CHAPTER - IV

ANALYSIS OF DATA

4.1 Introduction

The analysis of data is the heart and soul of any research work. If the collective data are systematically arranged & analysed through appropriate scientific and statistical technique, the results obtained are scientific and correct. This is where precision counts most.

This chapter deals with the analysis of the data. The checklist scores were analyzed obtained by the learners parents and teachers. Finally the scores and their freqencies, percentages were arranged in tabular form.

Analysis of data was done in following manner :

4.2 Percentage of all Early Indicators

a)   For Teachers

b)   For Parents

One of the major objectives of this study is to identify the extent of presence of the early indicators among children .For this purpose ,the investigator obtained the perception of both parents & teachers ,by asking them to ticking "yes" or "no" option of the checklist depending on whether a particular early indicator was present or absent during the early years of development.The frequencies of "yes" responses & their corresponding percentages were computed & is presented in table 4.1

4.3 Percentage of all Attributes (Item-wise)

a)   For Teachers

b)   For Parents

From the Frequency of 'yes' responses, the percetage of each attribute of early indicators were computed & presented in the following table no. 4.2 to investigate in depth & detail of all the items under each indicator in perception to teachers & parents

4.4 Frequency wise Analysis

Frequencies were tabulated score wise, i.e. scoring on one-scale of each 'Yes' response on the total no. of items & each early indicator.Comparisons were made on the basis of Parents & Teachers perception viewed on each indicator.

Depending on the number of items under each early indicator, is given as 0,1,2,3,4 & 5 respectively for absence of attribute, presence of one attribute, presence of two attribute, presence of three attributes, 4 attributes & 5 attributes i.e. Depending on the number of attributes the scoring varied from 0 to 5. (refer table 4.4)

4.5 Correlation wise Analysis

Coefficient's of correlation were computed using the Pearson Product Moment Method for correlations"r" between the teacher & parents perception on aii early indicators to compare the extent of relation between their perceptions. (refer table 4.5)

4.6 Background variable Analysis

In order to know the extent to which background variable of students attribute for early indicatorsas perceived by parents &teachers values of 't' & 'F' are computed. In this study only gender & class of students have been taken into consideration .The results are presented here under table 4.6.1 and 4.6.2

4.2 Percentage wise analysis of All indicators

Table 4.1   Showing % of teacher & parent perception on early indicators

S.No.	Indicator	Teacher %	Parent %
1.	Hyperacitivity	60	81.11
2.	Difficulty following Verbal Instruction	73.33	80
3.	Difficulty following Visual Perception	53.33	53.33
4.	Difficulty in conserving	63.33	63.33
5.	Spatial Orientation	44.66	46
6.	Auditory blending .	72.50	72.50
7.	Unable to organize information.	66.66	73.33
8.	Distractibility.	93.33	96.66
9.	Perseveration.	48.33	50
10.	Memory.	76.66	76.66
11.	Poor gross motor coordination	31.66	40.83
12.	Clumsy in mobility.	30	43.33
13.	Poor Eye Hand Coordination	63.33	63.33
14.	Impulsivity.	46.66	43.33
15.	Lack of interest	31.66	31.66
16.	Difficulty in oral expression.	53.33	60

The behavioural symptoms as seen in Table 4.1 and also depicted in Graph 1 reveal that highest early indicator accounting for learning problems is distractibility. Majority of Teacher (93.3%) and Parent (96.6%) found their children to be highly distractible. Hyperactivity accounted for second highest early indicator in perception to parents and was 81.1% while in perception to teachers it was 60%. The next indicator in perception to parent, verbal instruction is 80% the teachers accounted for this indicator 73.3%

4.3 Analysis of all Attributes to all indicators.

Table 4.2 Showing % of teacher & parents perception to all Attributes (items) of all early indicators.

S.No.	Indicator	Teacher %	Parent %
1.	Hyperacitivity		
	a Unable to sit at one place	70	86.66
	b Unable to complete given task	73.33	93.33
	c Pushing, Pulling	36.66	63.33
2.	Difficulty following Verbal Instruction		
	a Need to be told repeatedly	86.66	93.33
	b Response delayed	60	66.66
3.	Difficulty following Visual Perception		
	a Unable to follow directions R/L	53.33	53.33
	b Top or bottom	50	50
	c Forward or backward	56.66	56.66
4.	Difficulty in conserving		
	a Conserving smaller or bigger	63.33	66.66
	b Far or Near	53.33	53.33
	c Yesterday or Tomorrow	73.33	70
5.	Spatial Orientation		
	a 'd' as 'b' or viceversa	100	100
	b 'p' as 'q' or viceversa	50	46.66
	c 'm' as 'w' or viceversa	6.6	13.33
	d 'N' as 'Z' or viceversa	10	13.33
	e '6' as '9' or viceversa	56.66	56.66

6.	Auditory blending .		
	a ब + स = सब	86.66	86.66
	b क + ल = लक	83.33	83.33
	c B + A + T = TAB	60	60
	d W + A + S = SAW	60	60
7.	Unable to organize information.	66.66	73.33
8.	Distractibility.	93.33	96.66
9.	Perseveration.		
	a Copying over & over	50	53.33
	b Repeat in oral expression	46.6	46.6
10.	Memory.	76.66	76.66
11.	Poor gross motor coordination		
	a While walking, running	3.33	23.33
	b Playing games	3.33	16.66
	c While speaking	60	60
	d While writing	60	63.33
12.	Clumsy in mobility.	30	43.33
13.	Poor Eye Hand Coordination		
	a Difficulty in actions	76.66	73.33
	b Difficulty pointing body parts	63.33	63.33
	c Fixing blocks & puzzles	50	53.33
14.	Impulsivity.	46.66	43.33
15.	Lack of interest	31.66	31.66
	a Rejected books	53.33	50
	b Not fond of seeing picture books	10	13.33
16.	Difficulty in oral expression.		
	a Pronounciation	60	66.66
	b Speech production	46.66	53.33

Trends from the above table reveal that an attribute to early indicator SPATIAL ORIENTATION ,i.e., 'b' as 'd' or viceversa scores 100% in perception to teachers & parents.

4.4 FREQUENCY WISE ANALYSIS

Table 4.3.1 Showing frequencies & % of responses Of parents & teachers on

HYPERACTIVITY

Score	Parent		Teacher	
	f	%	f	%
0	-	-	4	13
1	4	13	6	20
2	9	30	12	40
3	17	57	8	27
Total	30	100	30	100

When we look at table 4.2.1 we find that 57% parents agreed to all the three attributes of hyperactivity, i.e., the child did not sit at one place for required amount of time or overactive was unable to complete task at hand & was every where, pushing, pulling sibling.

13% parents agreed on only one attributes that the child is too fast or overacitive.

No parents have reported the -nce of any the traits of this Indicator.

The teachers 40% viewed that children did not complete the task at hand in class 13% teachers viewed that name of the hyperactivity attributes account for learning problems.

The percentage of parents (57%) is more in perceiving the +nce of all the three traits in comparison to the teacher (27%) However, 40% of the teachers viewed that two traits were found prominent among children i.e. incomplete task & overactive or too fast.

Table 4.3.2 Showing frequencies & % of responses Of parents & teachers on

VERBAL INSTRUCTION

Score	Parent		Teacher	
	f	%	f	%
0	1	3	4	13
1	11	37	8	27
2	18	60	18	60
Total	30	100	30	100

From table 4.2.2 we find that, both parents & teachers (60% each) are in respect of the presence of both the traits under this early indicator - i.e., need to be told repeatedly & responses were delayed, confused on asking a question.

Only 3% parents reported the -nce of any of the traits of this indicator.

However, 13% teachers reported the absence of any of the traits.

Table 4.3.3 Showing frequencies & % of responses 0f parents & teachers on VISUAL PERCEPTION

Score	Parent		Teacher	
	f	%	f	%
0	11	37	11	37
1	4	13	4	13
2	1	3	1	3
3	14	47	14	47
Total	30	100	30	100

When we look at the table 4.3.3 we find, parents & teachers are in respect of the +nce of traits under visual perception i.e., unable to tell & follow directions (a) right (b) forward or backward (c) top or bottom. In both, parents and teachers opinion (47% each) that three characters pertended to visual perception are present among children & almost equal percentage of parent & teacher (37%) did not perceive any of the attributes of difficulty in visual perception.

Table 4.3.4 Showing frequencies & % of responses 0f parents & teachers on CONSERVATION

Score	Parent		Teacher	
	f	%	f	%
0	8	27	8	27
1	3	10	2	6
2	3	10	5	17
3	16	53	15	50
Total	30	100	30	100

From the table 4.3.4 we find that 53% parents were in the opinion on difficulty in conserving traits - i.e., relative smaller or bigger, far or near, yesterday or tomorrow. Similarly the percentage of teachers to the comparison of all 3 traits was nearly same (50%)

However the percentage of both parents & teachers who did not perceive any of the attributes was almost equal (27%)

Table 4.3.5 Showing frequencies & % of responses Of parents & teachers

SPATIAL ORIENTATION

Score	Parent		Teacher	
	f	%	f	%
1	10	33	11	37
2	6	21	5	17
3	10	33	12	40
4	1	3	-	-
5	3	10	2	6
Total	30	100	30	100

From Table 4.3.5, we find 33% of parents opinion was in favour of 3 traits (out of the five) of different spatial orientation i.e. 'd' as 'b' 'p' as 'q' & 'm' as 'w' or viceversa in all above cases.

Another 33% parents holded the first trait i.e. 'd' as 'b' or viceversa as the major attribute to spatial orientation and a minimum of 3% parents regarded the attribute 'N' as 'Z' or viceversa.

However the percent of teachers was 40% to the three attributes comparison to parents (33%) was greater while 37% of teachers viewed the +nce of 'd' as 'b' or viceversa attribute. None of the teacher reported the presence of 'N' as 'Z' or viceversa attribute.

47

Table 4.3.6 Showing frequencies & % of responses Of parents & teachers on

AUDITORY BLENDING

Score	Parent		Teacher	
	f	%	f	%
0	4	13	2	7
1	2	7	1	3
2	7	23	7	23
3	-	-	-	-
4	17	57	20	67
Total	30	100	30	100

From table 4.3.6, we find that 57% parents viewed the following traits of auditory blending while speaking

In comparison to the presence of these characteristics the teachers percentage was more (67%)

None of the parents or teacher attributed to B + A + T = TAB for auditory blending whild speaking

Table 4.3.7 Showing frequencies & % of responses Of parents & teachers on

ORGANIZE INFORMATION

Score	Parent		Teacher	
	f	%	f	%
0	7	23	9	30
1	23	77	21	70
Total	30	100	30	100

RIE, BHOPAL

From table 4.3.7 we find, 77% parents view the attribute to unable or difficulty in organizing information, i.e., the children are unable to repeat a story, fix jigsaw puzzle, co relate colours to flower, animal voice to its mask. To 23% parents none of the attribute contributed & thus absence of difficulty in organizing information was encountered.

However in comparison to teachers presence of attributes were less than parents i.e. 70% on the other hand absence of attribute to different in organizing information was more i.e. 30%

Table 4.3.8 Showing frequencies & % of responses Of parents & teachers on

DISTRACTIBILITY

Score	Parent		Teacher	
	f	%	f	%
0	1	3	1	3
1	29	97	29	97
Total	30	100	30	100

From table 4.3.8 we find that both parents and teachers (97% each) are in respect of presence of traits under distractibility i.e. light, shadow, sound, random movements very easily drew away the childs attention.

Rest 3% each did not account for distractibility.

Table 4.3.9 Showing frequencies & % of responses Of parents & teachers on

PERSEVERATION

Score	Parent		Teacher	
	f	%	f	%
0	14	47	14	47
1	2	6	3	10
2	14	47	14	43
Total	30	100	30	100

From table 4.3.9, we find that 47% parents were in respect to the attributes of different in perseveation i.e. repeat persistently in almost any behavioural area even if it was not required copying a word over & over again involuntarily or repeating it orally.

However, in comparison to above stated trails the percentage of teachers was less i.e., 43%.

Also, both parents & teachers, nearly the same percent i.e. 47% were in respect to absence of character of perseveration.

Table 4.3.10 Showing frequencies & % of responses 0f parents & teachers on MEMORY

Score	Parent		Teacher	
	f	%	f	%
0	7	23	7	23
1	23	77	23	77
Total	30	100	30	100

From table 4.3.10, we find that 77% both parents & teachers are in respect to the presence of traits under memory i.e. difficulty to follow & memory i.e. difficulty to follow & remember instruction or changing from ine activity to another. Both 23% parents & teachers reported the absence of difficulty in memory trait

Table 4.3.11 Showing frequencies & % of responses 0f parents & teachers on GROSS MOTOR COORDINATION

Score	Parents		Teacher	
	f	%	f	%
0	5	17	7	23
1	11	37	11	37
2	9	30	11	37
3	1	3	1	3
4	4	13	-	-
Total	30	100	30	100

From table 4.3.11, we find the 37% parents viewed difficulty in gross motor coordination that too to only one attributed i.e., poor coordination while running & walking during 0-3 yrs. 3% parents report difficulty when began speaking.

However 37% teachers reported each for poor coodination while running, walking & each of coordination in playing games & other physical activities. And none of the reported difficulty in writing holding pencil.

Table 4.3.12 Showing frequencies & % of responses 0f parents & teachers on

CLUMSY IN MOBILITY

Score	Parent		Teacher	
	f	%	f	%
0	18	60	21	70
1	12	40	9	30
Total	30	100	30	100

40% parents reported the attributed to clumsy in mobility, i.e. bumped into thing, child had frequent accidents got hurt physically while 40% parents reported its absence.

Similarly 30% teachers viewed the presence of trait & 70% of teachers viewed its absence.

Table 4.3.13 Showing frequencies & % of responses 0f parents & teachers on

EYE HAND COORDINATION

Score	Parent		Teacher	
	f	%	f	%
0	6	20	5	17
1	3	10	4	13
2	8	27	11	37
3	13	43	10	33
Total	30	100	30	100

43% Parents were in the opinion that the child had difficulty in performing actions involving eye-hand coordination Eg. Different pointing body parts & difficulty in fixing 2-3 pieces of block or puzzles. And 10% reported, different only in cone trait i.e. performing actions involving eye-hand coordination.

However 37% teachers reported difficulty in pointing body parts & 33% teacher fixing blocks or solving puzzles, lack of Eye & hand coordination. 13% Reported for poor action.

Table 4.3.16 Showing frequencies & % of responses Of parents & teachers on

ORAL EXPRESSION

Score	Parents		Teachers	
	f	%	f	%
0	9	30	13	43
1	6	20	4	14
2	15	50	13	43
Total	30	100	30	100

50% parents viewed with respect to difficulty in oral expression i.e., difficulty in pronouncing specific syllabes or sound while speaking & the children did not speak early or speech production was affected.

However 30% of parents viewed the absence of trait.

Similarly 43% teachers viewed the difficulty in oral expression & a same percent (43%) viewed its absence.

4.5 Correlation wise analysis

Table 4.4 showing values of 'r' between Parents & Teachers inrespect to early indicators.

S.No.	Indicators	r
1.	Hyperactivity	0.17 #
2.	Visual Instruction	0.75**
3.	Visual Perception	0.84**
4.	Conservation	0.94**
5.	Spatial Orientation	0.89**
6.	Auditory Blending	0.61**
7.	Unable to Organize Information	0.81#
8.	Distractibility	1.00**
9.	Perseveration	0.98**
10.	Memory	1.00**
11.	Poor Gross Motor Coordination	0.74**
12.	Clumsy in Mobility	0.50**
13.	Poor Eye-Hand Coordination	0.65**
14.	Impulsivity	0.86**
15.	Lack of Interest	0.88**
16.	Oral Expression	0.69**

** r   Significant at 0.01 level

r   Non significant

Distractibility & Memory were found to have perfect correlation i.e. perceptions of teachers & parents are highly related & relation is the Hyperactivity & unable to organize information indicator his positive relation but not significant relation was found between teachers & parents perception.

For all other indicators i.e. visual instraction, visual perception, conservation, spatial orientation, Auditory Blending, Perseveration, Poor Cross Motor Co-ordination. Clumsy in mobility, poor Eye Hand coordination, impulsivity, lack of interest & oral expression significant relation was found between teachers & parents perception.

Table 4.7   Values of 't' between class III & V vs early indicator

Indicator	Class	N	Mean	S.D.	t
VIT	III	13	1.53	0.66	1.16
	V	7	1.85	0.37	
VPP	III	13	1.69	1.37	1.80
	V	7	2.71	0.75	
SOP	III	13	3.07	1.32	2.17*
	V	7	1.85	0.89	
ABT	III	13	3.69	0.75	0.67
	V	7	3.42	0.97	
MobilT	III	13	0.15	0.37	0.62
	V	7	0.14	0.37	

Table 4.8 Values of 't' between class IV & V vs early indicator

Indicator	Class	N	Mean	S.D.	t
VIT	4	10	1.10	0.87	2.13*
	5	7	1.85	0.37	
VPP	4	10	0.70	1.25	3.78*
	5	7	2.71	0.75	
SOP	4	10	1.80	1.03	0.11
	5	7	1.85	0.89	
ABT	4	10	2.30	1.63	1.62
	5	7	3.42	0.97	
Mobil T	4	10	0.60	0.51	1.99
	5	7	0.14	0.37	

*significant at 0.05 level   ** significant at 0.01 level

RIE, BHOPAL