CHAPTER II

THEORETICAL VIEWS OF n ACH AND HYPOTHESES

Concept of n Achievement

The study of motivation goes back to the beginning of this century. It became popular with the work of McDougall and Freud and later with the development of learning theories it occupied the central position. McDougall (1908) was the first to give the concept of instinct, who defined it as "an inherited or innate psycho-physical disposition which determines its possessor to perceive and to pay attention to objects of a certain class, an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner or at least to experience an impulse to such action". Soon after McDougall himself gave up the word instinct and substituted it with propensity and tendency.

Freud's concept of unconscious brought a different trend in the field of psychology. He stressed unconscious to be the basis of motivation. Since unconscious is beyond the reach of introspection, he introduced the indirect clinical method.

The instinct theories were taken up by ethologist and by psychologists into two different fields of learning and personality.

In the field of learning, James, Woodworth, Tolman and Hall, to mention a few, worked in this direction. For James(1890), motivation dealt with springs of action which could be traced in
the conscious awareness of the person who was acting. Voluntary behaviour was thought to be regulated by consciously felt goals and ends.

Tolman (1951) changed his concept of purposive behaviour later when he stated behaviour to be the function of three independent or initiating variables - the stimulus situation, states of drive arousal and/or satiation and individual differences. Drive is of special importance in the theory of motivation. The real definition of drive lies in precise statements concerning the states of the underlying organs and tissues themselves. He classified needs in three classes - primary needs, secondary needs or socio-relationship needs, and tertial needs.

Hull (1943, 1952) modified Thorndike's "law of effect" into a systematic and precise reinforcement theory. In this theory he introduced the term 'need reduction' and later 'drive reduction'. Another term he gave is 'reaction evocation potential'.

Lewin (1936) developed the concept of 'need' which included quasi-needs. Tendencies are determined by decision. Later he developed "Field Theory" including environment as an important field for the individual to act. Basic to his theory was psychological force. This was a vector variable defined as having both strength and direction which were functions of two other variables - tension and balance.
McGee et al. (1953) have given a definition of motive in terms of affective arousal. Motives are considered to be affectively toned associative network arranged in a hierarchy of strength or importance within a given individual. According to McClelland et al. (1953):

"In time cluster of expectancies or associations grow up around affective experience many of which are not connected by any means with biological needs. These clusters of expectancies are commonly labelled as motives. The strength of motive (its position in the individual's hierarchy of motives) is measured essentially by counting the number of associations belonging to this cluster as compared to other associations that an individual provides on a given occasion."

Atkinson (1964) attempted to account for the determinants of the direction, magnitude and persistence of behaviour in a limited but very important domain of human activities. It applies only when an individual knows that his performance will be evaluated (by himself or by others) in terms of some standard of excellence and that the consequence of his action will be either a favourable evaluation (success) or an unfavourable evaluation (failure).

With the application of psychology and advances in the field of education, it became evident that motivation is crucial
in learning and for that matter in doing any work with any degree of excellence. However, in spite of the popularity of the theories of motivation not much conceptual clarity was obtained until McClelland and his associates published the book "The Achievement Motive" (1953). In this book McClelland has not only indicated the method of identifying one particular motive — n Achievement — but also clearly revised the problem involved in developing a theory and a method for measuring motives.

The tendency which is called n Achievement gets rooted in human nature. The presence of need for achievement in a person reflects his wish to do well. It refers to the behaviour of an individual who strives to accomplish something — to do his best, to excel others in performance. This involves competition with particular standards of excellence of performance.

It was with the efforts of McClelland that research in the field of n Achievement got impetus though it had been a subject matter of importance earlier also.

In Murray’s (1938) system of personality study, also, important place is accorded to human needs. Among the manifest needs listed by him, n Achievement has been described as a desire or tendency to do things as rapidly and/or as well as possible. Thus, there is a great variety of acts from blowing smoke rings to discovering a new planet which may gratify the n Achievement. He defined n Achievement as "tendency to accomplish something difficult; to master, manipulate or organise physical objects,"
human beings or ideas; to do a task as rapidly and as independently as possible; to overcome obstacles and attain a high standard; to excel oneself; to rival and surpass others; and to increase self regard by the successful exercise of talents.

Murray's need is descriptive, hypothetical vector term including both dispositions and functions which are determined by the personality factor, internal stimuli and external stimuli. It is more like Freud's drive, difference being in number - Freud's two and Murray's forty four divided in two categories: (1) Viscerogenic needs, inborn and determined primarily by the states of or process in peripheral organ as hunger, thirst, (ii) psychogenic needs which are acquired and determined by external press situation as affiliation, achieving, dominance etc.

McClelland et al. (1953) explained the concept in terms of Achievement goal which means "success in competition with some standard of excellence. The individual may fail to achieve this goal but the concern over competition with standard of excellence still enables one to identify the goal sought as an achievement goal".

According to Heckhausen, achievement motivation is "A hypothetical construct designed to explain the inter- and intra-individual differences in the extent, intensity and consistency of achievement behaviour. In terms of content, achievement motivation may be characterized as the tendency to maintain and increase individual proficiency in all areas in which
a standard of quality is taken as binding.¹

Heckhausen (1967) had explained that the standard of excellence may be "task related", "self related" or "other related" when it is task related the person tries to gain perfection as the result of performance. When it is self related the person compares his achievements with his own previous achievements. When it is other related, the person tries to compare his achievement with those of others in competition. He further states that whether the standard of excellence is task related, self related or other related it consists of two parts, namely, (1) fear of failure, and (2) hope of success.

Almost similar views on achievement are expressed by Sears (1951). In his view "there are many names for this learned drive, pride, craving for superiority, self approval, self assertion, but these terms represent different emphasis or different terminological systems, not fundamentally different concepts. Common to all is the notion that the feeling of success depends on the gratification of his drive and feeling of failure results from its frustration."

Crandall and his associates (1960) have defined achievement behaviour as the one directed towards the attainment of approval or the avoidance of disapproval for competence of performance in

situation where standards of excellence are applied.

De Charms (1968) adds, "a motive is a disposition to strive for something and have satisfaction. The achievement motive is thus the disposition to strive for satisfaction derived from success in competition with some standard of excellence".

Development of a Achievement

Quite a few studies have been carried out to explore the factors in the development of achievement related motives. Phenomena which appears to be "achievement-oriented" in early childhood include various behaviour repetitions which Buhler (1919) interpreted as "function pleasure" and Piaget (1936) as "circular reactions", particularly "wanting to do it alone can be observed at the start of the second year during familiar routine in the home such as during eating or dressing". These modes of behaviour seem to be more basic than acquired because each child abandons himself to the task with concentration, persistence and satisfaction and yet does not need positive reinforcement from the parents which he does not get any way, and he frequently persists in his behaviour despite negative sanction. The early demand of the child that he does something by himself is made only for those activities the mastery of which has just been acquired and that the demand is given up if still greater difficulties have to be overcome. The most impressive type of achievement behaviour during the first three years is the persistence in sensory motor activities involving objects as in erecting things, stringing pearls, or painting.
Kagan and Moss (1962) found that the early activities of the child are by no means the predictors of the development of achievement behaviour, but intellectual activities like talking, counting during the subsequent conceptual state do have predictive value.

Whereas Heckhausen points out the improbability in the presence of achievement behaviour before the age of three years, Wendt (1961) pointed out to the origin of risk-taking behaviour at the time when the child starts sitting and learning to walk which are "sensitive periods" during which the relatively unpredictable behaviour of the mother appears to "imprint" the child in ways which are expressed as a risk taking preference in adolescents and adults. It is noteworthy that the preverbal stage of the sitting up has an "imprinting" effect only if it coincides with the rise and fall in the mother's general activity level at different times of the year.

Achievement motivation presupposes the structuring of the situation within an achievement related person environment frame of reference of which children first become capable between the ages of 3 and 3½, in other words, at a time when 'the success or failure' of one's activity directs the pleasure or disappointment no longer only at the outcome of the activity as such but rather at the self so that with failure the child experiences shame about his incompetence.

According to Crandall, Preston, and Rabson (1960) the origin of motives is neither innate nor in the descent,
ontogenetically from earlier motives. It appears along with the cognitive step in maturing which enables the structuring of the person-environment frame of reference to take place. This step is not taken before the age of three as has been confirmed by other research on competition among small children of that age.

If three year old child is compared to four year old, four year old shows the stronger reaction to failure, they no longer give up easily. They do not even ask for the help as a three-year old would do.

Research on competition behaviour in the imbeciles shows that the first appearance of achievement motivation has to do with a cognitive development (Heckhausen and Wasna, 1965). As long as the mental development is above the age of three and a half the cognitive demands of the task do not surpass the level of mental development attained. All the signs of achievement motivated behaviour can also be found in the feeble-minded, independent of age.

Rosensweig (1933, 1945) and Bialer (1961) observed the tendency to overcome failure over a period from four to fourteen years of age. Crandall and Rabson (1960) found some sex differences. After entering school, girls continue to prefer to work with solved tasks, while boys attempted to master the ones which they had failed. Zunich (1964) found in 3- and 4-year-olds that girls attempted to overcome failure in a more independent and persistent way while boys reacted rather in an affective
and inadequate way. Kagan and Moss (1962) report that achievement, measured by TAT, shows moderate but significant stability between the age of eight and eleven and then from fourteen to twenty-five, in the latter it correlates with achievement performance.

In general, it has been concluded that achievement is exclusively a product of social learning and that achievement behaviour originates entirely in reinforcement by social sanctions.

McClelland (1958a) has stressed the importance of early childhood experiences in the development of achievement for reasons of (a) primacy, (b) because they occur before the development of symbolic process, (c) many such experiences occur repeatedly and repetition leads to over learning, and (d) conditions for learning are unique in early childhood. McClelland contends, "for all these reasons and for others which are closely related, affective associations formed in early childhood are apt to be strong and very resistant to unlearning or forgetting. From the theoretical viewpoint there is no reason why such associations could not be formed at any time in life but most of the conditions we have laid down are apt to occur in childhood, particularly at the preverbal stage".

A number of studies indicate that achievement motivation is developed in the early relationship between a child and his parents. In the early years of his life the growing child receives a good amount of recognition, praise and reward for his accomplishments; he develops some feelings of personal worth, some sense of recognition, and some sense of achievement. It is
important for the development of n Achievement that the child is exposed to a higher standard of excellence and is encouraged for better performance and independent efforts (Winterbottom, 1958; Child, Storm, and Veroff, 1958; Rosen and D'Andrade, 1959).

Teevan and McGhee (1972) have extended the findings of Winterbottom by differentiating positive and negative attitudes of parents towards achievement. An individual who is highly concerned about achievement can be motivated primarily on the positive basis in that he is hoping for success or primarily on a negative basis, in that he is afraid of failure. It was found that fear of failure develops when mothers respond in a neutral way to a satisfactory behaviour and with punishment when behaviour is unsatisfactory. When there is reward for satisfactory behaviour and a neutral response for unsatisfactory behaviour, a positive achievement motive is developed. One important determinant of n Achievement is father's occupation. Sons, whose fathers are in entrepreneurial occupations score higher than those whose fathers are in non-entrepreneurial jobs (Rosen, 1956). Studies have proved that the presence of dominant father is a negative factor in the development of n Achievement (Rosen and D'Andrade, 1959; Bradburn, 1963).

It has been found by McClelland and Winter (1969) that more clearly and thoroughly a person conceptualises the motive, the more likely he is to develop the motive. Numerous studies show that under experimental conditions, subjects will perform nonsensical and boring tasks, under the set that this is an experiment (Orne, 1962).
Field studies as well as experimental studies by social psychologists and sociologists also show change in behaviour as a result of role set. This comes about because these roles or sets arouse learned associative network. Therefore, people must be trained to think well. There is some experimental evidence which shows that symbolic practice facilitates actual performance (Hovland, 1961). There are low positive correlation between thinking about certain activities and carrying them out (Skolnick, 1966; McClelland, 1966). Subjects should be trained to think about doing well, selecting medium difficult level goals, taking responsibility for their actions and pride in their achievement. They should be encouraged to explore and try out various activities so that they can decide upon the one which fascinates them most.

**Measurement of Achievement**

Psychologists had been interested in the experimental analysis of animal learning ever since Darwin’s theory of evolution, but not till nineteen forties the problem of measuring human motivation was taken up. The work initiated by McClelland and co-workers (1948) on achievement motivation and the work of S-R theorists lead to the combination of the study of individual differences with the study of process of motivation. The first major report of the experimental work on measurement of human motivation, particularly the achievement motivation, appeared in 1953. Atkinson (1958) later edited further research which employed ‘Thematic Apperception’ as a technique for the
measurement of human motivation. McClelland stated that achievement like other forms of human motivation could best be studied in the realm of fantasy. Fantasy is free in the sense that conditions of testing do not place external constraints on the responses that are possible. The subject can think about any thing, "about killing some one, committing suicide taking the south sea on a Pogo stick, having an illegitimate child, anything is symbolically possible" (McClelland, 1961).

The study of human motivation in the realm of fantasy is widely recognised as promising. Freud believed that basic motivations are revealed in fantasy, in day dreams and night dreams. Projective tests also depend on imaginative content.

McClelland and his associates (1953) adapted Murray's TAT technique (1938) for the measurement of human motivation. In this technique certain pictures are used to obtain stories from the subjects for analysis of their motivation. Stories obtained for the purpose of measurement of achievement motivation are scored in a particular way following a scoring system developed by McClelland and his associates (1953).

Fantasy also has its weak and strong points, regarding its uniqueness and reliability. The sensitivity of fantasy is both its weak as well as its strong point. Weakness, because it picks up variations in other factors as well as making it difficult to get stable and replicable results. Strength because it picks up slight motivational variations.
The three major factors influencing fantasy art are (a) type of cue used to elicit the fantasy, (b) the social context in which the testing is done, (c) the type of fantasy response elicited from the subject. Changes in any of these three affect the frequency and functional significance of the type of imagery theoretically supposed to reflect uniquely a given motive. If one knows what are the effects of other factors, control is possible. If one does not control such effects, results may be unstable and not due to motivational factors in the individual.

Different types of tools have been tried with varying degree of success in the assessment of achievement motivation. Murray's TAT and Rorschach Ink Blot tests are only too well known projective tests to deserve any special mention in connection with assessment of motivation. Murray's description of needs and their assessment by Murray's TAT give us an insight into the nature and cause of human behavior. Besides these two projective tools, a number of projective tools have been evolved to assess motivation. Some earlier psychological studies like those of success and failure (Sears, 1942), ego involvement (Allport, 1943), and level of aspiration (Lewin, 1944) contributed to the growth of thinking about human motivation in general and achievement motivation in particular. The methodological innovation, namely the experimental validation of measuring motivation initiated by McClelland and his associates (1953), combined with the studies of individual differences resulted in a break-through for studies of the process of motivation. It was demonstrated that the
motivational state of individual can be diagnosed by means of content analysis or imaginative behaviour. The initial experiments have been replicated in various cultures including India.

Similar to the TAT measure is "Test of Insight", FTI, by French (1955, 1958). It is a measure of complex motivation. It has been developed by combining items similar to those of Sherriff's "Intuition Questionnaire" (1948) with a system of scoring responses as used by McClelland et al. (1953). The subject is presented with a set of items describing behaviour characteristics of a man. The subject is then asked to give a likely reason why he behaves as he does. These statements are scored in terms of achievement and/or affiliation motives.

The "Iowa Picture Interpretation Test", IPIT, by Hurley (1955) represents a combination of projective technique with a multiple choice test. In this test subject is presented with one TAT picture at a time and is asked to rank four alternate statements given with each picture.

Aronson (1958) developed "Graphic Expression" test for achievement. This is a non-verbal measure and is mainly used with children population. This measure is based on distinction in graphic expression of some scribble pattern.

In addition to these, a number of questionnaire measures have been devised (cf. Fineman, 1977). A special mention of Edwards Personal Preference Schedule (Edwards, 1959), achievement scales of California Psychological Inventory (Gough, 1957), and
Sentence Completion Test (Mukherjee, 1965) may be made here.

McClelland (1958b) has argued for the use of fantasy (TAT), rather than of questionnaires, in assessing human motives. The TAT n Achievement score is an "operant" and not a "respondent" measure. That is it records, how often a person spontaneously thinks about improving things, not how interested he is in improvement in response to another question. The distinction is not a trivial one in psychology, although some people have treated it as if it were (McClelland and Winter, 1971). Generally speaking in psychology, correlation between operants and respondents are near zero (McClelland 1958b, 1966). A person may say that he is very interested in achievement but a careful sampling of his thoughts over a period of time, will show that actually he thinks about achieving very rarely. Some findings reported by Levine (1966) illustrate the point beautifully, he asked his students to write two essays - one on the topic of "What is a successful man?", and other "How does a boy become a successful man?" He used the regular n Achievement scoring system for coding the essays and found no difference on the stress of achievement, work and sacrifice between Ibo and Hausa students. Yet when the same scoring scheme was applied to dreams, Ibo dreams scored much higher in n Achievement. Essay seems to be tapping what the boys thought they ought to respond, whereas dreams reflected more accurately what they spontaneously tended to think about. Other studies have also shown that what people spontaneously think about is more apt to spill over into relevant actions than their
attitudes and opinions as expressed in questionnaires/or interviews.
While the operant character of the n Achievement response index has real scientific value, it undoubtedly has hindered its general acceptance among social scientists and policy makers, who persist in thinking that the best way to find out about a person's motives and values is to ask him what they are. It is to distinguish it from what is obtained in interviews or questionnaires that the index is referred to as a motive, rather than a value or attitude. It is given the esoteric label "n Achievement" to set it off from measures of achievement orientation obtained by such alternative methods.

Correlates of n Achievement

The measures of n Achievement developed by McClelland and his associates has shown a high degree of relational fertility.

The most noteworthy application of this measure has been made to test McClelland's (1961) hypothesis that n Achievement is related to economic growth. This highlighted the social and developmental consequences of achievement motivation.

At least from the time of Plato and the Bhagwad Gita, western philosophers have tended to see reason and desire as two distinctly different elements in the human mind. There would be little point in giving the history of the various ways in which the desiring elements have been conceived in the last two thousand years. Suffice to say that it always represented a kind of
motivational force often opposed to but ultimately controllable by reason. At about the dawn of modern psychology in the middle of the nineteenth century the relationship between those two psychic elements took on a very specific meaning largely under the influence of Darwin and the wide interest he and others aroused in the theory of evolution. Man was conceived as an animal engaged in a struggle for survival with nature. It was an obvious corollary to assume that because man struggled he had a desire or wish to survive. Biologists and psychologists were quick to point out how such a desire was mechanically controlled by the organism since unmet physiological needs ordinarily triggered certain danger signals which would irritate or disturb the organism until the needs were satisfied.

The concrete environment relationship in which evaluative dispositions operate are always fixed in the frame of reference of a culture or one of its subcultures. In highly industrialised mass societies competition with standards of excellence represents a dominant theme in public as well as in private life. This competition had and still has a decisive role in the economic rise of present day industrial notion. Even in the primitive societies the achievement theme is there which may be low. Weak achievement orientation in the culture, of course, does not exclude heightened motivation in the individual.

McClelland (1961) claimed that achievement is an essential ingredient for economic development. He has attempted to show that the rise and fall of ancient societies was related to their
level of n Ach preceding such a transformation. A similar
relationship has been reported in the case of modern societies
(also cf. De Charms and Moeller,1962).

Since the publication of McClelland's (1961) book,
Achieving Society, Roger and Neill (1966) have reported correlations between n Achievement scores and agricultural innovations in farming communities both in India and Columbia. Sheppard and Belitsky (1960) surveyed over three hundred blue collar workers who had been put out of work in Erie Pennsylvania in 1964. They found that motivation made a big difference in the way the workers behaved when they were laid off. Those with higher n Achievement started looking for work sooner and found new jobs, whereas those with very low n Achievement sat around waiting to be called back or for something to turn up. Levine (1966) illustrates still in other context the importance of motivational differences. He studied two African races in Eastern Nigeria and Hausa in North Nigeria and established close association between n Achievement and entrepreneur spirit. Papanek (1966) studied motivational pattern of Memons a muslim sect engaging in business. Memons left India and settled in Pakistan. It is possible that they might have carried high n Achievement with them. The very fact that they migrated in itself constitutes a valid reason to believe that they probably had higher n Achievement which contributed much to the economic growth.

McClelland (1961), collecting enough data from various countries and drawing the similarities on the type of behaviour
of the successful entrepreneur, both from the developed and
developing countries, democratic, socialist and communist countries,
has been able to lay down the norms of entrepreneurship. Further
these researches suggest that n Achievement is an important
factor in the economic development which ultimately results in
the overall development of society.

The later researches in America are more on n Power.
Winter (1973) has developed the elaborated on the work of
Veroff and Veroff (1972) and Uleman (1972) to provide a
comprehensive scoring definition for n Power which he has been
using with great success in exploring aspects of power behaviour
reported in his book, "The power motive". McClelland (1975) in
his book "Power : the Inner Experience" has carried out an
analysis of the role of power motivation in society analogous
to what he did in the "Achieving Society". Still others have
worked on need for Affiliation as reported by R.Boyatzis in
McClelland and Steele's (1973) volume.

Research evidence shows that numerous other variables are
also associated with n Achievement. It was, however, thought
pertinent to give only those variables here as have been included
in this study. The main focus of the study was to establish
relationships, if any, with n Achievement of variables of social
class, sex and intelligence. Years of research has shown that
people with high n Achievement tend to act in certain
characteristic ways. By analogy, one might conceive of their
thought stream" as showing a high concentration of "virus 
in Achievement" and then ask how people with such a high 'infection level' tend to act in real life.

McClelland and Winter (1971) have given the following traits of high achievers:

High achievers tend to set moderate goals and work harder when the chances of succeeding are only moderately high. By doing so they are perhaps trying to maximise their achievement satisfaction.

High achievers prefer work situation in which they can take personal responsibility for the performance necessary to achieve the goal. They avoid gambling situation in which they have no control over the outcome.

Men with high n Achievement like to get feedback as to how well they are doing; and are responsive to that feedback. Boys with high n Achievement like to build or make things, on the other hand they are neither especially good or bad at intellectual activities or academic work.

Men with high n Achievement show more initiative in researching their environment. They travel around more. They generally try out more new things. The purpose is clear, they are searching for new opportunities to try out their achievement skills or to find ways of realising the goal they have already set for themselves.
French (1958) has pointed out that high achievers pick up experts rather than friends as work partners. They have great future time perspective. They are more concerned about the future, especially medium to long range future. They are more willing to postpone immediate reward in favour of large future reward (Mischel, 1961). Heckhausen (1967) has further drawn together some interesting findings as to how an achievement oriented individual perceives the environment. These findings assembled by him indicate that a man with high n Achievement is surprisingly better able to recall his failure and the tasks that were not completed and therefore, counted as failure. Moreover given the opportunity he is more likely to return to these tasks in order to succeed if there is reasonable probability of success. Even under situational pressure men with high n Achievement are more likely to apply quick perception, practical reasoning and insight to arrive at a new and creative solution to the problems. In perceiving the environment they are likely to be more independent. They make judgements based on their own experience and standards rather than become overwhelmed by the perceptual environment or the opinion and pressure of others.

All these findings suggest that n Achievement leads a man to pay greater care and accurate attention to his situation. It refers to particular qualities of a person's action, perception and experience.
Social Class as Related to n Achievement

The term social class often referred to as classes is generally used by sociologists to denote a vertical stratification of a population by means of factors related, in some way, to the economic life in society. Within this broad framework the term class has precise or well agreed upon meaning but is treated in a general way as a concept combed to designate differences based on consumption of wealth, education, family background and so on. "There is substantial agreement however that stratification of classes are not by definitions those of race, religion, and nationality background although the two systems of stratification may be related". Class idea implies the possibility of at least a minimum amount of some vertical mobility from one layer to another.

At present, there is very little agreement as to what factors or combinations of factors demarcate a social class. But, it is commonly held that class deals with stratification of population into higher and lower categories. Whether this stratification is to be considered as dependent on income, occupation, status feeling, education, cultural attributes or a combination of these and to what extent separate group life is indicated are moot questions for which there is no single answer.

In the present study the term class is considered as representing a particular combination or consolidation of factors
or variables connected with it. To put together the variables such as income, education, occupation and social status into a conceptual whole and apply the term class to this construct would imply that the construct has social reality in the life of the community and reveals itself empirically in the actual division of society.

Important variables for the stratification of the class are:

**Economic factor**: This includes, income, wealth as establishing social status.

**Occupation**: Dealing with the means of earning money and contributing to the social status.

**Education**: Indicating the level of education which also contributes to the social status.

**Nature of Family**: Joint or nuclear, during the present time that is an important factor in contributing to the social and economic status.

**Affinity to the Community**: Person may feel one with the community or may be alienated from it.

**Social Class You Belong To**: The social status you think you belong to, is an indicator of one's perception as to which class one belongs to.

Class would under these considerations constitute a stratified unit of empirically operative social sub-systems. The variables as defined would be expected to display consistently
different patterns of behaviour and attitudes which may be attributed to the members belonging to differentially privileged control subgroups within the total culture of the nation.

Stratification is of two types: The first is based on power, wealth and status consideration related to economic and occupational factors, this is labelled as social class. Second is based on the differences of race, religion, colour of the national background and what comes under the 'ethnic group'. In India we may not say we exactly have ethnic groups but certainly we cannot deny being based and divided by caste and religion. These play a most significant role in our social system.

Family is the training ground, the reinforcer of the kind of behaviour in which people in given classes are supposed to engage. Studies have indicated that child typically learns quite early in life usually by his first year in school to what class he belongs.

Members of different classes differ in their life chances, the higher the social class to which a person belongs, the less he is prone to illness, physical or mental and the longer is his life expectancy. This may be mainly due to nutritive, hygienic, and medical advantages that money and position can secure. Child bearing and child rearing practices are also found to differ among classes. The lower class children are supposed to have less parental supervision, more of parental authority, more of physical punishment, less control of sexual and other impulses, more
freedom to express aggression, less development of conscience, less stress towards achievement and less permissive up-bringing. Differences are observed to exist among members of various classes in marital and family relations, in values, standards and social participation.

Warner (1948) in his study has maintained throughout that status levels are highly correlated with subcultural system of behaviour and a lot of evidence is provided to substantiate these differences in income associated with various status levels. The broader significance is the resultant differences in motivation and intelligible behaviour patterns which are internalised in the individual as a result of being socialised in a particular portion of the status hierarchy.

In a way it can be said that the pivotal meaning of social class to the students of human behaviour is that it defines and systematises different learning environments for children of different classes as a result of which different cognitive patterns of motivation emerge (Havighurst, 1948).

The striking differences among upper, middle and lower class groups is in their value systems and motivational pattern. According to Cronbach (1954), "These values refer to general tendencies and to rigid characteristics of upper, middle and lower class groups".

Many studies carried out both in India and abroad, provide results pertaining to the relationship of achievement with
various categories of social class.

Douvan (1958) found that middle class subjects are achievement-oriented as compared to the working class subjects. The mean n Achievement scores for working class subjects under two reward conditions showed greater variation than did the means for middle class subjects (t = 2.31, p < .02). The subjects were adolescents in the senior year of high school in a medium-sized mid-western community. Two types of indices were used in defining the subject's class position. The first was an occupation index derived from school records and a questionnaire in which subjects were asked to describe their father's work and conditions of employment. The second index was a subjective class assigned based on a variation of Centres technique. n Achievement was measured with McClelland's TAT.

Rosen (1956) with 120 white male subjects between the age 14-16 years, using Hollingshead (1953) index of social position, found that individuals coming from middle class tend to have considerably higher n Achievement scores than individuals in the lower strata.

Bruckman (1966) obtained positive significant correlation between social class membership and n Achievement scores. Correlation of .14 (N = 204, p < .05) and .20 (N = 179, p < .01) were obtained for the boys and girls group, respectively.

Lieberman (1968) proved that there was no significant differences between n Achievement level of high and middle class.
subjects. The subjects were 125 upper class private school boys and 109 middle class public high school boys.

The research in motivation in general and achievement motivation in particular seems to be developing fast, touching many new areas. In view of the educational needs of the country it was thought of interest to study the relationship between variables of social class and $n$ Ach.

Tamhankar (1968) on young adolescent boys at Pune found that achievement motivation is related to personal values, socio-economic status, intelligence and academic performance.

Mehta (1969) found that the SES of pupil as such was not significantly related to $n$ Ach. However significant trends appeared when father's educational level and occupational group were considered separately. Both these factors in the pupil's home background showed significant relationship at .01 level. Father's income did not show such relationship. The significant relationships were clearly curvilinear, with high and low father's education groups showing significant difference ($p < .01$) with secondary education group. Children of fathers in professional and semi-professional group, particularly the latter consistently showed higher level of $n$ Ach than children from the other group. Children of small shopkeepers showed about the lowest level. The differences between $n$ Ach of children of skilled workers and those of shopkeepers was quite significant ($p < .01$). Within the lower middle class group (clerical, petty shopkeepers and shop employees group) education showed positive relationship with $n$ Achievement.
On the other hand, children of skilled workers with low education showed significantly greater n Ach than those of lower middle class fathers also with low education. Both, i.e., father's education and occupation, suggested depression in Ach of children in the middle ranges of the father's education continuum as well as on the occupational ladder (if at all such a ladder can be conceived).

Gokulnathan (1970) found a negative (non-significant) correlation between n Ach and social class. Desai (1972) found that the father's composite SES did not show significant relationship with children's n Ach. Chaubhry (1971) found these two to be positively related.

In Namdeo's (1972) study, middle class adolescents had highest n Ach score.

Gokulnathan and Mehta (1972) found tribal high school children showing higher n Achievement than non-tribal children (p<.01). The study also revealed a similar trend of difference (p<.01) between rural and urban children. Another finding of the study was that there was tribal, non-tribal difference in the level of n Achievement as far as girls were concerned. On the other hand the tribal boys showed significant differences (p<.02) with the non-tribal boys. Within the tribal group, there is no sex difference. On the other hand, non-tribal girls showed significantly greater n Achievement than the non-tribal boys (p<.01). On the whole girls showed significantly greater n Achievement than boys (p<.05). They concluded that "The respondents, therefore, appeared to fall into two distinct
Achievement level groups: tribal boys, tribal girls, and non-tribal girls with greater achievement level formed the first group while the non-tribal boys with significantly lower level of achievement formed the second group.

Mukherjee (1968) using Sentence Completion Test for measuring level of achievement motivation found that first born coming from middle class had a significantly higher average achievement score than the latter born. The relation was just the opposite for the upper class and no differences were found for the lower class. The study also shows that birth order and economic class are joint determinants of achievement.

Aggarwal and Chand (1974) found achievement and socio-economic status to be positively related. Subjects belonging to high socio-economic status possess significantly higher achievement motivation than the subjects belonging to lower socio-economic status. Middle class subjects possess higher achievement motivation than lower class subjects but the difference is not statistically significant. Girls have higher achievement motivation as compared to boys.

Lyndon (1976) found, on three hundred undergraduate boys and girls, that low SES students had higher aspiration for occupation than middle and high SES students, middle SES students had higher aspiration than high SES students.

Mubayi (1976) attempted to study the achievement of scheduled class students, mainly in a tribal area. It was found that the girls in the non-tribal schools scored higher on achievement than those in the
tribal schools. The environment of the school and not the cultural background was found to be the factor influencing their n Ach level.

The number of siblings in a family birth order of the pupils, vocational aspiration of pupils, occupational level of the father, motivation towards school, perception of achievement demanded by fathers, and educational level of father were not found to be related to n Ach.

Parikh (1976) in a study on 1850 pupils found that pupils of high SES had higher n Ach than the pupils of middle or low SES.

Pathak (1974), conducted study on the sample of 1346 students of 8th, 9th and 10th class on 12 schools in Kiara district. The major finding were that the pupils studying in the school with high socio-economic and achieving status had high n Ach score as compared to pupils studying in schools of various status combinations.

Patel (1977) found the mean n Ach score of high SES group to be higher than that of middle and low SES group; a significant positive relationship existed between n Ach and SES.

Tiwari and Misra (1977) studied developmental pattern of achievement motive in relation to prolonged deprivation, parental attitudes towards independence training, demands for mastery and independence and restrictions on independence activities. The results indicate that the strength of n Ach significantly varies as a function of deprivation level low
deprived group and high deprived group demonstrated strongest and stronger n Ach respectively.

It is also found that the parents of high achievement and low anxiety group (H.L) reported significantly high degree of independence attitude and indicate more early demands and lesser number of early restrictions as compared to parents of other groups of subjects. The results also demonstrated that the strength of n Achievement increases with age at all deprivation levels.

Chadha (1979) found intelligence, n Achievement and socio-economic status to be related with the levels of vocational aspirations.

**Intelligence and n Achievement**

The concept of intelligence has been explained differently by different psychologists. According to Burt (1921) the term is derived from the word 'intelligentia' it refers to something unobservable or abstract and is interpreted as a complex characteristic of the human performance. It does not refer to what a person does but it does have a bearing on ability or capacity. Psychologists have given different definitions trying to stress on the different aspects of intelligence. Binet (1905) defined intelligence in terms of unitary factor or a simple capacity which shows itself in all activities of the individual. If the individual is able to perform well it is because of his experience and training. Thorndike (1926) considers "general intelligence" as something that is determined by the diversity of
specific abilities which enter into performance and is an average of many different abilities. He modified his earlier concept of (1926) saying that certain traits may extend over such wide fields as to be almost general in nature. Freeman (1926) is of the view that 'intelligence' is represented in behaviour by the capacity of the individual to adjust himself to new situations or to solve new problems or to learn. Spearman (1927) said that intelligence had become a vocal sound a word with so many meanings finally having none. But he developed his two factor theory: 'g' operating in all mental activities and 's' in the specific activity. Boynton (1933) defined intelligence as the inherited capacity of the individual which is manipulated through his ability to adapt and reconstruct the factor of his environment in accordance with the most fundamental needs of himself and his group. Wechsler (1944) considered intelligence as the aggregate or the global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment. Stoddard (1943) relates intelligence to the ability to undertake activities characterised by difficulty, complexity, abstraction, economy, adaptiveness to goal, social values and emergence of originals and to maintain such activities which demand concentration of energy and resistance to emotional force. Garrett (1946) considers intelligence as the ability demanded in the solution of problems which require comprehension and the use of symbols. Thurstone (1938) formulated a group factor theory. He holds that there are a number of mental abilities each
of which has its own primary factors providing a functional aspect and cohesiveness. He lists six primary mental abilities:
(1) numerical, (2) spatial, (3) verbal, (4) memory, (5) reasoning, (6) word fluency. Vernon (1961) opined that Thurstone divided 'g' among group factors on the basis of researches. Vernon (1947) showed that 'g' covered more than twice as much variance as all group factors combined together. Besides 'g', Vernon found two major group factors which he called Vned (Verbal numerical educational) and 'K.m.' (Practical Mechanical Spatial and Manual) factors.
Cattell (1963) has given the concept of fluid and crystallised general abilities. He called these two factors 'gf' or fluid general abilities and 'gc' crystallised general ability factor. 'gc' shows itself in tests that measure skill which is the result of previous learning, whereas 'gf' shows more in tests that require adaptation to new situation 'gf' is thought of as having a more heredity bias than 'gc'. It reaches maximum level by fourteen or fifteen years of age however 'gc' may go on increasing even up to the age of twenty five to thirty.

Various attempts have been made to make one or the other aspect of intelligence clear, such as ability to learn, close relationship to abstract thinking, dependence on judgement and reasoning, concern with perception and formation of relationship. All of them point out to different aspects of intelligence. It can be inferred that intelligence is a descriptive concept which can vary from a very low to a very high score. It is also normally distributed among the individuals. It is regarded
hereditary in nature, some others think it is determined by environment. The third approach is eclectic. According to this, the individual is born with innate intelligence potential however, for its proper development, conducive environment is essential. So, for the growth and development of intelligence heredity and environment both interact and the intelligence tests measure the resultant interactional phenomena. It has been regarded as an important factor in achievement and many studies have shown these two to be positively related.

Parental level of education is a better predictor of child's intelligence than is mother's. I.Q. (Heckhausen, 1967). The relationship is easy to understand because the parents level of education is expressed in the achievement related content of every day life in its socio-cultural context and from this the child picks up, takes over, and develops his values and attitudes.

Intelligence measures obviously contribute significantly to the improvement of accuracy in the prediction of achievement in schools and colleges based on motivation scores.

Heckhausen (1967) stated that different kind of relationship may be observed in the total sample and may appear only if, one discovers the selection criteria necessary to produce homogenous sample. There is undoubtedly an upper limit in the distribution of intelligence from which point on accomplishment (which also includes intelligence test score) depends decisively on differences
in motivation. McClelland et al. (1958) there is also a lower limit at which point motivation becomes irrelevant.

In certain studies when the sample had been restricted the relation of intelligence and n Achievement had been positive. French and Thomas (1958) worked with Air Force recruits with intelligence test score in the upper 11% of the distribution and they chose only the highly motivated. They found a correlation of .36 between intelligence and n Achievement scores. According to French (1958), excellence of performance in a complex task correlates with level of intelligence only in the case of highly motivated subjects. McClelland (1953), French (1955) and Smith (1964) have not been able to get statistically significant relationship between intelligence and n Achievement. Robinson (1961, 1964) obtained a correlation of .40 for a group of 11-12 years old children in the upper half of intelligence distribution.

Mehta (1968), found low positive correlation between n Achievement and intelligence scores ($r = .143$, $p < .10$). Bruckman (1966) found outstanding relationship revealed between n Achievement and intelligence level. The product moment correlation between IQ and n Achievement were found to be significant beyond the one percent level of confidence.

Muthayya and Rajeshwari (1968) found that the backward children have a lower n Achievement score compared to normal but the mean difference was not significant, indicating that the backward and normal children do not differ in their n Achievement.
The study was conducted in Madras on 14-16 years old twenty six normal and 16 backward children. Desai (1970) found a positive correlation between IQ and n Achievement scores, having a linear relationship \( (n = 1000, r = .248) \). Patnak (1974) too found n Achievement score to be positively related to intelligence. Chaudhry (1971) hypothesised that n Achievement and intelligence would be significantly and positively correlated but it was not supported by her study on 429 higher secondary students of Punjab. Mehta's TAT and Raven's Standard Progressive Matrices were used to assess n Achievement and intelligence, respectively. Using Mehta's TAT and Jalota's (1972) General Mental Ability Test, Singh (1978) found no significant difference between n Achievement scores of different intelligence groups. Chadha (1978) found n Achievement and intelligence to be positively related to vocational aspiration.

Several studies have reported insignificant correlation between n Achievement and intelligence (Mahone, 1960; Shell, 1967; McKeachie et al., 1966). Others have reported positive relation between n Achievement and intelligence (Kagan and Moss, 1959; Robinson, 1961; French and Thomas, 1958).

Sex as Related to n Achievement

In many of the studies of n Achievement, sex has also been found to be affecting the results. Results obtained by Veroff (1950) indicated that high school girls' mean n Achievement score in response to three pictures containing male characters was higher than that of the high school boys, under both neutral and achievement conditions. The girls' mean n Achievement score was
significantly higher than that of boys ($t = 3.06, p < .01$) and under achievement oriented conditions the same superiority appeared but it was not statistically significant. In this study and in another study by Veroff, Wilcox, and Atkinson (1953) it was observed that achievement involving instructions did not produce an increase in $n$ Achievement scores of female subjects.

Shell (1967) found no difference in the $n$ Achievement score of the boys and the girls. Sinha (1967) got higher mean $n$ Achievement score in the case of male subjects. The mean $n$ Achievement score for boys was 4.67 ($N=9$) and for girls 3.33 ($N=7$). There was, it may be noted, a very slight superiority in boys mean score, but the sex difference did not approach statistical significance. The $n$ Achievement scores were obtained from contents of an essay in which subjects had to write about their aspirations, limitations, and what they would like to teach their children. Desai (1970) found higher $n$ Achievement scores on TAT (Mehta) in boys than girls with a sample of 735 boys and 265 girls of Kaira district in Gujrat. Mean score for girls was 5.48 and for boys it was 6.01. Differences were not significant statistically. Same are the findings of Hamdeo (1972), with the same instruments. Sample was 15-17 year old 150 boys and 150 girls of Jabalpur city. Pathak (1974) conducted study on 1346 students. He found that boys and girls did not differ on $n$ Achievement components.

Gupta (1970) had found superiority in girls' mean $n$ Achievement score. The mean $n$ Achievement score for girls was
10.52 (N=100) and for the boys 6.38 (N=100) 't' ratio for differences in the sex was significant at the .01 level.

Gokulnathan (1971) found significantly high (p < .01) n Achievement score on TAT in girls. Same was found by Chaudhry (1971) with a sample of 200 boys and 229 girls. Rashid (1970) used two scales: (a) Hard work and need to do a job well (n Ach I), (b) need to accomplish unique and personal success (n Ach II). He found female subjects scoring significantly higher than male subjects on Bendig's adapted Achievement motive scale. Panda and Singh (1971) found no significant difference between the two sexes on n Achievement. Mehta (1972) found girls to be having higher n Achievement scores than boys.

Carpenter (1976) found that the motive to avoid failure is stronger in female than the motive to approach success. Parikh (1976) conducted a study on 1850 pupils selected on the basis of grade level, SES, Sex, medium of instruction and community. The study revealed that girls had higher n Ach score than boys. Patel (1977), on 876 students teachers found the difference in n Ach between male and female student teacher was significant, the later having a higher mean score.

In sum, the review of research literature showing relationship between the variables of Social Class, Intelligence, and Sex on the one hand and n Achievement on the other does not lead to conclusive results which necessitates a further probe. The study in hand is an attempt in this direction.
Hypotheses

Based on the factual evidence of research in the field of n Achievement as presented in this chapter and in Chapter I, the following hypotheses were formulated:

- Variables of social class as operationally defined by scholarship, educational level of father, educational level of mother, early school education, occupation of father, occupation of mother, occupation of the subject's choice, income, nature of family, social class you belong to, and affinity to community account for variations in respect of n Achievement of university students.

- Sex is a variable to account for significant variations in respect of n Ach of the university students.

- There is a positive and significant correlation between intelligence and n Achievement.

- Faculty to faculty differences exist in respect of variables of n Ach at different levels of intelligence.

- Continuous variables of social class contribute towards common factor variance in conjunction with the variables of intelligence and n Achievement.