CHAPTER-III
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RESEARCH DESIGN AND METHODOLOGY

This chapter comprises the detailed description of the research methodology. The sample of the study, sampling procedure, procedure and tools for data collection and statistical method used for data analysis have been discussed in this chapter.

3.1. Method used in the study

For the present study the Normative Survey Method or the Descriptive Method was used to make an investigation on the education received by the Children With Special Needs in an Inclusive setting, other facilities received by them and the socio-economic status of the parents of Children With Special Needs. “Descriptive method study, describes and interprets what is and it is this method which is concerned with conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing. It is primarily concerned with the present.” (Best, J.W. and Kahn, J., 1999).

3.2. Sampling plan

A sample constitutes a smaller representation of its larger whole. So it is a small proportion of a population selected for observation and analysis (Kothari, C.R., 2004). By observing the characteristics of the sample one can make certain inferences about the characteristics of the population from which it is drawn.

The education of Children With Special Needs, which is also termed as Inclusive Education, was being implemented in all the government and provincialised primary schools, Middle-English (M.E.) and Middle-Vernacular (M.V.) schools in 27 districts of Assam (including 2 hill districts namely Karbi-
Anglong & Dima Hasao) through Sarva Siksha Abhijan Mission under Education Department of Government of Assam and two districts namely Nagaon and Morigaon has been taken for the purpose of the study. For field study the investigator had to obtain the permission from the Mission Director of Sarva Siksha Abhijan Mission and the copy of permission was being sent to the respective District Programme Officers' office directly by the State Mission Office.

For the collection of data related to the research work, two districts viz. Nagaon and Morigaon were selected. In Morigaon district SC, ST (H), ST (P), OBC, MOBC and Minority group of people are there and in Nagaon district tea tribe community, Ex-Tea Tribe, Bodo, Dimasa, Karbi, Hmar etc. are to be found. So the investigator selected these two districts to draw a representative sample. In Nagaon district there are eleven (11) educational development blocks out of which four (4) were selected on the basis of less concentrated and more concentrated CWSN. Accordingly, in Nagaon district, Nagaon Sadar, Khagorijan, Kaliabor and Rupahi were selected again on the basis of urban and rural blocks. Nagaon Sadar is an urban educational development block where CWSN is less concentrated. Khagorijan, Kaliabor and Rupahi are rural educational development block where CWSN is more concentrated.

In Morigaon district two (2) educational development blocks were selected for the study on the basis of less CWSN concentrated and more CWSN concentrated block. Morigaon district has four (4) educational development blocks viz. Bhurbandha, Kapili, Mayong and Lahorighat and out of four two blocks namely Mayong and Kapili were selected. In Morigaon district, Morigaon Sadar educational development block is officially merged with Kapili educational development block and therefore Kapili block is considered as urban block in the study.

For representative sampling the investigator has selected 30% CWSN from each block and the total sample comprised 920 CWSN. The schools selected were...
government and provincialised primary schools, Middle-English (M.E.) and Middle-Vernacular (M.V.) schools where inclusive education has been implemented. Altogether 550 schools (315 schools from Nagaon district and 235 schools from Morigaon district) were covered under the study. The age group of CWSN was considered in the study between 6 to 14 years of age. The sample comprised both girls and boys of the government and provincialised schools.

The purposive sampling procedure was adopted in the study. The educational blocks having CWSN less concentrated and more concentrated were given special attention in the study.

*Table -3.1. Sampling pattern of the study*

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>District</th>
<th>Educational Development Block</th>
<th>Rural / Urban blocks with more / less concentrated CWSN</th>
<th>Total in school CWSN</th>
<th>CWSN taken for the study (30% from total in school CWSN)</th>
<th>Girl</th>
<th>Boy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Nagaon</td>
<td>Nagaon Sadar</td>
<td>Urban (less concentrated)</td>
<td>166</td>
<td>50</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khagorijan</td>
<td>Rural (more concentrated)</td>
<td>415</td>
<td>125</td>
<td>63</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kaliabor</td>
<td>Rural (more concentrated)</td>
<td>453</td>
<td>135</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rupahi</td>
<td>Rural (more concentrated)</td>
<td>567</td>
<td>170</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1601</strong></td>
<td><strong>480</strong></td>
<td><strong>240</strong></td>
<td><strong>240</strong></td>
</tr>
<tr>
<td>2.</td>
<td>Morigaon</td>
<td>Mayong</td>
<td>Rural (more concentrated)</td>
<td>1135</td>
<td>340</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kapili</td>
<td>Urban (less concentrated)</td>
<td>334</td>
<td>100</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1469</strong></td>
<td><strong>440</strong></td>
<td><strong>220</strong></td>
<td><strong>220</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Sub-Total (Nagaon + Morigaon)</strong></td>
<td></td>
<td><strong>3070</strong></td>
<td><strong>920</strong></td>
<td><strong>460</strong></td>
<td><strong>460</strong></td>
</tr>
</tbody>
</table>
3.3. Tools for data collection

To gather relevant information, the investigator used the following tools:

1. Socio-Economic Status Scale by Rajbir Sing, Radhey Shyam and Satish Kumar of National Psychological Corporation, Agra\(^3\) (Singh, R.; Shyam, R. and Kumar, S.). This scale was used to find out the socio economic status of the parents of sample CWSN.

2. Interview Schedule.

3. Observation Schedule

Observations were recorded through photographs and in written form.

Fig. IV. Sample distribution of the study.
For secondary data, various libraries, institutions and organizations were visited.

1. K.K. Handique Library, Gauhati University.
2. Library, Pragjyotish College.
5. Ōmeo Kumar Das Institute of Social Change and Development, Guwahati.
6. NEHU, Shillong.
7. National University of Educational Planning and Administration, New Delhi.
8. NIPCCD, Guwahati.

For collection of official records, Social Welfare Department, Government of Assam and Office of the Director of Census Operation, Govt. of India were visited.

3.3.1. Socio-Economic Status Scale (SESS)

Socio-economic status is considered as one of the important variables in the present study. Through SES scale, informations were collected regarding parents' social status, economic status, educational status and religion.

In the present study Socio-Economic Status Scale developed by Rajbir Singh, Radhey Shyam and Satish Kumar of National Psychological Corporation, Agra, was used for collecting data regarding the social, economic and educational status of the parents of CWSN. There are 25 statements in the scale. One item each for caste and occupation. Two items for family (type and size), one item for educational qualification of self and other members. Four items related to monetary matters (i.e. income, savings, income tax and deposits). One item was kept for entertainment expenses per month while four items relate to housing (type
and size). Item No. 15 (real estate) has been divided into three parts (A) agricultural land holding, (B) residential plot and their sizes, (C) shops and their locations. In order to cover life areas nine items relating to social, religious, political and academic participation have been included. Last item of the scale relates to household possessions (material and livestock). Thus the items in the scale are related to caste / class, occupation, family, education, income, housing, relational network and material and livestock possessions.

3.3.1.1. Administration of the Socio-Economic Status Scale:

For the present study total 920 parents of 920 sample CWSN from Nagaon Sadar, Khagorijan, Kaliabor and Rupahi educational development block of Nagaon district and Mayong and Kapili educational development block of Morigaon district were considered to determine their socio-economic status and accordingly parents were asked by the investigator to give responses to the SES scale either by the father or by the mother.

The parents were approached in the school while accompanying their child and in some cases parents were contacted at home. The investigator gave assurance that the information given by them would be kept confidential and would be used only for the purpose of the research work. When the parents gave consent and became ready to give responses, the investigator explained the items one by one and asked the respondents to respond to each item by putting a tick (✓) mark in the square of the chosen alternative against each item of the SES scale. Subjects were required to respond to all the items likewise. They were not allowed to leave any item unanswered. The subjects were not permitted to put any unnecessary marks except where required. As medium of the SES scale was English, therefore the investigator had explained the items by translating it into mother tongue of the parents of Children With Special Needs. Some parents filled up the SES scale by themselves while some other asked the investigator to write the responses by her whatever they would say.
3.3.1.2. Scoring of SES Scale

The scoring for the test is of quantitative type. It is done with the help of a scoring key. Every alternative of any of the items has only one weighted score which will serve to provide the score if any ticked mark (✓) is present in the horizontal plan. In some items there are sub-items also and scoring of these items are additive to get a final score of the respective item whereas on rest of the items only single score is given. However, the total raw scores are also additive for all the items. Accordingly, parents with a score of 41 and below are categorized as low SES, with a score 101 and above are categorized as high SES and parents with scores from 42-100 are categorized as middle SES. Again among the middle SES category, parents with scores from 42-56 are categorized as lower-middle class, with score from 57-76 are categorized as average-middle class and with scores from 77-100 are categorized as upper-middle class.

3.3.1.3. Reliability

Reliability was estimated by test-retest method, 100 subjects were administered the SES scale twice after a gap of one year and reliability was found to be 0.653. 50 subjects were administered the scale again after a gap of 30 days and the reliability was found to be 0.944. For internal consistency Cronbach alpha was calculated on normalized (with mean of 50 and SD 10) T scores (N=500) and was found to be 0.791.

3.3.1.4. Validity

To assess the validity of the SES scale, manifold criteria were set. Firstly, 150 subjects were asked to rate their own SES on a three point scale. Secondly, the neighbours and colleagues of the respondents were also asked to rate the respondents SES. Thus, two types of criterion scores were available i.e. self ratings and others ratings. The ratings were correlated with the obtained SES scores, the coefficient of correlation between self and others rating was $r = 0.98$. Self ratings
correlated with SES score positively, $r = 0.737$. Other’s rating were also found to be correlated significantly with SES scores, $r = 0.55$.

Thirdly, SES questionnaire of Singh and Saxena (1981) and present SES questionnaire were administered to 50 subjects simultaneously and the score of both correlated significantly to the tune of $r = 0.689$.

Fourthly, the factorial validity of the scale was also determined by factor analysis. Scores of 500 subjects on SES scale were firstly transformed into normalized T-scale with a mean of 50 and S.D. of 10. The normalized T-scores were, then, subjected to principal component method of factor analysis with Varimax rotation along with Kaiser Normalization restricting to four factors. The four factors accounted 41.73\% of the total variance with their eigenvalues being greater than unity.

3.3.2. Interview Schedule

The Interview Schedule is an important tool for data collection. It involves the collection of data and information through direct verbal face to face interaction between the interviewee and the interviewer.

The Interview Schedule was a structured one and developed comprehensively so that it could cover all broad aspects of the study. In order to investigate the infrastructural, environmental, co-curricular, recreational, academic, medical, transportation and other facilities availed by CWSN, the interview schedule was made.

After preparing the interview schedule it was first tried out upon 60 Children With Special Needs and it was found that some items were ambiguous and confusing. Therefore, after first try out those ambiguous and confusing questions were omitted and necessary corrections and modifications were made with expert’s guidance and guidance of the guide and supervisor.
The interview schedule comprised the following aspects in regards to CWSN:

A. CWSN friendly infrastructural and environmental facilities.

1. Location of the school
2. Permanent building
3. Temporary building
4. CWSN friendly classroom
5. CWSN friendly playground
6. Drinking water facility
7. Special sanitation facility
8. Library
9. Auditorium
10. Rest room for CWSN
11. Resource room
12. Ramp facility
13. Day Care / Residential facility
14. Morning prayer

B. Co-curricular and recreational facilities for CWSN.

C. 1. Medical facility received by CWSN.
3. Provision of uniform to CWSN.
4. Mid day meal to CWSN.
5. Provision of transportation facility for CWSN.

D. Academic Support to CWSN.

1. Teaching staff
2. Curriculum for CWSN.
3. Medium of instruction.
4. Teaching-learning method applied
5. Teaching learning materials used
6. Pre-vocational education availed by CWSN.
7. Scholarship.
8. Remedial teaching.
9. Home based support teaching.

E. Educational Performance of CWSN.

3.3.2.1. Administration of the Interview Schedule

The Children With Special Needs selected for the present study were contacted in their schools and in their residences. At first the investigator established a friendly relationship with the CWSN either by making some informal conversation or by singing a song, reciting a poem, by telling a story etc. and when CWSN felt easy and comfortable then the investigator tried to elicit the information from them for the purpose of the study. Some responses were elicited from the teachers and volunteers also. The investigator explained the items one by one in a very clear and precise manner by making the items easily understandable by the CWSN. As the sampled CWSN were mild to moderate kind of disability, so children with mild visual impairedness, hearing impairedness (who are provided with glass, hearing machine etc.) and orthopedically impaired were very responsive to the investigator and in some other cases the resource teachers and volunteers provided the responses in lieu of the CWSN and responses were recorded very carefully in the interview schedule by the investigator. The respondents were informed that their responses to be used for research purpose and will be kept confidential.

By observing the situation or the environment also the investigator obtained information regarding some queries included in the interview schedule.
3.3.3. Observation

Observation was also used in this study. "Observation is the most direct, natural and most refined of modern research techniques." (Siddhu, K.S., 1984). The physical and infrastructural aspects of the schools where sampled CWSN studied had been observed by the investigator. The investigator had observed the sampled CWSN in different time, especially when they are in the classroom or when the classes are going on and when they are busy in some co-curricular or recreational activities. Both participant and non-participant observation techniques were employed by the investigator. Observation helped the investigator to understand and collect data and information related to different aspects of CWSN. With due permission from the authorities concerned the investigator spend a considerable amount of time in the school premises and also in the classrooms when the classes were going on in an inclusive setting i.e. CWSN along with the normal children.

Spending over a considerable amount of time in the classroom helped the investigator to know how the teachers teach the CWSN along with their normal peers, what teaching aids, materials, apparatus were developed and used, what teaching methods were applied by the teacher to teach CWSN and other facilities provided to and received by CWSN in their school.

During field study investigator observed the medical facility such as health check up camp, medical aids and equipments availed by CWSN, guidance and counseling programme by the counselor and teachers and physiotherapist's visit to school. Investigator observed the special needs children very carefully in every situation whenever and wherever possible. Such observation enabled her to know how special needs children follow instruction, take part in other curricular and co-curricular activities and express their feelings and emotions through various activities, gestures and postures.
The record of educational performance of sampled CWSN was obtained by observing the official records and reports available in the school headmasters office where the particular special need children studied.

3.4. Sources of data

The study is based on primary data. The investigator approached personally each subject to elicit requisite information. To collect information, Socio-Economic Status Scale by Rajbir Singh, Radhey Shyam and Satish Kumar and self structured Interview Schedule were used.

3.5. Collection of data

The respondents were informed that their responses to be used for research purpose will be kept confidential. They were requested to go through the instructions given in the SES scale and the interview schedule and then respond. It was announced that there is no right or wrong answers so they may report the first response of the mind after reading the statement. They were asked to complete the SES scale and the interview schedule in a single sitting.

3.6. Statistical implication

After collecting the research data it is necessary to process and analyze these data by applying some statistical methods and techniques.

In the first objective of the study, investigator tried to study the level of socio-economic status of the parents of CWSN in Nagaon and Morigaon district. For this purpose simple percentage is used.

In the second objective to gain an idea about the CWSN friendly infrastructural, environmental, co-curricular and recreational facility availed by the special need children in Nagaon and Morigaon district simple percentage is used.
In the third and fourth objective to gain an idea about the medical, transportation, midday meal, uniform, parent-teacher association and academic support availed by CWSN of Nagaon and Morigaon district percentage of data is calculated.

In the fifth objective t-test has been made for making a comparative study of educational performance based on gender of children with special needs. Mean, standard deviation and significance of differences are used to calculate t-test.

In the sixth objective to study the correlation between the socio-economic status of parents and educational performance of CWSN Pearson’s co-efficient of correlation is used.

Graphical representation has been shown in this study through bar graph and pie diagram.

3.7. Chapter Summary

The present study is a descriptive type and it tries to analyse the education of special need children and the socio-economic status of the parents of these children. The investigator has selected Nagaon and Morigaon district for the purpose of the study. However, the study was delimited to 4 (four) educational development block of Nagaon district and 2 (two) educational development block of Morigaon district and hence 30% CWSN between the age group 6-14 years drawn on purposeful basis from the primary and middle (both M.E. and M.V.) schools were taken as the sample. To collect relevant information Socio-Economic Status Scale by Rajbir Singh, Radhey Shyam and Satish Kumar and an Interview Schedule were used. For analyzing the data statistical techniques like simple percentage, mean, standard deviation, Pearson’s correlation and t-test were used.
References:


