CHAPTER III

METHOD AND PROCEDURE
3.1 **Design of the study**

In a scientific study it is essential to select the sample scientifically and to administer reliable and valid tools under condition essential for the administration of the psychological tests, so that the results should be dependable and realistic inferences can be drawn. The researcher selected the experimental method. At first survey was conducted to locate public schools in Himachal Pradesh in addition to those which are real public schools. The name public school was not the guideline but schools which maintained standard with regard to facilities, syllabii and activities, equivalent to the real public schools, but were not the members of Indian Public School Conference were also included in the data. In order to know the problems of foreign based public school students paired group technique was designed. For this purpose each one who was originally Indian, but whose parents resided in some foreign country and was selected in the sample, was equated from amongst the students studying in the same institution but whose parents lived in India, but had the similar socio-economic background and intelligence. Each pair was equated on the basis of sex, age, educational qualification, occupation of
parents, income, size of family, and intelligence, from the same institution.

As the study was an experimental investigation in which the paired group technique was used, the group of foreign based Indian public school students (FBIPs) was used as experimental group and Indian based public school students (IBPs) studying in such institutions was used as controlled group. Henceforth with foreign based public school students, foreign based public school boys and foreign based public school girls will be written as FBIPs, and FBIPsG respectively. In the same way Indian Based public school includes Indian based public school boys & Indian based public school girls will be written as IBPs, IBPG & IBPGG respectively.

3.2 Sampling

First of all a survey of real public schools (P.s) and public type schools (P.T.s) which had the reputation of being public schools but were without any membership of the Indian public schools Conference was made and the list was drawn up (table 3.1). Hence forthwith public schools & public type schools will be written as P.s, and P.T.s, simultaneously.
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of school</th>
<th>No. of students</th>
<th>No. of Foreign Based Indian Students</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lawrence School, Saver</td>
<td>600</td>
<td>110</td>
<td>50</td>
</tr>
<tr>
<td>2.</td>
<td>Chail Military School, Chail</td>
<td>500</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>Sainik School, Sujanpur Thrice</td>
<td>300</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>Bishop Cotton School, Shimla</td>
<td>600</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>5.</td>
<td>Auckland House School Shimla</td>
<td>580</td>
<td>40</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Himalayan International School, Shimla</td>
<td>250</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>7.</td>
<td>Jesus &amp; Mary Convent, Shimla</td>
<td>600</td>
<td>40</td>
<td>-</td>
</tr>
<tr>
<td>8.</td>
<td>Our Lady of the Snow School, Kulu</td>
<td>200</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>9.</td>
<td>Sacred Heart School, Dalhousie</td>
<td>600</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>10.</td>
<td>Dalhousie Public School Dalhousie</td>
<td>400</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>11.</td>
<td>Sacred Heart School, Dharamsala</td>
<td>300</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>12.</td>
<td>Dagshai Public School, Dagshai</td>
<td>250</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>13.</td>
<td>St. Soldier Divine Public School, Dagshai</td>
<td>200</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

Total: 5,280 356 148 2

Table 3.1
Strength of Total and Foreign Based Indian Students of Public Schools in Himachal Pradesh.
Himachal Pradesh
Map of Himachal Pradesh showing the location of P.S. and P.T.S. of the study

Chamba
- Dalhousie
  - SII (Sacred Heart)
  - DPS (Dalhousie Public School)
- Dharamsala
  - Sacred Heart School
- Kangra
- Una
- Bilaspur
- Hamirpur
- Mandi
  - Mandi Public School
  - Mandi Mandoghar
- Kulu
- Lahaul and Spiti
- Kullu
- Shimla
- Solan
  - Solan Public School
  - Solan Lawrence Public School

Reference:
- 3+ P.S. Public School
- 10+ P.T.S. Public Type School
A letter was addressed to the headmasters of all these schools requesting them to give information about the number of foreign based Indian adolescent students aged between 12 to 18 in their schools (Appendix No.1). This was followed by reminders, personal visit and telephonic talks as a result of which the number of such students studying in these schools, was revealed (Table 3.1).

Only 356 such students were available in P.S. and P.T.S. in Himachal Pradesh, so it was decided that all these students be included in the study. Amongst these students 256 were from advanced countries and 90 from developing countries. Out of them 148 were boys and 208 girls. Out of this total of 356, 130 students were below the age of 12 years who could not be included in the study. In the study of the data collected in the socio-economic schedule, it was noticed that 50 students were not living in hostels, but lived with their relations i.e. grand parents, uncles, aunties, maternal uncles etc. A few of them also resided with the friends of their parents. All such students were not made the subject matter of this investigation. In all 128 students were studying in P.S. and 228 in P.T.S. When the investigator visited these institutions, he found that there were some students whose parents had been staying abroad for less than three years and as such they were also not included in this study.
This left only 150 students of both the sexes. At the
time of conduct of testing programme fifteen students
were not available. When the socio-economic schedule
was got filled in by these students, it was noticed
that eighteen of them had lost either both of their
parents or one of them. They were excluded from the
sample. Besides, this the data collected on the socio-
economic schedule also indicated that seventeen students
were the only children of their parents. The problems
of such students too were expected to be different
from ordinary students and as such, they were also not
included in the investigation. In this way the research
worker was left with only 100 students whose parents
lived in foreign countries, but who had sent their
wards to the hostels of P.S. in Himachal Pradesh.

3.3 Construction and Standardisation of Tools

In this investigation the following tools
were to be used for the experimental study:

1. Intelligence Test
2. Socio-economic Schedule
3. Problem Inventory
4. T.A.T.
5. Interview Schedule

The tool at serial No. 1 and 2 i.e., Intell
test and socio-economic schedule were used for the
formation of paired groups, while tools from serial No. 3 to 4 were put to use to evaluate the differences in personality and the problems between FBIPs and IPs. The tool at serial No. 5 was used to locate the problems of institutions by keeping FBIPs on their strength.

1. **Intelligence Test:**

   In order to equate the students in intelligence, Dr. Jolota's Intelligence Test, which has already been standardised and is widely used was administered. The test has the reliability of .938 and validity between + .50 to + .78.

2. **socio-economic schedule:**

   This was to be used to assess the social and economic background of the students' families i.e., material possessions, role of the family members in the community, parents' qualifications, occupation, the adjustability of the student with regard to his studies, co-curricular activities, games and hostel. The investigator could not lay his hands upon any such standardised tool, and decided to construct his own instrument.

   The aim of the construction of the schedule was to use it to equate FBIPs with IPs studying in the same institution. The schedule was at first
drafted by the investigator and then discussed with the
workers engaged in the field of education and educational
research. Some changes were made in the light of their
suggestions. It was then circulated amongst ten Heads
of Departments of Education in Universities and Principals
of Training Colleges and their opinion was sought for
making it valid and reliable. It was then discussed with
the Headmasters of five public schools and the equal
number of class incharges in these schools. The suggestio
given by them were incorporated in the schedule. The
schedule was then got cyclostyled (Appendix II) and
filled in by twenty students of Bishop Cotton School,
Shimla. In the light of the difficulties experienced
by them some changes were made in it. It contained two
parts. The information in part A was to be collected
from the students and in part B it was to be obtained
from the teacher incharges after explaining the main
objectives and techniques involved in giving the opinion.

The information was to be used to pair out
the students. The main idea behind the construction
of this tool was to equate, as far as possible, one
MBIPes with another MBIPes of the same school. For
this purpose the students were to be paired out on
socio-economic data and the intelligence. The schedule
was broadly divided into three parts. The first part
contained the bio-data of the students. This contained
the name of the institution, class, age, father's address,
the information about the parents, address in India,
ancestral address in India, guardians in India, monthly
expenses in the school. The second part contained
sub-parts A and B.

The sub-part A of the second part was to be
filled in by the student himself and was later on to be
authenticated by the teacher incharge. The information
about the occupation of the father was to be given on
five point scale, information about mother's occupation,
income, total income from all sources; total number
of family members, social status, reasons for sending
the wards to India and the duration of his being in
public schools in India.

The sub-part B of the second part was to be
filled in on five point scale by the teacher incharge
indicating the social status of the parents, his behaviour
his position in studies, games and sports, co-curricular
activities, adjustment, behaviour in hostel and overall
behaviour. In order to be objective in making pairs
that information to be given by the teacher incharge
in part B of the schedule was to be given by the same
teacher in case of both the students of the same
institution.

**Weightage to the items of the schedule:**

The tool was to be used for equating one FDPs with another FDPs. For this purpose numerical appropriate weightage was given to each item. This was discussed with the jury of experts which included Heads of the public schools, teachers of public schools, members of the staff of Department of Education, research scholars, members from Department of Psychology, and teachers of the Correspondence Courses of Himachal Pradesh University. As a result of it the weightage given to different items on the schedule was finalised. The weightage is appended at Appendix No. III.

**Reliability:**

Before the use of socio-economic schedule it was ensured that the tools was a reliable one. The reliability was increased by removing ambiguous questions modifying the mode of having the responses and putting it in an appropriate format. However, in order to test it the schedule was given to 25 students and repeated upon them after a period of ten days and scored. The co-efficient of correlation between two scores came to be .89 which was quite high.
Validity:

The content of the schedule was validated by discussing with the teachers, research workers and house master and by dropping, modifying and adding the information to be asked in the schedule. It was further validated by administering it on the students and avoiding double-edged and complicated questions and further improving them in the light of difficulties faced by them.

standardization of Timing:

The idea behind the standardization of timing was not to disallow any student to attempt the tool beyond the time limit. It was to assess firstly the time, which should, generally, be given to the students for attempting it and secondly to assess the overall time needed for the conduct of this investigation in order to evaluate it. The tool was given to 20 students. They were able to fill it in the time ranging from 10 to 12 minutes with an exception of only 2 students who were found to be non-serious.

printing of the socio-economic schedule:

After giving the above treatment, the tool was got printed keeping in consideration the paper size, managing of the spaces, etc. It is appended in Appendix No. IV.
The investigator was in need of a tool for evaluation and comparison of personality-needs of the students. He found that Indian adaptation of T.A.T. by Dr. Uma Chaudhry had been fairly used in a good number of studies though reliability of this adaptation has not yet been worked out. The test along with the manual was bought. Separate sets of 12 pictures for males and females consisting of the following, as prescribed in the manual were used:

For Male:

T₁, T₂, T₃, MB, T₄, M.R., T₅, T₆, T₇, T₈ add,

T₉, T₁₀, Blank Card.

For Female:

T₁, T₂, T₃, F.G., T₄, F.G., T₅, T₆, T₇, T₈ add

T₉, T₁₀, Blank Card.

Each student was to be given one of these pictures and told to write down a story based on the picture but having the four aspects i.e., what do you see in the picture? How were the actors in the picture related with one another? What had happened earlier than the occurrence in the picture? What will happen after it?
When the story was completed, the investigator red it and in case some links were missing, the student was asked questions and the story was completed. After finishing the 11th picture a blank card was provided to the student for writing the story. He was to imagine that there was a picture in the card and then to coin a story of his own, based upon that imagined picture containing answers to the above said four questions. The investigator found that the time taken for writing these stories ranged from two hours to three hours for each student. The test was administered by the research worker individually to each student, after fixing the time with the Headmaster.

The investigator was trained in the administration of T.A.T. by his supervisor who had extensively used this tool in many a research project. Originally he got the training in Bureau of Psychology, U.P. Government, Allahabad for his doctorate study. He observed the investigator when he administered the tool in Auckland House School, Shimla and Lawrence School, sanawar, Shimla Hills.

**Scorer's Reliability:**

After the test was finally administered on a sample, the test protocols of the two schools, selected at random by drawing lot, were taken. The schools along with the number of 20 students which were selected as
such are detailed below:

**Table 3.2**

The students used for scorer's reliability

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Schools</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Auckland House School, Shimla</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Lawrence School, Sanawar</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

All the stories written by the above 20 students along with 20 blank sheets used by the investigator for the purpose of tabulation of the scores were sent to Dr. B. Shodhi, Assistant Professor, Department of Education, Himachal Pradesh University, Shimla. He was very kind to score them and to send them back along with scoring sheets to the investigator in a sealed cover with the instructions not to open that till the test protocols were scored by the investigator. The coefficient of scores was calculated by applying ranked-difference method for all the personality-meeds. The coefficient of reliability was found to be .82.

The investigator then scored all the sheets of the students personally and obtained the scores.

All the pairs formulated for carrying on this investigation were given T.A.T. The groups were compare
on different variables which have been explained below.

**Definitions of personality-needs**

**Affiliation**

To draw near and enjoyability cooperate or reciprocate with an allied other (another who resembles the subject or who likes the subject). To adhere and remain loyal to a subject.

**Emotional Maturity**

It is the decision taking act at emotional level of thinking, but is a mature level of emotional thinking. It is to think in a mature way.

**Social Adjustment**

This is to adjust with social circumstances and to behave in a mature social way.

**Achievement**

To accomplish something difficult. To master, manipulate or organise physical objects, human beings and ideas. To do this as independently and rapidly as possible. To overcome obstacles and to obtain a high standard. To excel oneself to rival and surpass others. To increase self retard by the successful exercise of talent.
Autonomy

To get free. To shake off restraint. To break out of confinement. To avoid or quit activities prescribed by domineering authorities. To be independent and free to act according to impulse. To be unattached. To defy convention.

Aggression

To overcome opposition forcefully. To fight. To revenge an injury. To attack, injure or kill another. To oppose forcefully or punish another.

Nurturance

To give sympathy and to gratify the needs of a helpless object. To assist an object in danger. To feed, help, support, console, protect, comfort, nurse and heal.

Exhibition

To make an impression. To be seen and heard. To excite, amaze, fascinate, entertain, shock, intrigue, amuse, or entice others.

Recognition

To get importance. To feel that one is a part of the decision making process. To be able to manage the things in an effective way.
Personal Adjustment

To be able to adjust his personality in accordance with the situation and not to be rigid and haughty.

Counter-action

To master or make up a failure by striving. To obliterate a humiliation by resumed action. To overcome weaknesses and to repress fear. To efface a dishonour or action. To search for obstacles and difficulties to overcome. To maintain self-respect and pride at a high level.

Harm Avoidance

To avoid pain, physical injury, illness and death. To escape from a dangerous situation. To take precautionary measures.

Blame-avoidance

To try to avoid the blame from oneself. To act in such a way that one does not get the blame upon him.

succourance

To have one's need gratified by the sympathetic aid of an allied object. To be nursed supported, sustained, surrounded, protected, loved.
advised, guided, consoled. To always have a supporter.

Abasement

To admit passively to external force, to accept injury, blame, criticism, punishment. To surrender, to become resigned to fate. To admit inferiority, error, wrong doing or defeat. To confess and atone. To blame. To belittle or mutilate the self. To seek and enjoy pain, punishment, illness and misfortune.

Interview schedule

This schedule was constructed for interviewing the Headmasters and house-masters of E.B.P.S. so as to spell out and enlist the problems being faced by the institutions because of their presence. For example Passport and Visa, delay in payments, political interference, difference in courses of curriculum abroad, non-uniform clothes of high standards and westernised fashion, parents not sending their documents in time, sickness of the children, adjustment to Indian culture, language problem, adjustment in school organization and sex etc. The researcher himself had the experience of working in two public schools and was quite alive to these problems. However, in order to be clear about the content of the problems which can be numerous and which also changed with the time as the rules, regulations of foreign exchange etc. go on
changing, the investigator interviewed three Headmasters and three hostel superintendents. Based on the information revealed by them the research worker constructed an open-ended interview schedule. This schedule was discussed with the Jury of experts and changes made in it in the light of their suggestions. However, the schedule was kept open ended so that if there was some information which was not asked for and was to be revealed could be recorded. The schedule so finalised and used in this research has been appended in Appendix V.

**Problem Inventory:**

The problem Inventory was to play a very important role in this piece of research. The research worker tried to find if some such tool was available to investigate into the problems of boarder students of public schools. He could not lay his hands upon any such instruments. One general students problem inventory by Badami, M.D. was available. This was meant for the college students and was not specifically made for the type of the students i.e., FBIPs. Thus, it was not found to be an appropriate test for this investigation. The alternative left with him was to prepare a tool of his own for this purpose. The problem was discussed with the students living in boarding houses, Headmasters and Wardens. The investigator took some help from the Inventory prepared by Sochi, T.S. and Kaur, Balbir(1982) coined by them for the conduct of their
research project on "Problems of Hostel Students in Himachal Pradesh University". At the same time Badami's inventory was also consulted. The researcher discussed the problems being faced by the students who were studying in P.S. or P.T.S. of Himachal Pradesh and prepared an exhaustive list of their problems. This list was quite exhaustive and contained 200 problems. For the purpose of convenience the problems faced by the students were categorised into the areas of physical facilities, educational, sexual, social, economic, psychological, family, adjustment problems, health and physical fitness and cultural.

After categorization it was noticed that some of the problems cut across different areas. The items were discussed with the workers who were engaged in the field of research in Education, Psychology and Sociology and also with the House master of public schools. The items which were not found appropriate were either improved upon, or pooled together or deleted. After this the investigator had expert opinion. After doing so the number of items left were 154. These items were put into 10 categories. The inventory was then got cyclostyled and circulated amongst the persons engaged in the field of research. Appendix VI. Their opinion was sought about the items. The items which were not
This left only 150 students of both the sexes. At the time of conduct of testing programme fifteen students were not available. When the socio-economic schedule was got filled in by these students, it was noticed that eighteen of them had lost either both of their parents or one of them. They were excluded from the sample. Besides, this the data collected on the socio-economic schedule also indicated that seventeen students were the only children of their parents. The problems of such students too were expected to be different from ordinary students and as such, they were also not included in the investigation. In this way the research worker was left with only 100 students whose parents lived in foreign countries, but who had sent their wards to the hostels of P.S. in Himachal Pradesh.

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The information was to be used to pair out the students. The main idea behind the construction of this tool was to equate, as far as possible, one student of another in the same school. For this purpose the students were to be paired out on socio-economic data and the intelligence. The schedule was broadly divided into three parts. The first part
contained the bio-data of the students. This contained the name of the institution, class, age, father's address, the information about the parents, address in India, ancestral address in India, guardians in India, monthly expenses in the school. The second part contained sub-parts A and B.

The sub-part A of the second part was to be filled in by the student himself and was later on to be authenticated by the teacher incharge. The information about the occupation of the father was to be given on five point scale, information about mother's occupation, income, total income from all sources, total number of family members, social status, reasons for sending the wards to India and the duration of his being in public schools in India.

The sub-part B of the second part was to be filled in on five point scale by the teacher incharge indicating the social status of the parents, his behaviour, his position in studies, games and sports, co-curricular activities, adjustment, behaviour in hostel and overall behaviour. In order to be objective in making pairs that information to be given by the teacher incharge in part B of the schedule was to be given by the same teacher in case of both the students of the same
research project on "Problems of Hostel Students in Himachal Pradesh University". At the same time Badami's inventory was also consulted. The researcher discussed the problems being faced by the students who were studying in P.S. or P.T.S. of Himachal Pradesh and prepared an exhaustive list of their problems. This list was quite exhaustive and contained 200 problems. For the purpose of convenience the problems faced by the students were categorised into the areas of physical facilities, educational, sexual, social, economic, psychological, family, adjustment problems, health and physical fitness and cultural.

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found relevant by the experts were deleted or modified. The first format of the inventory was then distributed amongst the students of Bishop Cotton School, Shimla, and got filled in. The difficulties faced by them were noted and changes were made in the body of the inventory in the light of the suggestions. It was again circulated amongst the experts for giving their suggestions. No concrete suggestion were received. However, for the two reasons, i.e. firstly that the students were biased when they gave information under different headings and secondly that some of the items were such that these could reflect more than one type of problem, the items were mixed up. This was done by putting the statements of the inventory on separate pieces of paper and putting these in a pot. The lots were drawn and the problem inventory was prepared accordingly.

Scoring key of the inventory was prepared keeping in view the area of the problem. The items which cut the boundaries of more than one type of problem were scored in the key in such a way that it got the weightage for areas also into which it put its weight. This inventory was prepared for the adolescents. The final format of the inventory is appended in Appendix No. VII was drafted keeping in mind the characteristics of its construction. The Principles of making items
found relevant by the experts were deleted or modified. The first format of the inventory was then distributed amongst the students of Bishop Cotton School, Shimal, and got filled in. The difficulties faced by them were noted and changes were made in the body of the inventory in the light of the suggestions. It was again circulated amongst the experts for giving their suggestions. No concrete suggestion were received. However, for the two reasons, i.e. firstly that the students were biased when they gave information under different headings and secondly that some of the items were such that these could reflect more than one type of problem, the items were mixed up. This was done by putting the statements of the inventory on separate pieces of paper and putting these in a pot. The lots were drawn and the problem inventory was prepared accordingly.

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more precise referred by Best (1959) by giving up items which could be misinterpreted, avoidance of descriptive adjectives, double negatives in adequate alternatives, double-barrelled questions, unwarranted assumptions, the principles of underlying a word in case of special emphasis, a point of reference in case of ratings and provisions of systematic quantification and classification of responses were employed in its formulation.

reliability of the Problem Inventory

The traditional process of calculating reliability did not work with this tool.

Table 3.4
Number of Items in Different Areas of the Inventory

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Area</th>
<th>No. of items in the second format</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Physical Facility</td>
<td>36</td>
</tr>
<tr>
<td>b)</td>
<td>Educational</td>
<td>62</td>
</tr>
<tr>
<td>c)</td>
<td>Sexual</td>
<td>13</td>
</tr>
<tr>
<td>d)</td>
<td>Social</td>
<td>61</td>
</tr>
<tr>
<td>e)</td>
<td>Economic</td>
<td>17</td>
</tr>
<tr>
<td>f)</td>
<td>Psychological</td>
<td>56</td>
</tr>
<tr>
<td>g)</td>
<td>Family</td>
<td>13</td>
</tr>
<tr>
<td>h)</td>
<td>Adjustment</td>
<td>115</td>
</tr>
<tr>
<td>i)</td>
<td>Health</td>
<td>26</td>
</tr>
<tr>
<td>j)</td>
<td>Cultural</td>
<td>47</td>
</tr>
</tbody>
</table>
It was enough that the problems had been carefully edited to allow little ambiguity. The instrument in itself was quite comprehensive. It gave a good deal of opportunity to the student to reveal all serious problems.

**Validity of the Tool:**

The present inventory is not built as a test. It can be used for variety of purposes such as better understanding of the student by the teacher, to assess the effectiveness of various plans executed in reduction of the student problems and also to conduct research. Further its validity can be established to a certain extent by inspecting the inventory in the light of the method used to obtain its content. In preliminary experimentation most of the students of various public schools and public type schools in the sample were approached. The problems were collected in a systematic way. The statements were carefully edited in order to ensure freedom from ambiguity.

This made the Inventory a valid instrument as it was based on the problems indicated by the student. It was thus noticed that the tool was reliable, valid and usable. It was then got printed and used as such for conduct of the investigation.
3.4 Collection of Data

A team consisting of two members, both of whom were trained graduates, was formed. They were provided with proper training in the art of administration of the tests. After fixing up the time with the Heads of the Institutions, the tests were administered by the members of the team along with the investigator under normal conditions. The enquiry part of the administration of the T.A.T being more technical was conducted by the investigator himself. The Heads of institutions generally cooperated with the exception of two who did not realise the importance of the research project and had to be tackled tactfully.

First of all the intelligence test and socio-economic schedule were given to the students whose parents lived abroad and had been selected by the investigator as detailed above. Then the same tools were given to the other population of the same school and the same class. These tests were then scored and the pairs were formed so that T.A.T was equated with one I.E.P.S.

In this way in all 100 pairs were formulated.

The students of each institution were seated comfortably well apart from each other so that they could not consult one an other. Rapport was established with them to get best cooperation from them. They
were assured that the information collected from them would be only used for research purposes and will not in any case be revealed to their friends, parents, house master, Headmaster etc. The room selected was well lighted and airy. Noise was controlled also so that there was no disturbance. They were provided with problem inventory and were asked not to turn over the page till they were asked to do so.

The students were first instructed to fill the columns at the top of first page of problem inventory with their names, name of the institution, age, class, date and year of joining the institution, permanent address of their parents and for foreign based Indian students, their parents' total period of stay abroad.

The instructions printed on the front page were read aloud and made clear to them. Then for the sake of practice and clarity two or three examples were explained with the help of blackboard. It was stressed that there was no time limit to finish this inventory. They were requested to tick mark the problems which they thought were bothering them. If it was not bothering them, they might skip over the item. When it was clear to them, the students were asked to start attempting them. The students who finished the inventory were requested to move out. When all the
students had finished their job of attempting the problem inventory, they were given a break for about 20 minutes so that they might feel fresh.

This was followed by the administration of T.A.T. which was done individually and not in a group. A student was seated in a room and made to feel comfortable after chatting a bit with him. He was again assured to be fearless as the information was to be kept strictly confidential and not to be passed on either to the parents or the school or any other organization or individual. The pictures were arranged in a sequence and the subject was requested to write a story on the basis of the picture in the card and containing answers four questions detailed under the tools above.

Both the members of the team started with the T.A.T. with two individuals at the same time. The investigator himself went to each of the two rooms, read the stories written by the students and prepared some questions in order to complete the stories written by the students. The questions were asked by the investigator personally and answers given by the student recorded on the back of the paper on which the story was written. This was done when the individuals had
finished the writing of stories based on all the cards including the blank one. After the work of T.A.T. was finished which took on an average three hours in case of each student, he was thanked and allowed to go.

The stories were arranged in the same sequence in which the cards were presented to the students and tagged along with the problem inventory of the student.

Interview schedule

In order to know the problems faced by the institutions because of FBIPEs being on their roles three principals and three house-masters, selected at random were interviewed and their interviews recorded in the schedules. The information thus collected was pooled and reported.

3.5 Scoring

First of all the problem inventory was scored. It was worked out as to how many students felt the problem in the total groups, amongst males and amongst females in FBIPEs and IDPEs.

The scoring of T.A.T. was done after going through each story and rating each need on five point scale as suggested by Murray. The total of each of
the area for all the twelve stories of each student was done on a sheet at Appendix VIII. Similarly the work of scoring of all the students of all the schools was completed.

3.6 **Statistical Treatment:**

For the purpose of comparing the different groups of the students on T.A.T., S.D., Mean and significance of Difference in the Means was worked out on the score of T.A.T. The statistics thus collected were got processed by the computers in Punjab University Chandigarh, for which the request was made by the Head of the Department of Education, H.P. University, Shimla.

However, for the scoring of the problem inventory it was not possible to give the same treatment as it was to be treated with non-parametric technique. So the $X^2$ was applied to the data. This too was got done on computers.

After giving the statistical treatment to the data, it was tabulated accordingly for the purpose of its analysis and discussion and also drawing out the educational implication and conclusion.

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