

CHAPTER - II

REVIEW OF LITERATURE

2.1 INTRODUCTION

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2.3 CONCLUSIONS FROM THE PAST RESEARCHES

2.1 INTRODUCTION

The essential aspect of a research project is the review of the related research literature before taking up the research project. It helps the researcher in many ways in conducting study with full insight.

Any investigation / research, whatever the scale, will involve reading about what other people have done about their area of interest, gathering evidences to support or refute their arguments & finally drawing their conclusions on the basis of available evidences.

Therefore the purpose of the reviewing of literature is to build up the context & background as well as to provide a basis for formulation of Hypothesis / Research Questions since a good research is based upon the relevant evidences that are known in the area of research for comprehensiveness, it is essential that the new work be based & built on what has already been accomplished. The review of research literature helps the researcher to delimit & define his/her problem avoiding duplicating well - established findings. It gives the investigator an insight into the problem & research methodology.

Since 'Learning Problems' is a new concept to Learning Disabilities & thus rightly named as 'hidden handicap' as specific Learning Problems are difficult to identify early in a child.

The present study is a retrogressive study to identify specific early indicators which are at the very grass-root level in learners but need to be identified.

Thus, it is the first attempt to identify preventive measures in children at an very early age. This being the main focus of the study.

The researcher had recourse to only a limited number of research studies & that too not directly & specifically connected with present problem of research.

2.2 RESEARCHES RELATED TO LEARNING PROBLEMS :

- (1) **Bhattacharya (1977)** conducted the first major study on 'Learning Disabilities' in Algebra

- Diagnosis & Prevention"

The objectives of the study were :

- * To diagnose the detailed patterns of disabilities of the student in specific areas of algebra with the help of specially designed.
- * To try out, experimentally the teaching methods which would prevent the development of learning disabilities in those area.

A stratified sample of slow learners both boys & girls of class VIII were taken. 28 students for addition & 252 students for multiplication

Statistical Technique - Correlation 'r'

The major findings were

- * Preventive measures developed and involved teaching through Audio visual aids.
- * Audio-Visual helps in motivation & retention.

(II) **Devee (1990)** Conducted a study on pre school children their problems in the rural areas of Kamrup District.

The objective of the study was :

To discuss the most important problems of childhood with specific reference to proper education and mental growth.

Sample -

Parents of Kamrup District & aimed to discuss problems of children upto 6 yrs of age.

The major findings were :

- * The parental stage exerted most remarkable influence on the growth & development of child but unfortunately not enough attention was being paid to the expectant mother by the family member.

- * Poverty of home, conservative attitude & superstitions of the family members were found to have a telling effect on growth & development of child.
- * Alcoholism, constant fighting husband and wife. Inhuman treatment of wife/daughter in law, vulgar language used in family, strained relation among family members were found to affect the development of young children.

(III) **Bhattacharya (1982)** conducted a study on 'Diagnosis & Prevention of Learning disability of Primary School students in Arithmetic.

The objectives of the study were : -

- * To diagnose the detailed patterns of disabilities in two areas arithmetic common fractions & decimal fraction
- * To try out, experimentally, teaching methods which would prevent development of Learning Disabilities in these areas.

The sample consisted of 450 student & 500 student of class V for common fraction & decimal fraction respectively.

Statistical Technique : The covariance analysis

The major findings were:

- * The experimental groups taught by audio-visual materials & techniques achieve significantly more than controlled group taught by conventional method.
- * Use of Audio-visual materials & techniques cause more prolonged retention than by conventional method.
- * Experimental group showed more interest in the lesson taught than the controlled group.

(IV) Ramaa (1984) conducted a study on Diagnosis & Remediation of Dyslexia - An attempt

The Objectives of the study were :

- * To identify dyslexics from among Kannada readers studying in grades III & IV of Ele. schools.
- * To develop tests required at different phases of the study.
- * To find out in which of the neuropsychological processes essential to learn to recognize words dyslexics were deficient in comparison with non-dyslexic poor readers & normal readers.
- * To analyse the types or errors committed by different groups of children while reading Kannada.
- * To study the developmental history of dyslexic children.
- * To study the effectiveness of the remedial programme in improving the specific & accuracy of Kannada word recognition in case of Dyslexics.

A sample of 550 student of class III & IV were taken

Statistical Techniques : One - way ANOVA and Chi-square

Major findings :

- * Dyslexics were differentiated from the other 2 group by visual verbal association ability.
- * Dyslexics may or may not have deficiency in one or more visual / auditory processing.
- * Majority of normal readers were deficient in visual processing skills in comparison with the other 2 group.
- * Visuo-spatial difficulties observed among Dyslexics while reading English could not be observed among dyslexics while reading Kannada.
- * Though, in individual cases there were behavioural symptoms like delay in speech / motor develop cross laterality, hyperanxiety & impulsivity there were no such symp-

toms common to most of the dyslexics.

- * The remedial programme was less effective in improving the speed of letter & word recognition.
- * In almost all the dyslexics the level of reading comprehension improved after remediation.

Major Implications :

- * Since dyslexics find it different to learn reading & writing in one language, learning of more than 1 language should not be insisted.
- * The mastery of any academic subject should be tested orally rather than then writing at the lower primary level.
- * Programmed Books to teach reading with clear instructions about the method of teaching should be supplemented to the prescribed text books for all children of Grade I
- * These books with instructions may guide both parents & teachers so that they can supplement the efforts made at school to enable their children to master reading & writing skills.
- * Non dyslexic poor readers should also be taught through special methods of teaching reading as they may be also poor in auditory processing skills.

(V) **Chugtai (1997)** A study of learning deficient children in Hindi language.

The Objectives of the study were :

- * To examine nature of learning Disabled in Hindi language at end of grade II
- * To evolve preventive strategies to prevent to occur.

A sample of 100 structure of Grade III & further through exclusionary process & differential diagnosis were used to select 20 Learning Disabilities's

The %, mean, SD we the statistical techniques used for analyses of data.

Major findings :

The study recommends that training be imparted to teachers to create awareness about the nature & needs of designing of classroom activities in such a manner that it will help children motor development.

Reading practice in the class by the teachers or parents helps the child's comprehension & fluency in reading.

(VI) **Gupta (1997)** Study of Incidence & Nature of Learning Disabilities at the End of class II in language & Arithmetic & to evolve preventive strategies.

The objective of the study were :

- * To investigate the incidence rate of children with learning disabilities
- * To develop diagnostic tests to study the nature of LD in Hindi & Arithmetic

A sample of 40 LD children through exclusionary process were selected.

Major findings :

- * Almost all children display LD in Hindi in written language.
- * Listening & factual comprehension are found to be better than inferential listening comprehension.
- * In Arithmetic, children show deficiency in basic operations
- * To enhance mathematical skills objects & materials from immediate environment should be selected.
- * Yoga exercises are recommended for children having attention deficit, hyper-activity, poor visual spatial orientation & poor ground perception.

(VII) **Goel (1996)** Remedial strategies for children with Learning Difficulties in Maths of Class I & II : Implications for Teacher Training

The objective of the study were :

- * To identify various Learning problem related to arithmetic difficulties.

- * To compare the performance of children in rural & urban schools of Orissa.
- * To design appropriate remedial teaching techniques.
- * To conduct an orientation programme for teachers to disseminate findings of research & acquaint them with remedial measures.

A sample of 300 children of standards I & II in Rural & Urban multigrade schools who had poor academic achievement in Maths as per school records & observation report of concerned teachers.

Data was analysed **statistically** using Mean, SD & t-test.

Major findings :

- * Experimental approach for T-L of mathematics helps pupils to understand the key concepts of mathematics.
- * These experiences can be sequenced from concrete to graphic & finally numeral.
- * For Learning at concrete level, exercises & drills on simple combination of addition / subtraction have their utility.
- * It is advisable to do away with traditional rote memory exercise & should be replaced by concrete learning activities which enhance the ability by rational counting.
- * Skills, need to be structured sequential alongwith associated activity for each concept & task.
- * Reduce dependence on the use of written materials & worksheets.

(VIII) Desai (1985) Learning Disabilities of Primary School Children

The main objective of the study were :

- * To study different types of LD, commonly in Grade IV children in Ahmedabad city.
- * To devise & try out remedies for correcting those LD

Sample - The study was conducted on 272 children of Grade IV in 6 schools

Statistical Technique - ANOVA

Major Findings :

The most potent cause of LD was property

The second cause of the malady was a pathy of teacher to their duties in school.

The third cause was abolition of Examination from standard I & II in schools of Gujrat.

(IX) **Biswas (1989)** studied " Learning disabilities in some areas of physical science Diagnosis & prevention".

The objectives of the study were :

- * To diagnose the detailed pattern of disabilities in some areas of physical science.
- * To try innovative teaching methods which could work as remedial tools.

Sample consisted of 250 students of class X from four schools (2 boys & 2 girls) of backward areas.

The F-ratios & U-test was the statistical technique used for the analysis of data.

The major findings of the study were :

Twenty - three major patterns of disability were identified.

The F-ratio between variance & within classes was significant

The U-value showed improvement in the achievement motivation of the experimental group.

(X) **Kamalam (1989)** conducted a study on "Training the Aganwadi workers in timely direction of disabilities in children".

The objectives of the study were :

- * To enable the Aganwadi workers to develop comprehension regarding various disabilities during childhood.
- * To train Aganwadi workers to acquire the skills to identify /detect disabilities in children.
- * To help Aganwadi workers to understand the modalities of referred services for the

disabled & undertake the task after detection.

Purposive **sampling** of 93 Aganwadi workers were selected for the study.

Mean, percentage, SD & t-test were the **statistical techniques** used.

Major findings :

- * Greater awareness of the types of disabilities were observed among the AWWS after the training as compared to the pretraining phase.
- * A significant difference in the knowledge of AWWS were found regarding the developmental milestones after the training.
- * A significant difference was also found about the awareness role of the families in helping the disabled in AWWS as they were able to think rationally & realistically.
- * A sizeable number of AWWS became aware of preventive measures against disabilities, such as avoiding early massages, exposure to X-ray during pregnancy, late pregnancy & maintaining hygienic environment, after attending the training.
- * A greater % of the AWWS were better able to conceptualize the management & rehabilitation services for the disabled, after they underwent the training.
- * As a result of participation in the training programme a substantial number of the AWWS became knowledgeable about integrated education.
- * Awareness of the special needs of the disabled, qualitative & quantitative improvement were seen after the training.
- * The training programme enabled the 86% of AWWS to comprehend well the characteristics & detection as identification of disabilities :
 - * The guidance to be given to parents to accept their disabled child at home
 - * integration of the disabled in the society.

XI. **Mohapatra (1991)** conducted the study of Reading, memory & attention processes of normal & reading disabled children

The objectives of the study were :-

D - 150

- * To investigate the difference between the normal & reading disabled children of Grade II & IV on the measures of decoding.
- * To compare the differences between the normal & reading disabled children in the psychological processes of attention & memory

The **sample** comprised 40 subjects, 20 each from Grade II & IV

Mean, SD & ANOVA were calculated to treat the collected data.

Major findings :

- * The normal & the reading disabled children did not differ with respect to their intelligence.
- * In decoding score, the normal subjects of both grades performed better than the reading disabled.
- * In case of oral-reading errors, the normal children made significantly less errors than the reading disabled children.
- * There was a significant difference in comprehension & digit span score, as a function of reading ability & not for grade.
- * The differences in errors in letter cancellation as a function of grade was not significant, but for reading ability the differences were significant.

(XII) **Sushila & Afiah & Srivastava (1992)** conducted a study on 'learning disabilities among elementary school children. Influence of sex, age & religion.

The objective of the study were :

- * To identify the learning disabled
- * To assess their ability in those aspects such as reading, writing, spelling, language & arithmetic.
- * To investigate the interaction among age, sex & religion with reference to learning abilities among elementary school children.

A sample of 150 ele school children of the age group. 8, 9 & 10 yrs. belonging to 3 religion i.e. Hindus, Muslims & Christian Statistics - ANOVA, Mean, SD & t-test.

Major findings :

- * Age had a significant influence on disability in reading, language, writing & spelling.
- * There was no significant difference between boys & girls in their disabilities in reading, arithmetic, language & spelling but sex had a definite bearing on the writing disability of the learning disabled.
- * The Hindus & Muslims & Christians did not differ significantly on 5 LD's.

XIII Tripathi, Tripathi & Shrivastava (1991) conducted a study on learning disabilities :

Some behavioural manifestations.

The objective of the study were :

- * To develop an adequate tool to diagnose learning disability
- * To study the variation in the psychological functioning of the children

The sample consisted of 1053 students of Grade I, II, III of Advantaged & disadvantaged students 575 & 478 in number respectively. t-test, path analysis & Pearson's Product moment correlation were the statistical techniques used.

Major findings :

- * Perceptual motor behaviour of LD & NLD students was assessed by Mariama Frosting Development Test (MFDT). It was found to be significant between LD & NLD
- * Hyperkinesis behaviour of LD & NLD student was assessed by the count of errors of the individual card of Bender Visual Motor Gestalt test & it was found that the two groups differed significantly.
- * Significant difference was found between LD & NLD student in their competence.
- * LD children were significantly poor in recognising the shape of English alphabet characters & Arabic numerals presented in various rotated positions.
- * NLD children demonstrated a high level of Iconic memory, whereas the LD children

could not tackle task very successfully.

(XIV) Narayanan (YEAR NOT KNOWN) conducted an independent study on - 'Analysis of early indicators of learning problems in schools - A Retrospective study.

The objective of the study were :

- * To elicit information from the parents of children having specific learning disabilities on the early symptoms as perceived by them.

The sample consists of parents of 3 & children, with learning disabilities.

Statistical technique for data analysis was percentage & was graphically plotted.

Major findings :-

- * Parents (especially mothers) can be trusted for the description of symptoms of their children in pre-school yrs.
- * Bilingual usage at home & its effect on language learning in children need to be further explored.
- * Distractibility, hyperactivity, speech disorder or delay & dislike for paper & pencil work are definite early indicators or learning problems.
- * Early indicators as suspected by parents in pre-school yrs should not be ignored & efforts towards helping the child should begin without labelling the child.
- * Intensive efforts towards listing symptoms & standardizing it for pre-school yrs. is imperative for early intervention for children with Lg problems.

2.3 CONCLUSIONS FROM THE PAST RESEARCHES :-

Some trends have been revealed by the researches reviewed in this chapter which are :

1. There are individuals who learn very fast. There are other who do not, but with reasonable teaching learning input can prescribed task.
2. These impairments/disabilities impedes the normal development of individual intellectually, socially, emotionally & physically.

3. Children with learning disabilities are those who are having an average/above in intelligence & have no visual/hearing impairment but have specific problems in reading, writing, spelling, speaking & arithmetic due to disorder in psychological processes like memory, attention & perception.
4. Studies have been administered in language (Hindi, Kannada) Mathematics (Algebra, Arithmetic) following by their preventive measure - i.e. studies are specific to Learning problems.
5. Presently, the studies are at embryonic stage & the coverage of dimensions is limited.
6. The institutional infra structure for research in this area is quite inadequate.
7. Learning problems are acquiring rightful place in educational system, culminating in momentum recommendations of NPE, 1986 & POA 1992 The NCERT & UGC have adopted this as one of the operational areas.

The ministry of welfare has established National Institutes for Handicapped.