IV

METHODOLOGY
The main purpose of the research study was to measure and understand the nature of the parental attitudes toward their handicapped children., visually handicapped, hearing handicapped and orthopaedically handicapped, and also to assess the self-perception of the children and to study how effectively the daily activities are performed by the children.

Area of study

The State, Andhra Pradesh, consists of three regions namely Rayalaseema, Telengana and Coastal Andhra, and among the three, Rayalaseema is said to be a backward area consisting of relatively a low income families, excepting a few of the business and educationally elited families. Among the four districts of this region namely Cuddapah, Chittoor, Kurnool and Anantapur, two districts, i.e., Chittoor and Cuddapah districts were selected. Within these two districts, towns namely, Tirupati (the local place), Chittoor and Cuddapah were considered to be the ideal place. The main reason for this is because of the availability of special Institutes/Special Schools which cater their services to the physically handicapped children. It was decided to select the handicapped children from these centres. In the local place Tirupati, two such institutes exist. They are: Sree Venkateswara Deaf School and Artificial Limb Fitting Centre, Balaji Complex, both run by the Tirumala Tirupati Devasthanam.
In Chittoor, Girls Home for the physically handicapped children, under the control of State women and child welfare department was also selected. On the other hand, Government blind school situated in Cuddapah which is aided and maintained by the State Government was another centre. These institutes provide educational, residential facilities and day facilities for the handicapped children, and special aids depending upon the nature of the handicap. These facilities are rendered at a free of cost basis. Besides, the officials and other responsible personnel of these centres help their inmates in vocational training and in finding suitable jobs once they complete their studies. During the period of this investigation, nearly 500 children with the three major physical handicaps from the said centres received the benefit. The special institutes function in a proper way and devote their time and energy in the upliftment of the handicapped children and they try their maximum to bring the children to cope up in their lives.

Before the selection of the handicapped children from a total of four institutes (blind, deaf and orthopaedic centres) in two districts of Andhra Pradesh, the initial approaches were made to the concerned authorities and special permission was accorded by them to the investigator. Later, the purpose and the outcome of this study was explained to them in a discussion. Their co-operation was sought in this endeavour. After this step only, the investigator could go further into the selection of sample.
Selection of Sample

Among the total of 500 handicapped children from the said institutes, 120 children both boys and girls between the age range of 6-15 years with different types of physical handicaps were selected randomly from the registers maintained i.e., 40 VH children from the Blind School, Cuddapah, 40 HH children from the Deaf School, Tirupati and 40 OH children from both Girls Home for the physically handicapped, Chittoor and Artificial Limb Fitting Centre, Tirupati. Among the sample of 40 of each type of handicap, 20 children living at home and attending the special schools/normal schools, and 20 children studying in the same special school and lives within the residential setup were taken. The sample thus taken were from rural, semi-urban areas of the selected areas representing varied community backgrounds and having almost similar type of family living. Thus, the chosen children both boys and girls possessed varying degrees of visual handicap, auditory handicap, and poliomyelitis and other orthopaedically handicapped conditions. Only children with parents who are alive were selected.

Table 1: Distribution of the handicapped children selected for the study

<table>
<thead>
<tr>
<th>Type of handicapped children</th>
<th>Institutionised children</th>
<th>Non-institutionised children</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visually handicapped (VH)</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Hearing handicapped (HH)</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Orthopaedically handicapped (OH)</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>60</td>
<td>120</td>
</tr>
</tbody>
</table>
The addresses of 120 handicapped children were collected. Parents of these children were met individually and before collecting the information the purpose of the study was explained to them in an informal way.

These parents were the main sample for the present study, and they represented different age groups, educational levels, and socio-economic status (predominantly from low-income and middle-income group).

For a comparison of the attitudes, 40 parents, both fathers and mothers having 2-3 normal children of 6-15 years were also included as sample. They were all residing close to some of the sample of parents.

**Table 2: Distribution of parents of the selected handicapped children**

<table>
<thead>
<tr>
<th>Group</th>
<th>Fathers</th>
<th>Mothers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents of VH children</td>
<td>40</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Parents of NH children</td>
<td>40</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Parents of OH children</td>
<td>40</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>Parents of Normal children</td>
<td>40</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>160</strong></td>
<td><strong>160</strong></td>
<td><strong>320</strong></td>
</tr>
</tbody>
</table>
Tools

Tools used for the study were:

I. To the parents:

* General purpose-Interview schedule covering personal and socio demographic information.

* Attitude scale - Adopted version of parental attitude scale developed by Bhatti (1975).

II. To the handicapped children:

* Daily Living Activities scale.

* Q sort Deck-Assessment of self-perception.

Interview Schedule

The format of the interview schedule about the handicapped child consisted items such as child's age, sex, caste, ordinal position etc., with regard to the parents, educational level, occupation and income per month were also included. Information pertaining to the handicapping condition such as causes, age of onset, identification and problems encountered by the parents also were part of the interview schedule (Annexure 1).

Description of the Attitude Scale

After reviewing the previous attempts made at the measurement of parents attitudes and behaviour the original author (Bhatti, 1975) of the tool found variety of research and informative reports on the reaction of families towards the retardates and hardly any attempts have
been made to measure the attitudes of parents towards mental retardation
and its management. After studying the available tools to assess
parental attitudes, Shoben's (1949) scale was selected to measure the
parent-child relationship and items pertaining to the other areas were
constructed. The four areas of the tool constructed are as follows:

Area I  The orientation of the parents towards child rearing - This
area consists of 35 items from Shoban's scale.

Area II  Knowledge of physical handicap: This area has eight items.

Area III  Attitudes towards physical handicap: This area has eight
items.

Area IV  Attitude towards management of physical handicap: This area
has five items.

Scoring

The instrument consists of a series of statements reflecting
the attitudes towards the child (Annexure II). Four responses for each
statement were given, strongly agree, mildly agree, strongly disagree,
mildly disagree. All the 56 items in the tool have the discriminatory
value. The weightage was given to each item according to Guilford's
(1942) formula and the total scores ranges from 0-148. The assigned
score for each item was given to the respondents' response. Through this
process the total scores was obtained for each of the 56 items. In this
study, a Telugu version of the scale was prepared for administering and
was used on the parents of handicapped children.
The corresponding scores ranging from 0-148 were classified into the following three intervals: 0-49, 50-98 and 99-148, and they were designated as Negative, Ambivalent and positive attitudes respectively.

The authors of the tool have reported satisfactory status of the tool with regard to reliability and validity based on comparison of scores with an interval of 6 years and comparing the pre and post level scores. However, they have expressed the need for establishing norms on a large scale for better use of the tool.

The following tests were evolved for use with the VH, HH and OH children.

(a) Q-Sort Methodology

Rationale

Q-sort methodology is a relatively new technique basically derived from multivariate analysis but varying from the traditional approach in respect of the application of correlations. Essentially this technique proposes to examine the structure in terms of the correlations obtained from a universe of traits properly sampled and correlated between individuals. It opens up a variety of new ways of testing hypotheses concerning human individuals, holistically and providing a synthesis of several traits converging into a meaningful picture. One of the common methods of Q-technique as advocated by William Stephenson (1953) is to develop a Q-sort deck consisting of a sample
descriptions and to get them sorted on a seven or eleven point scale by individuals with instructions to assign a specified number of cards in each of the rating pile. The number of cards to be put is pre-determined to follow a quazi normal distribution. Statistically this provides a unique advantage having the same mean and S.D and therefore possible to work out correlation between any number of such sorts fairly rapidly. This procedure has been found to be extremely useful in establishing degree of similarities or dissimilarities between any two sorts obtained with a pre-determined purpose. For example, we can obtain a sort for a handicapped child and also another sort for the same child but with a different purpose, namely how the child perceives himself and how the child perceives the same statements as it thinks he is perceived by the parents. We may refer to the first sort as self sort and the second as the parent sort. By correlating between these 2 sorts we can empirically establish whether the 2 perceptions are similar or dissimilar in terms of the correlation co-efficient. Against this rationale of the technique Q-sort methodology was chosen as appropriate to assess the perceptions of self and the perception of the parents as seen by the child. Discrepancies in these perception will be highly interesting to evaluate the status of the handicapped child in terms of inter-personal perception within the family.

Description of the tool

A Q-sort deck consists of 50 self reference statements (Annexure III) (Rogers and Dymond, 1954, modified by Venkatramaiah,
1965) which represents the sample of description revealing or reflecting the way a child refers to itself on various aspects of its life. On each card a statement is typed to constitute the deck of Q-statements. In the case of blind children 'Braille Version' of the statements in Telugu was prepared and used.

**Administration**

Q-sort is administered in two stages. First stage, 'self-sort' is obtained and in the second stage "parents-sort" is obtained.

**FIRST STAGE**

**Self-sort**

The deck of cards is placed before the child and the child is instructed as follows: "In this deck there are 50 statements printed one on each card. You take one by one, read the statement and examine whether they are 'most like you' or 'least like you'. In front of you I have kept 7 boxes numbered from 1 to 7 from left to right. 1 signifies least like and 7 most like you, in between are varying degrees of resemblance to you. If a card is least like you put in the box number 1, if the card is most like you put in box number 7, if it is in between select the box which is appropriate to you and put it in. But remember you cannot put any number of cards in any one of these boxes, but you will have to follow a specific number. For example, box number 1 and 7 should have one card (any card) box number 2 and 6 should have three cards. Similarly box number 3 and 5 should have twelve cards and box
number 4 will have eighteen cards. You are at liberty to re-arrange if you like the cards you have put in, until you are sure that you have put most appropriate cards in the box. Let me know when you have finished". After the child finishes, the examiner will record the card number and box number for all the 50 cards.

**Note:** Wherever the child could not sort the cards due to physical disability the investigator intervened and helped the child.

**SECOND STAGE**

**The Parent Sort**

In this stage the child is instructed as follows. "Now you will be presented with the same set of 50 cards for another sort. This time I want you to examine each card and say how your parents would consider each statement according to you 'least like you' or 'most like you'. The rest of the procedure of assigning the cards to each box remain as before. There is no change. Please go ahead and sort all the 50 cards into 7 boxes but this time examining each statement how your parents consider the descriptions 'least like you' or 'most like you'". As before the examiner records card number and the score in a separate sheet.

**Scoring and Interpretation**

From the recorded entries, the correlation between self sort and the parent sort are computed using the procedure described in
Kerlinger (1978). Higher the correlation, more the closeness. Negative correlation indicates change in the opposite direction. Any discrepancy in the perceived judgement of the statement would reflect the existence of a gap in the perception of the child (self) and perception of the parent as seen by the child.

Note: The 50 statements have been translated into Telugu, the regional language of the children.

(b) Daily Living Activities Scale

A 32 item scale was devised listing the daily activities (within the capabilities of the handicapped children) such as personal hygiene, dressing, wearing the special aid etc. (Annexure IV). The children were asked to respond to whether they could perform the tasks independently, or they are able to perform activities with some help (semi independent) or are they depending on the family members and friends to attend to the activity. Scores were numerically scaled as follows and recorded according to the degree of performance.

- Independently performing - 3
- Need help - 2
- Totally dependent on others - 1

Major Terms of the Study

Some of the major terms used in the study have been explained as follows:
Attitude: A relatively stable and enduring predisposition to behave or react in a certain way toward persons, objects, institutions or issues. Looked at from a slightly different point of view, attitudes are tendencies to respond to people, institutions or events either positively or negatively. The persons who do not have predominant tendency to act positively or negatively are called ambivalent.

Handicap: Any disadvantages imposed by an impairment or disability.

Visually handicapped: The children with no perception of light in both eyes together and who had light perception but cannot correctly count fingers of a hand even with spectacles in daylight also, and are educated through the brialle method.

Hearing Handicapped: The children who do not hear at all, not even loud sounds but understand only gestures and the children who are able to hear partially, thereby wearing the hearing aids continuously.

Orthopaedically Handicapped: The children who are unable to move normally or to exercise proper control over movement and as a result wear calipers, use crutches and wheel chairs.

Parents of the Handicapped Child: The biological parents., father and mother of a handicapped child is referred as parents.
Parents of the Normal Children: Parents, both fathers and mothers of 2-3 normal children.

Pilot Study

The translated (Telugu version) attitude scale was pre-tested/administered on a sample of 30 parents, i.e., 15 fathers and 15 mothers, of all the three types of handicapped children (each consisting of 5 fathers and 5 mothers) from the urban area and rural area. Each literate parent took around 40-50 minutes to complete the rating scale. The illiterate parents were asked to give their opinion for each of the statement which was read to them by the investigator. The responses given by the parents indicated that the wordings and meaning to the statements were appropriate and adequate. The rated scales were checked before giving the assigned scores to each of the statement.

Data Collection

An informal talk and an exchange of information with the parents made them to co-operate with the investigator.

(a) Personal interview method was used in collecting the data with regard to the background information of the handicapped child and about the socio-demographic aspects of the parents, which was regarded on the basis of the information provided by the head of the family, the father of the handicapped child.
(b) In order to obtain the attitudes of the parents toward their handicapped children, the attitude scale was distributed to the literate parents, both fathers and mothers. They were asked to rate the scale in the presence of the investigator. And the parents were encouraged to rate all the statements and to clarify their doubts. Whereas with regard to the illiterate parents, the researcher read out the statements one by one to the individual parent.

Throughout, the parents were given ample time to think and give their opinion.

The filled in rating scales were collected and the assigned scores were allotted very carefully for the 'strongly agree', 'mildly agree', 'mildly disagree' and 'strongly disagree'.

(c) To collect the information from the handicapped child with regard to the daily living activities performed by them, the scale was given to the HH and OH children. They were asked to read and mention the activities performed by them without the investigator's help. And in the case of VH children, the investigator read out each activity and obtained the information from the children individually.
Data Processing

Completed schedules and scales were scrutinized for any discrepancies, rectified and the data was analysed with the help of a computer. For this purpose, the data have been coded in order to transfer it from the research schedules to a mini floppy disc. The data in the floppy was analysed by using a standard package programme such as the SPSS in a IBM compatible computer and prepared the basic tables.

Statistical Treatment

The data were analysed by using descriptive statistics—Mean and S.D., tests of significance: 't' test for mean scores and chi-square, and multiple regression. The correlation co-efficient has been treated for the performance of daily living activities and the parental attitude scores.