



## Learning Disability and Behaviour Problems among School Going Children

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### ABSTRACT

Parents are often worried when their child has learning problems in school. There are many reasons for scholastic problems one of them is specific learning disability (SLD). Children with learning disabilities can have intelligence in the normal range, but the specific learning disability may make teachers and parents concerned about their general intelligence. Often, these children may try very hard to follow instructions, concentrate, and "be good" at home and in school. It is found that 15% - 30% of LD children have emotional and behavioural difficulties. **Aim:** The aim of the study is to identify the children with learning disabilities in schools and to compare their behavioural problems with normal children. **Method:** For the purpose of the study 327 children (215 boys, 112 girls) were taken randomly from two regular schools at Warangal, India. The age range of the school children is 6 to 14 years. Three tools, Rhode Island Pupil Identification Scale, Learning Disabilities Checklist and Children's Behaviour Rating Questionnaire for Completion by Teachers were used. **Results:** The results revealed that 19% students were suffering from learning disability in the schools. Children with learning disabilities are exhibiting significant behavioural problems than children without learning disabilities in the form of hyperactivity and aggression. The gender difference was found on hyperactivity and aggression in children with learning disability.

**Keywords:** Learning Disability, Behaviour Problems, School Going Children

### INTRODUCTION

Learning disability is the largest disability among school going children. There is a severe discrepancy between ability and actual achievement. The characteristics of learning disabled children vary widely. Children with Learning Disabilities (LD) are those who, despite adequate ability, have great difficulties areas of academic achievement. These difficulties are characterized by problems in language, attention, perception, memory, auditory perception, language, visual perception, fine and gross motor coordination. The identification of Special Educational Needs (SEN) associated with learning disabilities is most stable in the age range 7-15 years.<sup>1</sup> Three types of SEN, when combined, are reasonably equivalent to learning disabilities: Moderate Learning Difficulty (MLD); Severe Learning Difficulty (SLD); and Profound Multiple Learning Difficulty (PMLD). In this age range, 2.46%

of girls and 4.01% of boys were identified with a primary SEN associated with moderate learning disabilities. 0.39% of girls and 0.60% of boys were identified with a primary SEN of severe or profound multiple learning difficulties (approximately equivalent to severe learning disabilities). These estimates are consistent with the results of epidemiological studies of the prevalence of learning disabilities in children.<sup>2,3,4</sup> The multilingual social context in India, where children often have to learn to study through a medium other than their mother tongue is a complexity that makes not only diagnosis extremely difficult but also, estimation of prevalence next to impossible. It is estimated that about 15-20% of school going children have Learning Disorders in India. Choudary (2012)<sup>5</sup> reported that a prevalence of learning disability is 10.25% in Class III to V at Bikaner City, India. Learning disabilities are found three to four times more often in boys. The total prevalence rate in 4-16 year old children in urban middle class, slum and rural areas was 12%.<sup>6</sup> The prevalence of specific learning disabilities was 15.17% in sampled children, whereas 12.5%, 11.2% and 10.5% had dysgraphia, dyslexia and dyscalculia respectively.<sup>7</sup> It is essential to find out the behavioural characteristics of children with learning disability for better management. Deficits in the brain function lead to deficits in learning and this in turn leads to psychological/behavioural consequences. Executive processes are integral to higher brain function, particularly in

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the areas of goal formation, planning, goal-directed action, self-monitoring, attention, response inhibition, and coordination of complex cognition and motor control for effective performance.<sup>8</sup> Deficits of the executive functions are observed in all population to varying degrees, but severe executive dysfunction can have devastating effects on cognition and behaviour in both individual and social contexts.

Behaviour problems in children and adolescents can be classified into two major domains of dysfunction, namely externalizing behaviours and internalizing behaviours.<sup>9</sup> The externalizing behaviours are marked by defiance, impulsivity, hyperactivity, aggression and antisocial features. The internalizing behaviours are evidenced by withdrawal, dysphoria and anxiety. Significant associations have been found consistently between learning disabilities and behaviour problems.<sup>10-30</sup> Manoj et al, (2015)<sup>31</sup> reported that 40% of children with LD are diagnosed with behaviour problems, 30% children with aggressive behaviour and 10% children showed withdrawn behaviour. Others have reported that invariably most have some kind of stress.<sup>32</sup> Beitchman described co-morbidity of learning disorders with externalizing and internalizing disorders. Various studies reported that both externalizing and internalizing behaviour problems are associated with learning disabilities.<sup>33-37</sup>

Maughan et al (1985)<sup>38</sup> in a review of studies on reading disabilities identified that these children have anxiety, low self-esteem, dysfunctional attributions, depression, inattentiveness, disruptive behaviour, aggression, delinquency etc. Results of surveys have shown that 24% - 54% of children with LD have behaviour problems.<sup>39,40,41</sup> Khurana (1980)<sup>42</sup> conducted a study at Baroda, India; on 100 children with learning disability, reported behaviour problems in 84% cases. Jorm et al (1986)<sup>43</sup> studied a sample of 453 Australian children followed over the first three years of schooling. It was found that at school entry, backward readers were having more behaviour problems. Number of Studies reported that about 39 to 54% of children with learning disability had more behaviour problems than normal children.<sup>32,36,37,41,44-46</sup> Ritter (1989)<sup>20</sup> estimated the problem behaviours of 51 adolescent girls with learning disability, using Child Behaviour Checklist and identified elevated problem behaviours in adolescents with learning disability group compared to adolescents without learning disability. Cunningham & Barkley (1978)<sup>47</sup> noted that reading disabilities might lead to behaviour problems such as hyperactivity. McMichael (1979)<sup>39</sup> assessed Scottish children for behaviour problems and reading readiness at school entry and later it was found that antisocial behaviour problems preceded the reading difficulties.

Kellam et al (1983)<sup>48</sup> reported that children having the reading disability are vulnerable to emotional as well as conduct problems. Badian (1983)<sup>49</sup> reported that 42% of children with dyscalculia had problems with attention. Evidence indicates that children who exhibit attention deficits without motor hyperactivity are likely to have learning disabilities than those who display attention deficits and motor hyperactivity.<sup>50,51</sup>

Cornwell & Bawden (1992)<sup>52</sup> examined the relationship between specific reading disabilities and aggressive behaviour. There was not enough evidence to conclude that reading disability causes aggressive or delinquent behaviour; although limited evidence suggested that reading disability may worsen pre-existing aggressive behaviour. Huntington & Bender (1993)<sup>53</sup> concluded that adolescents with learning disabilities experience higher levels of trait anxiety and have a higher prevalence of somatic complaints, as well as reduced self-esteem. Nabuzoka & Smith (1993)<sup>54</sup> from The United Kingdom found that the learning disabled children were shyer, seeking help and were often victims of bullying. McBride & Siegel (1997)<sup>55</sup> of the University of Columbia in a study on adolescent suicide reported that 89% of the 27 adolescents who committed suicide had significant deficits in spelling and handwriting. The study by Prior et al. (1999)<sup>28</sup> highlighted the risk for internalizing problems including anxiety, depression and phobias in preadolescent children with mathematics difficulties. Various studies supported the view of co-morbidity of emotional and behavioural problems with learning disabilities.<sup>14,56-58</sup> Therefore, this disability needs to be recognized and remediation before it creates long-lasting negative consequences for an adolescent. In a study Rozario (1991)<sup>59</sup> found that a girl had a lot of negative feelings about herself due to poor performance in academic work. She was given 10 sessions of REBT focused on building positive thinking, and counselling to the parents and teacher and found significant improvement. A study revealed that CBT has been improved the self-confidence and self-esteem of adolescent and effectively worked in adolescents with depressive and anxiety features.<sup>60</sup>

**THE AIM OF THE STUDY:** The aim of the study is to identify the learning disability among school children and to compare their behavioral problems with normal children.

#### OBJECTIVES OF THE STUDY

- To assess the learning disability among school going children
- To assess the behaviour problems among school going children
- To compare the behaviour problems among children with learning disability and children with no learning disability
- To see the gender differences in behaviour problems among children with learning disability

#### METHODS AND MATERIAL USED

The sample was selected from two schools by using random sampling with each alternate student were selected from the class register at Warangal, India. The sample consists of 327 children (215 boys, 112 girls) from formal schools who were selected after getting the informed consent from the school authority and the participants. The children who are attending normal school with either sex between the age group of 6 to 14 years were included in this study. Children with any physical, intellectual and other neurological disabilities and children who

are studying in residential model schools were excluded from the study.

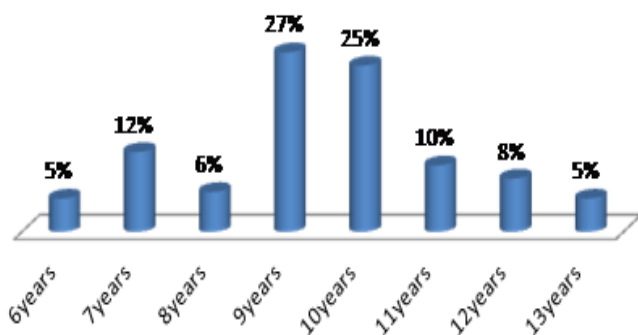
**Tools and assessment:** The socio-demographic data – age, sex, grade acquired in last annual examination were collected. Rhode Island Pupil Identification Scale<sup>61</sup> was used to screen behavior and learning problems in children. This is a five-point scale rated by the class teachers. It is used by the teacher to identify learning disability. Learning Disabilities Checklist<sup>62</sup> was used to find out the learning difficulty in each area. There are eight areas in the questionnaire, for example, reading, writing, mathematics, language etc. Children’s Behavior Rating Questionnaire for Completion by Teachers<sup>63</sup> was used to find out the behavior problems in the children. This is a three-point scale rated by class teachers. It consists of 25 items with 5 domains - aggression, antisocial behaviour, hyperactivity, daydreaming and personality problem.

**RESULTS AND DISCUSSION**

**Socio-demographic Background of the Student**

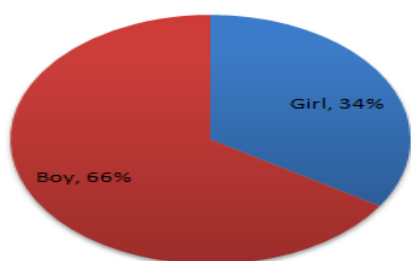
**Age:** In a total sample of 327 children, 19 (5%) children are from 6 year age group, 38 (12%) children are from 7 year age group. The children from 8 year age group are 21 (6%) children and 9 year old children are 89 (27%). 10 year old children are 82 (25%) and 11 year old children are 34 (10%) children. 26 (8%) children are from 12 year age group and 18 (5%) children are from 13 year age group. In this sample, most of the children are from 9 years to 10 year old children.

Graph-1 Age Ranges of the School Children



**Sex:** Total number of sample was 327 children in which 112 (34%) were girls and 215 (66%) were boys.

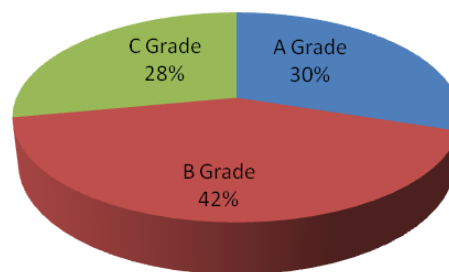
Graph-2 Sex of the Children



**Grades acquired in the last annual exams:** In this total sample of 327 children, 98 (30%) children got “A” grade in their

studies, 137 (42%) children got “B” grade and 92 (28%) got “C” grade. In this sample majority of the children got B grade.

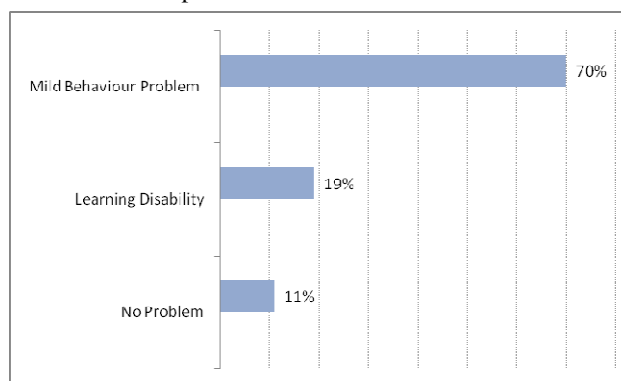
Graph-3 Grades Acquired in the Last Annual Exams



**LD and Behaviour Problems in School Children**

On screening behavior and learning problems of the school children using Rhode Island Pupil Identification Scale.<sup>61</sup> In total 327 school children; 229 (70%) children are showing mild behavior problems, 62 (19%) children are suffering from learning disability and only 36 (11%) children were not having any kind of learning disability or not showing any kind of behaviour problems.

Graph-4 LD and Behaviour Problems



**Group Difference on Behaviour Problems**

Based on Rhode Island Pupil Identification Scale<sup>61</sup> screening we have three group of children – (i) children with LD (ii) children with mild behaviour problems but no LD and (iii) children without LD or behaviour problems. To compare the behaviour problems among children with learning disability and children with no learning disability mean score of all three tools Rhode Island Pupil Identification Scale, Learning Disability Checklist and Children’s Behavior Rating Questionnaire used for the study were taken into consideration and the data obtained were analyzed using two-way analysis of variance (ANOVA).

On Rhode Island Pupil Identification Scale, there was a significant difference between these three groups of children. The mean ± standard deviation (SD) scores of children with LD, children with mild behaviour problems but no LD and children without LD or behaviour problems were 115.06 ± 14.47, 21.23 ± 5.96, and 13.41 ± 3.76 respectively. It shows that

children with LD have scored more on Rhode Island Scale than another group of children.

On Children’s Behaviour Rating questionnaire, there was a significant difference between children with LD, children with a behaviour problem and no problem children. The mean ± standard deviation scores of children with LD, children with a behaviour problem and no problem children were 40.67 ± 4.08, 21.28 ± 6.08, and 9.16 ± 5.31 respectively.

who were having learning disability were also showing behaviour problems.

### Various Behaviour Problems of Children with LD

Graph-5 shows the behaviour problems of children with learning disability on Children’s Behaviour Rating Questionnaire<sup>63</sup>. Children with a learning disability had scored more on all sub-scales: aggression, anti-social, hyperactivity, day dreaming and personality problems than children without

Table-1: Group Difference on Behavior Problems

Items	Problem	N	Mean	SD	F	p
RIPIS	Children with LD	62	115.06	14.47	3445.7	0.000***
	Children with Behavior Problem	229	21.24	5.96		
	No Problem	36	13.42	3.77		
CBRQ	Children with LD	62	40.68	4.08	417.2	0.000***
	Children with Behavior Problem	229	21.22	6.08		
	No Problem	36	9.167	5.31		
LD Checklist	Children with LD	62	46.15	7.62	1284.1	0.000***
	Children with Behavior Problem	229	12.76	3.61		
	No Problem	36	11.00	4.36		

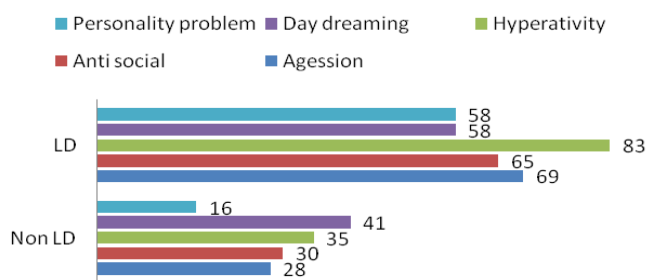
\*\*\*Significant at 0.001 level SD = Standard Deviation RIPIS = Rhode Island Pupil Identification Scale CBRQ = Children’s Behaviour Rating Questionnaire LD Checklist = Learning Disability Checklist

It shows that children with learning disabled have scored more on CBRQ than children with the behaviour problem and no problem children which indicate learning disabled children are showing more behaviour problem than other children. On LD Checklist, there was a significant difference between children with LD, children with a behaviour problem and no problem children. The mean ± standard deviation scores of children with LD, children with a behaviour problem and no problem children were 46.14 ± 7.62, 12.76 ± 3.6, and 11 ± 4.3 respectively. It shows that children with a learning disability have scored more on LD Checklist than other children.

On Learning Disabilities Checklist<sup>62</sup> among 62 children (18.6% of total study sample) of the students were having reading and writing difficulties such as substitutions, omissions, distortions in their spellings and were also not able to write within lines were suspected for learning disability.

learning disability. Children without learning disability were more day dreamers, hyperactive and having a low level of personality problem and aggression. Children with a learning disability were more hyperactive, aggressive and had lesser day dreaming and personality problems.

Graph-5 Sub-scales of CBRQ for School Children



### CORRELATION BETWEEN LD AND BEHAVIOUR PROBLEMS

Table-2 Correlation between Scores of Different Tools

Item	LD Screening	CBRQ	RIPIS
LD Checklist	1		
CBRQ	.788**	1	
RIPIS	.919**	.762**	1

\*\*Correlation is significant at 0.01 level

The above table-2 shows the correlation between LD Checklist, CBRQ and RIPIS score. It indicates that scores on LD Checklist has a significant positive correlation with CBRQ and RIPIS score at 0.01 level. It suggests that those children

### Gender Difference in Behaviour Problems

Table – 3 Gender Difference in Behaviour Problems

Items	Gender	Mean	SD	t	p
Aggression	Male	7.06	2.17	2.95	0.004**
	Female	5.81	1.79	3.11	
Anti-social	Male	6.68	2.16	2.04	0.44
	Female	5.81	1.88	2.27	
Hyperactivity	Male	8.06	2.37	2.75	0.007**
	Female	6.83	1.66	2.81	
Day Dreaming	Male	6.06	2.07	0.535	.589
	Female	5.83	1.96	0.543	
Personality Problem	Male	7.65	1.76	1.506	.135
	Female	7.08	1.93	1.469	
CBRQ Total Score	Male	34.158	7.919	2.585	0.009**
	Female	30.101	6.915	2.678	

\*\*Significant at 0.01 level

The above table-3 shows the gender difference on CBRQ. There were statistically significant difference was found on aggression, hyperactivity and CBRS total score at 0.01 level. It indicates that male children were showing significant aggression and hyperactivity than female children. These findings are consistent with a study by Willcutt & Pennington.<sup>36</sup> They found that externalizing disorders are more common in boys and internalizing disorders in girls. On the sub- scales of anti-social, day dreaming and personality problems male and female children were showing a similar level of behavior problems.

## CONCLUSION

This study reveals that almost 19% students are suffering from learning disability in the schools in the study area. Learning disabled children are exhibiting significant behavioral problems than normal children. Children with a learning disability were having more hyperactive, aggressive and had lesser day dreaming and personality problems. Children without learning disability were having more day dreamers, hyperactive and low level of personality problem and aggression. There was gender difference on hyperactivity and aggression on children with learning disability.

## IMPLICATION OF THE STUDY

This study was conducted to gain an understanding of the behavioural problems of children with a learning disability which has implication on different interventional programs for children with learning disability in school and home settings.

## LIMITATIONS OF THE STUDY

The limitations of the study are small sample size and confined to school settings and the degrees of disability has not been taken into consideration.

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