CHAPTER - I

INTRODUCTION

The human organism is continuously developing from the time of conception to late maturity. The development process unfolds itself through the years of growth. The process, though undoubtedly showing some uniformity, shows diversity and variation from group to group, between sexes, cultures, and societies. The whole phenomenon is dependent on a variety of factors the exact number of which is perhaps yet undertermined (Parameswaran, 1972).

The importance of developmental psychology lies in the fact that it can perhaps be thought of as the foundation for all branches of psychology, having significance both in the development of the science and in its application. The second factor especially takes on added significance due to its vital role in programmes on the induction of social and behavioural changes. In introducing a particular social change it is imperative to have information on the social, intellectual and emotional development of the people.
The Developmental Orientation implies several implicit assumptions:

1. Various aspects and behaviour develop continuously and the process of growth and development proceeds in a sequence of imperceptible changes.

2. Different aspects of behaviour develop at different rates and are influenced by a wide variety of factors - hereditary, constitutional, environmental and accidental.

3. Different aspects of behaviour show their interrelationship (Parameswaran, 1972).

Developmental Studies in India:

Most studies done in India in developmental processes have been specific in nature rather than general, and have therefore lost something of the overall perspective and integrative orientation that forms a basic requirement of a meaningful developmental orientation.

In a review of studies done in this field by the ICSSR (1972), it was found that:
Very few studies were developmentally oriented, with the orientation appearing to be more of convenience and availability of subjects.

Most of the investigations concentrated upon particular age groups (for example nursery children) and were not longitudinal or cross-sectional.

Most of the studies were "fact-finding", being concerned with studying the role of different environmental factors, familial variables or specific aspects of behaviour like adjustment, language or academic achievement.

None of the studies were based on specific theoretical models. Very few attempted even to postulate specific hypothesis. Most were vague, descriptive, with loosely designed methods and tested on badly selected samples. Further, most of them indulged in deriving posteriori explanations.
5. Very few studies were comprehensive, the only exception being the N.C.E.R.T. Project on the Developmental Norms for Pre-School children; other investigations have been concerned with very specific areas of behaviour.

6. Most studies were of the survey type - very few used the experimental approach or resorted to any other form of psychological testing.

7. Most studies were based on highly localized incidental samples which did not even warrant generalizations for the population of a small town.

Of 122 studies which were under review by the I.C.S.S.R. though a majority were concentrated in studying emotional adjustment in children and adolescents, all but nine used questionnaires and personality inventories.

Further, several studies, e.g., Gupta (1945), Nagaratna (1939), Pathak (1966) and Verma et al. (1969) were on single subjects.
Although investigations on adolescence and childhood have been far more numerous than in other areas, not much light has been thrown on the understanding of the Indian child or adolescent. This has been primarily because of the previously mentioned "Specific" orientation of the investigations. Most studies have tried to investigate either physical development, or physical changes at puberty, attitudes, personality changes as measured through self-rating questionnaires and inventories, or adjustment problems.

In view of the social problems of our country and the need for inculcating new social values, it was felt that the major lacuna lay in developmental studies which emphasized a dynamic approach to the area of psychosocial maturity and development investigating and integrating maturity patterns with psychological variables that might be expected to be related to the psychosocial development processes in the Indian culture.

THE PURPOSE OF THE STUDY:

The purpose of the present study was to investigate just such a broad-based developmental process, in its psychosocial aspect, relating it to a theoretical framework of the process of maturity, to other psychological variables. 
and to environmental and background variables such as family and socio-economic status.

The theory of psychosocial maturity to be specifically tested was that of Stewart (1975). The study was designed to provide both a dynamic and a broad based approach thereby attempting to correct the shortcomings of all the previous studies reviewed.

OBJECTIVES:

Specifically the objectives of the study were:

1. To test amongst Indian youth the theory of psychosocial maturity propounded by Stewart (1975).

2. To trace patterns of maturity amongst Indian urban youth, from puberty to the young adult stages.

3. To study patterns, and development of the power motive in the urban Indian setting, and to integrate it, if possible, with patterns of maturity.
4. To investigate the parameters within which the urban youth defined the self, and to study its relationship with maturity and need for power.

5. To study levels and directions of aggressive behaviour with a view to integrating them with a general pattern of maturity.

6. And finally, to attempt to evolve a general theory of psychosocial maturity capable of being generalized to urban educated youth anywhere in India.

In view of the objectives of the study, it was felt that a cross-sectional sample of both sexes ranging in age from 11 to 19, would prove adequate in signifying developmental trends in the areas under study. It was felt that this ten-year period of life is the most tumultuous as far as maturation goes, and comparison of the youngest and oldest groups would yield radical differences in levels of maturity.
This study was conducted in the city of Ahmedabad (Gujarat), a large metropolis, with a population of approximately 2.7 million. In order to study developmental trends it was decided to select students ranging in age from 11 to 19, with three age groups (11, 13 and 15) falling at the school level, and two (17 and 19) at the University undergraduate level.

These students were in the 7th, 9th and final year S.S.C. classes in school, and first and third year degree classes in college respectively. Younger children were not selected as they were too young to understand sections of the test. Further, as many major psychological and physical changes take place during the teens, it was felt that the age groups selected would highlight the psychosocial changes occurring during puberty, adolescence and early adulthood. Within the age and sex sub-groups, the selection was done randomly.

Each age-sex sub-group consisted of 50 students, making a total of 500 students, half of them boys, and half girls. (Responses of eight students from the group of 13 year old boys had to be subsequently dropped as they were very incomplete).
The students were selected from three educational institutions; the school boys were studying in St. Xavier's High School, the school girls in Mt. Carmel Convent and the college students in St. Xavier's Arts and Science College.

The reason for restricting sample selection to these institutions was that while on one hand students of varying backgrounds came to them, they are homogeneous in as much as they are all studying in the English medium. Further, whereas in other schools each class has students of three or four different ages, these two schools had classes where a majority of students were of the same age.

While the school children were selected from sexually segregated institutions, the older students belonged to a co-educational institution; their areas of specialization ranged from the physical and social sciences to languages.

Of the total sample just under 50% were first class students, 42% second class students and the rest third class students.

Approximately 71% of the sample were Hindus, followed by 12% Christians (Catholics and Protestants combined), 8% Jains, 4% Muslims, and 3.5% Parsees. A few of the students were Sikhs or Buddhists.
A little more than 83% of the students came from families that had a nuclear (as against joint) structure. 76% of them had three siblings or less, with six students having more than nine siblings.

40% of the students were first borns, and another 30% had one older sibling.

60% of the students belonged to families where only one member worked, and another 23% from families where there were two working members.

33% of the sample listed their father's occupation as Business, 24% as Professionals (Doctors, Lawyers, Professional Managers, Teachers), 22% as Government Servants, 12% as White Collar Workers.

87% of the students had mothers who were housewives, 9% were professionals, and about 3% White Collar Workers (secretaries, Clerks etc.).

45.5% of the students belonged to families where the total monthly income was between Rs.750/- and Rs.2,000/-, 40% from families with a monthly income of over Rs.2,000/-, 12% from families with a monthly income of between Rs.350/- and Rs.750/-. The rest (about 2%) came from families where the monthly income was less than Rs.350/-. (The grouping of income was done in accordance with census income brackets).
METHODOLOGY:

Data were collected in groups. Various tests were administered to students in groups consisting of between 30 to 50 Ss. With the two older age groups, the groups were mixed, both in respect of age as well as sex. In the three younger age groups each group consisted of the entire sub-sample of 50 boys or girls.

The following tests were used for the school going children:

1. Who Am I
2. Thematic Apperception Test
3. Picture-Frustration Study

The University Students were administered:

1. Who Am I
2. Thematic Apperception Test

The tests were introduced by stating that the purpose of the tests "was to collect data for a study to measure the level of creativity and imagination amongst students". Ss were assured that it was a non-competitive test without "absolute" right or wrong answers. This was felt to be necessary in view of the widespread prevalence of
examination-anxiety amongst the students. It was emphasised that the answers would be kept absolutely confidential, and Ss were urged to be as frank and honest as possible.

"WHO AM I"

The "Who Am I" test was used as a projective test, with the specific purpose of measuring the self concept of the Ss in terms of orientation towards activity and efficacy.

Most measures of self concept in current use in India are of the verbal adjective list type where results have consistently shown that the social acceptability bias is very strong (Deo, 1964). Also the verbal scale used generally tends to probe more social masculine - feminine role adjectives rather than the action orientation or personality-resource awareness of an individual. Pareek and Rao (1975) have stressed the importance of the use of a projective technique such as the "Who Am I" in getting a meaningful measure or idea of the individuals self concept.

For initial scoring of a pilot sub-sample Pizer's Sense of Efficacy Scale (McClelland, 1969) was used. It was felt, however, that there were certain limitations in
the break up of categories in this measure that made it somewhat inadequate for children in our culture. The use of the English language in India being somewhat different from that in the Western countries, categories like Pizer's Activity Goal and Essence Goal, which were dependent on the construction of a sentence, rather than on its flavour, were found to be misleading. Responses of all the Ss in the pilot group, for instance, were scored for the Essence Goal Category, supposedly implying a passivity in orientation because of the use of the verb "to be" rather than "to do" in describing their goals.

Further Pizer's system was designed for scoring projective material where specific instructions regarding responses were not given. In scoring the responses to the "Who Am I" in the present sample, the written instructions which preceded the test seemed to lead to a situation where differences in Efficacy and Action Orientation got vitiated. Specifically, the instructions stated that Ss were expected to write about their goals, aims, problems and possible solutions of these problems. All responses in the pilot group got scored for resource categories.
Therefore a need was felt for developing a new scoring system based on Pizer's system and including some of his categories, but also taking into account the need to tap differences emerging from a study of the sub sample. After repeated tests with the pilot sample a measure was evolved which seemed to be adequate, in differentiating individuals falling into different stage groups in terms of maturity and power. (A detailed account will follow, in Chapter IV).

The numerical scoring system also had to be altered from Pizer's method of scoring categories as either +1 or -1. While on the one hand a large number of students obtained a zero score because of not having scored any category on the "Who Am I", another large group ended up with zero scores as a result of scoring an equal number of positive and negative categories. Once the total score had been computed there was no way of distinguishing between these two groups. This was found to be a major limitation as it was felt that these two groups consisted of very different kinds of individuals.
Further Pizer's decision to score certain categories negatively and others positively was questionable in light of the fact that the mere awareness of problems, with or without positive solutions, may also justifiably be considered positive factors; specifically, the negative score given to "lack of resources" did not seem justified as an awareness of the absence of resources did not appear to go against efficacy.

A new scoring system was therefore adopted where negative scores were excluded. Each category was scored for its presence or absence. The presence of a positive category such as Goal Oriented Activity was scored +2, its absence 0.

Presence of a negative category such as Global Stage was given a score of 0, its absence a score +1. All students thus got a score for each category present or absent. The scores ranged from 0 to 14. Only those Ss who scored no category got a 0. Ss with a score of 14 were those who scored all the "positive" categories and none of the "negative" ones. The total number of categories was nine.
Written instructions for the "Who Am I" were given (Appendix I) indicating in broad terms what the Ss were expected to write. In a pilot sample study with the "Who Am I" prior to actual testing it had been found that without specific questions or direction regarding what was to be discussed in a "Who Am I", Ss were at a total loss as to what to write: What was finally written and turned in to be scored, was the name, family name, school, educational background and occupation of the student. The written "direction-sheet" was therefore subsequently introduced. A time limit of 10 mins was set.

**THEMATIC APPERCEPTION TEST**

Since its original development as an aid to clinical assessment of global personality configurations, the Thematic Apperception Test (TAT) has gained increasingly widespread use in laboratory studies of personality traits and human motivation (Scott 1958).

According to McClelland (1958), the validity and reliability of this measure lies in that it fulfills the criteria necessary for its acceptability as a scientific measure. These criteria are:
A. It sensitively reflects the presence or absence of a motive or its variations in strength, even when compared with the motive strength derived independently without the measure.

B. It reflects variations in the motive being measured, and that alone.

C. It is a measure that gives the same reading for an individual or a group under the same or nearly the same conditions.

D. Compared to other measures it has high relational fertility.

In summary McClelland (1958) concludes that the greatest advantage of the CAT measure is that it capitalizes on the generalization, repeatedly confirmed in studies of the effects of motivation on behaviour, that the more ambiguous the situation, the greater the effect of motivation.
The underlying assumption of the TAT and one for which there exists a great deal of empirical support, is that when stories are written in response to vague and ambiguous pictures, a process of self projection occurs whereby the characters in the stories portray the predominant motives of the author himself.

Many sets of pictures have been used in TATs differing both in number and content. For the purpose of the present study two sets of pictures, six in each set, were used, one set of sketches for the school children, and another for the college students.

**Prayag Mehta's Sketches for Children** : (Mehta, 1967)

For his study of the level of n Achievement in High School Boys in India, Mehta (1967) developed a set of six sketches to be used for TAT. In selecting a set of six sketches from 30 developed the following considerations were kept in mind:

1. The picture should suggest some situation which may be considered suitable a-prior for evoking n Ach.
2. The picture should depict a situation familiar to achievement experiences of high school students.

3. The picture should depict a situation familiar to pupils irrespective of their socio-economic background.

4. The picture should have some person(s) resembling the sex and age of the group to be studied.

Further the specific criteria by which these were selected were as follows:

a. Discrimination power - The difference in mean Ach scores of Ss who formed the top 25% and the bottom 25% served as a validation.

b. Evokability of Achievement Imagery - The sketches, along with the 24 others from which the final selection was made, were examined for achievement related cues.

c. Correlation between total scores on each cue and total school marks.
The six Sketches in this series were:

1. **DOCTOR AND PATIENT**: A man sitting by the side of a bed where another man is lying.

2. **THE MUSICIANS**: An older person and a child playing the tabla.

3. **BOY IN A ROOM**: A child alone in a room reading.

4. **THE LITTLE MAN**: Cartoon of a pint sized man with a huge pen and ink bottle.

5. **CRICKET**: Four boys playing cricket.


**MURRAY'S PICTURES**: (Atkinson, 1958, as adapted at SIET)

1. Older man talking to a younger man in a room.

2. Man alone in a room gazing at a photograph on his desk.


4. Man alone in a big office, working at his desk.

5. Older man and a young boy, in the field.

6. An oldish man relaxing on an easy chair, with an open book on his lap.
Verbal instructions were given for the TAT. The pilot study suggested that written instructions both confused and distracted Ss. Ss were told to let their "imagination run riot" and make up any kind of story, incorporating: Who the character/s were, what they were doing, what had been happening and what would happen in the end.

Each picture was projected onto a screen for 20 seconds and the Ss were then allowed 4 minutes to write.

The TAT stories were scored for psychosocial maturity and for the power motive.

On a pilot sub-sample two scoring systems were tried for measuring the power motive that of Veroff (1957) and of Winter (1973, revised Power Scale). Winter's system was subsequently used for the entire sample because, in its revised form, it incorporates not only Veroff's criteria for the power motive, but also those of Uleman (1966) and Winter (1967). The system was found to be more exhaustive and comprehensive, besides having less culture bias. From the point of view of psychological theory and its applicability too, the Revised Winter's Power System seemed an improvement over all the previous systems.
The psychosocial maturity was assessed using Rao's adaptation of Stewart Maturity Scale (Rao and Stewart, 1975). Several other systems exist, like the inventory of Psychosocial Development and the Dignan Ego Identity Scale (Munley 1975) which have been used for measuring psychosocial maturity. The major advantage of Stewart's system however, is that it is the only system that is integrated with a theory of social maturity. (A detailed account of the theory and the scoring system appears in Chapter II).

Whereas Erikson's stages of development need several individual inventories for measuring the stages (Munley, 1975), Stewart's scoring system has been specifically developed to empirically test, from projective material and especially from stories written in response to TAT pictures, a theory of psychosocial maturity.

The system is based on research (Stewart, 1975) indicating that the four stages of personality development outlined by Freud (1905) - the oral, anal, phallic and genital - get reflected in the stories written by youth and adults in response to TAT pictures. The system, broadly, helps to find out the psychosocial developmental pattern of individuals and also locates the general developmental
level of his personality as revealed through the TAT pictures. Research indicates that this system is useful in describing the maturation levels of youths and adults in much the same way as the Freudian stages of development describe the developmental stages of children (Rao, 1975). Details of this system are discussed in Chapter XI.

**PICTURE FRUSTRATION STUDY:**

The Picture-Frustration Study is a controlled projective test intended to measure reactions of individuals to frustrating situations. The test consists of 24 cartoon-like drawings of frustrating situations (Appendix II). One character in the cartoon is shown saying something that causes frustration to the other character depicted in the picture. The respondent is required to write what the other character (the one facing the frustrating situation) would say in that situation. Some of the situations are "egoblocking" where an obstacle (personal or impersonal) interrupts, disappoints or deprives, thereby causing frustration; other pictures are "superego-blocking" where the frustrated character is accused wrongly.
The assumption underlying this test is that while writing reactions, the respondent's own personality will be projected, as will be his ways of dealing with frustration.

The test as used in the present study is an adaptation of the Children's form of the Resenzweig Picture-Frustration Study adapted by Pareek (1959) for Indian children.

Some of the dimensions studied are: extrapunitiveness, intropunitiveness, impunitiveness, (direction or aggression), and obstacle-dominance ago-defense, and need-persistence (type of aggression) to indicate reactions in preadolescents to frustrating situations.

This test was administered to the students of 11, 13 and 15. To ensure that the language (Hindi) did not become a problem and that immediate responses (as against deeply contemplated and therefore perhaps those biased towards the "socially acceptable") were elicited, the administrator read out the caption of each picture in Hindi, translated it into English, and allowed approximately 20 seconds for the responses to be written. Respondents were told not to linger, nor to skip pictures, but were allowed to write the responses in any language they found convenient. This freedom was allowed for both the other tests as well.
In the end all respondents were asked to fill up a sheet regarding personal background data such as sex, age and socio-economic factors. (Appendix III). It was felt that any attempt at formulating a general theory of psychosocial maturity should consider such background factors as the family structure, parent(s) occupation, income, number of siblings, ordinal position, and religion in order to see whether any of these significantly influenced or determined maturity patterns, need for power or the sense of efficacy.

DATA ANALYSIS:

Keeping view of the main objective of the study, that is, of being able to study the process and trends of psychosocial maturity, it was felt that a comparison of mean scores of each age-sex group on each of the variables would provide an adequate basis. Consequently means and standard deviations of all the variables, and each sub-category in each variable were computed for each age group and both sexes. Analysis of variance was also used. t values were computed for all age-sex differences for each of the variables, to investigate the significance of differences between groups.
A correlation matrix of 49 x 49 was also computed, so that no significant interrelationships between variables or their subcategories might be overlooked. All the correlations significant at a level of 5% or lower were identified. From these, those correlations which had a value of $ \pm 0.40$ or higher were chosen and further analysed: the rational was, that while an acceptable level of significance can be a result of the size of the sample, a relatively stronger relationship between two variables gets manifested in the actual degree of correlation.

Step-wise multiple regression analysis was also done using maturity scores and power scores as dependent variables, and all others as independent variables, Beta values were calculated to identify those variables which had the maximum impact on the dependent variables.

In order to have a clearer idea about the internal structure of the two dependent variables and self-concept, the data from each of these variables were factor-analysed, using the centroid method, and varimax rotation.