Mental retardation requires long-term care and management in the family. The major share of the burden falls on the parents. It is a privilege of the parents to keep their retarded children at home. The children should be absorbed in the family. In an affectionate and secure atmosphere the mentally retarded child has lesser problems than in an institutional atmosphere. The residential institutions are good only, only for those MR children whose environment at home is not appropriate.

The attitudes of parents towards their MR children have a considerable impact on the learning ability of the child. Parents of a MR child should know that he needs special care and treatment. A mentally retarded child, like any other child, needs to be allowed to develop at his own rate in positive surroundings. The parents should know the limitations of their child and try to give him the most helpful type of training for his handicap conditions. Before the child attains the school age, the mother must assume the major role and help him to make progress in all directions.

Effective parent involvement is the main ingredient in long-term, effective early childhood intervention. Brodfenbrenner (1974) stated "..... the involvement of the child's family as an active participant is critical to the success of any intervention programme."
Without such family involvement, any effect of intervention appears to erode fairly rapidly once the program ends. In contrast, the involvement of parents as partners in the enterprise provides an ongoing system which can reinforce the effects of the program while it is in operation, and help to sustain them after the program ends.*

The Portage Model is a home intervention programme that has been in operation since 1972. It was originally developed by Shearer and Shearer (1969). This Model centres around a home teacher who trains parents to become more effective teachers of their own children by training them how to target appropriate teaching tasks, how best to present them and how to record and assess their child's performance in order to continually modify the goals and procedures to meet each child's individual needs.

STATEMENT OF THE PROBLEM:

"Effect of Different Portage Training Intervention Models on Motor Development of Pre-School Mentally Retarded Children".

OBJECTIVES:

The present study aims at:

(1) Adaptation of the existing Portage Guide to Early Education (check-list items of motor development area) by Bluma, Shearer, Frohman, and Hilliard (1972).
Develop different Portage Models which will be effective and practical in nature for pre-school mentally retarded children with motor handicaps.

Individualize Portage training for mentally retarded pre-school children according to their specific handicaps.

To utilize the services of parents, ICDS Anganwadi workers who look after the pre-school education of children of ICDS centres in India, supervisors as well as teachers of the institutions meant for mentally retarded children to implement Portage training so that the beneficiaries and the community can be involved.

To enhance the basic knowledge of mental retardation and change the unfavourable attitude of parents and the community towards mentally retarded children with conspicuous handicaps.

HYPOTHESES:

The following hypotheses were framed on the basis of research findings and the ingenuity of the researcher:

(1) Portage training for the pre-school MR children will be effective in reducing their specific motor handicaps.

(2) The effectiveness of different Portage Models for imparting Portage training will be different.
The socio-economic status of parents will determine the extent of gains the children will make as a result of training.

There will be differentials in the attitude of parents towards their MR children between pre and post-training scores.

**METHOD AND PROCEDURE**

**SAMPLE:**

The sample of the present study consisted of 24 MR school children with motor handicaps. The sample was divided into two Models; Model I consisted of 12 MR children who were trained by the teacher, and Model II comprised 12 MR children who were trained by their parent. Each Model was again divided into two categories, i.e., 6 MR children of each Model belonged to high socio-economic status families and 6 belonged to low socio-economic status families. The pictorial form of the sample is given below:

<table>
<thead>
<tr>
<th>Sample</th>
<th>24 MR children with Motor handicaps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 MR children trained by their parents</td>
</tr>
<tr>
<td></td>
<td>(Model II)</td>
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</table>

<table>
<thead>
<tr>
<th>as MR children trained by the teacher</th>
<th>12 MR children trained by their parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Model I)</td>
<td>(Model II)</td>
</tr>
<tr>
<td>6 MR children of SES(_H)</td>
<td>6 MR children of SES(_L)</td>
</tr>
<tr>
<td>(Group I)</td>
<td>(Group II)</td>
</tr>
<tr>
<td>6 MR children of SES(_H)</td>
<td>6 MR children of SES(_L)</td>
</tr>
<tr>
<td>(Group I)</td>
<td>(Group II)</td>
</tr>
</tbody>
</table>
DESIGN OF THE STUDY:

The present study has a time series, and a quasi-experimental design. "This time series design is the presence of a periodic measurement process on the same group or the individual and the experimental change into this time series of measurement, the results of which are indicated by a discontinuity in the measurement, the results of which are indicated by a discontinuity in the measurements, recorded in the time series." (Combell and Stanley) This design gives clear evidence of success of an intervention and the time of achievement of objectives of the study by showing improvements in the same child from time to time.

TOOLS EMPLOYED:

The following tools were employed for data collection:

1. A Developmental Check-list by Bluma et al. (1976) which listed sequential behaviour from birth to six years of age (Motor area).

2. A set of 140 curriculum cards to match each of the behaviours on the check-list. Each card includes a behavioural description of the skill and suggests material and curriculum for teaching it.

3. Weekly activity charts for each of the subjects.

(5) Vineland Social Maturity scale (Nagpur Adaptation by Malin, 1965).


PROCEDURE FOR DATA COLLECTION

Finally, 28 eligible subjects identified with the recommendations of doctors, nurses and neighbourhood referrals were taken for the present study. These subjects were administered all the above-mentioned tools.

Gesell's Developmental Schedule, Developmental Screening Test measuring intelligence by Bharthraj, check-list of Motor Development, and Vineland Social Maturity scale were administered to each of the 28 clients at his doorstep. Answers of these tests were sought in their regional language. The Socio-economic Status Scale and the Parental Attitude Scale were administered to the parents of MR children. Since half of the parents were illiterate, each item of each test was asked in Punjabi (regional language) and the answers were noted down by the home-teacher. The remaining half of the parents of the MR children were educated; therefore, tests were administered to them in the original form. The home teacher, with the help of the director, chalked out the programme for the succeeding
months. The whole period was divided into two groups:

1) Base-line period  : 4 weeks
2) Experimental period : 40 weeks

During the base-line period, home teaching was not given. For the experimental period, the check-list items were adopted according to the Indian environments. The adapted check-list is given in the booklet attached (App: ). The check-list items which could not be performed by a particular child were noted down. After recording the base-line data, the home teacher had enough information about the child. She then planned goals for the week accordingly and explained the activity charts to the mothers. Since this was a novel experience for them they felt amused. Some of them regarded it as very difficult, some hesitated by saying that when physicians could not cure their children, how would this training cure? It was a hard task to convince them of the utility of training.

As the programme was new to them, they asked many questions, e.g., "Why are you interested in curing our children?". But most of the parents were satisfied after meeting the director. Mothers were asked to put a tally mark for the achievement activity for each day on the activity charts. This work was started with great enthusiasm, but within two weeks two mothers backed out by saying that they had neither the time nor any faith in this type of training. After 17 weeks of training two more children left the
training due to some family problems. In the final sample, only 24 MR children were left. The final sample consisted of two Models:

Model I

It consisted of 12 children out of which 6 MR children belonged to high socio-economic status families and 6 to low socio-economic status families. The home teacher visited the Anganwadi centre where MR children of low socio-economic status families were available and the Institute of MR Children where MR children of high socio-economic status families were located. The teachers of the Anganwadi centre and the Institute for MR children were given training about the tasks which were to be accomplished during the remaining weeks. The home teacher used to visit them once a week and spend one hour with each child and the teacher.

Model II

It consisted of 12 MR children with motor handicaps; out of them 6 MR children belonged to high socio-economic status families and 6 to low socio-economic status families. The parents of $\text{SES}_H$ were willing to cooperate in the project while those of $\text{SES}_L$ were not so cooperative. The home teacher used to visit them once a week and give training to the parents of MR children about the tasks which were to be performed by the child during the week. The home teacher spent one hour with each child and his/her mother, or both parents, once a week.
Statistics Used

In order to find out the significance of the difference between the means of pre and post-test scores of Model I and Model II, as well as of \( \text{SES}_H \) and \( \text{SES}_L \), t-values were computed.

CONCLUSIONS

As a result of the preceding study, research, interpretation and analysis, the present investigator has reached the following conclusions:

1. Portage training was provided only in the motor development area, but each child gained check-list items of the other four developmental areas as well, i.e., social, language, cognitive development and acquiring self-help skills. These five areas of development are interrelated. It may be interpreted that subjects have gained these items as a side effect of Portage training provided in the motor development area.

2. The teachers gave a large number of prompts than parents to train their MR children.

3. A large number of hours were spent by the teachers with the MR children to train them than their parents.

4. Every MR child had gained DQ's on DST, VSMS and GDS as a result of Portage training, irrespective of the Models and the socio-economic status of their parents. The highest DQ gain was found on GDS. Hence, Portage
training for the pre-school MR children was effective in reducing their specific motor handicaps.

5. MR children who were trained by the teacher gained higher DQ scores as compared to those who were trained by their parents.

6. MR children of SES$_L$ group scored as high as those of the SES$_H$ groups due to Portage training. Hence, the socio-economic status of parents did not determine the extent of gains their children made as a result of Portage training.

7. As a result of Portage training, the parents' attitude towards child rearing, mental retardation, and management of mental retardation considerably changed. Portage training also added to their knowledge of mental retardation. Within the existing facilities in India, this Portage training can be of great assistance in reducing the developmental impairments/handicaps with the involvement of community and beneficiaries.

**Suggestions**

1. Since most of the adult population in India is illiterate, the manual of instructions should be less verbal and more and more in a pictoral form.

2. Behavioural items should be such as are usually practised in the homes of the children taken up for the Portage service, e.g., items like tricycles and skates are rarely available in lower class families.
3. The parents concerned should be made aware of the fact that their child is mentally retarded. Parents in India generally are not willing to accept the fact that their child is MR.

4. The parents should be encouraged to discuss problems with one another evolve and bring out possible solutions.

5. Reinforcement in proper form should be given to children and parents so that they may continue the training.

6. There should be a centrally located centre to train 2 or 3 parents, especially mothers at the initial stages, to carry on skill teaching. This will give them direction and motivation; it will also develop confidence in the parents to carry on Portage service at their own doorstep. Later on, they will be able to complete the activity charts themselves.

7. Anganwadi workers and helpers should be given training on Portage service so that they can help the community at large.

**Suggestions for Further Research:**

1. Due to the paucity of time, the present study was limited only to the motor development of pre-school MR children. Such studies should also be conducted in the other developmental areas.

2. The training should be extended to older children and adults.

3. Portage service should be extended at the national level.

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