Research Article

Screening for the Risk of Specific Learning Disabilities Among School-Going Children in Ujjain: A Cross-Sectional Study

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Background: Specific Learning Disability (SLD) is a neurodevelopmental disorder characterized by persistent difficulties in acquiring academic skills such as reading, writing, and mathematics. Early identification of children at risk is important for timely evaluation and intervention. The present study was conducted to screen school-going children for risk of SLD and assess associated socio-demographic and clinical factors.

Methods: A cross-sectional study was conducted among 385 school-going children in a private school in Ujjain, Madhya Pradesh, from December 2023 to July 2024. Socio-demographic and relevant clinical information was collected using a semi-structured proforma. A self-designed 10-item screening checklist was used for preliminary identification of children at risk of SLD. Data were analysed using SPSS version 24. Associations were assessed using the chi-square test or Fisher's exact test, as appropriate.

Results: Among 385 cases, 103 (26.8%) screened positive for risk of SLD. Significant associations were observed between screening status and age (χ^2=6.161, p=0.046), sex (χ^2=7.683, p=0.006), type of family (χ^2=7.899, p=0.005), and birth weight (χ^2=6.651, p=0.036). Poor memory was strongly associated with screen positivity (p<0.001). Significant associations were also observed with psychological problems (p=0.019), ADHD symptoms (p<0.001), and ASD symptoms (p=0.001). Class, residence, religion, and socioeconomic status were not significantly associated with screening status.

Conclusion: A substantial proportion of school-going cases screened positive for risk of SLD. Early school-based screening may help identify children requiring further evaluation. Screen-positive cases should undergo comprehensive standardized psychological and educational assessment before a diagnosis of SLD is made.

Access this article online

Website: www.cijmr.com

DOI: 10.58999/cijmr.v5i03.380

Keywords: Specific Learning Disability, SLD, School-going children, Screening, Learning difficulties, ADHD, ASD

Introduction

Specific Learning Disability (SLD) is a neurodevelopmental disorder characterized by persistent difficulty in learning and using academic skills, particularly in reading, written expression, and mathematics, despite adequate intelligence and opportunity for learning. It includes disorders such as dyslexia, dysgraphia, and dyscalculia. SLD can affect a child's academic performance, self-esteem, classroom participation, and long-term educational progress if not identified and addressed in time. The reported prevalence of SLD varies across settings, with estimates ranging from 5% to 15%, depending on the population studied and the methods used for identification.1,5,8

Early identification of children at risk of SLD is important because these children may benefit from timely educational support, behavioural guidance, and referral for detailed assessment. Difficulties in reading, writing, and arithmetic often begin to affect school performance during the early school years. If these difficulties are not recognized, they may be misinterpreted as poor motivation, inattentiveness, or low ability, which can delay appropriate support. Early screening may therefore help identify children who require further psychological and educational evaluation and can facilitate timely intervention.

Dyslexia is considered the most common type of SLD and accounts for a substantial proportion of learning difficulties identified in school settings.

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Submitted: 14/04/2026 Revision: 25/08/2026

Accepted: 25/08/2026 Published: 25/09/2026

How to cite this article: Lahariya I, Muvel A, Mandliya JC, Bhujade R. Screening for the Risk of Specific Learning Disabilities Among School-Going Children in Ujjain: A Cross-Sectional Study. Central India Journal of Medical Research. 2026; 5(3):1-8.

Dysgraphia is characterized by persistent difficulty in written expression and handwriting, while dyscalculia involves difficulty in understanding and performing mathematical operations.4,5 In addition, children with SLD may have associated behavioural and emotional concerns, and comorbidities such as attention deficit hyperactivity disorder (ADHD), anxiety, poor memory, and autism spectrum disorder (ASD)-related features have also been reported.6,14

In India, identification of SLD remains challenging because of limited awareness among parents and teachers, variability in school curricula and language of instruction, and lack of access to standardized psychological and educational testing in many settings.7,8 This is particularly relevant in school environments where early academic difficulties may go unrecognized until they become more pronounced. In such a context, school-based screening can be useful for identifying children who may be at risk and may benefit from further evaluation.

The present study was therefore undertaken to screen school-going children for risk of Specific Learning Disability and to study selected associated factors in the local school setting.

Aim

To screen school-going children for risk of Specific Learning Disability and identify associated socio-demographic and clinical factors.

Objectives

- To identify children who screen positive for risk of Specific Learning Disability.
- To assess the association between screen positivity and selected socio-demographic and clinical factors.
- To facilitate referral for further evaluation and appropriate intervention where indicated.

Materials and Methods

Study design and duration

This was a cross-sectional study conducted over a period of one year from December 2023 to July 2024, after obtaining approval from the Institutional Ethics Committee of the medical college.

Study setting

The study was conducted in a private school located in the catchment area of a private medical college and hospital in Ujjain, Madhya Pradesh.

Study participants

School-going children studying in the selected school and falling within the eligible age group were included in the study after obtaining permission from school authorities and informed consent from parents/guardians. Assent was also obtained from students, wherever applicable.

Inclusion criteria

School-going children in the selected age group enrolled in the study school. Children whose parents/guardians gave informed consent. Children who were present during the study period could be screened.

Exclusion criteria

Children with known syndromic conditions (such as Down syndrome or Turner syndrome), developmental delay, or major neurological/developmental disorders already diagnosed. Children with significant comorbid illnesses that could interfere with assessment. Children with uncorrected hearing or visual problems are detected during screening. Children whose parents/guardians did not provide consent.

Sample size

The sample size was calculated using the formula for the estimation of a proportion in a cross-sectional study:

$$n = \frac{Z^2 pq}{d^2}$$

where:

- n = required sample size
- Z = standard normal deviate at 95% confidence level (1.96)
- p = anticipated proportion; since local prevalence data were not available, it was taken as 50%
- q = 1 – p
- d = absolute precision of 5%

The calculated sample size was approximately 384, which was rounded to 385

Study tools

Semi-structured proforma for the collection of socio-demographic and relevant clinical information from parents/guardians.Self-designed screening checklist for identifying children at risk of Specific Learning Disability.

The screening checklist contained items related to difficulties in reading, writing, and arithmetic, along with selected associated concerns such as poor memory, hyperactivity, and behavioural concerns.

Since permission to use the NIMHANS screening tool could not be obtained, a self-designed screening checklist was developed with input from an expert in child psychology. This checklist was intended only for preliminary screening to identify children who may be at risk of SLD. It was not used as a diagnostic tool, and formal psychometric validation of the checklist, including reliability, sensitivity, specificity, and predictive validity, was not undertaken before its use in the study.

Teacher orientation and screening procedure

Before data collection, an orientation/training session was conducted for the class teachers regarding: the concept of Specific Learning Disability, the purpose of screening, the items included in the screening checklist, and the method of completing the checklist. Teachers were also encouraged to clarify any doubts they may have regarding the screening process.

Method of data collection

Data collection was carried out in the following steps:

Permission and orientation

Permission was obtained from the school authorities, following which a training/orientation session was conducted for class teachers regarding SLD and the use of the screening checklist.

Consent and collection of background information

Informed consent from parents/guardians and assent from students were obtained. Socio-demographic and relevant birth/developmental details were collected using a semi-structured proforma.

Initial screening for hearing and vision problems

Children were screened for major hearing and vision problems. Those with significant uncorrected deficits were excluded to minimise misclassification of academic difficulties due to sensory impairment.

Teacher-based screening

Teachers completed the screening checklist based on their observations of the child's academic functioning and classroom performance.

Collection and review of completed forms

Completed checklists and proformas were collected for data entry and analysis.

Scoring of screen positivity

The screening checklist consisted of 10 items, each with a three-point response scale: Frequent, Sometimes and Never.

Operational definition

For this study, a child was considered screen positive for risk of Specific Learning Disability if the difficulty was reported as frequent in at least 3 items, or sometimes in at least 5 items. Children who did not meet these criteria were classified as screen negative.

Statistical analysis

Data were entered into Microsoft Excel and analysed using SPSS version 24 (IBM). Categorical variables were summarised as frequency and percentage. The association between screen positivity and selected socio-demographic and clinical variables was assessed using the chi-square test. Fisher's exact test was used wherever expected cell counts were small. A p-value <0.05 was considered statistically significant.

Results

The Table 1 showed the sociodemographic and birth-related characteristics of 385 cases. Regarding age, the majority of cases were aged 7 years (182; 47.3%), followed by 8 years (139; 36.1%) and 6 years (64; 16.6%). There were 264 (68.6%) male and 121 (31.4%) female cases, indicating a higher proportion of males. Regarding class, most cases belonged to Class III (204; 55.1%), followed by Class II (126; 34.1%) and Class I (40; 10.8%). The majority of cases were from urban areas (279; 72.5%), while 106 (27.5%) were from rural areas. With respect to religion, most cases were Hindu (347; 90.1%), followed by Muslim (22; 5.7%) and other religions (16; 4.2%). Regarding type of family, 219 (56.9%) cases belonged to nuclear families, while 166 (43.1%) belonged to joint families. Socioeconomically, the largest proportion of cases belonged to the upper socioeconomic class (158; 41.0%), followed by upper middle (126; 32.7%), lower middle (79; 20.5%), and upper lower class (22; 5.7%). Regarding birth weight, 258 (67.0%) cases had normal birth weight (≥2.5 kg), while 63 (16.4%) had low birth weight (<2.5 kg), and birth weight was unknown for 64 (16.6%) cases.

Among the 385 cases screened for the risk of Specific Learning Disorder (SLD), Table 2 shows, 103 (26.8%) cases were screen positive for risk of SLD, whereas 282 (73.2%) cases were screen negative. Thus, approximately one-fourth of the screened cases were identified as being at risk of SLD, while the majority were not identified as being at risk based on the screening assessment.

A total of 385 cases were included in the present study. Table 3 explains, poor memory was present in 48 (12.5%) cases , while it was absent in 337 (87.5%) cases. Psychological problems were present in 3 (0.8%) cases,

Table 1: Socio-demographic characteristics of the study participants (N = 385)

Variable	*Category*	*Frequency (n)*	*Percentage (%)*
Age (years)	6	64	16.6
	7	182	47.3
	8	139	36.1
Sex	Male	264	68.6
	Female	121	31.4
Class	I	40	10.8
	II	126	34.1
	III	204	55.1
Residence	Urban	279	72.5
	Rural	106	27.5
Religion	Hindu	347	90.1
	Muslim	22	5.7
	Others	16	4.2
Type of family	Nuclear	219	56.9
	Joint	166	43.1
Socioeconomic status*	Upper	158	41
	Upper middle	126	32.7
	Lower middle	79	20.5
	Upper lower	22	5.7
Birth weight	Low birth weight (<2.5 kg)	63	16.4
	Normal birth weight (≥2.5 kg)	258	67
	Unknown	64	16.6

Table 2: Proportion of children screened positive for risk of Specific Learning Disability (SLD) (N = 385)

Creening status	*Frequency (n)*	*Percentage (%)*
Screen positive for risk of SLD	103	26.8
Screen negative	282	73.2
Total	385	100

Footnote: Children classified as screen positive were identified using the study screening checklist and should not be interpreted as confirmed cases of Specific Learning Disability.

whereas 382 (99.2%) cases had no psychological problems. Symptoms of Attention Deficit Hyperactivity Disorder (ADHD) were present in 6 (1.6%) cases, while 379 (98.4%) cases had no ADHD symptoms. Similarly, symptoms of Autism Spectrum Disorder (ASD) were present in 5 (1.3%) cases, whereas 380 cases had no ASD symptoms.

Table 3: Distribution of selected behavioural and developmental characteristics among study participants (N = 385)

Variable	*Category*	*Frequency (n)*	*Percentage (%)*
Poor memory	Present	48	12.5
	Absent	337	87.5
Psychological problems	Present	3	0.8
	Absent	382	99.2
Attention Deficit Hyperactivity Disorder (ADHD) symptoms	Present	6	1.6
	Absent	379	98.4
Autism Spectrum Disorder (ASD) symptoms	Present	5	1.3
	Absent	380	87.5

Footnote: The behavioral characteristics shown above were based on responses obtained during screening and should not be considered clinical diagnoses.

In the present study, Table 4 shows the association between sociodemographic characteristics, birth weight, and screening status was assessed using the Chi-square test. Regarding age, among 6-year-old cases, 23 (35.9%) were screen positive and 41 (64.1%) were screen negative; among 7-year-old cases, 52 (28.6%) were screen positive and 130 (71.4%) were screen negative; and among 8-year-old cases, 28 (20.1%) were screen positive and 111 (79.9%) were screen negative. A statistically significant association was observed between age and screening status (χ^2=6.161, p=0.046). Regarding sex, 34 (28.1%) female cases were screen positive and 87 (71.9%) were screen negative, whereas 69 (26.1%) male cases were screen positive and 195 (73.9%) were screen negative. The association between sex and screening status was statistically significant (χ^2=7.683, p=0.006). Regarding class, 13 (30.2%) cases from 1st class were screen positive and 30 (69.8%) were screen negative; among 2nd class cases, 33 (26.0%) were screen positive and 94 (74.0%) were screen negative; and among 3rd class cases, 57 (26.5%) were screen positive and 158 (73.5%) were screen negative. The association between class and screening status was not statistically significant (χ^2=0.109, p=0.947). Regarding residence, 33 (31.1%) rural cases were screen positive and 73 (68.9%) were screen negative, whereas 70 (25.1%) urban cases were screen positive and 209 (74.9%) were screen negative. The association between residence and screening status was not statistically significant (χ^2=1.139, p=0.286). Regarding type of family, 57 (34.3%) cases from joint families were screen positive and 109 (65.7%) were screen negative, whereas 46 (21.0%) cases from nuclear families were screen positive and 173 (79.0%) were screen

Table 4: Association between socio-demographic characteristics and screen positivity for risk of Specific Learning Disability (N = 385)

Variable	*Category*	*Screen positive n (%)*	*Screen negative n (%)*	*Chi-square*	*p-value*
Age	6	23 (35.9%)	41 (64.1%)	6.161	0.046
	7	52 (28.6%)	130 (71.4%)		
	8	28 (20.1%)	111 (79.9%)		
Sex	Female	34 (28.1%)	87 (71.9%)	7.683	0.006
	Male	69 (26.1%)	195 (73.9%)		
Class	1st	13 (30.2%)	30 (69.8%)	0.109	0.947
	2nd	33 (26.0%)	94 (74.0%)		
	3rd	57 (26.5%)	158 (73.5%)		
Residence	Rural	33 (31.1%)	73 (68.9%)	1.139	0.286
	Urban	70 (25.1%)	209 (74.9%)		
Type of family	Joint	57 (34.3%)	109 (65.7%)	7.899	0.005
	Nuclear	46 (21.0%)	173 (79.0%)		
Religion	Hindu	94(27.1%)	253(72.%)	0.862	0.650
	Muslim	4 (18.2%)	18(81.8%)		
	Other	4(25.0%)	12(75.0%)		
SES	Upper	39 (24.7%)	119 (75.3%)	5.359	0.147
	Upper Middle	30 (23.8%)	96 (76.2%)		
	Lower Middle	24 (30.4%)	55 (69.6%)		
	Upper Lower	10 (45.5%)	12 (54.5%)		
Birth weight	Low	25 (39.7%)	38 (60.3%)	6.651	0.036
	Normal	64 (24.8%)	194 (75.2%)		
	Unknown	14 (21.9%)	50 (78.1%)		

negative. A statistically significant association was observed between type of family and screening status (χ^2=7.899, p=0.005). Regarding religion, 94 (27.1%) Hindu cases were screen positive and 253 (72.9%) were screen negative; 4 (18.2%) Muslim cases were screen positive and 18 (81.8%) were screen negative; and 4 (25.0%) cases belonging to other religions were screen positive and 12 (75.0%) were screen negative. The association between religion and screening status was not statistically significant (χ^2=0.862, p=0.650). Regarding socioeconomic status, 39 (24.7%) cases from the Upper socioeconomic group were screen positive and 119 (75.3%) were screen negative; 30 (23.8%) cases from the Upper Middle group were screen positive and 96 (76.2%) were screen negative; 24 (30.4%) cases from the Lower Middle group were screen positive and 55 (69.6%) were screen negative; and 10 (45.5%) cases from the Upper Lower group were screen positive and 12 (54.5%) were screen negative. The association between socioeconomic status and screening status was not statistically significant (χ^2=5.359, p=0.147). Regarding birth weight, 25 (39.7%) cases with low birth weight were screen positive and 38 (60.3%) were screen negative. Among cases with normal birth weight, 64 (24.8%) were screen positive and 194 (75.2%) were screen negative, while among cases with unknown birth weight, 14 (21.9%) were screen positive and 50 (78.1%) were screen negative. A statistically significant association was observed between birth weight and screening status (χ^2=6.651, p=0.036), indicating that screen positivity was highest among cases with low birth weight.

The Table 5 showed that poor memory, psychological problems, ADHD symptoms, and ASD symptoms were significantly associated with screening status. Among cases with poor memory, 37 (77.1%) were screen positive and 11 (22.9%) were screen negative, whereas among those without poor memory, 66 (19.6%) were screen positive and 271 (80.4%) were screen negative; this association was statistically significant (p<0.001). Psychological problems were present in 3 cases, and all 3 (100.0%) were screen positive, while none were screen negative; the association

Table 5: Association between behavioural/developmental characteristics and screen positivity for risk of Specific Learning Disability (N = 385)

Variable	*Category*	*Screen positive n (%)*	*Screen negative n (%)*	*p-value*
Poor memory	Present	37 (77.1%)	11(22.9%)	0.000
	Absent	66 (19.6%)	271 (80.4%)	
Psychological problems	Present	3 (100.0%)	0 (0.0%)	0.019
	Absent	100 (26.2%)	282 (73.8%)	
ADHD symptoms	Present	6 (100.0%)	0 (0.0%)	0.000
	Absent	97 (25.6%)	282 (74.%)	
ASD symptoms	Present	5 (100.0%)	0 (0.0%)	0.001
	Absent	98 (28.8%)	282 (74.2%)	

Note: Due to small expected frequencies and zero cells, Fisher's exact test was used for Psychological problems, ADHD, and ASD, while Chi-square test was used for Poor memory.

was statistically significant (p=0.019). Similarly, all 6 cases with ADHD symptoms were screen positive and none were screen negative, demonstrating a statistically significant association with screening status (p<0.001). Among cases with ASD symptoms, all 5 (100.0%) were screen positive and none were screen negative, and this association was also statistically significant (p=0.001).

Discussion

In the present study, 103 (26.8%) of 385 cases screened positive for risk of Specific Learning Disability (SLD). This proportion was higher than that reported in several Indian studies, including Arun et al. (9), Petchimuthu et al.(10), and Bandla et al. (13). However, direct comparison should be made cautiously because the present study used a self-designed preliminary screening checklist and identified children at risk rather than confirmed cases of SLD.

Age

Age was significantly associated with screening status (χ^2=6.161, p=0.046), with screen positivity being highest among 6-year-old cases (35.9%) and lowest among 8-year-old cases (20.1%). This finding supports the importance of early identification of learning difficulties. Chacko and Vidhukumar (12) also emphasized the importance of early identification of SLD among school-going children.

Sex

A significant association was observed between sex and screening status (χ^2=7.683, p=0.006), with screen positivity of 28.1% among female and 26.1% among male cases. This finding differed from previous Indian studies, as Arun et al. (9) and Singh et al. (14) reported a higher proportion of SLD among males. The difference may be related to variation in study population and screening methodology.

Class and Residence

Class and Residence: Class (p=0.947) and residence (p=0.286) were not significantly associated with screening status. Screen positivity was slightly higher among Class I and rural cases. Bandla et al. (13) also did not report a significant association of class with SLD.

Type of Family

Type of family showed a significant association with screening status (χ^2=7.899, p=0.005), with higher screen positivity among cases from joint families (34.3%) than nuclear families (21.0%). Okoli et al. (11) also reported associations between sociodemographic characteristics and learning disability, although their study population and analytical approach differed from the present study.

Religion and Socioeconomic Status

Religion (p=0.650) and socioeconomic status (p=0.147) were not significantly associated with screening status. Although screen positivity showed some variation across socioeconomic groups, the difference was not statistically significant. Okoli et al. (11), however, reported an association between socioeconomic circumstances and learning disability among preterm children, indicating that differences in study population may explain the contrasting findings.

Birth Weight

Birth weight was significantly associated with screening status (χ^2=6.651, p=0.036). Screen positivity was higher among low-birth-weight cases (39.7%) than among cases with normal birth weight (24.8%). This finding was consistent with Chacko and Vidhukumar (12),

who identified low birth weight as an important factor associated with SLD.

Poor Memory

Poor memory showed a strong and statistically significant association with screening positivity ($p<0.001$). Among cases with poor memory, 77.1% were screen positive compared with 19.6% among those without poor memory. This finding is consistent with the cognitive and information-processing difficulties described in children with SLD by Singh et al. (14).

Psychological Problems

Psychological problems were significantly associated with screening status (Fisher's exact $p=0.019$), as all three cases with reported psychological problems were screen positive. However, because of the very small number of cases, this finding should be interpreted cautiously. Singh et al. (14) also reported psychological and psychiatric comorbidities among children with SLD.

ADHD Symptoms

ADHD symptoms showed a significant association with screening status (Fisher's exact $p<0.001$), with all six cases showing ADHD symptoms being screen positive. This finding is consistent with Singh et al. (14), who reported a high frequency of ADHD among children with SLD. McGee et al. (6) also demonstrated a relationship between reading difficulties and behavioural problems.

ASD Symptoms

ASD symptoms were significantly associated with screening status (Fisher's exact $p=0.001$), with all five cases with ASD-related symptoms being screen positive. Singh et al. (14) also reported neurodevelopmental comorbidities among children with SLD. However, the small number of cases and the screening-based nature of assessment warrant cautious interpretation.

Conclusion

The present study identified a substantial proportion of school-going cases at risk of Specific Learning Disability, with 26.8% screening positive. Screen positivity was significantly associated with age, sex, type of family, birth weight, poor memory, psychological problems, ADHD symptoms, and ASD symptoms, whereas class, residence, religion, and socioeconomic status were not significantly associated. The findings highlight the importance of early school-based screening for identifying cases with academic, cognitive, behavioural, or developmental difficulties. Since the screening checklist was intended for preliminary risk identification and was not formally validated, screen-positive cases should be referred for comprehensive standardized assessment and appropriate educational and developmental intervention.

Limitations

The present study has several limitations. First, a self-designed screening checklist was used, and formal psychometric validation, including assessment of reliability, sensitivity, specificity, and predictive validity, was not undertaken before its use. Second, confirmatory psychological assessment using standardized diagnostic tools was not performed; therefore, the findings represent screen-positive children at risk of SLD rather than confirmed cases of Specific Learning Disability. Third, the study was conducted in a single private school, which limits the generalizability of the findings to other school settings and populations. Finally, the analysis was limited to bivariate associations, and multivariable analysis was not performed; therefore, the observed associations should be interpreted cautiously.

Recommendations/Future Directions

- School-based screening for academic difficulties may help in the early identification of children at risk of Specific Learning Disability.
- Children who screen positive should be referred for comprehensive psychological and educational evaluation before any diagnostic conclusion is made.
- Teachers and parents should be sensitized to early signs of reading, writing, and arithmetic difficulties and associated behavioural concerns.
- Future studies should use validated screening instruments, include confirmatory diagnostic assessment, and involve multiple schools and diverse settings to generate more robust and generalizable evidence.

RDGMC, Ethical Committee approval no Ref. no.- PG/PAEDIATRICS/58

References

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington, DC: American Psychiatric Association; 2013
2. Gilbert JK, Compton DL, Fuchs D, Fuchs LS. Early Screening for Risk of Reading Disabilities: Recommendations for a Four-Step Screening System. Assess Eff Interv. 2012 Dec;38(1):6-14. doi: 10.1177/1534508412451491. PMID: 24478613; PMCID: PMC3903290.
3. Lyon, G. R., Shaywitz, S. E., &Shaywitz, B. A. (2001). A definition of dyslexia. Annals of Dyslexia, 51(1), 1-14.
4. National Association of Special Education Teachers. Characteristics

of children with learning disabilities, https://www.naset.org/fileadmin/user_upload/LD_Report/Issue__3_LD_Report_Characteristic_of_LD.pdf.
5. Scaria, Liss & Bhaskaran, Deepa & George, Babu. (2022). Prevalence of Specific Learning Disorders (SLD) Among Children in India: A Systematic Review and Meta-Analysis. Indian Journal of Psychological Medicine. 45. 025371762211001. 10.1177/02537176221100128.
6. McGee R, Williams S, Share DL, et al. The relationship between specific reading retardation, general reading backward-ness and behavioural problems in a large sample of Dunedin boys: A longitudinal study from five to eleven years. J Child Psychol Psychiatry 1986; 27: 597–610
7. Karande S, Kulkarni M. Specific learning disability:The invisible handicap. Indian Pediatr 2005;42:315–9.
8. Joseph J, Devu B. Prevalence and pattern of learning disability in India: A systematic review and meta-analysis. Indian J Psychiatr Nurs. 2022;19(2):152.
9. Arun P, Chavan BS, Bhargava R, Sharma A, Kaur J. Prevalence of specific developmental disorder of scholastic skill in school students in Chandigarh, India. Indian J Med Res. 2013;138(JUL 2013):89–98.
10. Petchimuthu P, Sharma N, Gaur A, Kumar R. Pattern of specific learning disability and awareness among care providers in children between 8-12 years. Int J Contemp Pediatr. 2018;5(3):809–14.
11. Okoli ML, Ogbu CE, Enyi CO, Okoli IC, Wilson RE, Kirby RS. Sociodemographic and socioeconomic correlates of learning disability in preterm children in the United States. BMC Public Health [Internet]. 2022;22(1):1–10. Available from: https://doi.org/10.1186/s12889-022-12592-4
12. Chacko D, Vidhukumar K. Original Article The Prevalence of Specific Learning Disorder among School - going Children in Ernakulam District , Kerala ,. 2020;
13. Bandla S, Nappinnai NR, Gopalasamy S, Avula VCR. Prevalence of specific learning disorders in school children in a South Indian city. Arch Ment Heal. 2023;24(2):128–32.
14. Singh S, Sawani V, Deokate M, Panchal S, Subramanyam AA, Shah HR, et al. Specific learning disability: a 5 year study from India. Int J Contemp Pediatr. 2017;4(3):863.
15. Kumar Sanju H, Verma S, Kumari P, Shashank Shekhar K, Jain T. Self screening of learning disability among school going children in North India. IP Indian J Anat Surg Head, Neck Brain. 2021;6(4):141–4.