CHAPTER IV

PROBLEM AND PROCEDURE

I - Problem in General
II - Specific Objectives and Hypotheses
III - Tools
IV - Sample
V - Procedure for Collection of Data
VI - Pilot Work
VII - Final Procedure for Collective Analysis of Data.
CHAPTER IV

PROBLEM AND PROCEDURE

"Even most charitably research in parent-child relations cannot be viewed as a field in which methodology is exemplary and in which evidence is firm and consistent. But even most critically or despairingly, this field cannot be dismissed as unimportant in behavioral or developmental theory. Despite or because of these facts, how parents bring up their children and how parental characteristics are infused into child personality are questions that continue to inspire research.

The several methodological problems encountered in such kind of research show the need for future research which a) will deal with the actual behavior of mother and child (or better of parents and child); b) will search for a broader substantive base of childrearing variables by considering additional variables; c) will concern itself with the genotypic similarities and differences in parental behaviour; d) will deal with interactions; and e) will be designed to permit more defensible causative inferences." (Marian Radke Yarrow, 1967).
Marian Radke Yarrow has discussed a number of problems of methodology involved in parent-child research. The present study has attempted to forestall some of these problems and has also kept in mind the suggestions she has given for future research in the area of parent-child relations, as will be seen in the course of this chapter.

I) **Problem in General:**

The problem of the present investigation may be stated as follows: "To study the pattern of interpersonal communication between parents and adolescents in communities of Greater Bombay, and to find the degree to which communication is related to the total adjustment of adolescents."

The major variables of the study are:

1) Level of Communication of Parents
2) Total Adjustment of Adolescents
3) Sex and Community of Parents and of Adolescents.

In order that the results of the study might be further validated, and confirmed, three other mediating variables have also been taken into consideration. These three variables are connected with interpersonal communication and influence it considerably. They are:

4) Dogmatism or open-mindedness vs. close-mindedness in Parents
5) Family Atmosphere as perceived by Adolescents
6) Family Adjustment as perceived by Adolescents.
An individual's pattern of interpersonal communication is undoubtedly related to personality factors. One aspect of personality that influences it a great deal is open-mindedness. An open-minded person is less dogmatic and therefore more receptive to the feelings and thoughts of another. Research on Dogmatism though not directly connected with interpersonal communication is sufficiently vast and indicative of a relationship between interpersonal communication and dogmatism. Carkhuff's Scale for measuring Level of Communication, being adapted for use on Indian subjects, there was felt the need to use an already existing tool viz. The Scale of Dogmatism, to confirm it in some way.

Interpersonal communication between parents and adolescents influences and is influenced by the "home climate". Hence the inclusion of the 2 other variables viz. Family Atmosphere and Family Adjustment. These are assessed only from the adolescent's point of view, since he is the one to be affected most by the home atmosphere. Although it is the parents who primarily create the home atmosphere, it is the adolescent who has to perceive it as helpful and supportive, if it is to be effective for his personal growth and happiness.

The following variables were controlled:

1) Age of Adolescents
2) Socio-economic level of Families.

Only adolescents between the age of 15 and 17 years were taken for the study. These are the early adolescent years,
when conflicts between parents and children are greater and therefore affect the communication pattern as well as the adjustment of adolescents. In the later adolescent years many conflicts are resolved and both parents and adolescents have already learnt characteristic ways of adjusting to one another.

Socio-economic level is a very important factor that influences not only child rearing practices in the family but also the personality and adjustment of all its members. Socio-economic level comprises income of the family, the occupation and educational level of the family members and the social status of the family. These are bound to influence the pattern of interpersonal communication in the family and bring about variations in it. Hence this variable also was held constant.

II) Specific Objectives and Hypotheses:

The specific objectives of the study may be summarised as follows:

1) To study the relationship between level of communication of parents and total adjustment of adolescents.
2) To study sex and community differences in the level of communication of parents.
3) To study sex and community differences in total adjustment of adolescents.
4) To study the relationship between level of communication and dogmatism of parents.
5) To study the relationship between level of communication of parents and family atmosphere and family adjustment as perceived by adolescents.

6) To study sex and community differences in dogmatism of parents, family atmosphere and family adjustment as perceived by adolescents.

With these objectives in mind, the following hypotheses were formulated:

1) There is a significant correlation between level of communication of father and mother and total adjustment of adolescents.

2) There is a significant correlation between level of communication of father and mother and family atmosphere as perceived by adolescents.

3) There is a significant correlation between level of communication of father and mother and family adjustment as perceived by adolescents.

4) There is a significant correlation between level of communication and dogmatism of father and mother.

5) There are significant sex and community differences in total adjustment of adolescents.

6) There are significant sex and community differences in the level of communication of father and mother.

7) There are significant sex and community differences in Dogmatism of father and mother.
8) There are significant sex and community differences in family atmosphere and family adjustment as perceived by adolescents.

III) Tools:

Paul Mussen, (1960) while discussing the methodological problems involved in the study of Parent-child relations, says: "Increasing attention is being paid to the importance and complexity of measuring parent behaviour and parent-child interaction. In part, this growing interest probably stems from the rather low level of success in making direct linkages between parent personality, values and attitudes and child personality and adjustment; and in part it probably reflects the theoretical and methodological interest in moving from correlational studies to more process-oriented studies of socialization. Direct observation of parent-child interactions is still rare in the research literature as compared to the number of studies in which categories of parental behaviour are derived from parent reports or from child reports."

Gene R. Medinnus (1967) feels that the best method for collecting parent child data depends on the specific variables with which a given investigation is concerned. Several studies listed by Mussen use the Report or Questionnaire Method successfully in research on parent-child relations. The present study therefore, uses the Questionnaire Method for data collection. Data was collected both from parents and adolescents.
The Adolescents' Questionnaire consisted of 4 parts:

i) The Family Atmosphere Scale (to be called henceforward FAS)

ii) 4 Open Ended Questions on the family

iii) Youth Adjustment Analyser (to be called henceforward YAA)

iv) Family Adjustment Inventory (to be called henceforward FAI).

Part I: Family Atmosphere Scale

The FAS is a scale used to measure the general atmosphere in the family or the "home climate" as it is generally known. It is a measure of the general emotional supportiveness provided by the parents as well as the feeling of togetherness and solidarity experienced by a family. This scale was taken from a study by William R. Morrow and Robert C. Wilson entitled "Family Relations of Bright and High Achieving and Under-Achieving High School Boys" (Child Development 1961, 32, 501-510) and has been adapted slightly to suit the conditions of Indian families especially in Bombay.

Morrow and Wilson's Scale consists of 16 Self-Report sub-scales. Each sub-scale has 3 questions about the child's experience in the family situation. The Sub-Scales are presented in consecutive order but without scale titles or breaks in spacing. The adolescent is asked to indicate as to what extent each describes his own home situation by using the following 4 response categories:
1) Not at all or Almost Never
2) A Little or Sometimes
3) Considerably or Often
4) Very much or Very Often or Almost Always.

These 4 responses received a graded score viz. 4, 3, 2, 1. The scores were high on the positive end of the scale and low on the negative end. The questions within each sub-scale could be positive or negative with respect to family supportiveness. Morrow & Wilson's scale had already ascertained as to which questions were positive and which ones were negative. The subject was assigned a score on each sub-scale and a score was also obtained on the total of all sub-scales conceived as an index of Over-All Family Atmosphere. The higher the over-all score the more supportive the family atmosphere as perceived by the adolescent.

The following are the scale titles of Morrow & Wilson's Scale:

1) Family Sharing of Recreation
2) Family Sharing of Confidences and Ideas
3) Family Sharing in making Decisions
4) Parental Approval
5) Parental Affection
6) Parental Trust
7) Parental Approval of Peer Activities
8) Adolescent Acceptance of Parental Standards
9) Adolescent Affection and Respect for Parents
10) Lack of Parental Overinsistence on Achievement
11) Sympathetic Encouragement of Achievement
12) Regularity of Home Routine
13) Harmony of Parents
14) Lack of Parental Over-restrictiveness
15) Lack of Parental Severity of Discipline
16) Lack of Parental Overprotection.

These 16 sub-scales and 2 additional ones were used in the adolescent’s questionnaire in the Pilot Study. An item-analysis of each of these sub-scales as well as of the total scale, showed that it was necessary to drop 3 sub-scales of Morrow and Wilson’s Scale, since they did not show variation in the responses. Hence the following 3 sub-scales were dropped:

1) Lack of Parental over-restrictiveness
2) Lack of Parental Severity of Discipline
3) Lack of Parental Overprotection

The following 2 sub-scales which were added to the Scale were retained since they were felt to be relevant to the study and item-analysis showed that they were suitable for the Scale.

1) Parental Support in Problem Situations
2) Helpful Parental Communication.

The final scale as it appeared in the Questionnaire consisted of 15 sub-scales. The administration and scoring
were done according to the procedure described above for Morrow and Wilson's Scale. Morrow and Wilson's scale has been tested by them for reliability and validity. Hence the new scale did not need to go through the process again. However, it was validated in this research study by correlating it with the Family Adjustment Inventory of Dr. A.S. Patel (Part IV of the Adolescents' Questionnaire) which will be described below. The correlation was found to be .30 which was significant at .01 level.

**Part II : Open Ended Questions**

Open ended questions were given to the Adolescents in this part, in order to allow them to freely express their perception of their father, their mother and their family life in general. This would also give an over-all idea of the perception of family life by most middle class adolescents living in Bombay and would serve as additional information while analysing the rest of the data. The 4 questions included were:

1) What sort of person is your father?
2) What sort of person is your mother?
3) What do you like most about your home and family?
4) What would you like to change about your home and family?
Part III: Youth Adjustment Analyzer (YAA) by Dr. (Miss) M.B. Bengalee, M.A. M.Ed., Dip. V.G., Ph.D.

The YAA provides five separate measures of personal and social adjustment of adolescents. The main aim of the Inventory is to screen maladjusted or potentially maladjusted students from the normal high school and college-going population.

The YAA consists of the following scales:

1) Parental Attitudes' Scale: the unhealthy attitudes measured are Dominance, Submission, Overacceptance and Rejection which are generally known to be the predisposing factors of maladjustment.

2) Home Adjustment Scale: includes the general home conditions, the individual's relations with the members of his family, the economic condition of the family and so on.

3) Agression, Neurotic and Lie Scales: the aggression and neurotic scales give the measure of prevalence of the symptoms, traits, attitudes and beliefs symptomatic of aggression and neurosis, to find out how far the individual has been affected or is likely to be affected. The Lie Scale helps to detect how far the individual has responded to the test items truthfully.

4) Interest Scale a) Likes b) Dislikes, measure the interests which are predominantly characteristic of the maladjusted. The 'Question Mark' Scale along with the 'Lie Scale' act as two Validity Scales to measure the honest responsivity to the items.
For all the Scales, except the Interest Scale, the responses are in the form of True, False or a Question Mark. The items are so framed that 'True' or 'False' responses could be significant from the maladjustment point of view. This is done to screen the real purpose of the test from the testees.

As regards the Interest Scale, the responses are in the form of 'A' and 'B'. Care is taken to place the items in such a way that both 'A' and 'B' could be significant from the maladjustment point of view.

The scoring is done with the help of keys. Generally speaking, the high 'Lie' and 'Question Mark' scores tend to be indicators of the subject's unwillingness to cooperate or his defensiveness in responding. There is a key for each of the scales of the test. To obtain the YAA score or the 'Total Adjustment' score, the scores of Parental Attitudes, Home Adjustment, Aggression, Neurotic and Interest Scales are added. The higher the score, the greater is the maladjustment.

The norms have been calculated on the random sample of 1002 students drawn from the high schools and colleges of Greater Bombay, both male and female, of 16 years and above, for Parental Attitudes, Home Adjustment, Aggression and Neurotic Scales and on 546 students for Interest and Youth Adjustment Analyzer Total Scales.

The reliability coefficient of the different scales have been found by two standard methods, the Test-Retest and the Odd-Even, to check the results of one with the other. It was found to be .97.
Four different methods were adopted to find the validity.

a) The significance of difference between the means of the adjusted and the maladjusted.
b) Pupils' ratings by Guess-Who Technique
c) Teachers'-Counsellors' Ratings
d) Correlation of YAA test scores with Bell's Adjustment Inventory Scores.

Part IV: Family Adjustment Inventory by Dr. A.S. Patel, Dean, Faculty of Education and Psychology, M.S. University, Baroda.

This inventory consists of 2 parts. Part A has 20 statements concerning the general social-emotional adjustment of the adolescent. Part B has 20 statements regarding adjustment of the adolescent to parents, relatives, siblings and his attitudes towards them. The response to these statements is in the form of Yes/No. The positive statements, that is, those attitude which reflect a positive toward oneself and the family were scored as follows: Yes = 1. No = 0. The negative statements, that is, those which reflected negative attitudes to oneself and the family were scored as follows: No = 1; Yes = 0. The higher the over-all score, the better the adjustment of the adolescent to the family as perceived by him.

The Parents' Questionnaire consisted of two parts:

Part I: Level of Communication Scale of Robert R. Carkhuff.

This scale has been adapted to suit Indian parents.
and to measure their level of communication. The development of this scale went through a number of stages. A large number of adolescents from high schools and colleges, at least 200 in number, were contacted at random, to collect statements on topics that they typically communicated with their parents. In addition to these, other such statements were collected by the investigator from psychology books, a number of them being taken from the book "Between Parents and Teenagers" by Haim Ginnott and from "Helping and Human Relations" by Robert R. Carkhuff. From all these statements, 16 typical ones were selected. These would serve as stimulus statements to parents. These statements were validated by being shown to 15 parents, who confirmed that they were typical statements communicated by their adolescent children.

When Pilot Study I was conducted, these statements were given to about 30 parents in the form of a written Questionnaire and they were asked to write down their responses to each of these 16 stimulus statements. The responses were then shown to 3 Experts, to be rated according to Robert Carkhuff’s Scale for assessing level of communication. In this way the parents' level of communication was assessed.

Who is an Expert? An "Expert" is an individual who has successfully gone through a counselling course based on Carkhuff's Model of Counselling. These courses are being conducted by Dr. J.M. Fuster in several parts of India. He has been trained himself on this model by Dr. Sidney Wolf,
Clinical Psychologist, Department of Health in Towson, Baltimore County. In this course, a group of 10 to 12 persons meet with a trainer twice a week and spend 50 hours over a period of about 3 months interacting with one another. Dr. J.M. Euster (1974) in his book "Helping in Personal Growth" explains the core of these counselling courses. "It applies to the whole gamut of interpersonal relationships wherever these are found; in the home, the school, the office, in trade unions, clubs etc. The counselling situation is just one aspect of this field of interpersonal relations .... Therefore, training, if it is to be effective must raise the level of functioning of the trainees as persons". The successful persons are those who have been rated by at least two-thirds of the whole group as well as by the trainer, to be a "helpful person".

However, it was found that the rating of the responses of parents to the stimulus statements by these Experts who were mostly professional people and therefore not easily available for work of this type, was a time consuming process. Hence a further modification was made in the Questionnaire.

Using the responses made by the parents in Pilot Study I and adding some responses framed according to Carkhuff's theory of helpful and harmful communication, a new Questionnaire was developed. It consisted of 16 stimulus statements, each of which had 4 possible responses below it. Each of these responses was assessed for level of communication by 10 experts (one of them being the investigator), before being given to the parents.
to answer. In answering this Questionnaire, the parent would not have to write down his response to each statement as he had done in Pilot Study I, but would tick only one of these 4 responses - the one that would typically represent his own. In addition there was a fifth alternative - (Any Other), where he could write down his response in case none of the other 4 was typically his own.

Pilot Study II was conducted with this modified Questionnaire, and the investigator again took a feedback from the parents as to whether the responses given to them at the bottom of each stimulus statement was representative of the typical responses made by Indian parents. Their feedback was interesting and very enlightening. Many parents felt that some of the responses were bookish - as indeed they were, since they were taken from books and framed by the investigator according to theory. When requested, the parents framed alternative responses, which were again rated by the Experts, before the final form of the Questionnaire as it is included at the end of this thesis, was drawn up.

The following were the 9 Experts who assessed the responses for Level of Communication according to Carkhuff's Model of Counselling:–

1. Miss Lydia D'Souza : Counsellor, Child Guidance Clinic, Seva Niketan, Bombay.
3. Mrs. N.A. Moochala : Clinical Psychologist, J.J. Hospital, Bombay.
5. Fr. Douglas Rowe : Counsellor, St. Stanislaus High School, Bombay.
7. Fr. Berchmans : Counsellor, St. Xavier's High School, Bombay.
8. Miss Z. Noronha : Counsellor, St. Mary's High School, Bombay.

The above mentioned have successfully completed the Carkhuff's Counselling Course at the Xavier Counselling Institute, with Dr. J.M. Fuster as Trainer.

The Questionnaire was given to a group of 57 parents to test its reliability. The test-retest reliability was found to be .87. The validity of the Scale was established in the following ways:

a) The Questionnaire was rated by 50 adolescents and they agreed that the responses were representative of the pattern of communication between Indian parents and their adolescent children.

b) The Questionnaire was also rated by 9 Experts who also agreed that the Scale was a typical demonstration of the communication pattern of Indian parents and their adolescent children.
c) The means of parents who communicated at a helpful level and of those who communicated at a harmful level were significantly different. This significant difference in the Means of the Helpful and Harmful Parents was found to be a way of further testing the validity of the Scale, in addition to the ratings of adolescents and Experts.

The Scoring was done in the following way: Each response to the Stimulus statement marked by the parents was scored according to the Scale Value given by the Experts on Carkhuff's Scale for Level of Communication. The values ranged from 1 to 5. The values of the 16 responses were totalled and the average was taken. This gave the level of communication of the parent. In case the number of responses made was less than 16, then the average of that number was taken. This happened in case one or two statements were not applicable to the communication of the parents concerned. If more than two statements were not responded to, the Questionnaire was rejected. Very few parents answered in Category (e), that is the category (Any other). These last responses were rated by 3 Experts for level of communication.

On the basis of the average value taken, the parents were classified into two categories: Helpful parents, that is, those whose level of communication was 3 and above; and Harmful Parents, that is, those whose level of communication was 2.5 and below.
Part II: Scale of Dogmatism by Qamar Hasan, M.A., Ph.D.,
Department of Psychology, Aligarh Muslim University, Aligarh.

Research and theory have supported the fact that helpful communication is closely related to open-mindedness. In order to have a further confirmation of the major hypotheses, a scale of Dogmatism or open-mindedness vs. close-mindedness, was introduced into the Parents' Questionnaire.

The dictionary meaning of dogmatism is "adhering rigidly to a tenet". However, Rokeach (1954) used the term to refer to certain characteristics of belief-disbelief system. To be more specific, dogmatism is defined as: "(a) a relatively closed cognitive organization of beliefs and disbeliefs about reality, (b) organized around a certain set of beliefs about absolute authority, which, in turn, (c) provides a framework for the patterns of intolerance and qualified intolerance towards others." For the conceptual clarification of dogmatism, one should be acquainted with the nature of organization of beliefs, the meaning of structure and the dimensions on which different belief-disbelief systems may be differentiated.

In order to orient himself in the surrounding world, the individual has to acquire beliefs about physical objects, other individuals, creeds, institutions and authorities with which he is related. Some of his beliefs may be known to others through verbal endorsement, while others are not explicitly verbalized to others and hence remain implicit in his actions,
inclinations and preferences. A person's beliefs are, therefore, to be inferred from all that he says and does. Thus the sum total of belief-disbelief systems would comprise verbalized and non-verbalized, explicit and implicit beliefs, sets and expectancies.

Here it seems important to mention that Rokeach (1960) talks of beliefs as well as of disbeliefs and not merely of beliefs. He holds that disbeliefs are not just the views which are excluded from beliefs but they form a separate system of their own. Represented in the belief system of an individual are all the beliefs, sets, expectations or hypotheses, conscious or unconscious, that a person at a given time accepts as true of the world he lives in. The disbelief system, on the other hand, is conceived to be consisting of all the beliefs, sets, expectancies, conscious or unconscious, that in some degree or the other person at a given time rejects as false.

Another important feature of the belief-disbelief system, according to Rokeach, is that our thinking about any issue does not remain unaffected by thinking about other issues, so that a person's beliefs and disbeliefs relating to political, philosophical and scientific issues form an integrated system of belief-disbelief and not belief-disbelief systems of these sets of issues separately.

The Dogmatism Scale was developed by Rokeach (1960) to measure individual differences in openness or closedness of organisation of belief-disbelief system. While formulating the items for inclusion in the Scale, Rokeach kept in mind
various defining characteristics of openness and closedness of mind and endeavoured to make the items free of ideological content so that "persons adhering dogmatically to such diverse viewpoints as Capitalism and Communism, Catholicism and anti-Catholicism, should all score together at one end of the continuum, and should score in a direction opposite to others having equally diverse yet undogmatic viewpoints." (Rokeach, 1960)

Under Qamar Hasan the Dogmatism Scale has undergone five revisions. The revisions were made with a twofold purpose: to improve the items in accordance with the increasing refinement in the theoretical formulations and to improve the reliability of the Scale.

The following is the account of the items of Form D covering different characteristics of dogmatism:

I) Items involving the belief-disbelief continuum.
   a) Accentuation of differences between the belief and disbelief systems.
   b) Perception of irrelevance.
   c) Coexistence of contradictions within the belief system.
   d) Relative amount of knowledge possessed about the disbelief systems.
   e) Differentiation within the disbelief system.

II) Items involving central-peripheral dimensions.
Beliefs regarding the aloneness, isolation and helplessness of man.

b) Beliefs regarding the uncertainty of the future.

c) Beliefs regarding self-adequacy-inadequacy.

d) Self-aggrandizement as a defense against self-inadequacy.

e) Paranoid outlook.

f) Authoritarianism.

g) Intolerance.

III) Items involving time perspective.

a) Attitude towards the past, the present and the future.

b) Knowing the future.

c) Belief in force as the way to revise the present.

One can see a consistent improvement in the reliability of the Scale after each revision. The corrected split-half reliability of the initial Form 'A' was .70. After eliminating some items the rest of the items constituted Form 'B', which had a corrected split-half reliability of .75. The reliability of Form 'C' was not as high as expected. In the next tryout, some more items were added and the corrected reliability of Form 'D' was as high as .91. The final form 'E' was drawn and its reliability coefficients ranged between .68 and .93. The entire work of Rokeach and his associates (1960) that followed the construction of the Dogmatism Scale may be regarded as validation studies of the scale.

The scoring of the Scale is done in the direction of closed-mindedness in accordance of the following scheme:
There is evidence in favour of the relationship between dogmatism and originality. Such factors as openness to experience, inquisitiveness as a habit of mind, cognitive flexibility and the tendency to reconcile opposites are the very factors which are integral to the definition of open-mindedness.

In the study of Qamar Hassan, when dogmatism was correlated with a combination of the five personality variables and the four dimensions of social attitudes the matrix of intercorrelations thus obtained yielded five factors.

The first factor, the one designated as Psychological Health is the most potent source of relationship between dogmatism on the one hand, and ego-strength, neuroticism, internal-external control, on the other. The variable of open-closed mindedness is also of vital importance for psychological health. An open-minded person is autonomous, in the sense that he feels, thinks, and behaves independently, is sensitive to experience and open to new ideas, is reality-oriented in so far as he evaluates the information received from the outside world in terms of its intrinsic value rather than in terms of preconceived notions and ready-made ideas, and is capable of tolerating those whose beliefs are different from his own. Most of these qualities are, directly or by implication, relevant to psychological health.
IV) Sample

Paul Mussen (1960) in his book "Handbook of Research Methods in Child Development" suggests various means by which the researcher may obtain the sample he needs. According to him "schools are a good starting point for getting families that include children of a particular age." Another method suggested by him is "to select a geographical area in which the possibility of locating the desired subjects is maximized." Finally, a very practical suggestion made by him is to gather "data on more subjects than will actually be included in the study." All these three suggestions were borne in mind while selecting the sample for the study.

The final sample consisted of 400 adolescent boys and girls between the ages of 15 and 17 years and their 800 parents drawn from 4 communities living in Greater Bombay city. The 4 communities taken for the study were Christians, Hindus, Zoroastrians and Muslims who knew English. Each community was represented by 50 Boys and 50 Girls and their parents. The adolescents were contacted through 10 schools spread over North, Central and South Bombay and their parents were contacted personally by the investigator in their homes. In certain cases, where adolescents of certain communities were not easily available, families were directly contacted in localities where such communities generally lived.

The Sample was selected on the basis of the following four criteria :-

1. 
2. 
3. 
4. 

The Sample was:
a) Community of Families
b) Knowledge of English by Families
c) Socio-economic level of Families
d) Age of Adolescents.

a) Community of Families: The study being made on the pattern of interpersonal communication between parents and adolescents in 4 communities - Christians, Hindus, Zoroastrians and Muslims, it is necessary to clarify the concept of "community" as it is used in this study and to give a brief explanation of the historical, religious and cultural background of each of these 4 communities.

As explained by Alexander A. Schneiders (1960) "a community is not simply a political or geographical unit; it is an organismic whole that emerges from the relationships that exist among the members of the community and among the various subunits within the community. These relationships determine the effects of the community on personal growth. The concept of the community as an organismic totality makes it clear that we are not dealing with a static unity, but with an organic thing whose characteristics strongly resemble those of living organisms. Like living things, communities are structured; they grow or decay, they are healthy or diseased and they possess individuating characteristics. The community is thus the larger social expression of the individuals of which it is composed and of the relationships that bind them together and influence
their dealings with each other and with the members of other communities. These aspects of the community have more direct bearing on personal development." In India, the different communities, reflect very strongly the cultural differences that exist between. They reveal in a unique way the attitudes, beliefs, values and the whole "way of life" of the different cultural groups that inhabit this country of ours.

According to the 1971 census, of the 548 million people living in India today, roughly 85% are Hindus, 10% are Muslims, 2% are Christians and 0.3% are Zoroastrians. Bombay being a cosmopolitan city and a heavily industrialised area, is therefore thickly populated. It has a population of about 6 million people with an adequate representation of the 4 communities needed for the study.

Christians: 'Although many Indian Christians embraced the faith in comparatively recent times, the Syrian Christians of the Malabar Coast in Kerala claim to have been first converted by St. Thomas, and thus they feel they conserve faithfully the earliest traditions of the Apostolic Church. Roman Catholics elsewhere owe much to St. Francis, Zavier, a Jesuit priest who came to India in the wake of the Portuguese in the 16th century. The various Protestant groups are mainly the result of British influence though Dutch missionaries have also been active.' (Fodor & Curtis, 1976/77).
The Christians in Bombay are a motley group - Protestants and Catholics hailing from Bombay itself, from Goa, Mangalore, Kerala, Madras and other parts of India too. Their religious belief centers around Jesus Christ, God and Man at the same time. They believe that he became man, lived, suffered death on a cross and rose again after 3 days - all to save mankind from sin and to show man the path to God. The Bible, their sacred book, contains the Good News of God's great love for man and teaches man how to love God and his fellowmen - the two great commandments of Christianity.

The Christians in Bombay are a very mixed group since they hail from many parts of the country. There is quite a western attitude among those coming from Goa due to the long Portuguese influence in that part of India. Some have more of a British influence due to their former connection with the East India Company, from where they got their name of 'East Indians'. However, large sections of them originating from areas like Tamilnad, Kerala and possibly Mangalore have retained their own Indian identity and culture.

Hindus: "A precise definition of Hinduism is hard to formulate since the beliefs and practices of the Hindus vary widely both regionally and within a given region, from class to class. Hinduism is not a religion but a whole way of life, whose precepts cover a vast range of human activity outside the scope of most modern religions. A distinction must be drawn, however, between the orthodox Hindu and the modern educated Indian of
Hindu origin who still respects much of his ancient religion and calls himself a Hindu but breaks so many of the ancient precepts that, strictly, he can scarcely be classed as such.

In its traditional form the chief distinguishing features of Hinduism are the doctrine of transmigration of souls; a complex polytheism subsumed in a fundamental monotheism, a deep-rooted tendency to mysticism and monistic philosophy, a stratified system of social classes, generally called castes which is given religious sanction, and a propensity to assimilate than to exclude. The number of sects is very large, the Vaishnavas, Saivas and Shaktas being the most important." (Encyclopaedia Britannica Inc.)

The Hindus of Bombay city belong to all sects and come from practically every region of India - thus speaking different languages. Culturally, their habits and customs vary according to their regional background and religious sect. The influence of modern and specifically that of the West has had a great influence on some sections of the Hindu community. This is specially noted among the well-to-do. It is still more noticeable among the younger generation, not only of the Upper classes, but even of a great number who belong to the middle and lower-middle classes. However, the western influence is more apparent than real, superficial than deep. In other words, they are the exterior expressions of another culture and way of life which have been imitated by these sections of the Hindu society, without basically departing from their traditional beliefs, culture and family traditions.
Zoroastrians: "The Parsees fled their native Persia in the face of Moslem religious persecution and arrived in India in the 7th century. Since then, most of them have remained in the region of Bombay where they try to follow the "Path of Asha" - a path of action - good thoughts, words and deeds. Their holy book, the Zend Avesta, describes the eternal fight between good and evil and man's duty in this conflict. Parsees worship fire, and Bombay has numerous fire-temples." (Fodor & Curtis, 1976/77)

The Parsee community in Bombay is quite prominent. It is perhaps one of the most open communities, in the sense that they have always been ready to assimilate whatever good they found in others. In doing this, they have worked out a most remarkable community where things typically "Parsee" are beautifully blended with things that are typically "Indian" and also typically "Western". The typical Parsee of Bombay is not just a Parsee, but an Indian, an Englishman and a Persian all blended in one. Their belief in the religion preached by Zoroaster is part of their Persian inheritance, but together with this, they are quite familiar with Christ, Buddha, Krishna, Sai Baba, Mohammed and the rest of the kaleidoscopic picture of religions in India.

Muslims: "Islam came late to India along with the Moslem invasions. It is a strictly monotheistic religion which professes the fatalistic acceptance of God's will and which allows no 'graven images' to profane worship. Equality of all believers and a caste-free society are two other features."
The Prophet Mohammed is believed to be the last and greatest of the prophets, and the Holy Koran as revealed to Mohammed, is the sacred book. The devout Muslim has 5 duties: belief in the one true God, prayers 5 times a day, the giving of alms, a month's fast every year and a pilgrimage to Mecca at least once in a lifetime." (Fodor & Curtis, 1976/77)

In spite of the influence of other religious groups and the close interaction among the communities in Bombay, the Muslims have retained their specific characteristics. We have here a very close community from the religious, cultural and social point of view. A Muslim of Bombay has a number of characteristics that are common to Muslims in other parts of the world. One walking through the deserts of Arabia would find women covered with their purdahs in the same way as he would see them crossing the streets of Bombay. Some have done away with these customs as it has happened to the Muslims of Beirut, Cairo and Damascus. The Muslim women are mostly home-bound. This has influenced very much their education and the way in which they look at the world. No wonder then, that on account of this we don't find in the Muslim woman the broad-mindedness that we find in her counter-part of other communities.

b) Knowledge of English by families: Language has played an important part in the development and control of social behaviour. It represents what is specifically human in social life. It is an instrument of thought and communication.
The Linguistic Survey of India, according to S.P.
Adinarayan (1964), records 179 languages and 544 dialects as
current. For literature, education, and public life we have 15
major languages in India.

1) Hindi 6) Gujarathi 11) Kashmiri
2) Marathi 7) Assamese 12) Malayalam
3) Nepali 8) Tamil 13) Oriya
4) Kannada 9) Bengali 14) Punjabi
5) Urdu 10) Sindhi 15) Telgu

The biggest rival to Hindi as the national language
of India is English. Although it is a foreign language, it is
very attractive and is a language in which generations of
Indians have been educated. It is the medium through which we
get light and air from outside. It is spoken by nearly 200
million as their mother tongue. In 1931 out of the 28 million
literates in India 3.5 million spoke English. It is the language
of administration and of college education. (S.P. Adinarayan,
1964).

The 1961 census enumerated a total of 1,652 mother-
tongues in India. Bombay city may not have people speaking all
these languages but a large number of them are being spoken,
since there are so many communities and regional groups living
there. In a study on communication like the present one, a very
important criterion to be considered is the language spoken by
the people. The only language that the majority of middle class
people have in common in Bombay, is English. It is spoken by
most middle class people employed in offices, industries etc., since it is still the major language for business, administrative, educational and even advertising purposes. It is generally understood by men, women and children of the middle class.

As a matter of fact, some are of the opinion that English is on the increase in the city of Bombay. This view is supported by the experience that one has of many families where the parents do not speak English but the children do. In many of these families one finds the queer phenomenon of the children speaking English among themselves in the most natural way, as if it were their mother tongue, and using the vernacular only when they address their parents.

Considering all these factors, it seemed practical and suitable to have the Questionnaire only in English. Translating it into other languages would create, besides, the problem of accuracy in the translation. Each language has varying nuances of meaning attached to words and these would influence the comprehension of the Questionnaire. It was felt necessary to ascertain that all subjects understood the questions in the same way. Hence the study was conducted only in English.

Several English medium schools were approached to obtain adolescent subjects. Finally 10 schools consented and all adolescents between the ages of 15 and 17 years whose parents knew English formed part of the sample.
c) **Socio-economic level of Families:** A person's social class or socio-economic level is determined by his family background, education, occupation, income, neighbourhood, the household conveniences used by him and his social status. Meyer Wunberg and Oscar E. Shabat (1956) define a social class as follows: "A social class refers to a group of persons who tend to have the same social status in comparison to other classes which the whole society ranks as superior or inferior. Each social class has its own way of life, its own unwritten rules, ideas and feelings. When groups become aware of their distinctiveness they become social classes."

Socio-economic level of the subjects was an important criterion for the selection of the sample. Since the purpose of the study was to investigate the pattern of interpersonal communication between parents and adolescents in middle class families, the two extreme groups, viz. the upper and the lower classes had to be eliminated. The socio-economic level of the social class of the families was ascertained on the basis of:

1) **Income**
2) **Education**
3) **Occupation**
4) **Household conveniences used.**

1) **Income:** The schools from where the adolescents were taken for the study were attended by pupils belonging to middle class families. The monthly income of each of the 400 families included in the sample did not exceed ₹ 3500/-. The table below shows the distribution of income of the parents.
It is difficult to get an estimate of the exact income of a family. The present study, not being specifically concerned with the exact socio-economic status of the family, a rough estimate of the income and of the other aspects of social class was found to be sufficient. The investigator has depended entirely on the facts as reported by the parents without trying to verify them and has classified them accordingly. Besides, the study being conducted at a time when emergency was declared in the country, people were hesitant to reveal their true income. Some parents even advised the investigator not to ask this question in the Questionnaire.

The table shows that more than half the number of Fathers (51.5%) have an income in the range of Rs 501 - Rs 1500 per month. The second largest number (24.5%) falls in the range of Rs 1501 - 2500 per month. Only 15.5% earn in the range of Rs 2501 - 3500 per month and only 8.5% have an income below
Rs 500 per month. These latter are mostly retired people. The majority of the mothers (80.5%) have no income and the rest supplement their husband’s income.

This distribution of income shows that the sample taken for the study did fall in the middle income group. This would, of course include lower middle, middle middle and upper middle groups, as the different ranges of income earned per month indicate.

ii) Education:

<table>
<thead>
<tr>
<th>Type of education</th>
<th>Father No.</th>
<th>Father %</th>
<th>Mother No.</th>
<th>Mother %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postgraduates</td>
<td>52</td>
<td>13</td>
<td>22</td>
<td>5.5</td>
</tr>
<tr>
<td>Graduates</td>
<td>102</td>
<td>25.5</td>
<td>50</td>
<td>12.5</td>
</tr>
<tr>
<td>S.S.C.</td>
<td>180</td>
<td>45</td>
<td>232</td>
<td>58</td>
</tr>
<tr>
<td>Any other</td>
<td>66</td>
<td>16.5</td>
<td>96</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

The table shows that a great majority of parents - 45% Fathers and 58% Mothers in the sample have finished High School. A good number of them have had the benefit of College education. 25.5% Fathers and 12.5% Mothers are Graduates and 13% Fathers and 5.5% Mothers are Postgraduates. Most middle class families value education and strive for academic achievement, as is evident from the table.
The last category shown in the table as (Any Other) includes those who have not finished S.S.C., as well as those who may have gone through other kinds of technical and skilled training, which do not come under the other 3 categories. There were no uneducated or illiterate parents in the sample. During the last five years the level of education in India, especially in cities like Bombay has risen considerably and middle class parents can therefore claim at least to an elementary school education.

The uneducated and illiterate are found generally in the lower socio-economic group and this group was completely eliminated from the study precisely because it was felt that the level of education would affect the level of interpersonal communication between parents and adolescents.

iii) Occupation: "In most communities a man's prestige or standing is closely linked to the occupation he follows. A man's occupation not only cues us to his prestige, it also suggests what his intellectual level is likely to be. Persons at any level of intelligence can work at the jobs with less prestige, but only those at the upper intellectual level can aspire to the top occupations." (Baughman and Welsh, 1962).

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Father No.</th>
<th>Father %</th>
<th>Mother No.</th>
<th>Mother %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profession</td>
<td>56</td>
<td>14</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>Business</td>
<td>72</td>
<td>18</td>
<td>30</td>
<td>7.5</td>
</tr>
<tr>
<td>Service</td>
<td>230</td>
<td>57.5</td>
<td>30</td>
<td>7.5</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>14</td>
<td>3.5</td>
<td>28</td>
<td>7</td>
</tr>
<tr>
<td>Retired</td>
<td>322</td>
<td>80.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>400</td>
<td>100</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

Total
An almost equal number of Fathers and Mothers - 14% and 12% respectively, come under the Professional group. This category includes Doctors, Engineers, Teachers, Nurses, Architects and a few other minor professions. The vast majority of middle class Fathers (57.5%) come under the "Service" category. Most middle-class men take up white collar jobs in a large city like Bombay. This occupation is the only one that is generally available to those who have finished S.S.C. To have a profession one needs a certain amount of education, preferably at the university level, which a small group of middle class people do go through. To have a business one needs a large amount of money as initial investment. Thus, the majority of middle class people go in for clerical jobs. Only 18% Fathers are Businessmen and only 3.5% hold semi-skilled jobs which are more characteristic of the lower class.

As for the Mothers, the majority of them (80.5%) are Housewives. Inspite of the trend for the modern woman to work, middle class women still value the home and most of them spend their time looking after their household chores and their children's education. Only 19.5% work - mostly as teachers, nurses or secretaries. When asked by the investigator whether they thought of taking up a job in the future, many mothers felt that their main responsibility was the upbringing of children and the welfare of the home.

The distribution of the sample in these various occupations is very much in keeping with the pattern of occupations characteristic of middle class people in this country and also in America and in Europe.
iv) Household Conveniences used: Each of the families was personally visited by the investigator. This gave a further idea about the type of home they lived in and the number of household conveniences and modern amenities used by them. 25% lived in one room tenements, 39% in two room houses, 29% in three room flats and only 7% had flats with more than 3 rooms. Approximately 30% had Television sets in their homes.

The localities where these 400 families lived were Mazagon, Byculla, Mahim, Parel, Dadar, Worli, Matunga, Girgaum, Dhobitalao, Grant Road, Tardeo, Mohammedali Road - localities where the majority of the homes are middle class or lower class. Only a sprinkling of them lived at Churchgate, Pedder Road and Nepean Sea Road - localities mostly inhabited by higher income families.

The type of house where the average middle class man lives in Bombay is usually of the type mentioned above. It is either a one room tenement, or a small flat with 2 or 3 rooms. The few families who had bigger houses were mostly families who had inherited some old bungalow type houses from their ancestors. Nowadays many middle class families are able to afford a small TV set and some also have a refrigerator since society is trying to provide these amenities at a reasonable rate for the middle class man.
d) Age of Adolescents:

<table>
<thead>
<tr>
<th>Age</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>15</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td>16</td>
<td>90</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>17</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

Mean Age for Boys = 15.75 years
Mean Age for Girls = 15.85 years.

Since the aim of the investigation was to study the early adolescent group, all the subjects fell in the age range of 15 to 17 years. Peter Blos says, "The initial stage of adolescence presents the most crucial period of the adolescent process as a whole. Whatever follows later, as for example, identity formation, personality consolidation, character formation or second individuation is augured favourably or unfavorably by the resolution of those particular developmental challenges that precede the unleashing of the adolescent turbulence of later years. It is the age when opposition to family values and patterns starts to assert itself and parents, especially in urban areas, are hard pressed whenever they practice their parental privilege by setting limits and by affirming their personal values. Opposition to parental guidance, silent or vocal, belongs to the stage of initial adolescence."
Hence it is during this developmental stage that communication is crucial between parents and adolescents. On the part of parents it calls for greater empathy and more refined skills in interpersonal relations during this period. In late adolescence the friction is less and the adolescents having passed most of the hurdles that are part of the growth process are more relaxed and easier to deal with. Adolescents of this age group, that is the 15 to 17 age group, were therefore selected for the study and this sample was found mostly in the last two years of High School or in the first year of College.

It is hardly possible to get a strictly random sample with so many specifications to be fulfilled. The sample was therefore, acquired, according to the availability and the cooperation of subjects - especially of the parents. With regard to randomization, Mussen (1960) says: "The representativeness is not always the primary issue in the study of a problem, and the greater accessibility of non-representative samples may at times be an acceptable reason for using them. Further the best test of the theory might require the use of homogeneous and non-representative groups. Finally good studies in family life often require a great deal of co-operation by the subjects, and the cost of obtaining the data on each family may be high. For this reason, the use of small samples and groups who are willing to co-operate becomes important."
Although not strictly random, a sample like the one selected for the present study may still be representative, since in an investigation on interpersonal communication, where personality and adjustment variables enter, even a small number of subjects who participate in the study give information from their experience which may be taken to be applicable to others belonging to the same population. Because of this difficulty of randomization, it was felt necessary to obtain as large a sample as possible and to get the maximum co-operation from the subjects, so that the information collected from them may be genuine and reliable. This has been attended to with great rigour as will be seen in the procedure followed for collection of the data.

V) Procedure for Collection of Data

It extended over a period of six months and was done in several stages. Usually the investigator contacted the adolescent subjects first and then through them got in touch with their parents.

1) Data Collection from Adolescents: The Principals of a number of English medium schools were contacted personally by the investigator, in order to explain to them the nature of the research and to arrange to meet the required subjects. At the time the data collection was begun, some schools were having their monthly tests or terminal examinations or sports or other such activities and hence could not co-operate.
Finally 10 schools were able to participate in the study. All adolescents between the age of 15 and 17 years, whose parents knew English were selected for the sample and the Questionnaire was answered by nearly 600 adolescents - both boys and girls.

Before giving the Questionnaire, a small slip was distributed to each subject requiring the following information:

- Name
- Age
- Class
- School
- Address
- Does your Father speak English?
- Does your Mother speak English?

This information was asked for beforehand in order to avoid asking for names on the Answer Sheet and to assure the subjects of anonymity and confidentiality. However, in order to be able to identify them, each one of them was given a number which was known to the investigator and which corresponded to the number on the Answer Sheets of his parents.

The Questionnaire was administered in groups of 30 adolescents. The instructions explaining to the subjects the nature of the study and their role in it, was read out from the Questionnaire itself. There was no time limit and on an average they took 1 1/2 hour to complete it.

Permission was taken from the Principals to visit the parents of the adolescents taken for the study.
At the suggestion of some Principals, on the day the adolescent answered his Questionnaire, he was given a letter for his parents, the contents of which are given below:

Dear ....

I am taking the liberty of sending this short note to you, through your child, whom I have contacted in his school. The purpose of this letter is to let you know that I will be dropping in at your home, within a week or two. I would like very much to see you and get your cooperation in answering a Questionnaire, which I will explain to you, when I meet you. It goes without saying that you must feel free to tell me whether you want to answer the Questionnaire or not, when I come over to meet you.

Looking forward to meeting you one of these days,

Yours sincerely,

This was done in order that the parents would be informed in advance of a visit by the investigator and would not thus, have to confront a total stranger.

Out of the 600 adolescents who answered the Questionnaire, only 400 were ultimately taken for the study. The others were dropped, either because they had only one parent, or because their Questionnaires were incompletely answered or because their parents did not cooperate.
2) **Data Collection from Parents**: Paul Mussen (1960), while predicting certain difficulties involved in collecting data from parents, gives some very valuable insights on this subject. He says: "In gaining subject cooperation, a personal contact is better than one made by mail or telephone. In addition, the anticipation of being a research subject is ordinarily more negative than the actual experience. Therefore, to approach the respondent at the time one is ready to begin is sometimes more effective than asking for cooperation in advance.

Regarding the motivation of the subjects to cooperate, the pluralistic ignorance and the general anxiety around the child-rearing area operate in the researcher's favour in some respects just as they operate against him in others. Because of parents' lack of familiarity with the manner in which other families interact and because of their extreme interest, subjects will quickly see the importance of a study in this area and will therefore be motivated to cooperate. Promising the subject a report on some of the findings will add incentive, enhance involvement and help make him feel a part of something important. Even though the reluctance to participate may be motivated by a need for privacy, the subject's feeling of making a contribution may be as helpful in gaining cooperation as the assurance of anonymity."
The above suggestions given by Mussen, as a result of the research experience of many psychologists, were carefully adhered to, while approaching parents for their cooperation in the study.

As soon as the schools in a particular locality were contacted and the Questionnaires filled in by the adolescents, the parents of the subjects were contacted. Usually only the mother was at home, sometimes the investigator was lucky enough to meet both the parents. Since a letter had been sent to them from the school, through the child, the parents were almost always welcoming to the investigator. The nature and purpose of the Questionnaire, already written on the Questionnaire itself, as well as the way in which it had to be answered was then explained at length to them, in the following manner:

The investigator having introduced herself, explained that she was making a study of 400 families for her Ph.D. Degree. Through her experience as a counsellor she had realised that many of the difficulties that teenagers face could be overcome with the help of their parents. The parents were requested to participate in this project and to share their valuable experience of how they dealt with their children. This would be of immense help to other parents as well as to school Principals, teachers and Counsellors who dealt with adolescents in different capacities.
Since the Questionnaire needed at least half an hour to read through and some reflection before answering it, it was thought prudent not to pressurise the parents to answer it on the spot. With the necessary explanations, the Questionnaire was left behind with 2 Answer Sheets, and with specific instructions that the same Questionnaire had to be answered separately by the Father and Mother of the adolescent. They were requested to answer it when they had some free time and were given a stamped envelope with the investigator's name and address on it, to be posted within 2 days.

Another type of difficulty usually encountered in collecting data from parents, as mentioned by Mussen (1960) is the following:

"Once the subjects have been located, the researcher faces another obstacle, one which stems from the aura of privacy that surrounds family life. The high value on family privacy may provide a barrier on certain points.

1) The family members may not wish to reveal what goes on in the home and thus refuse to participate.

2) Even if cooperation has been agreed upon, the family members may hold certain aspects of their home life as inviolate."

The first reaction of the parents when told about the research being on family experiences, was to be on their defensive
The investigator put them at ease by showing them the Questionnaire and reassuring them that their privacy would not be invaded upon. When they read the Questionnaire and saw the harmless stimulus statements which are the common experience of all parents, as well as the neutral statements of the Dogmatism Scale they felt more relaxed. Their co-operation was more forthcoming once they were told that they need not answer the Questionnaire in the presence of the investigator and could do it later. This made them drop their defenses and many parents even sat down and discussed their personal difficulties in dealing with their adolescent children. Many asked that they be sent a copy of the findings of the study and full assurance was given to them on this point. Before leaving the house, the investigator asked them once again whether they were willing to participate in the project. In some cases — very few of them — the parents refused and the Questionnaire was not given to them.

After a week or ten days, if the Answer Sheets did not reach the investigator, a letter was sent to the parents to remind them of the Questionnaire. After another month or so, a second reminder was sent, if the first letter had not proved effective. As a result of these letters, more than 2/3rds of the parents who had been visited, sent back their Answer Sheets duly filled in. 550 families were contacted, out of which 400 were selected for the final sample. The rest were eliminated either because of non-response or of incomplete response.
VI) Pilot Work

Two pilot studies were conducted, as a result of which the tools used were constructed, tested and perfected before analysing the results of the research.

The Adolescents' Questionnaire consisted of 2 parts:
   a) A problem Check List
   b) A Scale to measure the Family Atmosphere.

A Problem Check List similar to that of Mooney's Problem Check List administered to 100 adolescents did not prove to be very useful since it was difficult to judge on its basis alone, how well adjusted the adolescent. Hence it was discarded since the measurement of adjustment was not very precise. Then Bell's Adjustment Inventory was tried out on 50 adolescents, but was also given up to be replaced by the Youth Adjustment Analyser of Miss M. Bengalee. The separate scales measuring adjustment in the home and to the parents seemed to be an extra asset to the present study.

The Family Atmosphere Scale was developed on the pattern suggested by Morrow and Wilson. As already mentioned before, the Scale consists of a number of sub-scales with items based on different aspects of family life.

The Parents' Questionnaire also consisted of 2 parts:
   a) Level of Communication Scale
   b) Scale of Dogmatism.
The Level of Communication Scale, as already described, went through a number of stages before it was administered to parents.

The Scale of Dogmatism of Qamar Hassan was used without any changes being made in it.

**Pilot Study I**: The sample consisted of 30 teenagers and their parents. The teenagers all answered the questionnaire. Of the questionnaires given to parents, only 20 were answered. The stimulus statements made by children were presented to them in the form of a questionnaire and they were asked to write their response to each of these statements. These responses were then rated by 3 Experts. The results of this study were not clear as the sample was inadequate and the questionnaires were not completely filled in by some parents. Hence another pilot study was conducted.

**Pilot Study II**: Modifications were made both in the parents' and the adolescents' Questionnaire. This time the sample consisted of 57 adolescents and their parents. However, some questionnaires were incomplete and had to be dropped, reducing the sample to 38 adolescents and their parents. The main hypotheses were tested yielding the following results:

a) A correlation of .12 was found between the Level of Communication of Fathers and total adjustment of adolescents.
b) A correlation of .09 was found between Level of Communication of Mothers and total adjustment of adolescents.

c) The correlation between Level of Communication and Dogmatism was .16.

d) The Correlation between Level of Communication and Family Atmosphere as perceived by adolescents was .26.

Conclusions of the Pilot Studies:

a) Although the correlations were not significant, it was encouraging to see that they were positive and yielded some results according to expectations.

b) A further modification was introduced in the Level of Communication Scale for the parents, as already explained before.

c) The YAA was not properly understood by some 14 year old adolescents. Hence the adolescent sample was selected to cover the age range of 15 to 17 years.

VII) Final Procedure for Collective Analysis of Data

The answer sheets of the Adolescents and their parents were scored and the data was analysed using the following Statistical techniques :-
a) Biserial Method was used to find the correlation between Level of Communication of Fathers and Mothers, which was a dichotomous variable and other continuous variables like Dogmatism, Total Adjustment of Adolescents, Family Atmosphere and Family Adjustment.

b) Product Moment Method of correlation was used to find the correlation between two continuous variables - Family Atmosphere Scale and the Family Adjustment Inventory.

c) Analysis of Variance was used to compute Sex and Community Differences in significant variables like Dogmatism, Total Adjustment Scores of Adolescents, Family Atmosphere Scale scores and Family Adjustment Inventory scores.

d) The Chi-Square Test of Independence was used to see if the Level of Communication of Fathers and Mothers was related to Occupation, Education, Age, Sex and Community of Parents.

e) Simple averages and percentages were used to analyse the responses to the open-ended questions, as well as some of the bio-data of the subjects.