Identification and Prevalence of Learning Disabled Students

Prof. Jitendra Kumar[*] and Ms. Singh Suman[**]

[*]Prof. Jitender Kumar, Head, Department of Education. MD University, Rohtak, Haryana, India.
[**]Ms. Suman Singh, Research scholar, Department of Education. MDU,Rohtak,Haryana.

Abstract- The objective of the study was to identify and know the prevalence of learning disability among children of class fifth. The sample comprised of all the students studying in class fifth of five schools in Kurukshetra and Jind districts of Harayana. The tools used were both formal and informal-Academic result of the previous class (English and mathematics),Checklist for identifying learning disabled students by teachers/parents, Ravens progressive matrices (test for intelligence) and Diagnostic test of learning Disability (Swaroop and Mehta 2005). It was found that that the prevalence rate of students with learning disability varies from 10.76 percent to 13.41 percent with mean percentage of 12.31.

Index Terms- Learning disability

I. Introduction

Education is the instrument which brings about change in the social scenario and aids change and progress of self, thereby contributing to building a healthy nation. Proper care and education is the basic right of every child and a doorway to access other rights. Whereas 'Education for all' still remains a distant dream and for disabled, it is even more remote in India. Poor achievements in reading, comprehension and basic mathematical functions were and continue to be issues of concern for Indian primary education. These facts make it clear that the unsatisfactory level in children's achievement could be due to the learning problems or learning difficulties (interchangeably used) faced by them. There are certain instances of poor performance in spite of average and above average intelligence, sufficient teaching-learning instruction and instructional materials, proper motivation and adequate home environment, social and cultural opportunity (Karande and Kulkarni, 2005).

A recent survey of the National Center for Promotion of Employment for Disabled People (NCPEDP), revealed that only 1.2 per cent of the disabled in India has had any form of education. In its effort to have an all India school level survey, NCPEDP found that from the 89 schools, 34 did not have a single disabled student and unfortunately, 18 of them having a policy against giving admission. Estimates range as high as 20% of the population, but recent reports to Congress on IDEA usually show that about 5% of school-age children and youths are receiving services under the SLD category. IDEA prevalence rates vary from state to state and even school to school. LD prevalence estimates vary as a result of how each state sets eligibility criteria and depending on the source of data (epidemiological, survey, child count, or research). Some of the variation in estimates may under represent prevalence; for example, data indicate that 15% of the population has dyslexia, which is only one of the disabilities served under LD, so it follows that the total prevalence of LD is greater than 15%. The identification of LD and determination of eligibility for services are two distinct concepts that influence reported prevalence rates. In India, the research conducted in learning disability has been primarily done over the last two decades and is today comparable with the research carried out in west nearly half a century ago.

Annual Status of Education Report (ASER), 2012 indicates that in std III 26.2%, in std IV 17.6% and in std V 12% of students only can read letters but not more. It means huge percentage of children in the education system in India is not able to read most basic level in their mother tongue.These facts suggest that the early diagnosis of learning disability in children is critically important to identify and suggest remedial solutions to the parents and children to understand about the learning disability as stumbling blocks such as lack of awareness, indifference and apathy and hamper success. Several studies have been conducted in India to determine the prevalence of learning disabilities in school children which has been reported to be 3-10 per cent among students population.

II. Review of related literature

Mogasale, V.V., Patil, V.D., Patil, N.M. et al.(2012) conducted a cross-sectional multi-staged stratified randomized cluster sampling study to measure the prevalence of specific learning disabilities (SpLDs) such as dyslexia, dysgraphia and dyscalculia among primary school children in a South Indian city among children aged 8–11 years from third and fourth standard. A six level screening approach that commenced with identification of scholastic backwardness followed by stepwise exclusion of impaired vision and hearing, chronic medical conditions and subnormal intelligence was carried out among these children. In the final step, the remaining children were subjected to specific tests for reading, comprehension, writing and mathematical calculation. And found that 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. This study suggests that the prevalence of SpLDs is at the higher side of previous estimations in India.

Arun, Chavan, etal.(2013) studied the prevalence of specific developmental disorder of scholastic skill in school students in Chandigarh, India to find out feasibility of screening tool in Chandigarh, India. A cross-sectional study on school

students was carried out in two phases. The students were drawn from classes VII to XII from 10 schools of Chandigarh, India. Details of academic performance of all the students was taken, subjectively from class teachers and objectively from the marks obtained in the last academic session. In phase I, 2402 students were assessed. In phase II, 108 students were randomly selected for evaluation for assessing sensitivity and specificity of screening proforma for teachers. A total of 124 students from phase I and all students in phase II were assessed in detail. Tests of intelligence (Malin's Intelligence Scale for Indian Children and Standard Progressive Matrices), and NIMHANS Index for specific learning disability (SLD) battery were administered. A total of 38 students were found to be having specific developmental disorder of scholastic skills in phase I, that gave a prevalence of 1.58 per cent. Majority had mixed type of errors on SLD battery. There were more boys diagnosed with specific learning disability.

Bansal,Sneh (2014) conducted a study with the objective to identify the children with learning disabilities in written expression studying at primary level. The sample comprised of 745 students in the age group of 8-10 years in third and fourth grade. The tools used were Teacher referral forms prepared by the investigator, Malin's intelligence scale for Indian children (1969), Diagnostic test of learning disability by Swaroop and Mehta (2005) and test of written expression for grade III and IV prepared by the investigator. The findings of the present study revealed that 5.36% were found to have learning disability in written English, 4.28% and 6.32% in class III and IV respectively. The percentage of learning disability in girls and boys was found to be 3.98% and 5.9% respectively.

M Veena Kumari, Sayid M Barkiya (2016) conducted a a cross-sectional study to identify learning disability in children with poor school performance and to analyze their clinical profile over a period of 1-year from July 2013 to June 2014 conducted at Kannur Medical College, Anjarakandy and rural areas of Kannur district in Kerala state, India, a total 300 students with poor school performance were selected by their class teacher. To the parents of these children, a questionnaire was given regarding birth history, development history, and questions regarding warning signs of learning disability. The students were later assessed. The study group included children in the age group of 8-12 years studying in third to seventh grade. Students with poor school performance were selected by their class teacher based on their academic and overall performance. Out of the 300 students with poor school performance, parental perception of learning problems was seen in 106 students. Post assessment 39 (13%) students had learning disability. Association was found between low birth weight, preterm birth, language, social and motor developmental delay. Association was also found between learning disability and attention deficit hyperactivity disorder.

Tools used

Multiple approaches were used for this purpose, which were as follows:

- Academic result of the previous class (English and mathematics).
- Checklist for identifying learning disabled students by teachers/parents.
- Ravens progressive matrices (test for intelligence)
- Diagnostic test of learning Disability (Swaroop and Mehta 2005).

Identification of students with learning disabilities

First the teachers were informed about the purpose and importance of the research. The academic results were taken into account and especially those children who were lagging in math's and language subjects were considered. In the second stage the preliminary information was collected by administering the checklist for identifying learning disabled students. This test was administered on 386 students and in all 267 students was identified by the teachers as having learning difficulties. The students identified by the teachers and with poor academic performance were selected. The identified 267 students were administered to standard progressive matrices the intelligence test to find out the IQ scores of the students, as the learning disabled students generally have average or above average IQ. Out of 267 students 197 students with average or above average IQ were further administered the diagnostic test for learning disability and finally 42 students were selected as learning disabled student.

After administration of the test the following children were selected:

- Children who are referred by the teachers
- Children who scored below 45% in the previous class and an average range of intelligence (deviation IQ 85 or above) measured by Ravens progressive matrices.
- Children who had a composite score below 50 in DTLD.

III. RESULT

In this section the prevalence rate of learning disability among students is given. The researcher has adopted both formal and informal identification and diagnosis methods. The data pertaining to identification of learning disability is given in table 4.1.

Table 4.1
Identification of students with learning disability

Phase	Identification tools	No. of students tested	No. of students identified
I	Checklist for identifying learning disabled students by teachers /parents.	386	267

II	Standard progressive matrices	267	193
III	Diagnostic test for learning disability	193	42

It is observed from table 4.1 that for identifying students with learning disability in the first place

4.2 Prevalence of students with learning disability

The table 4.2 reflects the prevalence of students with learning disability of class V studying in 5 different schools. The prevalence of students with learning disabilities is shown in terms of percentages. The table clearly indicates that the prevalence rate of students with learning disability varies from 10.76 percent to 13.41 percent with mean percentage of 12.31.

Table 4.2
Prevalence of students with learning disabilities

Sr. No.	Name of the School	Number of students	Number of students with learning disability	Percentage of students
1	School I	82	11	13.41
2	School II	68	8	11.76
3	School III	53	6	11.32
3	School III	73	10	13.69
4	School IV	65	7	10.76
	Total	341	42	12.31

IV. Conclusion

During the past few decades, the understanding of learning disability has changed. However, it is a tremendous challenge to identify and diagnose and assist children with learning disability. Since no national census of the learning disabled has been taken in India, it is difficult to collect their actual number. In India, the learning disabled children are not identified using reliable tests. We do not have a clear idea about incidence and prevalence of learning disability in India. These facts suggest that the early diagnosis of learning disability in children is critically important to identify and suggest remedial solutions to the parents and children to understand about the learning disability as stumbling blocks such as lack of awareness, indifference and apathy and hamper success. If proper identification and diagnosis is done remediation can be provided at the right time, children with LD can and do learn successfully and become winners in the society later.

References

[1] **Kirk, S.A. (1970),** Educating Exceptional children Boston, Massachusetts Houghton Miffin Company.

[2] **M Veena Kumari, Sayid M Barkiya** (2016) "**Children with Poor School Performance for Specific Learning Disability"** International Journal of Scientific Study, March Vol 3, Issue 12.

[3] **Mogasale, V.V., Patil, V.D., Patil, N.M. et al. (2012); "**Prevalence of Specific Learning Disabilities Among Primary School Children in a South Indian City". Indian Journal of Pediatrics March 2012, Volume 79, Issue 3, pp 342–347

[4] **Namara, Mc. & Edwards, Barry**. **(1998)** Learning Disabilities. State University of New York Press, New York.

[5] **Priti Arun, Bir Singh Chavan, Rachna Bhargava,* Archna Sharma, and Jaspreet Kaur** ** **(2013) "**Prevalence of specific developmental disorder of scholastic skill in school students in Chandigarh, India" Indian Journal of Medical Research. 2013 Jul; 138(1): 89–98. PMCID: PMC3767262

[6] **Singh, C. (2008).** Children with learning disabilities in relation to different ecological factors. Disabilities and Impairments, 22(1), 24-28.

Authors

First Author – Prof. Jitendra Kumar, Prof. Jitender Kumar, Head, Department of Education. MD University, Rohtak, Haryana, India

Second Author – Ms. Singh Suman, Ms. Suman Singh, Research scholar, Department of Education. MDU,Rohtak,Haryana