## **Original Research Article**

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# Assessment of knowledge level on learning disability among primary school teachers

Basim Ali C. T., Fysal N.\*, Akhila Thasneem A., Aswathy P. S.

Department of Paediatrics, MES Medical College, Perinthalmanna, Kerala, India

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## \*Correspondence:

Dr. Fysal N.,

E-mail: drfysaln@gmail.com

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#### **ABSTRACT**

**Background:** Learning disability (LD) is one of the major causes of poor scholastic backwardness. Undetected and unmanaged specific LDs result in chronic scholastic backwardness ensuing school dropouts, emotional and behavioral problems such as depression, substance abuse and social delinquency. Since teachers are the ones who first encounter academic difficulties of children, their knowledge and training on LD is of utmost importance in identifying it at an initial stage and to prevent further mental and social damage. This study is to assess the knowledge level of primary school teachers on learning disability.

**Methods:** This cross-sectional study was conducted among government primary school teachers of Malappuram district, Kerala from April 16, 2018 to May 20, 2018. Convenient sampling method was adopted. The study sample consisted of 709 primary school teachers from 21 schools in Malappuram district of Kerala and the teacher's knowledge level on learning disability was assessed using a questionnaire.

**Results:** Even though majority of the teachers had some knowledge about the outcome and treatment of learning disability, they lack sufficient knowledge about its concepts and causes and it is grossly insufficient for its practical application in the class room.

**Conclusions:** There is a need to improve the knowledge of primary school teachers on LD and to enhance their basic skills in recognizing learning disability at the earliest. This is very important for the management of these children by introducing and applying the appropriate remedial measures on time. This can go a long way in improving the quality of learning among children with poor scholastic performance.

**Keywords:** Knowledge, Learning disability, Scholastic backwardness

### INTRODUCTION

Learning disability is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual presumed to be due to central nervous system dysfunction and may occur across the life span. Problems in self-regulatory behaviours, social perception and social

interaction may exist with learning disabilities but do not by themselves constitute a learning disability. The term learning disability (LD) was first coined in 1963 by Dr. Samuel Kirk, a psychologist while delivering a speech at an education conference held in Chicago. He had worked extensively with many students who were repeatedly failing in their examinations but were clearly not retarded. He observed that these so called scholastically backward students could be helped by specific methods of teaching.

Poor school performance or scholastic backwardness is estimated to affect one in every five school children in India.<sup>4</sup>

Specific learning disabilities are recognized as an important cause for the scholastic backwardness even though many other reasons such as below average intelligence, vision and hearing impairment, chronic medical and mental disorders, emotional problems and poor socio cultural environments are suggested.<sup>5</sup>

Undetected and unmanaged specific learning disability results in chronic scholastic backwardness ensue school drop outs, emotional and behavioural problems such as depression, substance abuse and social delinquency.<sup>4-10</sup>

In this context, it is imperative to acknowledge what the teacher thinks about the causes, reasons and consequences of learning disorders, that will enable the analysis of his/her point of view about this problem.

#### **METHODS**

This cross-sectional study was conducted among government primary school teachers of Malappuram district, Kerala from April 16, 2018 to May 20, 2018, along with the training session given to them as a part of IAP State President's Action Plan "VIBGYOR". Convenient sampling method was adopted. The study sample consisted of 709 primary school teachers. Permission to collect data was taken from the relevant Block resource centres (BRC) of Malapuram district.

#### Inclusion criteria

All teachers who were attending the training program.

#### Exclusion criteria

 Teachers who have already attended BRC training classes on learning disability.

Basic level of knowledge among the teachers were assessed using a questionnaire.

## Statistical analysis

Statistical analysis was done using excel entry and SPSS trial version 22.

#### **RESULTS**

Out of the study population 56% were females and the males were 44 % (Figure 1).

Table 1 describes the knowledge about the causes of LD. Among the study population 278 (39.2%) have no knowledge about any causes of poor scholastic performance. 42% of them answered one cause for

scholastic backwardness in children, 14% of the study group correctly mentioned two causes of it.

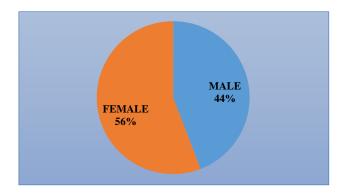


Figure 1: Gender distribution.

Only 2 % of the study population could answer five causes of scholastic backwardness in school going children.

Table 1: Major causes of learning disability.

q1	Frequency	Percent
0	278	39.2
1	298	42
2	100	14.1
3	26	3.7
4	5	0.7
5	2	0.3
Total	709	100

Table 2 analyses the awareness of the group regarding the relation between LD and intellectual disability. Out of the 709 participants, 596 (84.1%) correctly mentioned that learning disability is not due to intellectual disability. It is very important to understand this concept since most of the time these children are labelled as having low IQ (intelligence quotient).

Table 2: Is there a relation between LD and intellectual disability?

<b>q2</b>	Frequency	Percent
0	113	15.9
1	596	84.1
Total	709	100

Three forth of the study population correctly stated that learning disability is treatable. This is very significant since LD is completely curable if detected early and managed promptly (Table 3).

Table 3: Is LD treatable or not?

q3	Frequency	Percent
0	175	24.7
1	534	75.3
Total	709	100

Table 4 evaluates the idea about the possibility of higher education in children with LD. A significant number of the participants (86.7%) believed that children with learning disability could enroll for higher studies.

Table 4: Is higher education possible in children with LD?

q4	Frequency	Percent
0	94	13.3
1	615	86.7
Total	709	100

Only 7.3 % of the participants were able to answer that dyslexia was the most common learning disorder. It is important for the teacher to understand the common causes of LD and its significance (Table 5).

Table 5: Which is the most commonly observed LD?

q5	Frequency	Percent
0	657	92.7
1	52	7.3
Total	709	100

A decisive majority (78.7%) of the respondents felt that students with learning disability did not need "special schools" for education. The basic idea that LD children don't need special schools but require special attention has got a significant impact in the way teachers evaluate and train them (Table 6).

Table 6: Do children with LD require "special schools"?

q6	Frequency	Percent
0	151	21.3
1	558	78.7
Total	709	100

Out of the 709 participants, 505 (71.2%) teachers correctly believed that LD was not caused due to impairment in communication skills (Table 7).

Table 7: Is learning disability due to impairment in communication skill?

q7	Frequency	Percent
0	204	28.8
1	505	71.2
Total	709	100

More than half of the participants (57.1%) correctly answered that attention deficit hyperactivity (ADHD) disorder was more common among children with LD.

So, teachers need to look for this problem in children with LD and take appropriate steps to get an optimal outcome (Table 8).

Table 8: Is there any association between LD and ADHD?

q8	Frequency	Percent
0	304	42.9
1	405	57.1
Total	709	100

Only  $1/3^{rd}$  (33.7%) of the participants were aware that the average IQ of a person is between 90 and 110.The basic concept of IQ and its grades should be specifically informed to the teachers (Table 9).

Table 9: What is average IQ of a person?

<b>q9</b>	Frequency	Percent
0	470	66.3
1	239	33.7
Total	709	100

Only 8.6% of the participants could state that "Thyroid Hormone" is the most essential hormone required for mental growth. Thyroid hormone is very important in any child who has poor scholastic performance. A recent dip in educational achievement is the most important clue that should prompt a thyroid assay (Table 10).

Table 10: Which is the most essential hormone for mental growth?

q10	Frequency	Percent
0	648	91.4
1	61	8.6
Total	709	100

Almost three quarters (74%) of the participants correctly expressed that there was an increase chance of anxiety among children with learning disability. Unless otherwise we address this problem in children with LD we may not get a satisfactory response (Table 11).

Table 11: Is anxiety more commonly observed in children with LD?

q11	Frequency	Percent
0	184	26
1	525	74
Total	709	100

80.7% of the respondents felt that students with learning disability should be given more time to complete their exams (Table 12).

Table 12: Should children with LD be given more time for writing an exam?

q12	Frequency	Percent
0	137	19.3
1	572	80.7
Total	709	100

#### **DISCUSSION**

The study revealed that even though primary school teachers have some knowledge about learning disabilities it is grossly insufficient for its practical application in the class room.

Similar findings were reported by earlier researchers (Gandhimathi and Eljo; Adebowale and Moye). <sup>11,12</sup> In other countries, various studies on the subject found that teachers had low to moderate knowledge and awareness about learning disabilities (Khatib; Saludes and Dante; Adebowale and Moye). <sup>13-15</sup>

Few Indian studies have revealed that the teachers had an average level of knowledge about specific learning disabilities, irrespective of their gender and teaching experience (Kamala and Ramganesh; Lingeswaran). 16,17

Furthermore, the teachers' age, years of teaching experience and the nature of the school were not related to knowledge and awareness about learning disabilities among them (Sarojini; Gandhimathi and Eljo). 11,18

However, teachers with higher education qualifications exhibited better awareness (Dharmaraj).<sup>19</sup>

Since teachers are the ones who first encounter academic difficulties of children, their knowledge and training on LD is of utmost importance in identifying it at an initial stage. It can prevent the incidence of further mental and social damage by giving them proper remedial education.

The challenge of achieving full educational and social integration of children with difficulties within the society can be easily achieved if the teachers possess better knowledge about disabilities, attitude towards children with disabilities and competencies to handle the children. Such knowledge and understanding will enable them to develop positive attitude towards children with disabilities which in turn leads to acquiring or developing better competencies to handle the children.<sup>20-22</sup>

In general, primary school teachers usually have very little knowledge about learning difficulties. This could be due to the lack of teacher training programs for understanding the challenges faced by children with particular disabilities. Also, teachers usually don't undertake any further training that focuses on the effective ways to teach children with learning difficulties. Moreover, educational authorities do not provide ongoing in-service training for teachers about teaching learners with special needs. 11,23

#### **CONCLUSION**

Present study showed the need for intensive training of primary school teachers on LD and the importance of incorporating it in the professional teacher's education curriculum so as to ensure identification and management of children with learning disability at an early stage.

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#### REFERENCES

- Dilshad HA. Prevalence of learning difficulties/disability among primary school children: effect on emotional problems and academic achievement (Doctoral dissertation, UAS, Dharwad). Available at: http://etd.uasd.edu/ft/th8654.pdf.
- 2. Hammill DD. On defining learning disabilities: An emerging consensus. J Learning Disabilities. 1990;23(2):74-84.
- 3. Richardson SO. Historical perspectives on dyslexia. J Learning Disabilities. 1992;25(1):40-7.
- 4. Sukumaran TU. Poor scholastic performance in children and adolescents. Indian Pediatr. 2011;48(8):597-8.
- 5. Karande S, Kulkarni M. Poor school performance. Indian J Pediatr. 2005;72(11):961-7.
- 6. Lyon GR. Learning disabilities. Future Child. 1996;6:54-76.
- 7. Wright Strawderman C, Watson BL. The prevalence of depressive symptoms in children with learning disabilities. J Learn Disabil. 1992;25:258-64.
- 8. Karande S, Mehta V, Kulkarni M. Impact of an education program on parental knowledge of specific learning disability. Indian J Med Sci. 2007;61(7):398-406.
- 9. Shaywitz SE. Dyslexia. N Engl J Med. 1998;338:307-12.
- 10. Winters CA. Learning disabilities, crime, delinquency and special education placement. Adolescence. 1997;32:451-62.
- 11. Gandhimathi U, Eljo JO. Awareness about learning disabilities among the primary school teachers. Cauvery Res J. 2010;3(1):71-8.
- 12. Adebowale, OF, Moye GP. Learning difficulties in primary schools: teachers attitudes and coping strategies. Int J Hum Soc Sci. 2012;2(3):113-8.
- 13. Al Khatib JM. A survey of general education teachers' knowledge of learning disabilities in Jordan. Int J Spec Eduction. 2007;22(1):72-6.
- 14. Saludes MC, Artenita D. The knowledge and perceptions on learning disabilities in the cities of region XI of the Philippines and a region in New

- York City, NY, USA. In The 19<sup>th</sup> Asian Conference on Mental Retardation; 2009:22-26.
- Adebowale OF, Moye GP. Teachers' knowledge of, and attitude towards learning disabilities. The Online Educational Research Journal; 2013. Available at: www.oerj.org.
- 16. Kamala R, Ramganesh E. Knowledge of specific learning disabilities among teacher educators in Puducherry, Union Territory in India. Int Rev Soc Sci Hum. 2013;6(1):168-75.
- 17. Lingeswaran A. Assessing knowledge of primary school teachers on specific learning disabilities in two schools in India. J Edu Health Prom. 2013;2.
- 18. Sarojini R. Awareness of primary school teachers towards learning disabilities in English at primary stage. Unpublished M. Phil. Dissertation, Alagappa University, Karaikudi. 2000.
- 19. Dharmaraj P. Awareness of primary school teachers towards learning disabilities in mathematics at primary level. Unpublished M. Phil. Dissertation, Alagappa University. 2000.

- 20. Kafonogo FM, Bali TA. Exploring classroom teachers' awareness of pupils with learning disabilities: Focusing on public primary schools in Tanzania. J Educ Pract. 2013;4(24):58-66.
- 21. Reddy GL. Children with disabilities: Awareness, attitude and competencies of teachers. New Delhi: Discovery Publishing House, 2006.
- 22. Hollenweger J. Teachers' ability to assess students for teaching and supporting learning. Prospects. 2011;41:445-57.
- 23. Robuck G. Raising a teacher's awareness about LD and AD/HD-parents as educators. Available at: http://www.greatschools.net/LD/schoollearning/raising-a-teachers awareness.984.2009.

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