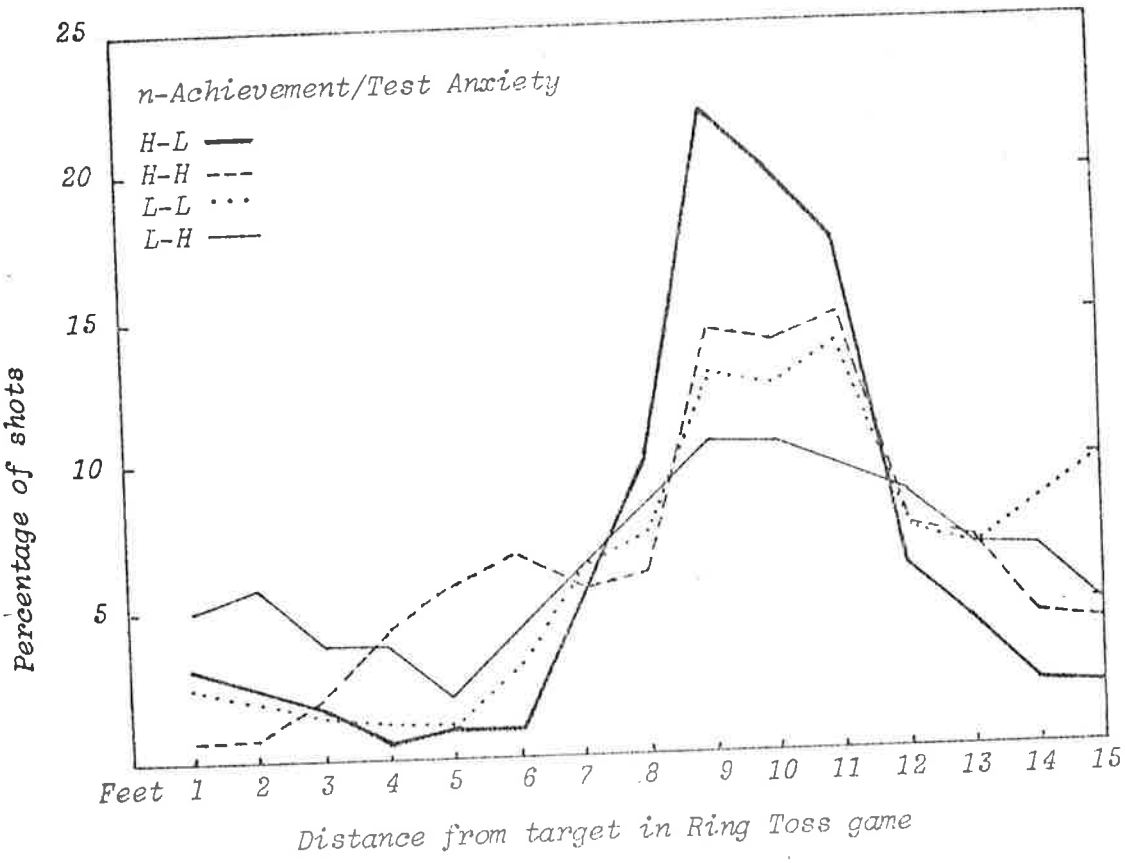

FIGURE 2.5 *PERCENTAGE OF SHOTS TAKEN FROM EACH LINE. GRAPH IS SMOOTHED ACCORDING TO THE METHOD OF RUNNING AVERAGES, FOR SUBJECTS CLASSIFIED AS HIGH OR LOW SIMULTANEOUSLY IN N-ACHIEVEMENT AND TEST ANXIETY, H-L (N=13), H-H (N=10), L-L (N=9), L-H (N=13)*

Source: *Atkinson and Litwin, 1960, p.55*

Atkinson and Litwin (1960) used alternative criteria for definition of degree of risk or difficulty. One method was adapted from Atkinson, Bastian, Earl and Litwin (1960) - the division of the range of distances into three equal sections. A second method, from McClelland (1958), used the actual distribution of throws, divided (a) into approximate thirds and (b) into the interquartile range. The third method used the middle third of distance around the calculated median of 9.8 feet. All methods produced very comparable results. Table 2.9 is adapted from a composite table from Atkinson and Litwin (1960), detailed measurements

for each of the alternative risk definitions having been summed and averaged (arithmetic mean).

TABLE 2.9 PERCENTAGE OF TEN RING TOSS SHOTS TAKEN BY SUBJECTS SIMULTANEOUSLY CLASSIFIED HIGH AND LOW IN N-ACHIEVEMENT AND IN TEST ANXIETY

Distance in Feet	*Motivation (n-Achievement/Test Anxiety)*			
	High-Low N=13	*High-High N=10*	*Low-Low N=9*	*Low-High N=13*
1 - 5	*13%*	*24%*	*18%*	*31%*
6 - 10	*70*	*51*	*46*	*39*
11 - 15	*17*	*25*	*36*	*30*
	100%	*100%*	*100%*	*100%*

Source: adapted from Atkinson and Litwin, 1960, p.56

The second of the three Atkinson and Litwin (1960) hypotheses, *viz*: persons with high n-Achievement tend to work longer on achievement tasks, was tested by using an objective type examination of three hours duration. Subjects were allowed to leave when they had answered all the questions they could, and each was scored on the length of time he persevered. The group with high n-Achievement (N=25) scored a median number of minutes working on the examination of 164.9, while the subjects with low n-Achievement produced a median examination work time of 154.0 minutes. In a high versus low, one-tailed test of significance, using the Mann-Whitney U Test, U=156.5 and p=.02. The difference between the two groups was statistically significant, and the hypothesis was accepted.

The final aspect of the Atkinson and Litwin (1960) study tested

the hypothesis that high n-Achievement persons perform better on achievement tasks than do those with lower n-Achievement. By using the final examination scores for the two groups of subjects in the preceding section of the study, the researchers found that the high n-Achievement group scored a median mark of 101, and the lower n-Achievement group a median of 85. Again the difference between the two groups was tested with the Mann-Whitney U Test, with one-tailed testing, U=152.5 and p=.02. Again the difference was significant and the hypothesis accepted.

Litwin (1958) achieved very similar results to those in the above mentioned studies, with ring toss games, tests of throwing coins into different-sized holes and pencil maze puzzles of varying degrees of difficulty. Atkinson *et al* (1960) demonstrated that, even when the outcome depends on chance rather than on the skill of the actor, subjects with high n-Achievement preferred betting situations with intermediate odds rather than very long or very short odds. Littig (1959) found that in an actual gambling situation, with subjects' own money at stake, high n-Achievement subjects consistently chose the shortest odds they could get - the highest probability of success! The varying results of the Atkinson *et al* (1960) study, and that of Littig (1959), are probably due to the fact that in the former study, no actual money was involved, the gambling aspect therefore being minimized. The greater preference that persons with high n-Achievement have for moderate risk situations seems to be the case when they perceive an opportunity to affect the outcome by their own skill and ability. In games of pure chance, they want the safest odds they can get.

Research evidence on the relationship of n-Achievement to task persistence and performance quality is far from unanimous. The only common thread in the various studies seems to be that n-Achievement appears less likely to be positively correlated with persistence and performance quality when the task is routine. When the task requires some measure of imagination, personal initiative, mental exercise or inventiveness for its solution, high n-Achievement persons perceive the probability of success as more dependent upon themselves, rather than on extrinsic factors. In such situations they will persevere with the task, which, to them, has traction, and, because of the greater interest, doggedness and resolution, will consistently perform better.

Atkinson (1957) has produced a theoretical model which purports to describe the rather vague interaction of n-Achievement and risk level preference. The components of the model include: (1) the motive to achieve (designated Ma); (2) task difficulty, being the decreasing probability of success (Ps), Task A having 1 chance in 10 of succeeding and 9 in 10 of failing, thus being a difficult one; (3) incentive value of achieving a task (Is) being the relative amount of satisfaction derived from successful achievement of task, and thus a positive function of task difficulty (quantified as the simple inverse function of the probability of success, or 1 - Ps); and (4) task preference, the extent to which motivation is aroused to approach a task (being a joint function of n-Achievement, probability of success and the incentive value or amount of satisfaction deriving from attainment of that goal).

TABLE 2.10 *TASK PREFERENCE AS A JOINT FUNCTION OF N-ACHIEVEMENT, PROBABILITY OF SUCCESS AND INCENTIVE VALUE OF SUCCESS WHERE Is=(1-Ps)*

	Higher n-Achievement		*Lower n-Achievement*	
	Ma X Ps X Is =	*Task Preference*	*Ma X Ps X Is =*	*Task Preference*
Task A	*8 X .1 X .9 =*	*.72*	*1 X .1 X .9 =*	*.09*
Task B	*8 X .3 X .7 =*	*1.68*	*1 X .3 X .7 =*	*.21*
Task C	*8 X .5 X .5 =*	*2.00*	*1 X .5 X .5 =*	*.25*
Task D	*8 X .7 X .3 =*	*1.68*	*1 X .7 X .3 =*	*.21*
Task E	*8 X .9 X .1 =*	*.72*	*1 X .9 X .1 =*	*.09*

Source: adapted from Atkinson, 1957, p.365

From both the Atkinson (1957) model and much of the other empirical evidence it appears that not only is there a tendency to prefer a task of moderate difficulty, but that the higher the level of n-Achievement, the stronger this preference will be. A person with an achievement drive of 8 (following Atkinson, 1957) will have a much stronger preference for tasks of moderate difficulty (Task C above) than for tasks of lesser or greater difficulty. With the person of lower n-Achievement (Ma=1), the pull towards the moderately difficult task is not so much different from that towards harder and easier tasks. The Atkinson (1957) model, together with the empirical data offered above, provide mutually supportive evidence of the risk preferences of person with high n-Achievement.

While the Atkinson model has far-reaching implications for explaining entrepreneurial behavior, caution is warranted in trying to apply it in a business situation. As has been noted, the model depends on the researcher's ability to measure

objectively several distinct variables, and there are real problems in doing this in a business situation. A person's inclination toward risk is extremely difficult to measure and is largely situational. Mostly Atkinson and his colleagues were content to assume that the probability of failure is an acceptable measure of risk. While this assumption may hold up in experimental situations used by many of the researchers in this field, it would appear to be inappropriate for 'real-life' business or investment decisions. In developing an instrument to measure risk inclination, the researcher must either employ very minimal laboratory risks or impose his subjects into hypothetical situations. Slovic (1969) found substantial differences between risk inclination scores obtained by certain alternative techniques. Weinstein (1969) found very low convergence between 12 different risk measurement instruments. One further weakness is that scores on such instruments are not valid for measuring risk-taking in business because they are situation-specific and thus lacking in generalizability. When reliable and valid measuring procedures are devised, the Atkinson model could play a significant role in explaining and forecasting business behavior. Entrepreneurs who differed in their relative motives to achieve and to avoid failure would make very different decisions. The individual who was more concerned with avoiding failure than achieving success could be expected to be very conservative or very speculative. The entrepreneur with a reversed ordering of motive strengths may tend to be moderate in his risk inclination.

The major problem in the application of Atkinson's model relates

to the need for an instrument which adequately measures a subject's propensity to avoid or take risks in a business situation. Fortunately, students of business finance have recognised the need to consider the entrepreneur's attitude toward risk when making financial decisions. This has been achieved through the use of "utility analysis", a technique whereby an investor can objectively determine his risk preference (Von Neumann and Morgenstern, 1947). The method allows the investor to select an investment opportunity that will provide him with the highest expected utility; in effect, the choice offering the highest possible level of psychological comfort. While the goal of such analysis is utility maximization, the procedure also produces objective measures of risk taking propensity. These measures classify individuals as risk-avoiders or risk-takers, and provide the researcher with a numerical indication of the extent to which either inclination is present. In terms of the Atkinson model, failure motivated persons, being either risk-avoiders or risk-takers, would earn high absolute scores (indicating extreme attitude). The success motivated individual would be characterized by a low absolute score.

While this method shows much promise, as yet it has not been subjected to the rigorous testing normally accorded psychological tests. No known attempt has been made to determine test-retest reliability. One further inherent problem is that utility curves indicate an individual's attitude about risking a particular sum of money, and such attitude will probably differ with larger or smaller sums. The procedure adopted for assessment

of risk inclination for this study is a simplified version of the method described above.

2.4142 *Self-Confidence*

An associated characteristic of the person with high n-Achievement is an above average level of self-confidence - a higher perceived probability of success. Sawyer (1954) has argued that self-confidence is an essential component of the entrepreneurial role. In relating entrepreneurship to rapid economic growth, Sawyer indicated that this entrepreneurial confidence level leads people to undertake business ventures, that, considered singly, would be economically unwise, but taken together, may be viable and profitable.

Besides Sawyer (1954), others including McClelland, *et al* (1953), Sutton (1954), Pottharst (1955) and Atkinson (1958) have empirically tested particular hypotheses relating to various aspects of perceived probability of success. Results available generally indicate that (a) persons with high n-Achievement perceive their probability of success as greater, especially when there are no facts to justify their optimism, (b) such persons will typically state higher levels of expected performance of tasks with which they have had no previous experience or practice, (c) when persons, who have high n-Achievement, know fairly accurately, from past performance, how well they will do on an achievement task, they tend to base their estimates of success probability on that knowledge, (d) when there is accurate knowledge of task difficulty, high

n-Achievement persons choose moderate risks or perceive themselves as being able to do somewhat better than they have done in the past - their preferences and optimism become modest and realistic, and (e) when there is little or no knowledge of how well they may perform, persons with high n-Achievement rely on facts so far as is possible, then fall back on inherent self-confidence.

Again, as with the reported empirical studies on risk preference, the data on perceived probability of success, point to subjects with high n-Achievement acting as expected for successful entrepreneurs, as the latters has been theoretically represented by economists and sociologists.

2.4143 *Energetic and Innovative Activity*

Research evidence exists to indicate that successful business executives and owner/managers work harder and for longer hours than do those who are less successful. Roe (1956) reported that well over twice as many top executives had records of working hard and long hours as did lower level executives. The editors of *Fortune*, in a study of the work habits of managers within large enterprises, concluded that their sample worked an average of 60 hours weekly under 'normal' conditions and 20% more than this in emergencies (1956, p.5). In a survey of 72 Australian senior executives (defined as being of managing director level) and their work hours, (*Rydge's*, 1967, p.7) it was determined that 1% worked 38 hours weekly, 29% worked between 41 and 49 hours, 35% worked 50-59 hours, 32% worked 60-69 hours and the remaining 3% worked an average week in excess of 69 hours. Thus, if it is

reasonable to assume that success as an executive can be measured by one's seniority within the hierarchy, these data indicate that successful managers work long hours. Even casual observation will suggest that the more successful entrepreneurs also work long hours, a fact adequately attested by the accompanying marital strain and/or social isolation.

The explanation for this particular work habit probably lies in the fact that, in most situations involving difficulty or problem, the high achiever finds that he can and should do something (Sutton *et al*, 1956). This disposition would appear to correlate highly and positively with optimism. Thus while working long hours is not peculiar to the entrepreneurial role, or to successful business activity, what are significant are the reasons for working so long and hard. The suggested reasons are found in other characteristics of entrepreneurs. Empirical data are available to demonstrate that people with high n-Achievement work long and with more vigour when the outcome is due, in part at least, to personal effort, rather than to chance. When the situation presents a challenge, some chance of failure, then greater effort with more persistence generally ensues. Following from this, non-routine tasks requiring some degree of mental exertion, originality and creativity produce more effort from persons with high n-Achievement, than do routine, prescribed tasks.

Considerable empirical evidence supports the proposition that the entrepreneurial role involves doing things in new and better ways. This has acceptance from the majority of economists and economic

historians, and empirical studies have shown that, under the right conditions, persons with high levels of n-Achievement exhibit more innovative behavior than do those with lower n-Achievement. Discussion of the relation of innovation and achievement oriented disposition to economic activity is offered elsewhere in this thesis (Secion 2.413). Briefly, innovation involves using new and improved solutions to solve old problems; it is widely regarded as an essential ingredient in economic growth and as a feature associated with achievement motivation.

Closely associated with the characteristic of energetic activity is persistence. Persistence may be distinguished from performance level and effort input for any activity, and from the direction in which effort is expended, but it belongs with both of these phenomena, as an important behavioral symptom of motivation. Studies by French and Thomas (1956), Winterbottom (1958) and Feather (1962) have investigated the prediction that subjects with high n-Achievement will have relatively higher motivation to succeed and, hence, should tend to show greater persistence. Evidence obtained unanimously supported the hypothesis. Atkinson and Litwin (1960), using Atkinson's (1957) model of achievement motivation, predicted and showed that, holding task difficulty constant, stronger motivation to succeed is associated with greater persistence, and stronger motivation to avoid failure would be associated with a lesser tendency to persist.

Implicit in much of the analysis of the role of the entrepreneur is a distinction between entrepreneurship and management, as

separate but complementary functions. McClelland has produced empirical data, which are purported to support several less rigorously sustained propositions from Shils (1958) and Hoselitz (1952). Shils distinguished between the person who is efficient and the person who is economical - the bureaucrat and the entrepreneur. He has argued that there are two kinds of achievers. One is exemplified by the person who works hard and efficiently at everything he attempts, in a rather indiscriminate manner. He is conscientious in everything he does. The other type of achiever works hard only at those tasks which, because of their challenge, will give him a sense of achievement. The former is the manager or bureaucrat; the latter the innovating catalyst. Hoselitz (1952) made the same distinction between manager and entrepreneur.

As has been shown in Chapter 1 (Section 1.42) the innovative role of small business in society is an essential one for economic vitality. However, rather little published research is available on the nature of innovation and its psychological aspects. Barnett (1953, p.4) defined innovation as "any thought, behavior or thing, that is new because it is qualitatively different from the existing forms". Thus novelty or newness is the key to defining the word innovation. Rogers (1962, p.7) incorporated this characteristic in the following definition:

> An innovation is an idea perceived as new by the individual. It really matters little, as far as human behavior is concerned, whether or not an idea is objectively new as measured by the amount of time elapsed since its first discovery. It is the newness of the idea to the individual that determines his reaction to it.

Other authors, however, have emphasized the reaction of individuals to the ideas in their definitions of innovation. Thompson (1965, p.2) has stated that

> by innovation is meant the generation, acceptance and implementation of new ideas, processes, products or services. Innovation, therefore, implies the capacity to change or adapt. Adaptive organisation may not be innovative, but innovative organisation will be adaptive, because it is able to implement new ideas.

Thompson thus implied two aspects of innovation - creation of the idea and then its acceptance. Schon (1967, p.43) has also differentiated between "invention" (a creative act) and "innovation" (bringing invention into use). Some writers have used the term "diffusion of innovation" to refer to the process by which a new idea or technique is spread from its source of invention or creation to its ultimate users or adopters. Various models of innovative behavior have been proffered, most stemming from economic considerations.

According to Barnett (1953), the process of innovation is characterized by a series of steps and by emotional and, hence, irrational elements of an individual's psychological functions, in addition to the economic and traditionally rational considerations. The basic ideas which emerge from Barnett's analysis are that an element of creativity is involved in the process of innovation, that this creativity is intrinsic to the individual, and that environmental factors may be effective, to some degree, in enhancing the innovativeness. This notion on individual differences in innovative potentials can be extended to larger units of analysis. Also, the idea that environmental factors

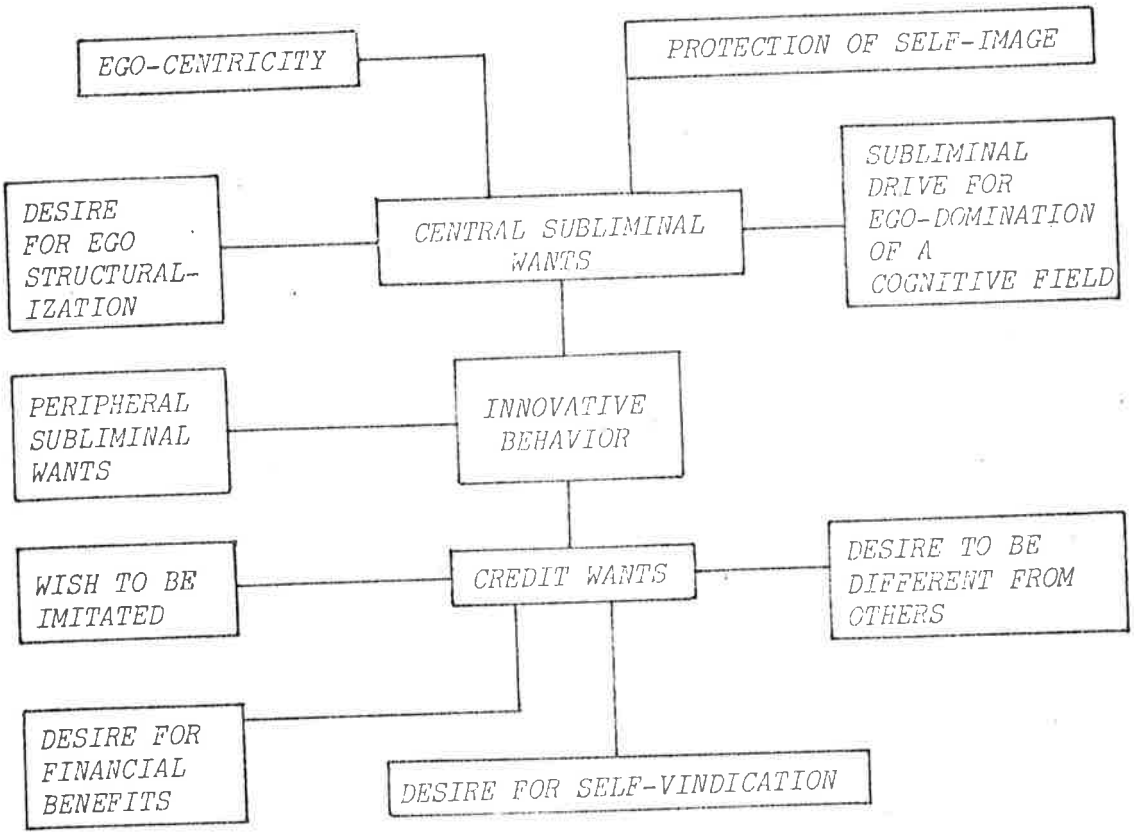

FIGURE 2.6 BARNETT'S MODEL OF INNOVATIVE BEHAVIOR

Source: Barnett, 1953

play a significant role in promoting the innovativeness of individuals may be utilized in consideration of innovation at the organisational level. Gellman (1966) coined the term 'innovation quotient' to denote the propensity to innovate at the firm (organisational) level. Barnett (1953) made a qualitative distinction between the process of innovation and the process of acceptance of a novel idea. Acceptance of an idea is based on its superiority to other available ideas in fulfilment of the person's needs. The desire for change, based upon the novelty of the idea, is dependent on a hierarchy of wants as shown in the above illustration of Barnett's model (Figure 2.6). However, Barnett does not elaborate on how these wants are created.

According to Rogers (1962) the innovative/adoptive process is a type of decision making activity, on which subject economists and management theorists have developed an extensive literature, incorporating the notion of the rational, economic man operating under assumed conditions of certainty. Challenges to the concept of the absolute rationality of the decision making process in real life are numerous. Simon (1957b,p.196) wrote that "human behavior in organisations is best described as intendedly rational", and proposed the related concepts of "bounded rationality" and "satisficing". Rogers' model of innovation and adoption, embodying five stages (awareness, interest, evaluation, trial and adoption) is thus ostensibly parallel to the rational decision model, but, in fact, incorporates affective elements as well as cognitive. The model is shown in Figure 2.7.

Schon (1967) recognized the shortcomings of the rational model for innovations and has stated his opinion that the rational view of innovation as an orderly, goal-directed, risk-reducing process must appear as a myth. He deprecated the stand, later taken by Gruber and Marquis (1969), that innovation, as a series of orderly steps, could be planned and directed. Schon has argued that advance planning of the innovative process is unfeasible, because there is a constant interaction between the need and the innovation, which produces unexpected vagaries. Innovation creates uncertainties, and it is for this reason that entrepreneurs in small firms are appropriately involved so frequently in innovative activity. In fact, the establishment of a new business venture is in itself, both a creative act and an innovative process.

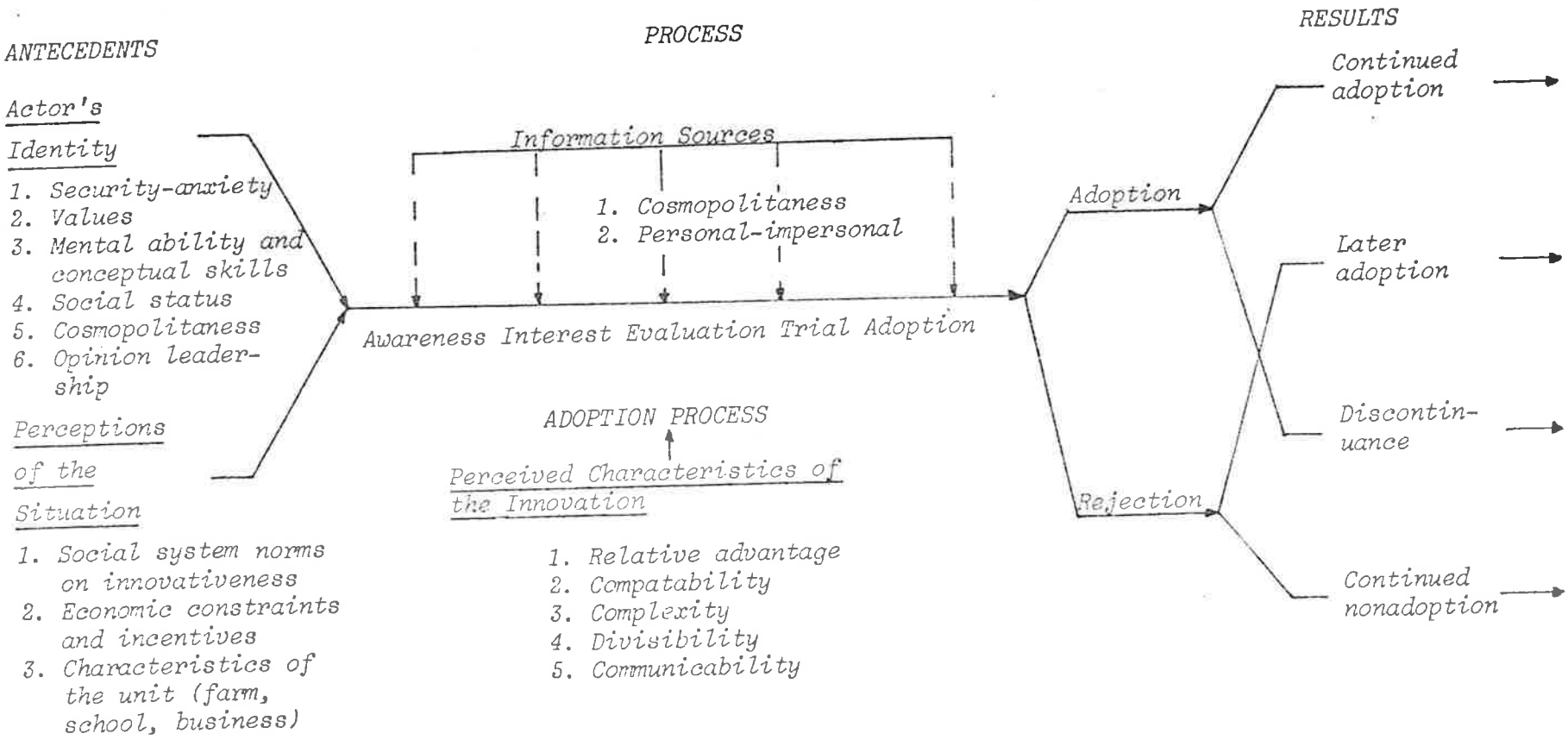

FIGURE 2.7 PARADIGM OF THE ADOPTION OF AN INNOVATION BY AN INDIVIDUAL WITHIN A SOCIAL SYSTEM

Source: Rogers, 1962

2.4144 *Personal Responsibility*

Suggested definitions of the term 'entrepreneur', in stressing innovative and decision-making functions, implicitly include personal responsibility as an integral characteristic of entrepreneurship.

Sutton (1954, pp.21, 22, 25) has written that definitions of entrepreneurship

> for the businessman seem to center around the concept of responsibility ... [which] implies individualism. It is not tolerable unless it embraces both credit for successes and blame for failures, and leaves the individual free to claim or accept the consequences, whatever they may be.

Research evidence already reviewed suggests that such a situation is congruent with the needs of the person with high n-Achievement who desires to operate in a situation where he can gain a sense of personal achievement. Freedom to make decisions and to have responsibility for their outcome may be found with the owner entrepreneur in his own business and in the discretionary authority delegated to managers in large organisations. Various field studies (Pelzel, 1954; Granick, 1960) and experimental studies (McClelland *et al*, 1953; De Charms, 1956; French, 1958) have pointed to the same conclusion, that, whether one works for himself or for others, if one has responsibility for his actions, there will be no difference in entrepreneurial efficiency due to the distinction between working toward individual or group goals. Achievement satisfaction arises from having initiated the successful action, whether it be in a group setting, or as

an individual, rather than from public recognition of one's accomplishment.

McClelland (1961, p.230) has drawn together the major empirical conclusions relating to this aspect of entrepreneurial behavior with the statement that

> if we are correct in our belief that behaving in an entrepreneurial way is practically an alternative way of saying that a person has high n-Achievement, then it is true that the individual must retain some individual freedom and responsibility for generating and choosing among courses of action if he is to get any achievement satisfaction, but it is not true that he must therefore work for himself rather than some group enterprise. Individual responsibility for action and working for oneself must not be confused, although they often go together. A man may get achievement satisfaction from having contributed to the success of a group enterprise, so long as it is he who made some of the decisions contributing to a successful outcome and he therefore has some way of telling how well he has done.

For the purposes of this study, it appears that entrepreneurs operating in groups, as partners or active directors, in small firms, can gain achievement satisfaction by their successful individual contributions to the firm.

2.4145 *Knowledge of Results of Action*

A person acting in an entrepreneurial role usually knows fairly objectively how well he is performing. In business, relatively definite, tangible and common measures are widely accepted as criteria for success. "These standards include profitability, percentage control of the market, size of firm, and rate of growth" (Sutton *et al*, 1956, p.328).

Not all people like to have concrete knowledge of the results of their actions and decisions. For some, such feedback is a source of anxiety - it not only offers proof of success, but also evidence of failure. Consequently, many people prefer to work in situations where the following of prescribed methods provides assurance of a job well done. These people tend to prefer routine administrative work rather than entrepreneurial activities. Individuals with high n-Achievement have been shown, under experimental conditions, to perform significantly better when provided with positive and precise feedback on how well they are doing.

A vast empirical research literature is associated with the question of the effects of type and frequency of feedback on future performance. One very fertile and rather recent area of interest is that concerning the behavioral implications of accounting practices, in particular, budgets, auditing and various performance reports.

French (1958), in a laboratory-type experiment, provided two difference kinds of feedback for groups of subjects working at a common task. It was found that subjects with high n-Achievement subsequently worked more efficiently with "task feedback" (mentioning specific operations and their usefulness in efficiently achieving the set task) than with "feeling feedback" (mentioning sociological and emotive aspects of the group's working). Concrete knowledge of correct methods improved subsequent performance of high n-Achievement persons, whereas knowing about the relevance or otherwise of their

co-operative interaction styles did not. French also found that subjects high in n-Affiliation improved performance after "feeling feedback", and exhibited much less improvement after "task feedback".

Another study undertaken by French (1956) has shown that subjects with high n-Achievement tend to choose experts rather than friends as working partners, whereas the reverse is true with subjects possessing high n-Affiliation. This finding supports the assertion that persons with high n-Achievement prefer problem solution to co-operative interaction.

Leavitt and Mueller (1951), in an investigation of the effects of varying the quantity of feedback, discovered that task accuracy, as an index of morale, increased as feedback was increased. Low feedback, or none at all, was accompanied by low confidence and poor work.

One of the most exacting laboratory-type experiments to examine the psychological impact of the frequency and type of performance feedback was that conducted by Cook (1968). The primary purpose was to determine the effect of feedback frequency, and, specifically, tested the following hypotheses:

1. Attitude (measured by interest and satisfaction) is directly related to the frequency of receiving performance reports.
2. The degree of success or failure in subsequent performance is related directly to feedback frequency.
3. Attitude (interest and satisfaction) is related directly to feedback knowledge of past success or failure.

4. The level of aspiration is raised or lowered as a result of success or failure being reported in the feedback.

The whole study lasted three years and all hypotheses were confirmed.

Achievement knowledge for the businessman is nearly always expressed in monetary terms. The conventional view of economic man attributes to him the psychological characteristic known as the 'profit motive'. However, with the greater clarification of the fundamental motivation of the entrepreneur during the past 25 years, it is now more readily accepted that much of man's interest in profitability stems from his need for achievement, which is concerned with profitability because it provides concrete knowledge of competence or achievement.

> Personal money income plays a highly important role in our society as a *symbol* of achievement. A man with a large income is likely to gain respect - not because of the income itself but because of the presumption that it is an index of his importance or competence (Sutton *et al*, 1956, p.331).

This assertion has empirical support. Persons with high n-Achievement are reported by Atkinson and Reitman (1956) to actually decrease their performance when monetary incentives are introduced, while those with low n-Achievement improve performance to the point where there was little net difference between the two groups. Atkinson (1958) reported a similar result, and Douvan's (1958) findings have added further weight to the proposition that persons with high n-Achievement are not greatly influenced by monetary rewards *per se*, whereas those with low n-Achievement are motivated to improve performance

for financial gain.

Litwin (1958) has also offered empirical evidence that persons with high n-Achievement regard achievement more highly than do the 'lows', and that they seek concrete recognition of it, in money terms. McClelland (1961), from the empirical evidence amassed, has averred that Western capitalists were primarily motivated by n-Achievement rather than the profit motive. "What gallons of ink and acres of paper might have been saved if economic and political theorists had understood this distinction sooner" (*ibid.*, p.237).

2.4146 *Long-Range Time Perspective*

As suggested from various sources, decision making is an essential element in entrepreneurial behavior. Decision making for long-range planning distinguishes the entrepreneur from the manager, who is characterized by many as a decision maker for problem solving in the short term. The primary entrepreneurial action of creating a new business enterprise may be, for some, a short term and rather impulsive act. For others, the more successful, the creative act is the culmination of a long period of preparation and planning. This proposition has been tested in this study, and, if proven, may well indicate a significant and positive relationship between long-range time perspective, high n-Achievement and entrepreneurial effectiveness.

As Lazarsfeld (1959, p.23) has suggested, the successful entrepreneur is someone who considers more alternatives, and

their consequences, before they actually occur - he anticipates future possibilities. The independent entrepreneur frequently has a substantial proportion of his total investment in plant, premises and other fixed assets. For this reason, among others, entrepreneurship appears to require more investment in and concern with the future, a longer time span and more forward planning.

It therefore follows that successful entrepreneurs must have the capacity to project themselves into future situations. Persons with high n-Achievement have been shown to have this facility. They tell stories (in projective testing) relating more often to the future (Ricks and Epley, 1960), and they indicate a greater sense of anticipation (Green and Knapp, 1959). Such persons are also more willing to forego immediate or short term gains and rewards in favour of achieving longer-range objectives (Mischel, 1960). Such time orientation often gives rise to behavior which is ascetic in nature - ascetism as a means to long-range goals rather than as an end in itself.

2.4147 *Organisational Skills*

If any entrepreneur is ever to achieve more than he can from his own hands, he must, by necessity, be able to organise the work of others. Many writers see co-ordination and organisation of resources as a fundamental function of entrepreneurs, while others regard it more relevant to the managerial role. There is little empirical evidence of the superior organisational ability of high n-Achievement individuals although certain findings relate closely to this. French (1956) has shown that

such persons select experts rather than friends as working partners for task solution or completion, and this attitude should contribute to enterprise efficiency. Godfrey, Fiedler and Hall (1957) have shown that successful entrepreneurs are more discriminating in selecting and judging personnel.

2.4148 *Geographical and Social/Occupational Mobility*

Evidence from a number of studies supports the contention that n-Achievement is associated with differential occupational mobility. Crockett (1962) has tested and accepted the hypothesis that strong achievement motivation and upward social/occupational mobility are related phenomena. Following the Bendix and Lipset (1953) occupational prestige hierarchy, which has both stability over time and general acceptability, Crockett has indicated that the acceptance of his hypothesis depended on whether higher prestige occupations are actually perceived as having more incentive value, and as being more difficult to attain (lower expectancy of successful attainment), than lower prestige occupations. His findings have either explicit or implicit support from Warner and Abegglen (1955), Rosen (1958), Seeman (1958) and Lipset and Bendix (1959). Given the acceptance of the above proposition, it follows that persons with high n-Achievement would tend to be more geographically mobile than their lower n-Achievement counterparts, if this was necessary to procure the sought job (Strodtbeck, 1958a, 1958b; Rosen, 1959). It would also be reasonable to expect that children of geographically and/or occupationally mobile families would find it easier to break away from domestic traditions and constraints. Children of migrant families should fit this category.

It should be noted here that such evidence, as outlined above, is inconsistent with the arguments of Riesman (1950), Whyte (1956) and Miller and Swanson (1958), which stressed the favourable implications of broad changes in the social *milieu* for persons high in n-Affiliation. The "other-directed" person (Riesman, 1950), or the "organisation man" (Whyte, 1956), it has been posited, is expected to be more occupationally mobile than the person with a different interpersonal orientation. Crockett (1962, p.204) has concluded that research findings generally do not substantiate these theses, and that his own study provides "empirical evidence ... that the strength of the achievement motive ... is an important personality factor, contributing to occupational mobility".

Discussion on social and occupational mobility is closely associated with the question of occupational or career choice, and is continued in Section 2.4149, following.

2.4149 *Preference for, and Pursuit of, Entrepreneurial Occupations*

It has been shown that persons with high n-Achievement tend to behave in ways that economists and historians have ascribed to entrepreneurs. Most of the behavioral characteristics associated with high achievement motivation have been demonstrated in laboratory situations. It cannot be assumed, *ipso facto*, that persons with high n-Achievement will actually gravitate toward business and, in particular, entrepreneurial roles. Yet, McClelland and his associates have been drawn to conclude, from

the convincing empirical and historical data they have gathered, that

> the most reasonable interpretation of these facts [seems] to be that high n Ach predisposes a young man to seek out an entrepreneurial position in which he can, normally, attain more of the achievement satisfactions he seeks, than in other types of positions. (McClelland, 1965, p.389)

Despite the widespread incidence of traditional family selection of children's occupations (Warner and Abegglen, 1955; Lipset and Bendix, 1959) one may reasonably suppose that individuals with high achievement motivation will be more occupationally mobile until they discover that they are more satisfied in entrepreneurial roles. Lipset and Bendix (1959) have shown that men who became owners of their own firms tended to have worked in a greater variety of occupations than have persons preferring paid employment. This finding is congruent with the suggested restlessness and innovative tendencies of entrepreneurs. It is thus reasonable to suggest that persons with high n-Achievement will be attracted to business occupations because they perceive (or find from experience) those occupations as requiring the characteristics which they possess. They will thereby achieve a satisfactory measure of role congruence in entrepreneurial activity. Is this assumption justified?

The verification of such a proposition requires a longitudinal study, since a static investigation would not indicate whether high n-Achievement was the predominant reason for working in entrepreneurial positions, or the result of so doing. McClelland (1965), in such a study, investigated the occupational

positions of 55 graduates some 14 years after college graduation. The students were tested for n-Achievement (with TAT) in 1947, and were found, in 1961, to have reasonably settled occupations. The 55 occupations were classified into professional, entrepreneurial and non-entrepreneurial business categories, by two judges with 91% agreement. McClelland here used the following criteria from Meyer, Walker and Litwin (1961):

> entrepreneurial activity is one in which the individual has
>
> - more responsibility for *initiating* decisions, rather than merely having to make decisions when presented with problems,
>
> - more *individual responsibility* for decisions and their effects - that is, without review or assistance of a supervisor or a committee,
>
> - [more] *objective feedback* of accurate data indicating the success of his decisions, such as in sales volume, profitability, reduction in errors, complaints etc., rather than a general subjective evaluation of his success by the group or by superiors,
>
> - [a] job [which] *entails more risk* or challenge in that there is more chance of a serious wrong decision being observed.

For the purposes of cross-validating the results, further n-Achievement testing was carried out in 1950-51, with a new sample. Results of the study are shown in Table 2.11.

TABLE 2.11 *NUMBERS OF ENTREPRENEURS, NON-ENTREPRENEURS AND PROFESSIONALS IN 1961 WHO WERE ABOVE AND BELOW THE MEDIAN IN N-ACHIEVEMENT AS COLLEGE GRADUATES IN 1947 AND 1950-51*

	n-Achievement				
	1947		*1950-51*		*% above median Combined Samples*
	Above	*Below*	*Above*	*Below*	
Entrepreneurs	*10 (83%)*	*2 (17%)*	*18 (60%)*	*12 (40%)*	*67% $\chi^2 = 8.70$**
Non-entrepreneurs	*3 (21%)*	*11 (79%)*	*12 (41%)*	*17 (59%)*	*35%*
Professionals	*16 (55%)*	*13 (45%)*	*50 (51%)*	*49 (49%)*	*52%*

* $p = <.01$

Source: *McClelland, 1965, p.390*

While the cross-validation data are not nearly so striking, they are in the same direction. The chi-square for all cases (both samples), of 8.70, is highly significant at $p = <.01$. It therefore appears that high n-Achievement does lead to entering entrepreneurial occupations, in support of the basic hypothesis relating achievement motivation to economic development.

It also seems that n-Achievement scores are reliable predictors of life patterns over periods of at least 10 years. Despite many allegations of test-retest unreliability over even very short periods, Moss and Kagen (1961) gained a correlation of $r = .34$ between n-Achievement scores in adolescent and adult male protocols, over a 10 year time span.

> These data support the hypothesis that n Ach is a fairly stable personality characteristic, which, given certain characteristics of the social system, predisposes young men to enter entrepreneurial occupations or to function in traditional occupations in entrepreneurial ways. (McClelland, 1965, p.392)

However, there is no simple relationship, because other factors are involved. McClelland's (1965) findings, and those of other researchers (Hyman, 1953; Strodtbeck, McDonald and Rosen, 1957; Litwin, 1959; Mahone, 1960), together provide an empirical confirmation of the prediction from Atkinson's (1957) model, that occupational aspiration is a multiplicative function of n-Achievement, prestige (attainment difficulty) of the occupation, and probability of success, the latter being affected by the individual's social class status.

2.42 *INTERPERSONAL RESPONSE TRAITS*

To the extent that small business entrepreneurs are necessarily involved in, or subject to, intensive interaction with employees and, to a lesser degree, with customers, a sufficiently inclusive, yet simple, interpersonal framework should be an integral part of the broader theoretical structure through which to investigate total entrepreneurial behavior.

To reiterate what has been stated elsewhere in this thesis (Section 1.5), the abilities and attitudes of the entrepreneur have a much greater total impact on the success of the venture than would be the case with any single executive in a larger firm. Ultimately, managerial effectiveness is a result of the effectiveness of leadership behavior and of other goal oriented actions, which are of a non-leadership type, and necessarily involve interpersonal communications to a lesser extent. In larger organisations, the role of management varies with the hierarchical level of operation, and leadership too, is largely a function of situation. Whereas technical skills (knowledge

of, and proficiency in processes and techniques) are a vital situational factor at the foreman/supervisory level, in upper echelons such competence becomes proportionately less important, as managers increasingly depend on subordinates to exercise the appropriate skills. Top executives frequently become almost totally divorced from their technical specialties. Conceptual skill (the ability to deal with ideas rather than things) becomes increasingly more important in higher levels of organisational life because the problems facing top management are usually more abstract and subjective than those experienced at lower levels.

Leadership and motivational skills are fairly equally applicable at all levels in the hierarchy. As managers progress from one hierarchical step to the next, they are required to develop skills appropriate to the demands of their new operational level. This, for most personnel, is an evolutionary process. However, the new entrepreneur, facing personal responsibility for the successful functioning of his total business venture, is required to effectively and simultaneously exercise all three types of skills. While conceptual skill requirements may be somewhat less rigorous in small firms, the other two classes of skill are certainly no less demanding than in the larger firm. Technical proficiency of the entrepreneur is discussed elsewhere in this thesis (Section 2.51). Leadership facility is a vital part of the entrepreneurial role.

Fiedler (1967, p.8) has defined a leader as "the individual in the group given the task of directing and co-ordinating task-

relevant group activities". Leadership may be regarded as "interpersonal influence, exercised in situation and directed, through the communication process, toward the attainment of a specified goal or goals" (Tannenbaum and Massarik, 1957, p.2). There have beeninnumerable studies of leadership style, the vast majority suggesting that there is a continuum of style ranging from authoritarian or job-centred, through laissez-faire or subordinate-centred. Such conclusions are of little practical use in the evaluation of the effectiveness or otherwise of any particular style. The above definitions suggest various factors which are involved in the leadership function, and the most profitable strategy for investigating leadership behavior is to do so in context.

Leadership is an influence process whereby attitudinal and behavioral changes occur as a result of inter-relationships and communication among people. Leadership is always undertaken in particular situations, which include certain variables, each capable of affecting the success of the activity. Fiedler (1967) has identified three situational elements - leader-member relations, task structure and leader position power. Tannenbaum and Massarik (1957, p.3) have suggested that

> the objective content of any influence relationship might include any or all of the following:
>
> 1. physical phenomena ...,
> 2. other individuals, including the members of the specific group of which the leader and follower are a part,
> 3. the organisation,
> 4. the broader culture, including social norms, role prescriptions, stereotypes, etc. and
> 5. goals, including personal goals, group goals, and organisational goals.

Finally, leadership is a communicative activity. There are many problems involved in differentiating between the communication and leadership processes (Fearing, 1953; Johnson 1953), but communication is the sole medium through which a leader, as leader, can function. The effectiveness of all leadership activity must always be assessed with reference to the leader's intended goal or goals. In the case of a small business entrepreneur, personal and organisational goals merge to the point of being practically inseparable - the superordinate goal of, and for each, respectively, being the viability of the venture.

Tannenbaum and Massarik (1957, p.9) have proposed a model of the leadership process, in which they emphasize the personality of the leader which manifests itself in each situation, and which

> influences his range of perception of follower and situation, his judgment of what is relevant among these perceptions, and thence his sensitivity to the personality of the follower and to the situation. The leader's personality also has impact of his behavioral repertoire (action flexibility) and on his skill in selecting appropriate communication behaviors.

Although Tannenbaum and Massarik agree that earlier attempts to define leadership, in terms of leadership traits, have generally been fruitless, they have proposed the thesis that the personality of the leader cannot be ignored. They have stressed that the leader's needs are important as they affect his perceptions of what he must do to effectively influence appropriate situations. A framework for understanding personality, and consequential interaction/leadership behavior, depends on the

derivation of meaningful categories of traits which provide valid prediction of interpersonal response patterns.

Most previous study of interpersonal orientations has focused on relatively specific personality needs and dispositions, and detailed lists of interpersonal response traits have been proposed (French, 1956; Krech, Crutchfield and Ballachey, 1962). Such catalogues, as have been offered, are unwieldly and complex, and therefore difficult to utilize in empirical studies. The social behavior of the individual (including his leadership behavior) is channelled or directed by his interpersonal response traits, here defined as relatively consistent and stable dispositions to respond in distinctive ways to other persons. "Much of what defines the personality is determined by relationships with other people" (Sullivan, 1954, p.78). Horney (1937, 1945 and 1950) has emphasized the need to study individuals within their social context, particularly in the analysis of anxiety. She has written (1950, pp.366-367) that

> neurosis in human relations [is] brought about by cultural conditions; specifically, through environmental factors which obstructed the child's unhampered psychic growth. Instead of developing a basic confidence in self and others the child developed a basic anxiety, ... defined as a feeling of being isolated and helpless toward a world potentially hostile. In order to keep this basic anxiety at a minimum the spontaneous moves toward, against and away from others became compulsive.

Horney's thesis is that anxiety grows out of disturbances in the child's early familial relationships. A wide range of adverse factors includes: direct or indirect domination, indifference,

erratic behavior, lack of respect for the child's personal needs, lack of real guidance, disparaging attitudes, too much admiration or the absence of it, lack of reliable warmth, having to take sides in parental arguments, too little or too much responsibility, overprotection, isolation from other children, injustice, discrimination, unkept promises and a hostile atmosphere. According to Horney (1945) all these factors may result in personal frustration, severe or prolonged experience with which will result in the inability to attain goals and satisfy wants, and, subsequently produce feelings of personal failure and anxiety.

The insecure, anxious child develops various strategies with which to cope with the pressures from his feelings of failure, isolation and helplessness. He may become highly competitive, or develop hostility and seek to avenge himself on those who have allegedly rejected or mistreated him. Alternatively, he may seek to gain power over others, to compensate for his sense of helplessness. Finally, he may become excessively submissive in an attempt to win back the love he feels he has lost. According to Horney (1945), any one strategy or defensive reaction may become a fairly permanent fixture in the personality a particular strategy may, in other words, assume the character of a drive or need in the personality dynamics. This view has support from many other psychologists, including McClelland who has stated that a motive is a learned construct, "a strong affective association, characterized by anticipatory goal reactions and based on past associations of certain cues with pleasure or pain" (1955, p.226). The McClelland achievement

motivation development programmes are founded on the motive-acquisition proposition, and reported results have been encouraging. Goffman (1959, p.145) has indicated that "the increasing ability with which one uses a predominant strategy provides a certain amount of security and self-condidence for the person". Kelly (1955) has shown that two interpersonal response strategies (self-confidence and sociability) are relatively stable over time. He attained correlations of .61 and .46 respectively, over a 20 year time span.

Horney (1945) has proposed a set of ten reactions or strategies which are acquired as a consequence of trying to find solutions to the problem of disturbed social relationships. She has regarded these reactions as "neurotic" since they are derived from nervous derangement.

The first three of these needs frequently occur together, and, as such, form a "moving toward people" syndrome. All entail admission of weakness, helplessness, dependence on others, compliance, need for affection and conformity, and efforts to arrange life on these bases. Such people have *compliant orientation.*

1. Need for affection and approval

   - indiscriminate need to please others, to be liked and approved and to live up to their expectations
   - predominant concern for others rather than self
   - strong desire to conform to the wishes and opinions of others
   - extreme sensitivity to any sign of rejection or unfriendliness

- fear of self-assertion

- fear of hostility from others or of hostile feelings within self toward others

2. Need for a "partner" who will take over one's life

- central concern for the "partner" who is expected to lead and dominate

- abandonment of personal responsibility

- tendency to become parasitic and subservient

- extreme fear of desertion and being left alone

- over-evaluation of "love"

3. Need to restrict one's behavior within narrow limits

- need to be undemanding, unassertive and content with little

- restricted ambitions

- preference for inconspicuousness

- overly modest (belittles own abilities)

Needs 4 to 8 inclusive, have in common a competitive drive toward absolute superiority over others, in one form or another. Persons manifesting these strategies tend to move against others - they have an *aggressive orientation.*

4. Need for power

- domination over others craved for its own sake

- involves basic disrespect for individuality, dignity and feelings of others

- indiscriminate glorification of strength and power, and contempt for weakness

- fear of helplessness and uncontrollable situations

(a) sometimes involves use of reason and foresight by persons too inhibited to use power directly and overtly

- omnipotence of intelligence and reason

- contempt for emotionalism

- fear of bad judgment
- value placed on prediction of consequences
- contempt for intellectual inferiority

(b) for others, belief in omnipotence of the will (by highly detached persons who dislike contact with others)

- obsessed with one's ability to influence
- fear of frustration of wishes
- tendency to withdraw (reduce demands) if failure likely

5. Need to exploit others

- others evaluated according to how far they can be exploited or made use of
- variety of modes of exploitation used
- fear of being exploited or manipulated
- pride in own manipulative skill

6. Need for prestige and public recognition

- all things evaluated according to prestige
- strategies developed to incite envy and recognition

7. Need for personal admiration

- inflated image of self (narcissism)
- wish to be admired, based on imagined self
- fear of humiliation from loss of admiration

8. Ambition for personal achievement

- need to surpass others in achievement
- ego dependent upon success/failure
- some destructive/competitive tendencies
- relentless driving of self to improve and win

The final two needs categories express isolation, self-sufficiency, freedom from obligation and strong desires to

be not influenced by others, nor to be involved emotionally with others. The tendency is to move away from people - a *detached orientation*. This mode of response and coping is often used as a compromise for persons who become frustrated with compliant or aggressive strategies. If one is uncertain about how to deal with particular people, a detached reaction may be most appropriate.

9. Need for self-sufficiency and independence
   - security derived from distance and segregation
   - necessity to never need anyone else, to never yield influence, to be independent and to never be insubordinate
   - free of emotional ties
10. Need for perfection and unassailability
   - relentless drive for perfection
   - fear of making errors and being criticized
   - tendency to be self-recriminating
   - attitudes of superiority and infallibility

In any one person, all three orientations will be evident in varying degrees. For some people, inner conflict may arise from the pressures of two or more different strategies. The three orientations are not mutually exclusive, and the normal person is able to integrate them. More neurotic persons, because of anxiety, from conflict, frustration or other stress agents, will use less rational solutions, recognise and use one of the strategies, and attempt to suppress the others.

Horney's (1945) tripartite interpersonal orientation model separates interpersonal response traits into meaningful

categories that are descriptive, not only of a single interpersonal response act, but also of a person's relatively consistent means or patterns of relating to, and coping with, others. According to Horney (1945), these three basic interpersonal configurations help to explain a person's perception of his social environment, and his behavioral tendencies toward other beings in his role set.

The relevance of compliant, aggressive and detached interpersonal response patterns to many particular interaction situations still remains to be empirically demonstrated. There are no known studies relating these interpersonal orientations to the entrepreneurial role. Atkinson (1957) and McClelland (1961), in associating the characteristics of the entrepreneur with those of the person with high achievement motivation, implicitly indicated that the entrepreneur exhibits features of both aggressive- and detached-orientations rather than those of compliant-orientation. This assertion may appear somewhat paradoxical in view of the necessity for a small business entrepreneur to interact constantly and favourably with many persons, both within and without his enterprise. The matter is one further example of where research on the concept of entrepreneurship has not been adequately carried into the area of operation purported to be the most representative of entrepreneurial behavior. Consequently, the proposition that the compliant individual is not generally one with high n-Achievement or entrepreneurial propensity, will be tested in the empirical aspect of this study.

2.43 ROLE PERCEPTION

One variable which has been shown to be related to job satisfaction, attitude and task performance is role perception, which concerns the direction of effort, rather than the amount - the sorts of activities one sees as necessary and desirable for successful task achievement. There has been considerable debate about the relationship between task performance and satisfaction. One view is that successful performance leads to satisfaction, whereby performance derives from the joint effects of ability, effort (motivation) and role perception (Porter and Lawler, 1968). Locke (1970) has suggested that satisfaction is primarily a result of performance, and only indirectly a cause of it. Sutermeister (1971) has offered a cyclical model, stating that performance and satisfaction are causes of each other, with the stronger causal linkage being from performance to satisfaction. These three theoretical positions are all in substantial agreement, and this view seems currently prevalent.

In the Porter and Lawler (1968) model, role perception is one significant factor in task performance, and if individual perceptions of the work role are appropriate to the true demands of that role, performance is more likely to be functional in terms of worker satisfaction and organisational objectives. Congruent with the opinion of the author, and with one hypothesis in this study, is the statement by Porter (1961, p.1) that

> in many cases ... individuals are promoted within management on the basis of their technical qualifications for a job, while their performance may in large part depend on how well they are able to

> accept such psychological aspects of the job as the types of motivational rewards received, the various pressures encountered, and the perceived expectations of superiors and subordinates. In short, some individuals may be qualified technically for particular management jobs, but do not fit the psychological nature of the jobs.

Taken from the large organisation context, which concerned Porter, and applied to the small firm, there will be some variations in the factors referred to, but the essence of Porter's statement has direct applicability to the latter situation. Self-selection replacing promotion, and different patterns of perceived expectations from one's role set, will not alter the clear implication - the way the individual defines his task, will, in large measure, determine the direction of his actions and the extent to which he achieves successful performance and thus job satisfaction. Porter and Lawler (1968) regarded abilities and role perceptions as the two human-type factors which interact with effort or motivation to determine performance. As such, they are intervening variables in the Porter and Lawler (1968) model of task performance.

An important question which has concerned researchers in this area, is the appropriateness of role perception. Both Porter (1964) and Porter and Lawler (1968) utilized a role perception dimension which, they claimed, has general applicability to studies of managerial behavior - the "inner-other directed" dimension, attributable to Riesman (1950). This concept has gained much research attention, particularly in relation to a widespread interest in (and concern about) conformity within

large business organisations.

Riesman (1950) has drawn a distinction between two polar types of character and behavior in society generally. For the *inner-directed* individual "the source of direction is 'inner' in the sense that it is implanted early in life" (*ibid.*, p.30); he relies on his own innate ideas and values as criteria for his behavior; he has his own "psychological gyroscope" (*ibid.*, p.31) or internalized set of goals; and "if he founded a firm, this was his lengthened shadow" (*ibid.*, p.165). Inner-directed persons "seem to be made of sterner and more intrepid stuff" (*ibid.*, p.187); they are "work driven and work oriented, [their] profoundest feelings wrapped up in work and the competence with which it is done (*ibid.*, pp.200-201); and they have "tremendous competitive energies" (*ibid.*, p.103). Riesman also suggested that his inner-directed individual, "ambitious, energetic, [and] self-reliant" has been involved in "transforming physical nature, instituting large scale formal organisation, and revolutionizing technology" (*ibid.*, p.139) - typically entrepreneurial activities.

By contrast, the *other-directed* individual is one whose behavior is much guided by his "tendency to be sensitized to the expectations and preferences of others" (*ibid.*, p.23).

> What is common to all other directed people is that their contemporaries are the source of direction for the individual ... the process of striving ... and the process of paying close attention to the signals from others ... remain unaltered throughout life (*ibid.*, p.37).

Such a person lives in a "group milieu" (*ibid.*, p.41) and lacks the inner-directed person's capacity to go it alone. He develops a rich store of social skills - skills he needs to survive. He has an "inescapable awareness, lacking in the inner directed man that, in any situation people are as important as things" (*ibid.*, p.210). While the inner-directed person is job minded, the other-directed type is people minded, both work and pleasure being regarded as activities involving people.

Riesman has discussed subtle but massive shifts in society away from inner-directed values toward those of other-direction. While it

> would be premature ... to say that it is already the dominant mode ... since the other directed types are to be found among the young, in the larger cities, and among the upper income groups, we may assume that, unless present trends are reversed, the hegemony of other direction lies not far off. (*ibid.*, p.36)

Riesman has cited the "old" middle class as typical of inner-direction:

> ... the banker, the tradesman, the small entrepreneur, the technically oriented engineer, etc., - while other direction is becoming the typical character of the "new" middle class - the bureaucrat, the salaried employee in business, etc. (*ibid.*, p.36)

To Riesman, people have become the central problem of industry, and there is evident, in the middle years of the 20th century, considerable pressure toward social competence, where upward mobility in business and organisational life involves working more with people than with things. Technical specialists frequently arrive at promotional and salary ceilings to find

that further upward movement first requires a lateral shift into managerial ranks. Increasingly "these men must bury their craft routines and desert their craft companions" (*ibid.*, p.155), and the advent of the line/staff dichotomy has further segregated executives and line personnel. To successfully climb the organisation pyramid, the mid-century manager "has to learn a new personality-oriented specialty and unlearn, or at least soft-pedal, his old skill orientation" (*ibid.*). Despite the extent to which one may accept or refute the case for the dominance of contemporary business and society by other-directedness, there is a clearly implicit distinction in Riesman's analysis between the climber of the hierarchical ladder and the creator of the new business entreprise. There are striking similarities between Riesman's inner-directed personality and Horney's concepts of aggressive- and detached-orientations. Likewise, there is much in common between other-directedness and Horney's compliant-orientation.

Riesman's (1950) thesis was followed and supported by another influential study, which re-inforced the impact of *The Lonely Crowd*. Whyte (1956) decried the decline of the Protestant ethic and the growth of the cult of the *organisation man*. He defined the organisation man as the person who, not only works for the organisation, but belongs to it as well.

> They are the ones of our middle class who have left home, spiritually as well as physically, to take the vows of organisation life, and it is they who are the mind and soul of our great self-perpetuating institutions. (*ibid.*, p.8)

The evolution of Whyte's Social ethic (variously labelled "organisation ethic", or "bureaucratic ethic") to replace the Protestant ethic, "more than anything else ... rationalizes the organisation's demands for fealty" (*ibid.*, p.11). To Whyte, this demand for allegiance is a demand for conformity - a suppression of individualism and creativity in the interests of corporate conformity. The organisation man, adaptable, socially attuned, concerned for group interests in preference to his own, will, according to Whyte, achieve vertical mobility in the organisation he serves and belongs to. Much of his work-day effort is "devoted to finding out the right pattern to conform to" (*ibid.*, p.147).

In the years following these two theses the image of big business in society became somewhat tarnished with the stigma of conformity. Despite the obvious public and academic interest, there is a relative dearth of relevant empirical research literature on the issue. Fleishman and Peters (1962), using the Gordon (1960) *Survey of Interpersonal Values*, and performance ratings by superiors, found a significant tendency ($r = -.44$) for middle-level managers in large firms, who scored low on conformity (as per the Gordon conformity sub-scale), indicating high inner-directedness, individuality, and creativity, to be highly rated on performance.

Their conclusion refutes the Riesman/Whyte thesis. A replication of the Fleishman and Peters (1962) study, by Crockett (1962), strongly supported the formers' findings, as did a further study by Hay (1964). Roadman (1964) obtained peer ratings on

originality, independence, co-operation with others, and tact, for 56 middle-level managers and their promotion records were observed for the following two years. Those managers described as more independent, original, aggressive and capable of self-expression, but low on tact and co-operation, earned the majority of promotions. These findings are a further rebuttal of the organisation man argument.

To test specific hypotheses arising from the Riesman/Whyte propositions, Porter (1964) used a sample of almost 2,000 managers from all levels of a variety of companies, and asked his subjects to rank ten personality traits, on the basis of how important each was regarded for success in their managerial positions. Five of the adjective trait descriptions were selected as inner-directed and five regarded as typifying other-directed orientation. Porter did not correlate his results with managerial success in this study, but assumed a close relationship between role perception and actual role behavior (later shown by Porter (1971) to correlate at .61). The data indicated support for the above mentioned studies, and cast further doubt on the validity of the conclusions of Whyte and Riesman. One further relevant study, that of Porter and Lawler (1968), involving a sample of 428 managers in five large organisations, replicated the ranking of personality traits method of Porter (1964). Again, the findings offer no support for Riesman and Whyte.

The only known empirical investigation of perceptions of role requirements involving small firms is that of Porter (1964),

but there were two features in this study which prevent the findings being relevant to the intent of the present study. Porter defined small firms as those employing less than 500 persons, and he involved salaried managers rather than entrepreneurs. However, his methodology has much to recommend it (see Section 5 - 413).

The foregoing empirical evidence of considerable doubt about the validity of the twin theses of Riesman (1950) and Whyte (1956) has more relevance to large scale enterprise than to small. Despite this fact, the concepts of inner- and other-directedness, the substantiated hypothesis of the relationship between role perception and role performance, and the methodological aspects, all have much to offer to this study of entrepreneurial role performance. The Porter and Lawler (1968, p.103) argument that "correct role perceptions [are] a necessary prerequisite for effective job performance" is presumably true of salaried managers and entrepreneurs alike. While the research in this area has been almost totally confined to large organisations, the relationship between inner-directedness and the aggressive- and (to a lesser extent) detached-orientations, and the association of this type of person with entrepreneurial aptitude and inclination and high n-Achievement, suggests that the successful small business entrepreneur tends to be inner-directed and aggressive/detached in his perception of role and appropriate interpersonal response patterns. The fact that empirical research convincingly refutes the Riesman/Whyte proposition as it applies to large firms does not *ipso facto* negate the hypothesis that entrepreneurship is associated with aggressive/detached/inner-

directed type orientations, and that these personality configurations are more frequently associated with successful entrepreneurial performance.

These propositions have been investigated in the empirical aspect of this study.

2.44 *ROLE SUCCESS MOTIVATION*

Achievement motivation has been conceptualized as a general disposition to succeed, improve and meet standards of excellence - to strive for a particular kind of psychological satisfaction. Vroom has used the term "motivation to refer to a process governing choices made by persons ... among alternative forms of voluntary activity" (1964, p.6). One element in the expectancy theory of human motivation is valence or incentive, which represents the relative attractiveness of any outcome, and most relevant to this study are the affective orientations toward satisfaction generated by successful endeavour in challenging situations. Another element in the theory is expectancy (Vroom, 1964; Atkinson, 1966), and with this component discussion turns to the matter of the direction of behavior - choices between qualitatively different activities.

Given that behavior is, in part, "a function of rational calculability, or decision making in terms of goal directedness" (Georgopoulos, Mahoney and Jones, 1957, p.345), the individual will elect to follow that path which he perceives as most instrumental to the attainment of his goal(s). Since most

decision making situations involve some risk, or uncertain outcomes, actual choice (and consequential behavior) depends somewhat on subjective probability - belief in the likelihood that a particular act will be followed by a particular outcome. The strength or force of any motive in a given individual is involved in understanding the reason behind direction of choice. Behavior by an individual is assumed to be the result of a field of forces, each of which has direction and magnitude (Lewin, 1935), and force strength is conceptualized as a "monotonically increasing function of the *product* of valences and expectancies" (Vroom, 1964, p.18).

It is assumed that the individual with a high level of achievement motivation will be attracted to activities, the outcomes of which will be perceived as satisfying his need for achievement. Thus, any activity perceived as potentially entrepreneurial in nature can be assumed to have valence for the individual who has high n-Achievement. While achievement motivation, as a general index of an individual's propensity to succeed, compete and strive for excellence, is a vital factor in this study, it is realized that there are alternative outlets for this energy, the founding of a business venture (i.e. independent entrepreneurship) being only one such outlet. It has been argued that entrepreneurial tendencies can be exercised in several functions within large organisations, and even in other fields of endeavour (Harbison and Myers, 1959; Stepanek, 1960). The decision by an individual to withdraw completely from the employee role and undertake the role of independent entrepreneur is one with far reaching consequences.

Collins and Moore (1970) have suggested that "role deterioration" represents the precipitative event which propels an individual out of his existing role into entrepreneurship. Others have proposed the concept of "social marginality" (Curran and Stanworth, 1971; Stanworth and Curran, 1973) as the foundation of psychological discomfort leading to a role-changing decision. McClelland, Atkinson, Winterbottom and sundry others have shown that certain persons, through their parents' child rearing practices, develop strong desires for independence of action and achievement drive. All these propositions may result in a similar consequence - the individual becomes disenchanted with his employee role (he develops negative valence towards it) to the extent that he seeks an alternate route by which to satisfy his motivation to achieve. To such person, the perceived probability of attaining the desired outcome, by entering the role of independent entrepreneur, is sufficiently high to stimulate the necessary activity.

The decision to become an entrepreneur, once made, commits the individual to actions which he perceives as instrumental in achieving his immediate objectives (successful operation of a business venture) and, hence, satisfy his underlying motivational base. The extent of his role commitment, the effort and other resources he will be willing to invest, will be largely determined by both the strength of his basic motivation (in this case, assumed to be his level of achievement motivation), and the strength of experienced and anticipated subjective probability that continuation in that role will attain desired outcomes. The strength of the individual's desire to succeed in a chosen

role will be related to his role commitment. If investment of time, effort and financial and other resources in a chosen role is an agreeable index of a person's commitment to that role, it is then reasonable to assume that these investments are indicative of his desire to successfully attain the objectives inherent in his role selection and performance.

Evidence of the relationship between motivation for business ownership and successful performance in the role is not readily available. Mayer and Goldstein (1961) derived expressed reasons for going into business from their respondents. Their data are presented here in Table 2.12.

TABLE 2.12 MOTIVATION FOR BUSINESS OWNERSHIP, BY SURVIVAL STATUS OF THE BUSINESS

Motives	*Closures*				*Survivors*		*Total*	
	Non-financial		*Failures*					
	No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
1. Supplement income	-	-	*3*	*60*	*2*	*40*	*5*	*100*
2. Immediate need of job	*1*	*4*	*10*	*48*	*10*	*48*	*21*	*100*
3. Make a living through self-employment and independence	*5*	*12*	*17*	*43*	*18*	*45*	*40*	*100*
4. Business for the future and "to make real money"	*1*	*8*	*1*	*8*	*11*	*84*	*13*	*100*
5. Other	*1*	*50*	*1*	*50*	-	-	*2*	*100*
	8	-	*32*	-	*41*	-	*81*	-

Source: adapted from Mayer and Goldstein, 1961, p.115

It is suggested that the list of motives (re-ordered from that originally provided by Mayer and Goldstein) from 1 through 4 (deleting 5) illustrates increasingly positive and motivated reasons for entering business ownership. Although the sample size is small, there are indications from these data that greater motivation (as assessed from expressed reasons for entering business ownership) enhances the likelihood of survival.

This study is concerned both with basic achievement motivation, deemed relevant to prediction of the dependent variable, and also the depth of commitment to instrumental activity ensuing from the correlates of this motivation.

2.45 AFFECTIVE REACTION

Organisational work roles have the propensity to induce stress in the individual. Permeating every work situation there are many needs, aspirations, perceptions, values, attitudes and motives, some of which are thrust into the setting by the demands of the organisation, others being attributable to individual organisation members and groups. It is logical that the satisfaction of one set of needs or motives can only be achieved at the complete or partial expense of other sets, maximization of alternatives being impossible. Individual organisation members face role expectations or demands, which require of them particular modes of activity. These role expectations are stimuli leading to cognitive, affective and psychomotor responses. For any behavior to ensue there must exist, within the individual, a state of tension, an unsatisfied

need. Thus, tension, strain or anxiety are determinants of behavior, but when these forces exceed the pressure necessary to create rational productive activity, they generate a stress within the individual. The term "stress" is used to refer to both the external stimulus which produces a behavioral reaction and the reaction itself. Stress exists when demands made of an individual exceed his capacity to respond, and, in some way, his needs satisfaction is threatened.

Cofer and Appley (1964, p.441) have defined stress as "a force which, acting on a body, produces strain or deformation", and have added that the term "has been used as a synonym for anxiety, conflict, ego-involvement, frustration, threat, and emotionality ..." (*ibid.*, p.449). With a slightly different emphasis, Lazarus, Deese and Osler (1952, p.295) have stated that "stress occurs when a particular situation threatens the attainment of some goal". Adding a further aspect, Appley (1962, p.880) proposed that stress is "the state of an organism in any situation where his general well-being is threatened, *and* where no readily available response exists for the reduction of the threat". In this definition "well-being" is regarded as contingent upon the satisfaction of motives. From this sample of definitions of stress, the following critical features are evident:

1. an emotional state of the person,
2. involves interaction between the person and his environment,
3. more extreme than an ordinarily motivated state (may be identical to severe frustration and conflict),
4. a threat must exist,
5. the threat must be perceived as threatening,

6. the person's well-being is involved,

7. a normal adjustive (coping) response cannot be readily utilized.

The specific influence of stress on any individual depends on his level of stress tolerance. Perceptions of threatened "ego-motivation" (Vogel, Raymond and Lazarus, 1959) vary considerably between individuals, as do the intensity of action inducing motivation, the significance of needs or objectives to the individual, and personal mental/emotional capacities. It may be that "stress is in the eye of the beholder", there being wide variations in levels of stress tolerance, and in individual modes of affective and behavioral reaction to stressors. Vogel, Raymond and Lazarus (*ibid.*) have shown that the effect of moderate stress on sensory-motor tasks was generally facilitative, while on conceptual tasks it produced impairment. Stress level and differentials between sensory-motor facilitation and conceptual impairment also vary between individuals.

Miller (1969), in a clinical analysis of stress, has outlined four distinct phases of stress effect and coping/adaptation techniques. The individual must make psycho-physiological responses to any new demand, and each person establishes his own patterns of organisation. For low stress levels, response patterns become practically automatic and the body returns quickly to its natural functional state. Miller has described the normal functional condition as one of relaxed wakefulness, characterized by the capacity for creative thought and generally routine reaction to stressors. The first level of adaptation

is one of *vigilance*, a state of attentive consciousness, anticipating an environmental change. It is a condition between quiet wakefulness and excited emotion, where responses are efficient, selective and quick. In this state, one is attentive to actions and behavior of others, and responsive to both verbal and non-verbal cues.

If a person is unable to cope with stress by being vigilant, he is then required to use alerting responses at one or other level of anxiety, until he stabilizes. Miller (*ibid.*) has represented anxiety as an over-reacted attempt to respond functionally. If a person does not believe he can cope with stress he will react with some level of anxiety, and it matters not whether his belief was correct or incorrect. The second coping level is *apprehension* (Miller, *ibid.*), in which the hypothalamus stimulates the pituitary to release ACTH hormone, corticosteroids and adrenaline, leading to an anxiety state. Apprehension is usually of short duration, during which time the individual behaves indecisively with others, until he resolves the situation, either functionally (return to vigilance or quiet wakefulness) or dysfunctionally.

The state of *free anxiety* is one of unpleasant and painful affect, which tends to be more sustained than apprehension. Further releases of ACTH and corticosteroids result in a chronic state of readiness or anxious alertness, even when the person is outwardly at rest. This condition is distracting and conscious, whereas apprehension may be sufficiently mild to escape attention for periods of time. Psychological techniques of

coping are reduced since there is some disruption of autochthonous processes. Concentration, reading and learning abilities are reduced, which makes psychotherapy less effective as a means of relieving such a state of anxiety.

Panic is the breakdown of the whole psychological system, with resulting disruption of all coping processes. It is a totally dysfunctional state and can result in extreme efforts to end it (suicide, complete regression into stupor).

Miller (*ibid.*, p.120) has catalogued anxiety symptoms as follows:

Related to psycho-physiological changes -

Palpitations
Chest pain
Feeling cold or hot
Increased perspiration
Weakness
Fatigue
Feeling short of breath
Headache
Blurred vision
Diminished sexual interest, ability
Abdominal distress
Diarrhea or constipation

Related to pyschomotor changes -

Restlessness
Tremor
Startle reaction
Diminished coordination
Increased muscle tension
Decreased muscle power
Insomnia

Related to affect -

Irritability, anger, agitation, tenseness
Depressed mood
Fluctuation of mood

Related to autochthonous processes and thinking -

Diminished alertness and attentiveness
Diminished ability to concentrate
Diminished judgment [and memory]
Confusion
Diminished clarity and control of speech
Attitude of guilt toward self

Interpersonal relations -

More inclination to blame others
Less tolerance of aberrant behavior in others
Less sympathy and empathy with others
[Tendency to withdraw]

Persistent stress induced disorientation normally leads to somatic expressions, and these symptoms can serve as stressors in themselves, to generate further anxiety. The ultimate can be complete psycho-physiological dysfunction including peptic ulcer, ulcerative colitis, neurodermatitis, hypertension, asthma, coronary artery disease or diabetes mellitus. These reactions, accompanied by cognitive collapse can commonly result in the termination of a person's productive and normal life.

Stress inducing situations are classifiable into two major categories - physiological and socio-psychological. The physiological area involves real or anticipated threats to one's physical well-being, by pain, injury or death. Situations regarded as socio-psychological may be related to either work or non-work problems. Non-work problems include life stresses such as divorce, death of loved ones, surgery and general concern for the welfare of significant others. Stress deriving from sources external to the immediate work setting can and do affect work performance. These areas of influence will be discussed in Section 2.6.

Of all potential stress sources, those stemming from the work role itself are of most concern to this study. There are two inter-related aspects of work role stress, one involving interpersonal disagreement and incompatibility, the other related to the intrinsic nature of work itself. Included in the latter

are anxieties about self and peer evaluation, status, competence, risk, work challenge and many more. Most of these stress sources are not mutually exclusive, since problems more specifically arising out of one set of conditions have impact on others, to the extent that precise delineation is neither possible nor profitable. This study is concerned with socio-psychological stress generally, and specifically with those sources of stress associated with the entrepreneurial role.

2.451 *Interpersonal Disagreement and Incompatibility*

This is a very common stressor, in those aspects of life where interpersonal activities operate. Some persons are stressed much more than others when faced with a real or anticipated interpersonal variance. Studies by Steiner and Rogers (1963), Steiner and Johnson (1964), Johnson (1966), and Steiner (1966), have examined the various responses that a person may produce - *conform* (adjust his own opinions to match those of the other party), *devaluate* the importance of the issue, *under-recall* the frequency or extent of the disagreement or incompatibility and/or *reject* the other person as being less competent than originally thought to be. Each of these possible responses is a means of reducing the stress created by interpersonal conflict (Steiner, 1970). Any one, or any combination, of the available techniques may be used to dissipate stress, but subjects have shown a significant tendency to rely upon a single response instead of using two or more simultaneously. According to Steiner (1966, p.187) "different individuals have revealed preferences for different responses, and these preferences have

been found to be related to scores on personality variables".

It would seem reasonable to assume that the prevalent stress reduction technique used by an individual, would correlate significantly with his dominant pattern of interpersonal response traits, with compliant persons tending to prefer conforming, the more aggressive ones using a rejection technique, and detached persons either devaluating or under-recalling the issues. The examination of such suggested relationships in any further depth is not within the ambit of this study, despite its obvious relevance to entrepreneurial effectiveness.

2.452 *Work Problems*

This rubric includes all stressors regarded as deriving substantially from the nature of the work role. All work roles, both in large organisations and small, as employee or as entrepreneur, have the potential to generate stress, although specific stressors are peculiar to specific roles.

2.4521 *Competence Evaluation, Status Uncertainty and Fear of Failure*

As outlined above (Section 2.4142), the entrepreneur, with high n-Achievement, exhibits above average self-confidence, since he has a higher perceived probability of success. This affective condition, combined with a typically more realistic evaluation of his own capabilities, and a moderate attitude toward risk, together produce a rational and propitious mental/emotional

capacity to cope with the demands of his chosen role. Empirical studies (McClelland, 1958; Atkinson and Litwin, 1960; and others) have shown that test anxiety, a disposition to avoid failure, is negatively correlated with high n-Achievement. Logically, the inclination to avoid failure will result in behavior atypical of high achievement motivation - in other words, non-entrepreneurial behavior. Such an affective state is conducive to behavior symptomatic of a stressed condition, including restriction of goal-directed behavior. The motive to avoid failure is a capacity for reacting with shame and embarrassment , when the perceived outcome of performance is failure.

Cartwright (1942) has shown that subjects anticipating failure welcomed interruption to task performance. Studies by Taylor and Spence (1952) and Farber and Spence (1953) have shown that persons who gain high MAS scores (*Manifest Anxiety Scale* - Taylor, 1953) perform less well than those who gain low MAS scores, in complex tasks involving decision making. As additional stress was introduced by imposing time limits, performance was reduced significantly for the anxiety prone subjects. Performance, in these two studies, was assessed from the number of errors made. Mandler and Sarason (1952) have demonstrated that persons with task anxiety possess a greater repertoire of task-irrelevant (avoidant) habits, which can be interpreted as meaning that such persons have less persistence at goal-directed behavior.

The essence of empirical research findings, on failure anticipation and anxiety affect, is that the perceived threat

of failure (a stressor) has been demonstrated as producing a tendency to inhibit the performance of actions which are expected to produce failure. This inhibitory inclination, called the tendency to avoid failure, opposes and dampens the positive tendency to approach success (which does stimulate goal-directed activity).

Situations leading to anxiety, *via* the tendency to avoid failure, are postulated as detrimental to entrepreneurial effectiveness and success. Such success is suggested as being associated with high n-Achievement, and this has been shown empirically to be significantly and negatively correlated with failure avoidance (Atkinson and Litwin, 1960). The entrepreneurial role is a conspicuous one, in that it usually involves leaving a previous work role, negotiations with others in the preparatory stage, and a certain amount of publicity and persuasion. Performance feedback is direct and often known to others. One potent source of fear for the anxiety-prone entrepreneur is the evaluation of his competence, by significant others in his role set - his family, employees, customers, suppliers and banker. In such a situation of anticipated failure, anxiety is also generated by expected effect on status. Business failure is seen by most entrepreneurs as involving much loss of face. Anxiety may be further provoked by impending financial loss, which also has status and competence evaluation connotations.

2.4522 *Task Inherent Stressors*

Associated with, but capable of operating independently of the

previously discussed group of stressors, are others, which are inherent in work *per se*. Very rarely does work take place without its organisational context, and the first step in understanding the individual work role is to locate the person, and the role, in the total set of ongoing relationships and behavior comprising the organisation. The work role is an expected set of activities and relationships which is related to, and influenced by, other roles, forming the role set (Merton, 1957). All members of a person's role set depend upon his performance, by being dependent on it or rewarded by it. All such persons therefore have perceptions, attitudes and beliefs about what he should do, and how he should do it. These demands are known as "role expectations" (Katz and Kahn, 1966). The activities which delineate a role are the composite expectations of role set members, which are communicated to the focal person. These communicated expectations represent the sent role (*ibid.*). Since role set members have various interests in the ultimate performance of the focal person, they will exert influence upon him - these are role pressures. The latter may vary along several dimensions e.g. magnitude, specificity, duration and intensity. Whenever the individual is confronted by the "simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult or render impossible compliance with the other" (Kahn and French, 1970, p.251), role conflict exists. Where the conflict is not readily resolved, the individual reacts with emotional strain, dissatisfaction, frustration and apathy. There are deleterious behavioral consequences from these affective conditions.

The individuals's specific behavioral and affective responses to role pressures depend on the emotive and cognitive aspects of his experience, which is a function of all the demands and pressures to which he has been subjected. The specific reactions by the individual to his perceived experience will depend on the nature of the components of such experience. If he perceptually experiences supportive role pressures, he will probably respond with satisfaction and confidence. However, if role pressures are excessive, contradictory or ambiguous, he will experience any or some of frustration, anger, bewilderment, tension, indecision and conflict. In sum, the intrinsic nature of the work role (and the "causal" chain outlined above) can be a cogent source of stress. As conflict and tension become more severe, the individual is more likey to adopt maladaptive coping techniques, or defensive mechanisms, with consequential performance deterioration. The total role episode can be cyclical, in that the individual's mode of response usually determines the nature, intensity and magnitude of subsequent role pressures.

To a considerable degree, the role expectations held by role set members are determined by the formal authority (Fiedler's (1967) "position power") and functional responsibility of the focal person. Kahn and French (1970, p.256) have asserted that "supervisory responsibility emerges as a major organisational determinant of role conflict", and therefore of stress within the supervisor. Empirical demonstration of this statement has been provided by Kahn *et al* (1964), who have shown that tension level and job worries experienced increase directly as a function of supervisory responsibility. Their data are shown in Table 2.13.

TABLE 2.13 *TENSION AND JOB WORRIES IN RELATION TO AMOUNT OF ... SUPERVISORY RESPONSIBILITY*

Supervisory Responsibility	*N*	*Mean* Tension*	*% of Respondents + Reporting Job Worries*
Respondent has more than one level below him in supervisory chain-of-command	56	2.0	72
Respondent supervises only immediate subordinates	97	1.8	66
Respondent has no supervisory responsibility	216	1.5	44

* *The F-test of over-all differences among means is significant at* $p < 0.001$.

\+ *2 X 3 chi-square test is significant at* $p < 0.001$.

Source: *Kahn et al, 1964, p.146*

Depending on the size of the venture, in terms of employed supervisors/foremen below ownership level, the small business entrepreneur would be classified at either of the two upper levels of supervisory responsibility, in the Kahn *et al* analysis (Table 2.13), and therefore is shown to be possibly subject to significant stress for this reason. The existence of additional anxiety, caused by fear of failure, compounds the stress potential of the entrepreneurial role.

Stress in such role, as well as in similar positions in large organisations, can be induced by boundary-spanning role expectations (Thompson, 1967). Kahn *et al* (1964) have defined a boundary-spanning role as one in which some role set members are located outside the immediate organisation. Many roles

have some job-related contact with outsiders, and there are two dimensions of boundary-spanning roles relevant to the question of stress. Both the amount of time a person spends in work-related interaction with role-senders external to the firm, and the relevance of such interaction and role-sending to the person's effective job performance, are significant factors in the production of stress. Table 2.14 provides data from Kahn *et al* (1964) in a study of the relationship between role conflict and frequency of external contacts.

TABLE 2.14 EXPERIENCED ROLE CONFLICT IN RELATION TO FREQUENCY OF CONTACT WITH ROLE SENDERS BEYOND COMPANY BOUNDARIES

Frequency of Contact Beyond Company Boundary	*Mean Experienced * Role Conflict*	*N*
Never	*1.6*	*157*
Rarely	*2.2*	*42*
Sometimes	*2.4*	*51*
Rather often	*2.4*	*49*
Nearly all the time	*2.6*	*55*

* *The F-test of over-all differences among means is significant at p < 0.001.*

Source: Kahn et al, 1964, p.103

Persons in boundary crossing roles have limited control, authority or even influence over outsiders; in fact the small business entrepreneur is dependent upon these persons for finance, supplies and market openings particularly. Demands from outsiders tend to vary widely, and, in many cases, are unpredictable and arbitrary as to timing and magnitude. Thompson (1967) has proposed certain strategies for coping with environmental fluctuations in the interests of technical and organisational rationality, but the small firm rarely has either the technology

or resources to effectively adopt such strategies. The entrepreneur must rely heavily on his own ability to forge bonds of trust, respect and esteem. Such bonds are difficult to make and maintain; they are frequently tenuous among entrepreneurs, who manifest the transactional mode of interpersonal relationships (Collins and Moore, 1970) or the detached orientation in interpersonal responses (Horney, 1945). Entrepreneurs are liable to be personally blamed by outsiders for shortcomings within the firm, and by employees for failure to negotiate satisfactory receivable role demands, which in turn determine role pressures on them. To achieve effective role performance at the boundary, a person must maintain a balance between extra-organisational demands made on him, and the resources available to him to meet those demands (including role pressures from employees).

The individual operating in a boundary role is faced with a larger number and variety of role senders, and therefore role demands, than persons in non-boundary-spanning roles. The entrepreneur is accordingly subject to considerable and persistent stress from this aspect of his chosen role.

Successful entrepreneurs are attributed with the related characteristics of creativity and innovation (Section 2.4143). In this respect, they presumably differ somewhat from their own employees, who have preferred to operate in non-entrepreneurial roles. Whereas the more successful entrepreneur has a propensity to innovate and break new ground, those not so inclined will generally be more averse to change. Entrepreneurs operating in boundary positions, in many trades and professions,

face demands for creative problem solving and then must convert these pressures into role demands directed at their own employees. The more turbulent the external environment (Emery and Trist, 1965; Terreberry, 1968) the greater the variety, magnitude and persistence of demands for change and innovation upon boundary-spanning role occupants, including independent entrepreneurs. From interpersonal conflicts which may develop between persons in innovative roles, and those who have an interest in resisting efforts to change the *status quo*, severe stress may develop (Kahn *et al*, 1964). Active resistance may be generated, resulting in morale problems, and the situation could feasibly deteriorate to the point where serious dysfunctions for the whole venture become evident. The small firm must have the capacity to change when the need arises, and its very existence can depend on this flexibility.

There is much potential for intra-role conflict within the individual, because of the existence of two categories of legitimate and unavoidable role requirements - the innovative and the routine.

Kahn *et al* (1964) have shown that organisational proximity is a determinant of the amount of sent role pressure, and consequently, of stress. Since entrepreneurs are subject to role demands from employees, and all parties to this particular role set are organisationally close, it follows that there could well be opportunity for stress to develop. It would appear likely that stress, generated from whatever source, could become intensified by the relative propinquity of the members of a

small firm.

Another suggested characteristic of the entrepreneurial role, which is a possible source of stress, is role ambiguity. This feature is associated with innovative demands and boundary position roles, but can occur independently. Role ambiguity results from a dearth of information necessary for adequate role performance. Entrepreneurs, particularly those with inadequate experience and preparation, are faced with a variety of role pressures, during the early months of the life of the enterprise, with which they must struggle to cope. One very real deficiency in these circumstances is the lack of information with which to solve business and managerial problems and to undertake an effective leadership role. To the new entrepreneur, and particularly the under-prepared one, his role is, without doubt, very ambiguous. He is unable to anticipate, with any assurance, the consequences of his actions, and may therefore be reluctant and/or unable to take decisive and positive action at a time when such is required. He is also likely to be uncertain about the scope of his new responsibilities, about what is expected of him by others, and about what behavior will be effective in meeting these expectations. Confusion may arise from the lack of adequate policies and procedures, or from apprehension about how to enforce them.

A number of writers (Maslow, 1943; Katz and Sarnoff, 1954; Cohen, Stotland and Wolfe, 1955) have postulated a human need, variously labelled "need for structure", "need for cognition" or "intolerance of ambiguity", regarded as a measurable trait, and

shown to be an intervening variable in the association between role ambiguity and frustration. Role ambiguity is demonstrated by Kahn *et al* (1964, p.88) to have a greater impact on anxiety and tension for persons scoring high on the Cohen, Stotland and Wolfe (1955) measure of need for cognition. It has been shown that individuals with high n-Achievement, who tend to fill entrepreneurial roles, have a strong need to get objective and prompt feedback on the results of actions. It would therefore appear that such persons would score high on the need for cognition scale, thus (after Kahn *et al*) indicating a tendency to be adversely affected by role ambiguity. The effects of role ambiguity are similar to those of role conflict - tension, frustration, anxiety, fear and even anger and hostility. There is adequate evidence of feelings of futility and apathy, job dissatisfaction and loss of self confidence.

Two other closely related features of the entrepreneurial role are seen as stress inducing. Because of the nature of the new role, and the need to master a wide variety of skills almost simultaneously, the owners of new business ventures are invariably confronted with work overload and, consequently, the need to work long hours. Overload leads to conflicts of priorities representing inter-sender and person-role conflict. One obvious coping response with role overload is to work longer hours, but this will, in turn, affect the person's opportunity and ability to perform other major life roles. This process leads to inter-role conflict and further stress.

Stress, from each and every source, results in affective reaction,

culminating in coping responses of various types. Numerous psychological and physiological symptoms may become manifest, and, frequently, with severe and prolonged stress, psychosomatic reactions appear. In summary, the effective performance of a work role is largely determined by both the capacity of that role to induce stress, and the ability of the individual to adapt to, and cope with, that stress. The entrepreneurial role is inherently very stressful, and the coping ability of the entrepreneur (his *affective reaction*) is largely a function of his basic motivational characteristics, his role perceptions, his interpersonal response techniques, his work competence and the presence or absence of other concurrent role pressures. Affective reaction is the key independent variable in this study, and both the nature and source of stress, and the capacity to cope with it, are vital elements.

2.5 PATTERNS OF EXPERIENCE AND PREPARATION

With this group of proposed variables available research reports are fewer and less convincing than in the foregoing area of interest. In most studies of work performance, and of the factors suggested as being causally related to it, individual skills and abilities are considered. Porter and Lawler (1968, p.23) have stated that "*abilities and traits* are hypothesized to interact with *effort* and with *role perceptions* to determine performance", but did not measure ability in their study. They suggested that their "results in general ... are congruent with the view that a multiplicative relationship exists" (*ibid.*, p.116).

Vroom (1964) has also recognised these factors, his views being that "the performance of a person is to be understood in terms of his abilities and their relevance to the task to be performed" (*ibid.*, p.197), and that "the level of performance ... is a direct function of his motivation to perform effectively" (*ibid.*). This proposition, that both capacity to work and the will to do so are joint determinants of the quality of performance, has specific support from Mace (1935), Viteles (1953), Maier (1955), Gagne and Fleishman (1959) and Baldwin (1958). Attempts to define operationally the term "ability", and to distinguish between what a person can and does do have not been very profitable. Vroom (1964) has suggested that there is no way of defining and measuring a person's ability, other than by observing his actual performance. Through a process of elimination, Vroom has declared that "ability ... refers to ... all of the psychological attributes necessary for ... performance excluding those of a motivational nature" (*ibid.*, p.198). The relationship between ability and motivation, according to Vroom, is multiplicative rather than additive.

Ability, relating to the performance of a given task or role, includes both psychomotor and cognitive aspects. The nature of the task or role determines the appropriate combination of physical and cognitive skills necessary for successful performance. All such skills and abilities derive from learning experiences. The duration and relevance of such experiential development are therefore seen as vital contributory factors. There are three suggested categories of experience that, in varying degrees, are pertinent to the successful establishment and operation of a

business venture.

2.51 OCCUPATIONAL EXPERIENCE

For the purposes of this study, occupational experience includes all trade, professional and technical experience, gained on the job, and resulting in a measure of competence to undertake the work in which the individual is currently involved.

Data from a sizeable study conducted by the University of California Institute of Industrial Relations in 1949-50 (Lipset and Bendix, 1954), has shown that the desire for business ownership is strong in all occupational groups, but this desire, and actual attempts to realise the aspiration, were stronger among manual/technical employees than among those in white-collar occupations. One explanation of the differential may be that business ownership is one of the few 'status' positions (escape routes?) attainable by manual workers, whose educational, and possible other limitations preclude an executive or professional career. Chinoy (1955) has supported the conclusions of Lipset and Bendix (1954) in his study of automobile workers.

Mayer and Goldstein (1961) have provided data which substantiate the argument that manual workers are strongly attracted to business ownership (Table 2.15). Of more significant interest to this study is the relationship between occupational experience and entrepreneurial success/failure patterns. Mayer and Goldstein (1961, p.104) have stated that their findings show "that experience as an employee in a given line of business does not insure success

as a business owner in the same line". Supporting data from Mayer and Goldstein (*ibid.*) are shown in Table 2.16.

TABLE 2.15 PREVIOUS OCCUPATIONAL EXPERIENCE OF BUSINESS OWNERS

Occupational Category	*No.*	*Percentage*
Manual	49	53.3%
Manual and white collar	15	16.3
White collar	22	23.9
Business experience only	4	4.3
No previous occupational experience	2	2.2
	92	100.0%

Source: *adapted from Mayer and Goldstein, 1961, p.22*

TABLE 2.16 PREVIOUS OCCUPATIONAL EXPERIENCE IN THE SAME LINE, BY SURVIVAL STATUS OF THE BUSINESS

Experience in same occupation						*No experience in same occupation*					
Closures		*Survivors*		*Total*		*Closures*		*Survivors*		*Total*	
No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
26	49.1	27	50.9	53	100	19	48.7	20	51.3	39	100
N = 92 entrepreneurs											

Source: *adapted from Mayer and Goldstein, 1961, p.104*

The belief that occupational experience in a particular line of business is an essential requirement for success as a business owner in that line is held by both the general public and prospective entrepreneurs. Data from studies by Oxenfeldt (1943) and Mayer and Goldstein (1961) have shown that the choice of

business line was largely determined by previous occupational experience. Table 2.17 summarizes the data on this point from the latter study.

TABLE 2.17 · REASON FOR CHOICE OF BUSINESS LINE, BY SURVIVAL

Reason for choice	*Closures*		*Survivals*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
Experience or training	*27*	*67.5*	*25*	*60.9*	*52*	*64.2*
Other reasons	*13*	*32.5*	*16*	*39.1*	*29*	*35.8*
	40	*100.0*	*41*	*100.0*	*81*	*100.0*

N = 81 firms

Source: adapted from Mayer and Goldstein, 1961, p.105

Hoad and Rosko (1964, p.92) found that a variety of non-managerial experiences, acquired as an employee, slightly improved one's probability as an entrepreneur, and stated that

> a test of the hypothesis that where managerial experience is lacking, non-managerial experience has an important bearing on success or failure produced no significant results.

Their data are shown in Table 2.18.

On the basis of rather sparse evidence, it would appear reasonable to believe that occupational experience, while being a predominant reason for the selection of a line of business, without the support of any more relevant experience does not do more than marginally improve the likelihood of succeeding as an independent entrepreneur.

TABLE 2.18 AMOUNT OF NON-MANAGERIAL EXPERIENCE IN SIMILAR BUSINESS

Total Years of Non-managerial Experience for All managers	Businesses						Totals	
	Successes		Survivals		Failures			
	No.	%	No.	%	No.	%	No.	%
0	6	21.4	9	32.2	13	46.4	28	100
1	2	40.0	1	20.0	2	40.0	5	100
2	2	50.0	-	-	2	50.0	4	100
3	-	-	1	100.0	-	-	1	100
4	-	-	-	-	2	100.0	2	100
5	-	-	-	-	-	-	-	-
6 - 10	5	31.2	5	31.3	6	37.5	16	100
11 - 15	5	50.0	1	10.0	4	40.0	10	100
Over 15	17	65.4	5	19.2	4	15.4	26	100
	37	-	22	-	33	-	92	-

Source: adapted from Hoad and Rosko, 1964, p.33

2.52 MANAGERIAL EXPERIENCE

It has been established that lack of managerial expertise is significantly associated with the incidence of business failure, and is commonly regarded as the predominent 'causal' factor, both in Australia and overseas (Section 1.5).

Hoad and Rosko (1964, p.1) have stated that "more sophisticated analysis tends to attribute business failure primarily to managerial shortcomings", and have provided the following empirical data (Table 2.19) supporting the Dun and Bradstreet survey results, and showing that previous experience as a salaried manager can significantly improve the probability of success as an owner/manager.

TABLE 2.19 MANAGERIAL EXPERIENCE ... BY SUCCESS RATING

	Successful						Marginal		Failure or Dormant		Totals	
	Profit		Moderate Wage		Total							
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 5 years' experience	9	14.7	12	19.7	21	34.4	18	29.5	22	36.1	61	100
More than 5 years' experience	13	38.2	3	8.8	16	47.0	4	11.8	14	41.2	34	100
	22	-	15	-	37	-	22	-	36	-	95	-

Source: adapted from Hoad and Rosko, 1964, p.10

Table 2.19 indicates that the duration of previous managerial experience is related to subsequent performance as an owner/manager. All the data from Hoad and Rosko (1964) relate to managerial experience in the same or similar kinds of business. No empirical evidence is available, relating entrepreneurial performance to the degree of relevance of previous managerial experience. It is considered that such a relationship could be significant to the intent of this study. There is a wide range of evidence on various aspects of the management process, and their importance to enterprise success. Peters (1962), in a study of 435 small firms in Arizona, U.S., has cited lack of managerial experience and expertise, and undercapitalization, as the two main limitations to success.

Several researchers have placed particular stress on the need for small business owners to be very much aware of factors in the external environment. Reyer (1962) has expressed the need for

small business to be able to readily adapt to supply and market conditions. Kinnard and Malinowski (1959) emphasised that small manufacturers should pay heed to the business mortality pattern in their environment. Fargher (1971), in a study of small Australian manufacturers, proposed an empirical growth model, a central factor in which was "environmental awareness".

While neither Mayer nor Goldstein (1961) nor Hoad and Rosko (1964) explicitly label selling experience and skill as an important contributory factor relating to business success, there is much implicit evidence in both research reports that such experience is of consequence. All firms must sell to survive, and sales/marketing expertise is proposed as a significant factor - especially managerial experience in the marketing function. Hoad and Rosko (1964) reported that the inability to find a profitable market is the problem correlating most significantly with the failure of new small manufacturers, in Michigan, U.S.. Etcheson and Robb (1962) confirmed this, in concluding that failure to reach a satisfactory sales volume is the prime reason for business termination in Washington State, U.S..

Other specific management functions have also received the attention of researchers. Flewellan (1961), Jackendoff (1961), Lawyer (1963) and Baumback, Lawyer and Kelley(1973) have all reported that lack of formalised planning, in one form or another, is a common feature of failed small firms. Haas *et al* (1964) have pointed emphatically to a pre-occupation with daily problems, a lack of adequate information and imaginative/

creative thinking, and a lack of knowledge of relevant techniques, as the major reasons why so few small firms have adequate planning and forecasting. Closely allied to the planning function is control, which requires financial and accounting data. Such data, prepared as often, and in as suitable a form as necessary, is simply not available in the vast majority of small firms. The value of, and necessity for such data are not realized by many entrepreneurs.

Lawyer (1963) has claimed that management skills and personality traits of the entrepreneur are more important than the possession of sophisticated operating procedures. Chambers and Gold (1963) and Pickle (1964) have presented lists of specific personality traits found to be associated, in varying degrees, with business success. It seems obvious, from surveying a scattered literature, that managerial expertise is an amalgam of fairly specific knowledge and experience with a rather wide range of personality characteristics which are appropriate to the motivational facet of managerial behavior. Neither one set of factors, nor the other, of itself, is adequate to produce effective management. This study may lead to a greater understanding of the nature of this amalgam, in relation to a common, yet specific, managerial role.

2.53 *ENTREPRENEURIAL EXPERIENCE*

It would seem reasonable that the most relevant and valuable experience a business founder can have prior to establishing his venture, is that of owning and managing a previous business.

In so doing, he will have gained experience in a wide range of managerial functions, will have endured the frustrations, disappointments and problems of entrepreneurship, and will have possibly realised that profits and growth are not the natural consequences of youth, vigour, enthusiasm, hard work and long hours, although all may be desirable.

It is apparent, both from the research literature, and the evidence in this study, that many business founders make more than the one attempt. Mayer and Goldstein (1961, p.33) reported that 35 (43.2%) of the 81 new firms in their sample were opened by persons who had previously been in business. In fact 13 (16.1%) of them had previously owned more than one business - the 35 owners had previously owned a total of 53 businesses. Mayer and Goldstein have shown that previous ownership experience significantly improves the likelihood of succeeding in the second or subsequent attempt. This is particularly so when the entrepreneurial experience was in a firm in the same trade as the current one. The data offered by Mayer and Goldstein are shown in Table 2.20, and indicate that previous ownership experience significantly increased the survival rate in their sample (from 43.6% to 62.2%). Analysed on the basis of occupational similarity, the evidence is all the more striking. Whereas previous entrepreneurial experience gained in some other line of business did nothing to improve the survival rate in the Mayer and Goldstein study, the survival rate almost doubled (34.6% to 66.7%) when previous ownership experience was gained in the same line or occupation as the present firm. Mayer and Goldstein (*ibid.*, p.136) expressed their conclusions thus:

> Owners who have not been in business before are often not sufficiently prepared, both financially and psychologically, to withstand protracted initial difficulties. They are unrealistic in their original expectations of how much the business will gross and are unable to make adjustments to the less rosy reality. They lose heart quickly. Individuals with previous experience as business owners tend to be more aware of the necessity to wait out the lengthy period of time it may take for a business to become established.

These statements support the earlier discussion, on role ambiguity (Section 2.4522), particularly during the early months in the new venture.

Evidence that the duration of previous ownership experience improves current performance is rather tenuous, as Table 2.21 indicates.

Experience in business ownership is more than a training run in skills and cognitive awareness. Of more importance than these facilities are the psychological aspects of preparation for entrepreneurship. The two kinds of preparatory experiences - the cognitive and the affective - become integrated into a total propensity/potential configuration. Particular hypotheses have been developed about the relationship of both the duration and relevance of this aspect of experience to the criterion variable. These hypotheses have been empirically tested, results and conclusions being reported later in this thesis.

TABLE 2.20 PREVIOUS ... EXPERIENCE IN THE SAME LINE, BY SURVIVAL STATUS OF THE BUSINESS

	Experience in same occupation						No experience in same occupation						Totals					
	Closures		Survivors		Total		Closures		Survivors		Total		Closures		Survivors		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Previous owner experience	9	33.3	18	66.7	27	100	5	50.0	5	50.0	10	100	14	37.8	23	62.2	37	100
No previous owner experience	17	65.4	9	34.6	26	100	14	48.3	15	51.7	29	100	31	56.4	24	43.6	55	100
Total - all owners	26		27		53		19		20		39		45		47		92	

Source: adapted from Mayer and Goldstein, 1961, p.104

TABLE 2.21 AMOUNT OF EXPERIENCE AS OWNER-MANAGERS IN ANY BUSINESS

Total Years' Experience for All Managers	Ratings						Totals	
	Successes		Mixed		Failures			
	No.	%	No.	%	No.	%	No.	%
0	8	30.8	9	34.6	9	34.6	26	100
1	3	100.0	-	-	-	-	3	100
2	-	-	1	50.0	1	50.0	2	100
3	4	66.6	1	16.7	1	16.7	6	100
4 - 5	2	33.3	2	33.4	2	33.3	6	100
6 - 7	2	66.7	-	-	1	33.3	3	100
8 - 9	1	20.0	2	40.0	2	40.0	5	100
10 or more	17	41.5	7	17.0	17	41.5	41	100
	37		22		33		92	

Source: adapted from Hoad and Rosko, 1964, p.33

2.54 POST-DECISION PREPARATION

Earlier discussion on specific role motivation (Section 2.44) indicated that behavioral decisions, made by highly motivated individuals, result in activity which is instrumental to the attainment of the objectives underlying those decisions. Given the validity of this statement, the highly motivated decision to enter the entrepreneurial role will have consequential rational behavioral outcomes. The transition from aspiring to actual entrepreneurship, by an individual who has the appropriate experiential background and personal traits, should be characterized by rationality of both attitude (i.e. expectations) and activity. In particular, such a person could be expected to undertake specific preparation for the decided role to support the more general experience gained prior to making the decision. Knowing what type of venture he intended to enter, the individual ought to be concerned with such

specifics as finance, location, timing, legal aspects of ownership, personnel, markets, supply, accounting and many more. The extent to which the individual gathers the necessary resources, both financial and informational, and intelligently considers as many of the foreseen problems as possible, should be a significant factor in navigating his venture through the hazardous first months of its existence. This post-decision preparation relates significantly to the matter of stress from role ambiguity and inter-role conflict particularly.

For those individuals whose decisions to enter business ownership were made in haste, in response to role deterioration (Collins and Moore, 1970), or fears about same, or in any manner not characterized by a reasonable time span between decision and establishment (or purchase) and thorough preparation, it is suggested that 'role change shock' will be experienced. Such a mental/emotional state will invariably have a serious detrimental effect on the quality of entrepreneurial skill.

Mayer and Goldstein (1961) have pointed to specific preparatory activity as being very relevant to business survival. They observed that the circumstances under which some firms were established precluded success from the beginning, and that many entrepreneurs lacked specific knowledge of what to expect in their new role or what to do about solving the many problems that arose. They were psychologically unprepared to cope with the complex demands of the new role. While rational behavior is difficult, if not impossible, to measure statistically, a longitudinal investigation such as the present study may be able

to demonstrate relationships between variables which are postulated as sequential. Such relationships may strongly suggest causal sequence. Thus, if individuals, who are found to be highly motivated to succeed in the entrepreneurial role, and who undertake adequate post-decision preparation, are subsequently associated with successful business ventures, a significant intervening variable may have been identified.

2.6 CONCURRENT ROLE OBLIGATIONS

2.61 MULTIPLE JOB HOLDING

A factor which affects the time and effort an individual is able and willing to invest in his business venture, is whether or not he holds a second job. Mayer and Goldstein (1961) discovered that 11 of their 93 owners (11.8%) were holding full-time jobs, in addition to operating the business. Most of them relied on unpaid or underpaid family help, or paid employees, to manage the firm during the times of absence. Some held the second job during night hours. Mayer and Goldstein did not indicate any relationship between multiple job holding and business performance. The present study has investigated this relationship.

2.62 MEMBERSHIP IN OTHER ORGANISATIONS

As indicated in Section 1.42, small business owners tend to identify with the locality in which they operate far more than do salaried executives. One logical means of demonstrating community spirit and loyalty is by joining and participating in appropriate clubs, associations or community organisations. Davids and Bunting (1963, p.48) have concluded that

> ... character, prestige, and a reputation for being honorable, responsible, and dependable may sometimes result from affiliation with churches, social and service clubs and recreational groups more than from strictly business relationships.

This statement may be seen as implying that some entrepreneurs could seek affiliation with non-business organisations for the purpose of furthering their business interests.

Membership in organisations invariably brings with it pressure for more than minimal activity, and many members become increasingly involved with time, effort and money inputs to the point where other interests and obligations are neglected. The extent of commitment to social, service and other organisations, and the effect of such commitment on business performance, has been examined in this study.

2.63 *MARITAL STATUS AND FAMILY RESPONSIBILITY*

The two most demanding and persistent roles for the vast majority of persons are those of worker and spouse/parent. The influence of demands and events in either role, upon effectiveness in the other, has been widely researched, but one gap in the research literature concerns the working role of entrepreneur. Available empirical studies have generally limited their results to a superficial analysis of the marital status of their subjects. From such data, it appears that around 90% of entrepreneurs are married (Davids and Bunting, 1963, p.114). This study has investigated the effect of the spouse/parent roles on the entrepreneurial role.

2.7 OTHER FACTORS

This section presents brief discussion of a number of factors which have been proposed as being associated with business performance. Some may be demonstrated empirically as having significant association with entrepreneurial effectiveness, while others may not have any meaningful relationship with the criterion variable. The elimination of this latter group of factors (if any) will strengthen the possibility of causality with the remaining variables.

2.71 AGE OF ENTRY TO OWNERSHIP

Age has long been considered a determining factor in human performance. There is an extensive literature on the effects of aging from medical and psychological sources, but, surprisingly, little evidence is available from business or management researchers. Research on the psychological aspects of aging did not begin seriously until the work of Miles (1933) and others around 1930. Chronological age is widely considered to be one of the most useful single items of information about an individual, knowledge of which provides

> an amazingly large number of general statements or predictions ... about his ... psychology and social behavior. Chronological age is a powerful index with which we can classify large amounts of data while seeking relationships. (Birren, 1971, p.8)

The effects of aging will be discussed in relation to a number of traits and behaviors which are regarded as relevant to the central thesis of this study.

The Use of Time and Energy

With regard to the relation between spontaneous activity and age, there is a lack of useful data, because of the difficulty of separating natural activity patterns from the superimposed controls on behavior that are set by living in society. Some evidence has been gathered by Brody (1945), indicating that younger organisms have more available energy than older organisms, and that they convert energy into activity at a more rapid rate. The older person possesses specialised activities adapted to the demands of the situations presented. He meets these demands by strategic direction of energy, rather than by intensive displays of energy.

The question of the relative productivity of younger and older persons is concerned with both energy expenditure and motivation. It is clear, although difficult to cite specific studies, that, in the course of his experience, a person acquires certain work habits, such as starting a job properly, carrying through to the completion of a task, expending time and energy systematically, persisting beyond the first feelings of fatigue or despondency, pushing on despite the commission of minor errors to the completion of the task, and many others. Such factors are, in part, related to the intensity of motivation in the particular situation, and are, in part, the product of

the person's life-experience in organising his energy and activity patterns.

When studying the individual in terms of the relation between his aging and his energy expenditure by work or general activity, two problems emerge: (a) the ordering within patterns of behavior, which results in greater effectiveness with less effort, and (b) the placement of behavior within time, in such a way that time becomes filled with activity. The first involves learning or achieving (through experience) competence in behavior; the second involves scheduling behavior efficiently. Both relate to age - in general, aging results in efficiency or economy of effort at the cost of variability, versatility and intensity. To determine whether a person's use of his time and effort improves or deteriorates with age, knowledge of the effects of one set of factors needs to be compared with those of the other set. Other factors, including motivation patterns, will affect the situation.

Creativity

Lehman (1953) has concluded, from a massive research programme, that the highest proportion of intellectual and creative contributions are made in the age interval 30-40. By studying the age classifications of almost 1,000 significant contributions in chemistry, he calculated that 68% were made before the age of 40, and only 3% after the age of 60. For contributions of the highest merit (52 of the greatest discoveries, as judged by three chemists) the modal age interval moved back to 25-29. Of

these 52 contributions, 32 were made before age 40, and none after 60. In their number and variety, Lehman's studies succeed in presenting an almost overwhelming picture of age decline in creativity. Other studies have generally supported Lehman's findings. For example, Bromley (1956) classified 256 subjects into four age groups which were similar in average social background and I.Q. (Wechsler-Bellevue). These subjects were then given a test involving, without time limits, the mental operations of abstracting, serializing, and productive thinking, as well as persistence, flexibility, and imaginative exploration. Bromley's findings (Table 2.22), with a "normal" sample, appear to match Lehman's results for outstanding individuals.

TABLE 2.22 RESPONSES TO THE SHAW TEST OF CREATIVITY

	Age			
	17-35	*35-51*	*51-66*	*66-82*
Mean "Social Background"	*2.95*	*2.86*	*2.84*	*2.92*
Mean I.Q. (W.B.)	*120.9*	*123.5*	*121.5*	*115.8*
Mean total output of responses	*12.8*	*11.2*	*11.4*	*9.6*
% high quality responses	*72%*	*68%*	*57%*	*36%*
% low quality responses	*3%*	*7%*	*12%*	*25%*

Source: adapted from Bromley, 1956

Schaie (1958) studied the relationship of age to mental ability and to flexibility, which he defined as the readiness to accept new ways of perceiving things. He administered Thurstone's Primary Mental Abilities Test (Intermediate Form) and a self-

developed Test of Behavioral Rigidity to 500 adults, 50 in each of ten age groups, ranging from 20 to 70 years. For each individual, these two instruments produced a total of ten scores, and Schaie found that eight of these scores reached a peak before the age of 35 years, and declined fairly steadily thereafter. In general, the flexibility scores started their decline before the mental age scores and declined more rapidly. Two flexibility scores actually were highest in the 21-25 age range. Given the validity of Schaie's flexibility instrument, these results add significant support for the other reported findings.

Memory

Empirical data, on the relationship between aging and memory, consistently indicate an association of advancing years and decremental memory facility. There is however, much disagreement about the possible causes of memory decline. Jones, Conrad and Horn (1928) reported the results of a series of experiments on memory retention (Figure 2.8).

Similar findings are reported from the vast majority of other empirical studies sighted by the author, but these will not be recorded in this thesis. The general conclusion is that memory reaches peak performance by the age of 30.

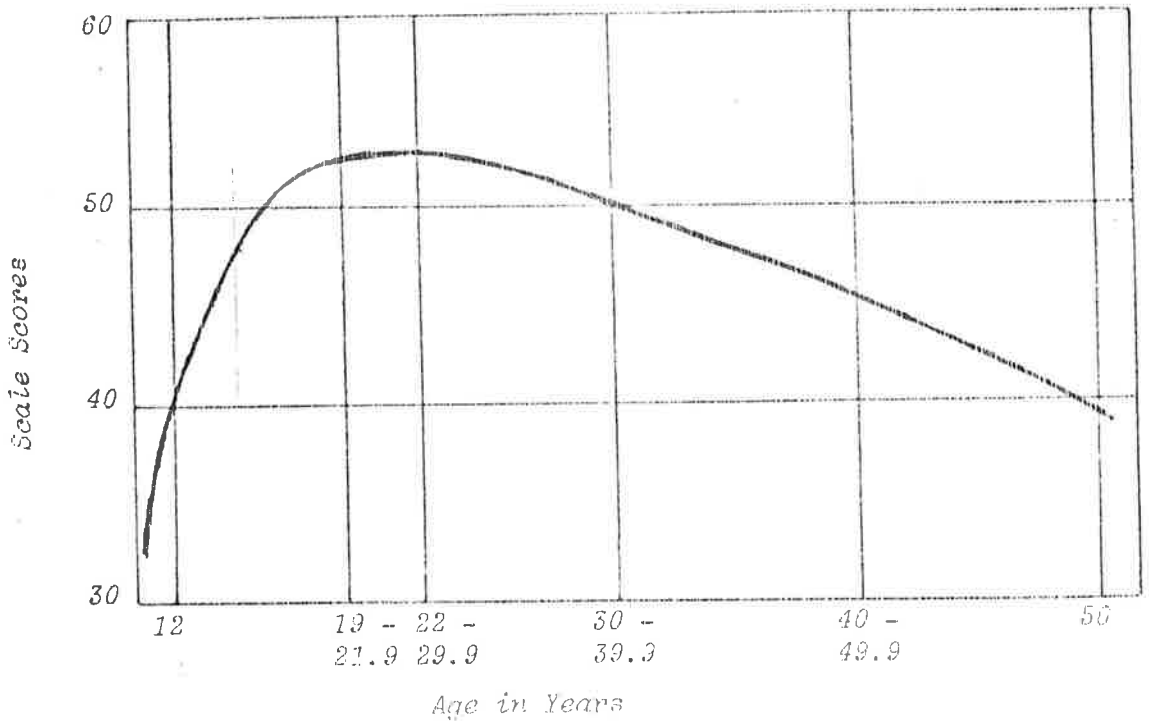

FIGURE: 2.8 AGE MEDIANS FOR TWO TESTS OF IMMEDIATE RECALL

Source: adapted from Jones, Conrad and Horn, 1928

Sensory Input and Psycho-motor Performance

The performance of sensory organs generally decreases with age, starting around age 40. This diminution in efficiency reduces the quality and quantity of information available to the individual. While this may reduce ability to interact with the environment, experience may compensate for the decreased information input.

Strength, both maximum and continuous exertion, is highest in the age range 20-30 (Speakman, 1956). Many studies of reaction times show varying results, but generally human physical responses are at maximum efficiency between ages 15 and 30.

Judgment

In general, ability to make accurate perceptions of phenomena, and judgments of various kinds, improves with age until around age 60, then declines. Speed of judgment becomes impaired from about age 40 (Wallace, 1956).

Interpersonal Response Patterns

Very few data are available on the nature of the effect of aging on interpersonal responses and communications. Certain empirical studies throw light on behavior which has interpersonal response implications. Older persons become more conservative and change resistant (Kuhlen, 1945); more dogmatic (taking emphatic positions on issues and holding to them) and intense in views held (Cantril, 1946); more emphatic in agreement or disagreement with attitude statements (Taylor, 1955); more frustrated by variance in social and personal standards (Jones, 1929); and demonstrate more prejudice (Pressey and Kuhlen, 1957). Such evidence, taken in total, indicates that older persons are generally less gregarious, less prone to develop new relationships, more introverted, and less tolerant of viewpoints at variance with their own, and of people holding same. Available evidence implies increasing prevalence of such attitudes and behavior patterns from about 45-50 years.

Stress Tolerance

Available evidence indicates that older persons become more

susceptible to stress and threat, although, as discussed in Section 2.45, there are numerous factors operating in the determination of stress reaction. Kuhlen (1956) has shown that aging and anxiety are only slightly related under 'normal' conditions, since adults often tend to select partners, jobs, and other environments that are congenial and non-stress evoking. It could be anticipated that older persons would in fact become better adjusted with the passage of time. When persons are subjected to stressful loads, age becomes a significant factor, according to Kuhlen (1956). Most striking evidence of the greater susceptibility of older persons to psychological stress is to be found in rates of suicide and admissions to institutions for the mentally ill, on the assumption that these psychopathological states or outcomes are triggered by stressful situations.

In summary, there is convincing evidence that aging is associated with gradual deterioration of human facilities. With the psychological and sociological aspects of aging, it is probably unwise to make causative assumptions too readily. It seems apparent from the comparative dearth of empirical evidence of the decremental consequences of aging in situations other than laboratory type experimentation, that little research has been undertaken in this area.

Several studies have investigated the relation of age to commencement of business ownership and/or performance in that

role. Davids and Bunting (1963), in a comprehensive study of the characteristics of small firm founders in Georgia and Texas, calculated the mean age of founders to be 37 years. Mayer and Goldstein (1961) reported a median starting age of 40 years. In both studies, the range of starting ages was wide, being 17 to 84 years in the former, and under 20 years (1.1% of sample) to over 60 years (5.4% of sample) in the latter study.

While it is popularly believed that the greater energy, vigour, and enthusiasm of youth is highly conducive to business success, what little empirical evidence there is available suggests the contrary, and that other factors are influential. Older persons, for example, who cannot as readily find employment because of age discrimination, probably tend to persevere longer in marginal ventures.

Hoad and Rosko (1964) have indicated that the most successful age for commencing entrepreneurial activity in their sample (N = 95) was between 31 and 40 years. Mayer and Goldstein (1961) have presented more detailed data (Table 2.23). These figures clearly indicate increased survival rates for owners who started their firms after reaching 30 years of age. However, the small sample prevents valid generalisation.

It would seem, from the little available evidence, that maturity and experience may have more influence on successful entrepreneurial performance than youth and vigour. The role of entrepreneur requires a wide range of skills, the adequate attainment of which would seem to be most important for success.

The relation of age to entrepreneurial performance has been investigated with a much larger sample in this study.

TABLE 2.23 AGE ... OF OWNERS, BY SURVIVAL STATUS OF THE BUSINESS

Age Groups	Closures						Survivors		Total	
	Non-financial		Failures		Total					
	No.	%	No.	%	No.	%	No.	%	No.	%
Under 20 years	-	-	-	-	-	-	1	100.0	1	100
20 - 29 years	1	6.3	10	62.5	11	68.8	5	31.2	16	100
30 - 39 years	3	10.4	11	37.9	14	48.3	15	51.7	29	100
40 - 49 years	2	7.7	9	34.6	11	42.3	15	57.7	26	100
50 - 59 years	-	-	6	37.5	6	37.5	10	62.5	16	100
60 years and over	2	40.0	1	20.0	3	60.0	2	40.0	5	100
	8	-	37	-	45	-	48	-	93	-

Source: adapted from Mayer and Goldstein, 1961, p.102

2.72 EDUCATION

The role of the formal educative process (i.e. schooling) in forming and influencing adult life patterns has long been a favourite research topic. Causal links are extremely tenuous since it is difficult to isolate purely educative experience from the whole complex of childhood and adolescent experience.

In studies of business performance, education is frequently included as an independent variable, although the exact nature of the contribution of this factor to the criterion variable is little understood. It seems generally accepted that formal education improves the use of innate intellect, provides certain

cognitive skills and undoubtedly moulds attitudes. The relevance of these skills and attitudes to the entrepreneurial role requires examination. Also, such questions as the following may be raised: Is the relevance of education more influential than its duration? What intervening variables are associated with particular levels or types of education? These issues are not discussed adequately in the available literature.

Several research studies reveal some conflicting evidence of the educational level reached by entrepreneurs. Collins and Moore (1970) reported a consistent pattern across educational levels, as shown in Table 2.24.

TABLE 2.24 EDUCATIONAL LEVEL: ENTREPRENEURS ...

Educational Level	*Percentage of Entrepreneurs*
Less than high school	*17%*
Some high school	*19*
High school graduate	*25*
Some college	*19*
College graduate	*20*
	100%
N = 84	

Source: adapted from Collins and Moore, 1970, p.50

These authors do not indicate how educational level relates to entrepreneurial success.

Hoad and Rosko (1964), defining an educated entrepreneur as one having one or more years of schooling beyond high school, reported the following data on education level and business success:

TABLE 2.25 CORRELATION OF EDUCATION ... WITH SUCCESS OR FAILURE

	Educated		*Uneducated*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
Success	*18*	*48.6*	*19*	*51.4*	*37*	*100*
Marginal	*5*	*22.7*	*17*	*77.3*	*22*	*100*
Failure/Dormant	*14*	*38.9*	*22*	*61.1*	*36*	*100*
	37	-	*58*	-	*95*	-

Source: adapted from Hoad and Rosko, 1964, p.91

These data suggest that 'educated' entrepreneurs are less likely to fail, but the findings are not conclusive.

Data from Mayer and Goldstein (1961), shown in Table 2.26, also suggest that owners with less education have a higher closure record. Their conclusion about the association between education and business survival "gives the lie to the assumption that anyone can go into business and be successful by dint of hard work alone" (*ibid.*, pp.103-104).

The rather inconclusive nature of the evidence on the significance of education, may stem from the possibility that, studied in isolation, it may not be a crucial factor. Its value could well be in its relation to other intervening variables, particularly various types of experience. Hoad and Rosko (1964, p.91) provide evidence that experience combined with education to associate significantly with business success, while absence of both factors correlates significantly with high failure rates.

TABLE 2.26 ... EDUCATION OF OWNERS, BY SURVIVAL STATUS OF THE BUSINESS

	Closures						Survivors		Total	
	Non-financial		Failures		Total					
	No.	%	No.	%	No.	%	No.	%	No.	%
8 yrs or less	3	16.7	8	44.4	11	61.1	7	38.9	18	100
9 - 12 years	3	5.9	20	39.2	23	45.1	28	54.9	51	100
12 years plus vocational education	1	20.0	2	40.0	3	60.0	2	40.0	5	100
13 yrs or more	1	6.3	6	37.5	7	43.8	9	56.4	16	100
	8	-	36	-	44	-	46	-	90	-

Source: adapted from Mayer and Goldstein, 1961, p.102

It may well be that study of the relevance of formal education to the entrepreneurial role may be more fruitful than study of the duration of same. A promising lead for future research on this question has come from Mayer and Goldstein (1961, p.104) who stated that "examination of the case histories shows that those entrepreneurs with higher education were more circumspect and rational in establishing their business enterprises".

2.73 PHYSICAL CONDITION

Entrepreneurial behavior, in many instances, is far more than a sedentary activity. Most small business owner/managers are actively engaged in the work of the business, and physical well-being is therefore a factor relevant to working efficiency. Particularly, in times of stress and anxiety, the state of one's physical health has an effect on tolerance and coping ability. In fact, symptoms of ill-health can ensue from severe stress

as psycho-somatic ailments. These, in turn, may further increase stress, by reducing the individual's physical and mental performance, and hence his coping ability, still further. Poor health also manifests itself in a person's motivation and attitude toward others and work generally. These unsubstantiated propositions have been tested in this study.

2.74 SEX

Apart from the fact that more males than females enter business ownership, little is known about the relationship between sex and business performance. Mayer and Goldstein (1961, p.27) reported that 17 of the 93 owners (18.3%) in their sample were women, and, of this number, eight (47.1%) had survived for two years. By comparison, 40 of the 76 male owners (52.6%) were survivors.

A possible reason for the poorer performance of female entrepreneurs is that many may be in business for the interest provided, or for extra income, and have the support of a husband to rely on. In fact, Mayer and Goldstein (*ibid.*) stated that 14 of the 17 female owners in their study were married and living with gainfully employed husbands. If these motivational propositions are valid, it would probably result in such owners being less willing to persevere with a marginal venture. Supportive of the argument that more adequate analysis of the performance of female entrepreneurs is warranted, is the fact that, in some trades and occupations, women outnumber men as entrepreneurs.

The relationship between sex and quality of entrepreneurial performance has been examined in this study.

2.8 BUSINESS PERFORMANCE: THE CRITERION VARIABLE

Disagreement still exists about the most valid and reliable method of determining the effectiveness of organisations, and the search for and analysis of adequate measures of effectiveness are still in their early stages. Organisational effectiveness would seem to be relative to the predominant pattern of demands made upon the organisation at that time. Faced with multiple demands, and therefore working towards multiple objectives, organisations are inevitably forced to sub-optimise.

Through to the 1940s, with the prevailing management theory of the period, organisations were deemed effective if they presented a rational "output-oriented, ordered image" (Hunt, 1972, p.319). The change in emphasis during the 1950s, with the human relations movement, was accompanied by a shift in effectiveness criteria from efficiency and order to human satisfaction in the work place. Currently the demand for social responsibility has again changed the demand for effectiveness criteria. With each shift in emphasis however, the need for criteria previously in vogue has not been eliminated.

There are seen to be two models of organisational effectiveness. Early management theorists perceived effectiveness as the achievement of organisational objectives, such approach being referred to, by Etzioni (1964), as the *goal model*. Evidence of the early widespread acceptance of such criteria of effectiveness as productivity, net earnings, return on investment and growth was provided by Thorndike (1949, pp.121-124). In the following

decade, human relations criteria began to gain ground, but the emphasis on goal attainment persisted. Price (1968, p.3), having produced an inventory of effectiveness criteria, stated that "effectiveness ... may be defined as the degree of goal-achievement". This view was supported by Reddin (1970, p.3):

> ... there is only one realistic and unambiguous definition of managerial effectiveness. Effectiveness is the extent to which a manager achieves the output requirements of his job.

Both Price and Reddin introduced criteria other than the ultimate organisational objective of survival. As an indication of the practitioners' attitude, a survey of General Electric executives resulted in eight key criteria being listed, four of which were profitability, market position, productivity and product leadership (Cordiner, 1956, pp.95-98). One problem with the identification and use of goals other than those associated with traditional organisational objectives is that there is some elusiveness in the relationship between organisational objectives and individual needs and aspirations.

The second general approach to the analysis of organisational effectiveness is termed the *systems model*. Effectiveness, in this approach, relates to the behavior of all components or sub-systems, and not merely to products, ends or objectives. Parsons (1951), for example, has argued that open social systems are faced with a series of fundamental role performance problems, the effective solution of which determines the survival of the total system. Parsons has identified four groups of sub-system activity and problems, *viz.*: adaptation, goal achievement, integration and maintenance. Other systems theorists have