

CHAPTER - 3
METHODOLOGY

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3.1 INTRODUCTION

Normally human mind works in terms of finding a solution to a problem. This may be considered as an attempt to discover the elements of the process of reflective thinking or reasoning. In any process of scientific thinking a problem should be felt, tentative hypothesis be formed, necessary data be collected and analyzed systematically (and objectively) and tentative conclusion be drawn which could be checked and rechecked.

The term methodology refers to the process and procedure one adopts while carrying out a study in order to achieve the particular objectives specified. It is concerned with how one goes about actually conducting the research, what particular procedure one might employ in an investigation. This chapter tries to deal with the sample, the method used for the study and tools and techniques of the study. Moreover, it also deals with the experiences, difficulties faced by the researcher in the process of data collection. Taken as a whole, the chapter deals with the methodological aspect of the study at its centre. It displays the whole procedure employed by the researcher to collect the data of the sample in a systematic form.

Methodology constitutes an important part of research. No research work can be undertaken successfully without proper thinking and planning. This planning and preparation of research design is a fundamental step in the process of research. It must be planned carefully, so as to attain perfect results. There are every chances of errors if proper care is not taken in drafting this step.

The present study has been planned to find out the effectiveness of behaviour modification, techniques and mostly it involves qualitative type of research. Therefore necessary care is taken in the following steps –

- (1) Formation of objectives of the problem under study
- (2) Selecting appropriate tool for the collection of data

- (3) Deciding upon the size of the sample for the study
- (4) Collection of data
- (5) Analysis of the collected data
- (6) Conclusion

3.2 STATEMENT OF THE PROBLEM

A study on effectiveness of behaviour modification techniques in children with mental retardation.

3.3 OBJECTIVES

- (1) To develop profile of each child with mental retardation.
- (2) To identify the problem behaviours amongst the children with mental retardation.
- (3) To make parents, family members aware about the behaviour modification techniques used to overcome problem behaviours in the children with mental retardation.
- (4) To study the effectiveness of behaviour modification techniques in terms of intensity and frequency of occurrence of problem behaviour.

3.4 SELECTION OF THE TOOLS

Tools are the instruments or devices through which the process of data collection is done. For the present study the tools used by the researcher were—

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|---------------------------|-----------------|
| (i) A case study Performa | (ii) Basic – MR |
| (iii) Anecdotal Records | (iv) Diary |

3.4.1 General description of the tools

(i) A case study Performa

A case study Performa was prepared by the researcher in order to study the cause and the present status of mental retardation in the child. It included the demographic data i.e. the family background, qualification and occupation of the parents, their economic status, information about their siblings, educational status. The second part consisted of the birth history of the child i.e. type of birth, any problems during birth, treatment or consultation with a doctor for the

problem at birth, family history of any kind of problem. The third part of the case study Performa consisted of educational background of the child i.e. whether going to a normal, integrated or special school. But for this study all of them attended only the special school. Finally what expectations did the parents have towards their child having mental retardation.

(ii) BASIC – MR

It is the abbreviated form of the Behavioural assessment scales for Indian children with mental retardation. This scale was developed by Rita Peshawaria and S. Venkatesan both from the National Institute for the Mentally Handicapped – Secunderabad in the year 1992. It has been designed to elicit systematic information on the current level of behaviours in children with mental retardation. It is suitable for children between 3 to 16 years of age having mental retardation. It is relevant for behavioural assessment and can also be used as a curriculum guide for programme planning and training based on the individual needs of each child.

It has been developed in two parts –

- (a) Part-A : It deals with assessment of current skill behaviours in the child. The BASIC-MR, Part-A, consists of 280 items distributed equally over seven domains viz motor, activities of daily living, language, reading-writing, number-time; domestic, social, prevocational and money respectively. Each domain has forty items. Each item is written in behavioural terms. There is a quantitative scoring procedure in the use of the scale.
- (b) Part-B : It deals with the assessment of current problem behaviours in the child. The part-B of the BASIC-MR consists of seventy five items grouped under ten broad domains, viz. violent and destructive behaviours, temper tantrums, misbehaviour with others, self injurious behaviours, repetitive behaviours, odd behaviours, hyperactivity, rebellious behaviours, anti social behaviours and fears respectively. The number of items within

each domain varies. Each item is written in observable and measurable terms.

For this study part-B has been taken as it deals with the problem behaviours. The administration of this part of the scale is based on direct observation of each child with mental retardation. The scoring for each item is done along a three point rating scale i.e. never (0), Occasionally (1) and frequently (2). Both the parts are standardized and also field tested on a selected population of children with mental retardation.

(iii) Anecdotal Record

It is a short, concise, narrative and note of the directly observed incident. It is usually chosen for its developmental significance. It is recorded after the occurrence of the behaviour.

(iv) Diary

A day to day observation record of the occurrence or change in behaviours in the child during the implementation of behaviour modification technique maintained by the parents that was monitored and then recorded by the researcher.

3.5 SELECTION OF THE SAMPLE

In any research, proper selection of the sample has the highest importance. Sample should be selected in such a way that it represents mass population except some rare instances in which the whole population is taken. Research is almost invariably conducted by means of a sample, on the basis of which some general conclusions are drawn which are applicable to the population from which the sample was obtained. Taking the whole population is generally much costly and difficult and many a times impossible. Modern statisticians now-a-days feel that taking the whole population is an indication of statistical incompetence. Taking a sample is not mere practical but it further permits a greater control over some other variables as well. It is to be admitted that a major reason for taking a sample is to reduce time, effort and money. There are two characteristics of a good sample –

(1) It should be representative

(2) It should be adequate

Some of the methods of sampling are suggested by H.E. Garrett as follows–

- (i) Random Sampling
- (ii) Stratified or quota sampling
- (iii) Incidental sampling
- (iv) Purposive sampling

Out of these techniques purposive sampling was selected for the study.

3.5.1 Details about the sample (Population)

All the cases registered at ARPAN – A centre for children with multiple disabilities constituted the population for the study.

ARPAN – A centre for children with multiple disabilities is a non government organization (NGO) which was established in December, 1993. It is a Diagnostic and Development Centre which renders a unique centre based and home based integrated service oriented programme for children with multiple disabilities. A multi disciplinary team of specialists comprising of pediatrician, physiotherapist, psychologist, special educator, vocational rehabilitator, speech therapist render their services at ARPAN for making the child as much independent as possible. Till December, 2007 ARPAN had catered to the needs of 1262 children with multiple disabilities which comprised of Mental Retardation, Cerebral Palsy, Autism, Downs, Syndrome, Children with Attention Deficit Hyperactive Disorder and many more except totally visual impaired and the hearing impaired. After a brief survey of institutions working in the area of mental retardation, children from Arpan were selected for the present study. As this being a longitudinal study for an year the researcher had to seek permission, which was granted by the authorities of Arpan.

The researcher also had to work with the parents during the implementation phase which was only possible at Arpan as parents come along with their children almost daily.

Also all the categories of children could be found at Arpan, which were needed for the study. So this institution was selected.

3.6 DATA COLLECTION (Design of the Study)

The data for the study was collected in three phases.

3.6.1 Phase – 1

Phase – 1 involved identifying the children having mild to moderate level of mental retardation with behaviour problems. These children were selected from ARPAN – an institution working for children having multiple disabilities. Out of all the children registered in the institution fifty children were selected for the study. Case studies of these children were taken and the problem behaviours as perceived by their parents and teachers, were noted (step – 1 of behaviour modification technique).

3.6.2 Phase – 2

Phase – 2 – It comprised of selecting thirty children having mild to moderate mental retardation with common behaviour problems out of fifty. These children were selected on the basis of their regularity in the institution and the co-operation and willingness shown by their parents for the study.

Before the actual administration of the tools and the intervention programme, the parents of these selected children were briefed about the study and its objectives.

The actual problem behaviours i.e. problem behaviours in objective terms were identified after administering the BASIC-MR – A problem behaviour checklist developed at NIMH (1992). The problem behaviours were then listed according to the priority and the need of the child. Which were simple and which could be easily achieved by the child. (step-2 Behaviour modification Technique).

After the problem behaviours were identified and prioritized, behaviour modification techniques were applied in the institution to each child. Parents as well as professionals working with the child were briefed about the techniques. These techniques were applied for one whole year and in-between every three

months BASIC – MR was administered to study the progress in the child. (step 3 and 4 of behaviour modification technique).

A diary regarding the observation and changes in the behaviour of each child was maintained. Parents were also asked to note the change in the behaviour or anything related to the behaviour in a separate diary.

3.6.3 Phase – 3

In phase – 3 at the end of the year, after the implementation of the behaviour modification techniques, the outcomes were observed in the child. The effectiveness of the techniques was also studied. The investigator also observed (1) the extent to which the problems were modified – whether totally or partially, (2) the time taken by each child to overcome a particular problem behaviour if resolved totally. (3) the type of Behaviour Modification Technique effective on the child.

In the final stage, the researcher made follow-ups every three months till December 2007. The follow-ups were regarding the presence, frequency, intensity of the problem behaviours and the sustainability seen in the desired behaviour (step – 5 of behaviours modification technique).

3.6.4 DATA ANALYSIS

The data obtained was analyzed case wise. A profile of each child was developed throughout the year. A chart of frequency and intensity of the occurrence of behaviour problems was developed. Descriptive analysis of each child was done on the basis of this table. On the whole it was qualitative analysis of the data.