

CHAPTER - V

ANALYSIS OF DATA AND STATEMENT OF RESULTS :



5.1 INTRODUCTION :

This chapter dealt with treatment and interpretation of the data. Data were collected with a view to identify the dyslexics and diagnosed their problems in reading attainments i.e. in accuracy and comprehension, analysis has been made to find out the percentage of students having problem in specific area of reading attainment.

5.2 ANALYSIS AND INTERPRETATION OF DATA :

The data collected for this study have been analysed in two steps. First the identification and prevalence of L.D. children have been found out. In second step errors committed by the students in accuracy and comprehension were analysed to find out the percentage of students having problem in specific area of accuracy and comprehension.

In order to achieve the first objective first of all L.D. children were identified. The process of identification is given in detail. The process of identification is given in detail in fourth chapter. In fourth chapter out of 95 students 48 were identified as L.D.

In order to achieve the second objective an intensive study was made to identify the L.D. children having problems in reading. The process of identification is given in detail in chapter IV. Out of 95 students 48 students were identified as L.D. having reading problem.

To achieve the third objective of the study proper criteria was developed i.e. a reading test was made to measure the accuracy and comprehension. The percentage of children having problems in accuracy and comprehension were calculated.

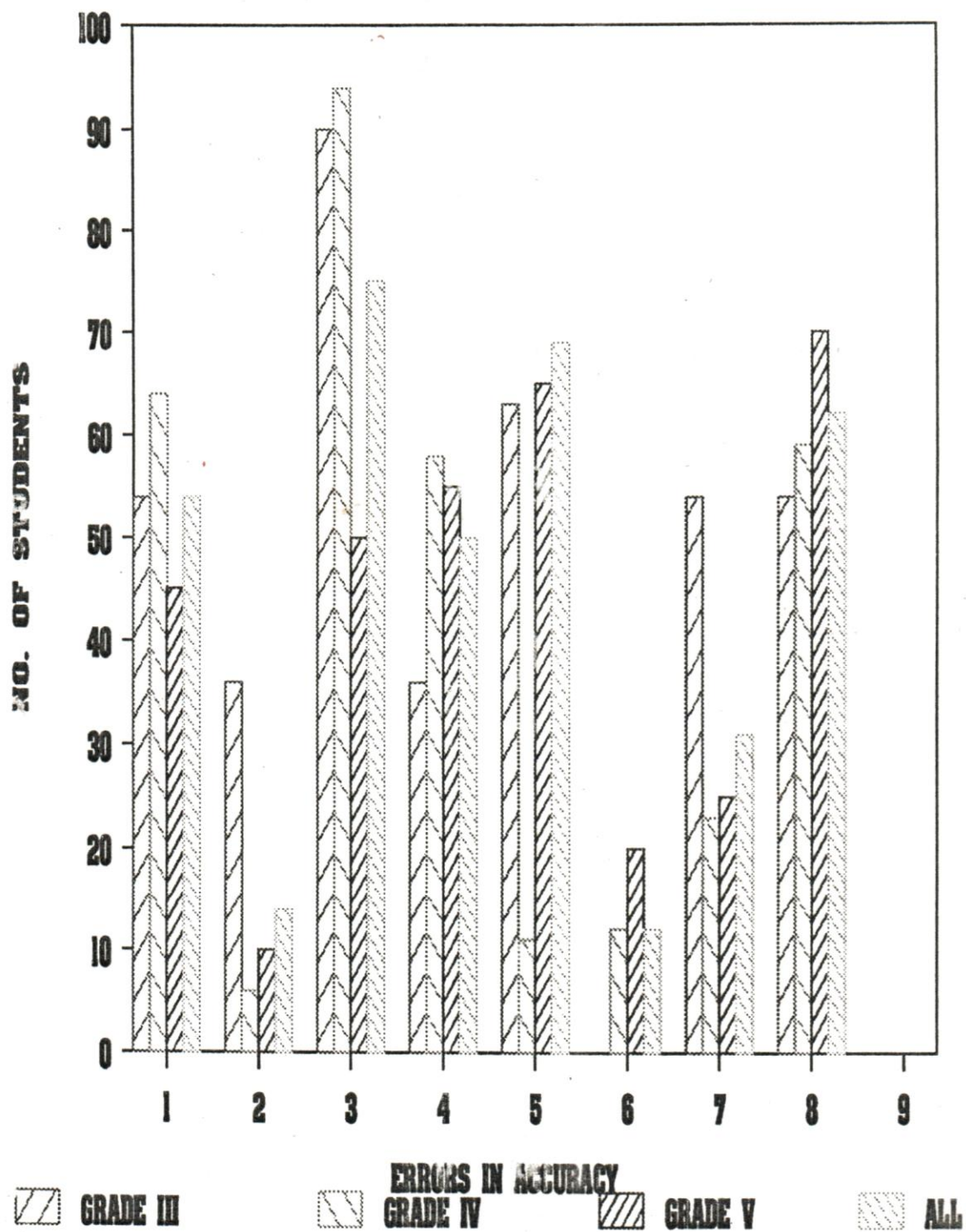
In the present study the V objective was to study problems in different areas of reading. these are accuracy (substitution, omission, distortion, addition, repetition, reversal, hesitation and self-correction) and comprehension, and then the percentage of the errors were calculated.

The number of students attempted successfully all test items and committed mistakes are given in detailed in Table No. 5.1

**TABLE 5.1 : DESCRIPTION OF STUDENTS
COMMITTED ERRORS (ACCURACY)**

Errors in accuracy	No. of students from III (N = 11) %		No. of students from Grade IV (N = 17) %		No. of students from Grade V (N = 20) %		Total no. of students N = 48 %	
	No.	%	No.	%	No.	%	No.	%
SUBSTITUTION	6	54	11	64	9	45	26	54
OMISSION	4	36	1	6	2	10	7	14
DISTORTION	10	90	16	94	10	50	36	75
ADDITION	4	36	10	58	11	55	24	50
REPETITION	7	63	2	11	13	65	33	69
REVERSALS			2	12	4	20	6	12
HESITATION	6	54	4	23	5	25	15	31
SELF-CORRECTION	6	54	10	59	14	70	30	62

STUDENTS COMMITTED ERRORS (ACCURACY)



From the table 5.1 it is clear that the test for reading accuracy was attempted by all the students. Most of them committed mistakes in abundance.

Each and every student was given a paragraph to read. Out of 48 students 26 of them committed errors in the form of substitution. The percentage of students who committed substitution error are approximately 54. No. of students from grade III, are 11 and out of 11 students 6 of them committed substitution error. The percentage of student who committed errors in grade III is 54. In IV grade 11 out of 17 students means approximately 64 percent of them committed substitution error and in V grade number of students committed errors were 9 out of 20 and the percentage is approximately 45.

Number of students who committed omission error were 7 out of 48 students it means approximately 14 percent. If calculated separately from III, IV and V were 4 out of 11, 1 out of 17 and 2 out of 20, respectively and the percentage is approximately 36, 6 and 10 respectively.

Distortion error was committed by 36 students out of 48 students, 75 percent of student committed this error. Students from III, IV and V who committed error are 10 out of all, 16 out of 17 and 10 out of 20, respectively. The percentage is 90,94 and 50 respectively.

Out of 48 students 24 committed addition error. The percentage is 50. From grade III, IV and V number of students committed addition are 4 out of 11, 10 out of 17 and 11 out of 20 and the percentage in approximately 36, 58 and 55 respectively.

33 out of 48 students committed repetition error, the percentage of student committed error is approximately 69. 7 out of 11, 2 out of 17 and 13 out of 20 from grade III, IV and V respectively committed the errors of omission separately. The percentage is approximately 63, 11 and 65 respectively of students who committed this error.

Error of reversal is committed by 6 students out of 48 students, so the total percentage is approximately 12. from grade IV and V students who committed this error are 2 out of 17 and 4 out of 20 it means the percentage is approximately 12 and 20 respectively.

Hesitation error were committed by 15 students out of 48 students the percentage who committed this mistake are 31 approximately. Students from III, IV and V who committed this error are 6 out of 11, 4 out of 17, and 5 out of 20 and the percentage is approximately 54, 23 and 25 respectively.

The errors of self correction was done by 30 students out of 48 students. The percentage of students who committed this error was approximately 62. Number of students from grade III, IV and V who committed this error are 6 out of 11, 10 out of 17 and 14 out of 20, the percentage is approximately 54,59 and 70 respectively.

Table no 5.1 is represented by figure 5.1

5.2.1 Errors Committed by Students in Reading Attainment - Accuracy and Comprehension :

In the present study error committed by the students is considered in respect of accuracy and comprehension only. The errors committed by students are described under following sub headings.

1. Errors in Accuracy :

Errors in accuracy are measured in terms of eight categories. These are substitution, omission, distortion, addition, repetition, reversal hesitation, and self correction. These are given in detail in Table No 5.2

a. Errors in Substitution :

Problems of substitution arised of mostly in the students of grade IV, out of 17 students 11 students has committed this error, they have committed 25 errors of substitution. 64 percent of students committed this error.

Eg. Wrong Right

Led Lived

Three There

In the above example word 'led' is substituted in place of 'lived' and 'three' is substituted in place of 'there'.

b. Errors in Omissions

Only 7 students out of 48 have committed this error. Only 14 percent students have this problem in this study.

eg. wrong right

big () big voice

In the above example it is clear that in first example pupil has omitted the word 'voice' in second one the word 'letter' is omitted.

c. Errors in Distortion :

Most of the students have committed this error. 36 out of 48 students has committed this error, the percentage is 75.

eg Wrong Right

Medley Middle

Thought Through

Above examples shows that the pupil has pronounced the words "middle" and 'through' incorrectly as 'medley' and 'thought'. This error ranks first in all the errors committed by the students.

d) Errors of Addition

50 percent of student has committed this error. 24 students out of 48 students have committed this mistake.

eg. Wrong Right

and who did not and did not

The correct sentences was "... and did not ..."but the student read it as"... and who did not..," he inserted the word "who".

e) Errors of Repetition :

This ranks second in the table of ranking errors (table 5.3), 69 percent of the student has done this mistake, 33 out of 48 students have committed these error.

f) Error of Reversal :

Very few students have done this error. Only 6 students out of 48 have committed this error.

MEAN FOR READING ACCURACY (ERRORS)

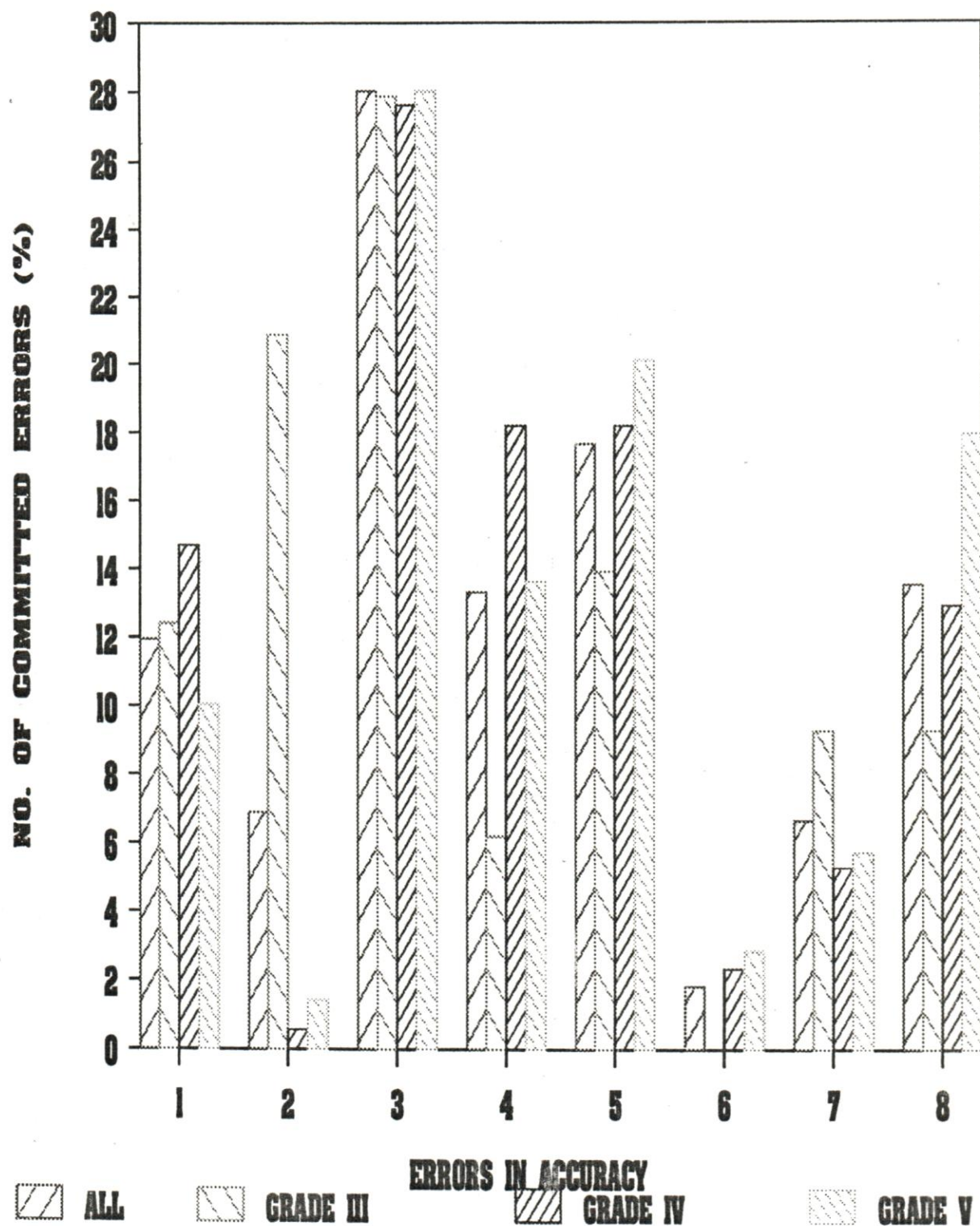


TABLE 5.2 DESCRIPTION OF MEAN FOR READING ACCURACY (IN THE FORM OF ERRORS)

Errors in accuracy	No. of committed errors (N = 48) %		No. of committed errors - III (N = 11) %		No. of committed errors - IV (N = 17) %		No. of committed errors - V (N = 20) %	
	No.	%	No.	%	No.	%	No.	%
SUBSTITUTION	52	11.95	16	12.4	25	14.7	14	10.07
OMISSION	30	6.89	27	20.9	1	0.58	2	1.43
DISTORTION	122	28.04	36	27.9	47	27.64	39	28.05
ADDITION	58	13.33	8	6.2	31	18.23	19	13.66
REPETITION	77	17.7	18	13.95	31	18.23	28	20.14
REVERSAL	8	1.83	--	--	4	2.35	4	2.87
HESITATION	29	6.66	12	9.3	9	5.29	8	5.75
SELF CORRECTION	59	13.56	12	9.3	22	12.94	25	17.98
TOTAL	435		129		170		139	

TABLE 5.3 RANK ORDER OF ERRORS (IN ABSOLUTE NUMBERS)

ERRORS (ACCURACY)	ALL GRADE	III GRADE	IV GRADE	V GRADE
SUBSTITUTION	IV	IV	III	V
OMISSION	IV	II	VII	VIII
DISTORTION	I	I	I	I
ADDITION	IV	VI	II	II
REVERSAL	VI	--	VI	VII
REPETION	II	III	VI	VII
HESITATION	V	V	V	VI
SELF-CORRECTION	III	V	IV	III

TABLE 5.4 - MEAN COMPREHENSION SCORE

VARIABLES	MEAN COMPREHENSION SCORE		PERCENTAGE %
	ALL STUDENTS N = 48	113	2.35
III N = 11	31	2.81	70
IV N = 17	35	2.05	51
V N = 20	47	2.36	59

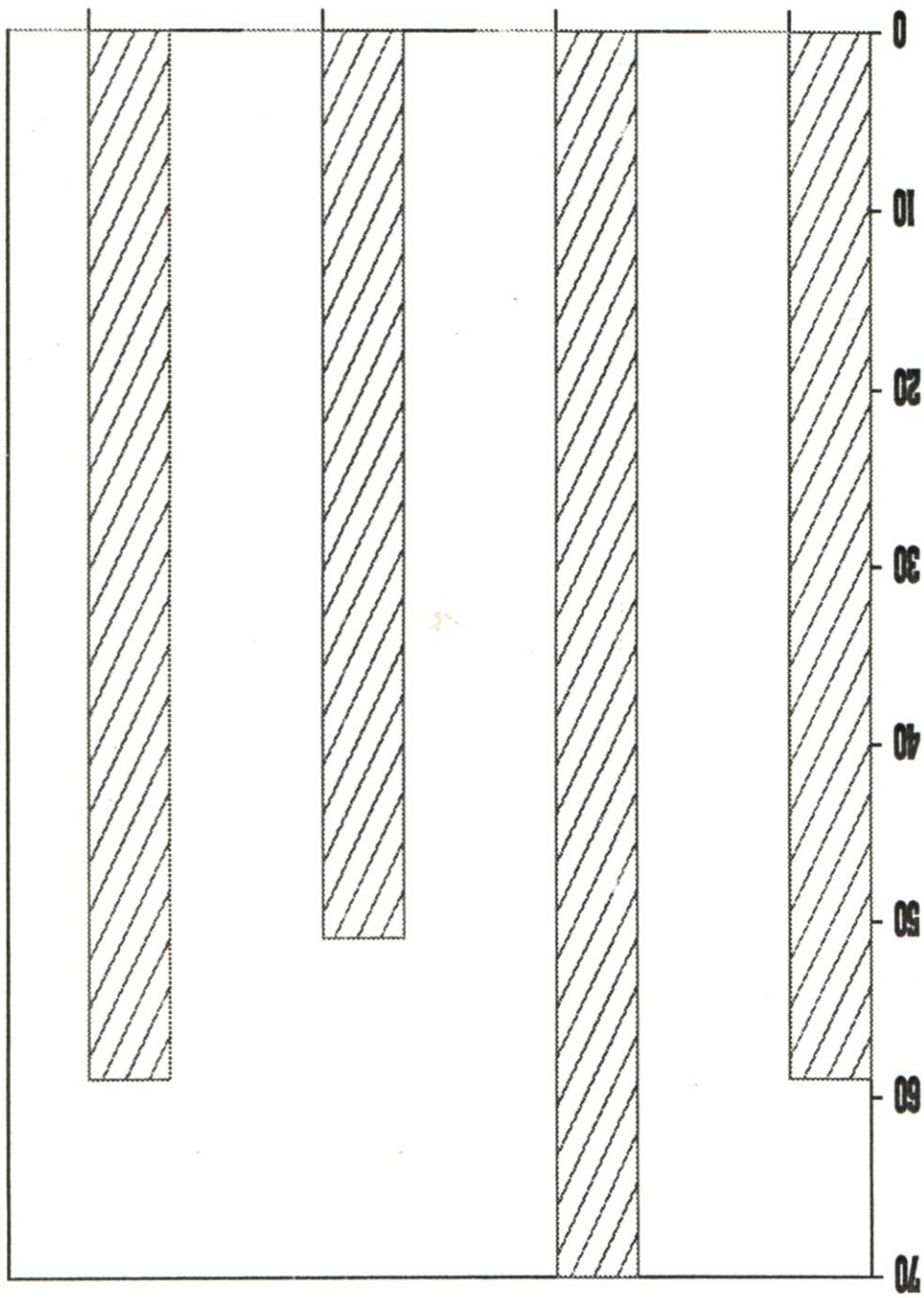
COMPREHENSION SCORE

GRADE V

GRADE IV

GRADE III

ALL



MEAN COMPREHENSION SCORE (%)

NO OF STUDENTS

Errors in Comprehension :

The Table 5.4 shows the mean comprehension score. The mean comprehension score of 48 students is 2.35, so the total percentile of questions comprehended correctly is 59.

eg. 1) How government helped all people's to send letters ?

Correct : by opening post offices.

Incorrect : By trains

2) Who had a loud voice

Correct : Father bear

Incorrect : Mother bear

Hence, the above examples shows that some of the students has not comprehended well but most of the students have good comprehension. In grade III the comprehension score is 31, the mean score is 31 and the percentage is approximately 70. The mean score of grade IV is 2.05 and 2.36 respectively. The percentage is 51 and 59 respectively.

5.3 DISCUSSION :

The study observes that the dyslexics are poorer to normal children of same class in reading accuracy but are good in comprehension. Further analysis of performance in reading accuracy (substitution, omission, addition, distortion, repetition, reversal, hesitation and self correction) reveals that dyslexics have problem in these eight areas of accuracy. The finding of the study supports the earlier findings of abroad for instance : Aaron suggest that dyslexics have :

- i) Poor decoding
- ii) Adequate listening comprehension.
- iii) Reading Comprehension superior to decoding
- iv) I.Q. is average or above average.

Further United States Education for All Handicapped Children Act, 1975 supports by : " A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen think, speak, read, write, spell or do

Jorm, 1983 ; Shankweiler and Grain - 1986 says it is however, possible to have difficulties with both comprehension and decoding print. These may indeed be linked in that the kinds of memory processes associated with specific learning difficulties can also interfere with tasks involving listening comprehensions.

Schonell J.Fred; Ovliver and Boyd in their book BAcKwardness in the Basic Subjects supports our study by :

The backward readers could not react accurately to the whole pattern of a word, they confused the minor structural differences that existed between words like 'wet' and 'went' 'he' and 'she' and were likely to replace one by the others in reading. In many instances they would take parts of the word and then try to guess the whole word, thus 'for' would attract them and 'form' 'front' would all be read as 'for' or 'from'.

They tend to omit, substitute, add or transpose letter in their confusion of known words with those unknown.

Sometimes even when they can analyse the words into its correct form and sound values they are unable to blend them or remember the constituents units or syllables.

All these studies support the present study. Even sometimes normal children have problems in reading but difference is of basic root and treatments. The problem of dyslexics are because of short-attention span, visual motor ability, visual spatial ability, memory and in comprehension, whereas normal children are having some problem due to ineffective instructions etc but not due to above mentioned factors they may have problem in one or more then one of above mentioned areas (Major J.C. and major B.M.)

Normal children are able to listen carefully to the teachers presentation of a concept. It is not true for many L. D. children L.D. children have extreme difficulty in doing so when teaching basic computations, an obvious strategy for helping L.D. child with short attention span is to be kept in mind of the teacher.

Normal children have sufficient eye hand coordination to manipulate objects and write symbols. Many of L D. children of regular class room exhibit a difficulty in visual motor performance that can interfere significantly with their basic computational skills.

Students have the spatial ability necessary to copy and organize, then arrangement into the formats that are readable and perceptually workable. Many L..D. children have difficulties in spatial abilities and this has reflected the problem of reading attainment as shown in the study.

The intellectual capacity of a child inevitably affect his ability to read. Its quite obvious that children with relatively high scores an intelligence test were backward readers and some children with not very high scores were very good readers (Bullock committee, 1975). Some of the L.D. children have found reading easy but others for a variety of reason have fallen further and further behind. The conclusion should not be drawn that all the dyslexics commit such high percentage of mistakes but may be some problems in reading have low percentage. Due to limitations of time, investigator could not cover the large population . If such type of investigation is done on large number of population the percentage of problem may differ due to fact that each L.D. child is unique and not all L.D. child with reading disability possess some difficulties (Learner 1981)

It is said that dyslexics have very good comprehension (Fig 2.2) but in the present study the comprehension is average. This may be due to the fact that when a child is having poor accuracy his full concentration on accuracy and hence could not not concentrate on comprehension. In present study it is shown that the students of grade III has good comprehension that may be because at this time they are not concentrating on accuracy and then in grade IV their comprehension is little affected because of deviation of concentration and again in grade V when he has developed some what perfect accuracy his degree of comprehension increased.

In accuracy most of the errors committed are of distortion, and then of repetition. Most of the self- correction is done at late age i.e. in grade V when students become aware of their mistakes.

While collecting this data it has been tried to control some of the threats but then also due to lack of time all the threats could not be controlled.

The present study reveals that in every class there are dyslexic student among the normal one.