

CHAPTER III

RESEARCH METHODOLOGY

3.0.0 INTRODUCTION

This chapter presents the methodology which is adopted by the researcher to realize the objective of the present study. The current chapter present research procedure, population, sample size, tools and technique of data collection and data interpretation as well.

3.1.0 METHODOLOGY OF THE STUDY

To achieve the objectives of the study, quantitative research methodology was used with a positivist paradigm. The detailed procedure including the population, sample, tools for data collection, procedure of data collection and data analysis are given as follows.

3.2.0 POPULATION FOR THE STUDY

The population of the present study consisted of all the children with ASD, their parents, their teachers (special educators), their helpers, experts, and doctors treating the children with ASD from Vadodara city. The population consisted of special school and autism centres like Disha, Kalrav, Arpan, Spandan, Karishma, Reach, Asha, Balbhavan, Sai Residential School, Vermi and Kashiba Child & Autism Hospital.

3.3.0 SAMPLE OF THE STUDY

Purposive sampling technique was used to select sample for the present study. Children with autism, their parents, their special educators/teachers, their helpers, doctors treating autistic children and the experts working in this area were selected purposively by the researcher from four centres working for autistic children in Vadodara city. Table 3.1. Presents the sampling distribution of the present study.

Table No-3.1: Sampling Distribution of the Present study.

Centres	Number of Sample					
	Autistic Children	Parents	Teachers	Doctors	Therapist/ Experts	Helpers
Disha	12	12	5	1	3	2
Karishma	2	2	1	0	0	0
Spandan	9	9	4	1	2	1
Kasiba child and Autism Hospital	7	7	0	3	3	0
Total	30	30	10	5	8	3

Four centres working for the children with ASD were selected purposely those provided their consent for data collection. From these centres, a total of 30 children with ASD and their parents were selected purposively; those gave their consent to be a part of the research. Ten special teachers, eight experts and three helpers working in those centres were considered as the part of the sample for the present study according to their availability and those consented to be a part of the study. Five doctors working for the autistic children and attached with the selected centres were also included in the present study those consented to be a part of the present study.

3.4.0 TOOLS USED FOR DATA COLLECTION

Interview and observation were used as tools for data collection to achieve the objectives of the present study. Interview schedules for parents, teachers, expert, helpers, and doctors tools were used for the data collection. Observation schedule was used to collect data related to students with autism during different occasions like classrooms, outside the classroom, at home and during different training sessions. All these tools were prepared by the researcher.

3.4.1 Interview Schedules

Different unstructured Interview schedules were prepared by the researcher for different stakeholders like parents of autistic students, teachers, experts, helpers, and doctors. To prepare these interview schedules, the researcher followed the following process.

- 1) Literature study: Researcher study the books and journals related to problems and challenges faced by ASD children and collected information. On the basis of this, activities of autism students in different dimensions were identified.
- 2) Observation of students with autism: Researcher observed the children with autism at their school for six month in different places like at classroom, at other places inside the school, outside the school when they were taken fun visit, picnic and excursion. During this six months behaviour of autism students were observed in different dimensions.
- 3) Focus group discussion with parents: Parents to gather at the school premise regularly who use to come with children. Several small focused group discussions were arranged by the researcher with the parents to collect information about autistic children.
- 4) Discussion with teachers and experts: Two discussion sessions were organised by the researcher at two different schools to collect information about autistic children in terms of their behaviour.
- 5) Preparation and finalization of items for Interview schedules: On the basis of the literature survey, observation of students and discussion with parents and teachers, behaviour of autistic children were identified in different like children's behaviour in school, behaviour related to communication, behaviour outside the school, socialization behaviour, cognitive behaviour, sensory-motor behaviour, affective behaviour, independence behaviour for survival, recreational behaviour, vocational behaviour, and undesirable behaviour.
- 6) Expert opinion and Validation of the interview schedules: Ten subject experts those were working in the field of autism, special education and psychology were selected and all the five interview schedules were given them for validation.
- 7) Finalization of the interview schedules: On the basis of the suggestions from the experts and the discussion with the guide, items were finalised for all these schedules. The final interview schedules are given in the appendices.

The interview schedules were unstructured due to the nature of respondents where the scopes were there to change the sequence of items at the time of interview. Details about the unstructured interview schedules are given as follow.

3.4.2 Interview schedule for special teachers

An unstructured interview schedule was prepared by the investigator to collect information related to educational needs and other details about autistic children from special educators. The

interview schedule consisted of details about children and eleven dimensions in terms of children's behaviour in school, communication, outside of the behaviour, socialization, cognitive behaviour, sensory-motor behaviour, affective behaviour, independence behaviour for survival, recreational behaviour, vocational behaviour, and undesirable behaviour. There were 51 items in the interview schedule. A copy of the Interview schedule is presented in Appendix- I.

3.4.3 Interview schedule for parents

An unstructured interview schedule was prepared by the investigator to collect data related to educational needs and other details of autistic children from parents. The interview schedule consisted of details about children with ten dimensions in terms of daily routine work, communication, behaviour outside the classroom, socialization, cognitive behaviour, sensory-motor behaviour, affective behaviour, recreational and vocational, independent behaviour for survival, and undesirable behaviour. There were a total of 110 items in the interview schedule. For parents. A copy of the Interview schedule is presented in Appendix- II.

3.4.4 Interview schedule for helpers

An unstructured interview schedule was prepared by the investigator to collect information related to educational needs and other details of autistic children from the care takers/ helpers. The interview schedule consisted of details about children in eight dimensions in terms of children's behaviour in school, communication, outside of the behaviour, socialization, affective behaviour, survival behaviour for independence, recreational and vocational, and undesirable behaviour. There were thirty nine (39) items in the interview schedule. A copy of the Interview schedule is presented in Appendix- III.

3.4.5 Interview schedule for experts

An unstructured interview schedule was prepared by the investigator to collect information related to educational needs and other details of autistic children from experts working for autistic children. The interview schedule consisted of details about children in nine dimensions in terms of children's behaviour in school, communication, socialization, cognitive behaviour, sensory-motor behaviour, affective behaviour, independent behaviour for survival, recreational and vocational behaviour, and undesirable behaviour. There were 40 items in the interview schedule. A copy of the Interview schedule is presented in Appendix- IV.

3.4.6 Interview Schedule for Doctors

An unstructured interview schedule was prepared by the investigator to collect information related to educational needs and other details of autistic children from doctors treating autistic children. This interview schedule included nine dimensions in terms of behaviour in school, communication, socialization, cognitive, sensory-motor behaviour, affective behaviour, independent behaviour for survival, vocational behaviour, and undesirable behaviour. There are 34 items in the interview schedule. A copy of the interview schedule is presented in Appendix- V.

3.4.7 Observation Schedule

Observation is a very effective ancient tool to know about anything. This tool also presents its importance in the research area of Autism. Children with ASD were observed through participatory observation to study and understand the educational needs of children with autism spectrum disorder at school in Vadodara city. Research observed autistic children at their school for six month. Literature review was also done to find the points of observation. On the basis of literature survey, experience from working with autism students and the expert opinion an observation schedule was prepared by the researcher to observe the behaviour of autistic children at their classes. It was also validated by ten experts in the area of special education, autism and psychology. All the comments and observations of the experts were accommodated in the observation schedule and the final observation schedule was ready for data collection. A copy of the observation schedule is presented in Appendix VI.

3.5.0 PROCEDURE FOR DATA COLLECTION

The researcher to the permission and request letters from the research guide and head of the department for data collection. The researcher approached the head of centres working for autistic students along with the request letter and got the permission for data collection from four centres. On the basis of willingness of the parents, teachers, experts, helpers and doctors, the sample for the present study was selected and data from the sample were collected through the following procedure.

3.5.1 Data collection through interviews

Interviews were conducted with selected stake holders such as teacher parents, experts, doctors and helper individually for this study. After the meeting with parents, teachers, and helpers they gave their time and place according to their suitability. The researcher conducted the interview and recorded it with a recorder in the sequence of questions which was prepared in an

unstructured interview schedule.

For the interview of Doctors and Experts who are diagnosing and treating children with Autism Spectrum Disorder, the researcher took prior permission from the Head of Hospitals. The researcher conducted interviews as per their availability and the interview proceeding were recorded with a recorder in the sequence of questions which was prepared in the unstructured interview schedule. Interview of all these stake holders were conducted over a period of six months.

3.5.2 Participant Observations:

Permission for observation was taken from four centres working for the education and rehabilitation of the children with autism. Time table was prepared for the observation of different teaching learning classes at these centres and the researcher observed these classes at least for two weeks at each centres. During the observation, researcher noted downs each and every aspect which was relevant for the study of educational needs of children with autism spectrum disorder in the observation diary. After coming back from the institutions, researcher used to study the noted information related to children with autism then categorized the data meaningfully and develop summary of observations. Apart from the observations at the centres, the researcher used to observe students when they went for outing activities like, picnic, visit too different places like malls, temple, market etc., annual day celebration and sports day activities. The observation was continued for six months in all the four schools.

3.6.0 DATA ANALYSIS

Most of the data collected through interview and observations were analysed qualitatively with the help of frequency count and percentage analysis. Narratives were also prepared with the help of the analysed data with the help of summary building.