

# Learning Disability in IX Class Students of High Schools in Chennai District

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**Abstract:** *The term “learning disabilities” is applied for heterogeneous group of students, who experience difficulty in maintain normal progress in school but they are not mentally retarded emotionally disturbed or physically handicap. This study sought to determine the learning disability in IX class students of high schools in Chennai district. In this study, survey method was used. The effective sample of the study consist 400, IX class students drawn from government and private schools of Tamil and English medium school located in Chennai district. The researcher used descriptive and differential analyses. There is no significant difference among the students in overcoming learning difficulties with dyslexia with respect to their age. There is no significant difference between boy and girl students in overcoming learning difficulties with dyslexia. There is significant difference between OC, BC, SC and ST students in overcoming learning difficulties with dyscalculia. There is no significant difference Tamil and English medium students in overcoming learning difficulties with dyscalculia.*

**Keywords:** learning disabilities, IX class student, high school

## 1. Introduction

When a child enters the world, he is unaware of its complexities. His mind is a clean slate and gradually with the increasing interaction with his environment he keeps assimilating and accommodating concepts and there-by adjusting to his surroundings. During the process of interaction and adjustment

Research of learning disabilities in students have been popular profession in western countries, but relatively new to the Indian educational system. The term learning disabilities were introduced by Kirk in 1962 which sweeps away various confusing levels. Learning disability Refers to retardation, disorder to delayed development in one or more processes of speech, language, reading, spelling, writing or arithmetic, resulting from a possible cerebral dysfunction and/or emotional, behavioral disturbance and not from mental retardation, sensory deprivation, or cultural or instructional factors”

The term “learning disabilities” is applied for heterogeneous group of students, who experience difficulty in maintain normal progress in school but they are not mentally retarded emotionally disturbed or physically handicap. Usually there are significant discrepancies between what is expected from the student.

## 2. Review of Related Literature

Shirley Durell (2016) conducted research with and by people with learning disabilities many people with learning disabilities are frequently excluded from active involvement in research and, as a result, along with researchers, have questioned research processes. These discussions have influenced how research is undertaken by, and with, people who have learning disabilities. Learning disability research is now increasingly framed as inclusive. This article explores the development of inclusive learning disability

research by tracing its background and influences, identifying key characteristics and highlighting some of the challenges in its application. It demonstrates how inclusive research can give people with learning disabilities a voice that will help to inform practice.

Cluley, & Victoria (2018) examined from "Learning Disability to Intellectual Disability"--Perceptions of the Increasing Use of the Term "Intellectual Disability" in Learning Disability Policy, Research and Practice Background: The term "intellectual disability" is increasingly used to refer to people with learning disabilities in British learning disability policy, practice and research. This change is undoubtedly a reflection of the changing international context. The inclusion of the term "intellectual disability" has been particularly pronounced in countries such as the USA. By contrast, this change has been relatively silent in England. Methods: In light of this, the paper explores the discussions of 12 focus groups conducted with professional and lay groups working in or influencing learning disability research and practice in England. Each focus group was asked the following two questions: Have you heard of the term "intellectual disability" and how do you feel about the term "intellectual disability?" Discussion and Conclusion: Thematic analysis of the discussions identified four dominant themes: dislike and disbelief; ambiguity; tautology; and fear. It is concluded that more explanation is required in order for researchers and practitioners in England to understand this semantic change.

Karthik Muthusamy & Jitendra Kumar Sahu (2020). Investigated Specific Learning Disability in India: Challenges and Opportunities.1. The present study is a school-based, cross-sectional study conducted at Pondicherry to ascertain the proportion of children aged 5 to 7 y at risk of specific learning disability (SLD) and to analyze the socio-demographic risk factors 2. The methodology is comprehensive and was done in three phases starting from screening assessment by school teachers,

evaluation to rule out neurological disorders followed by an assessment of NIMHANS index 3. Children at the risk of SLD were 7.5% in this study with a male preponderance. Authors had also alluded to low levels of awareness among teachers. While assessing children aged 5 to 7 y gives an advantage of early identification and initiate appropriate remedial measures, it could potentially overestimate the prevalence where most of these children would have only a limited duration of school exposure and related skills. Lack of awareness among parents and school teachers continues to pose a significant issue. Multiple curriculums at schools, varying standards and multilingualism preclude a unifying standardized approach. Nevertheless, regional adaptations in protocols and universal screening of children are the key. Evolving knowledge in genetics and functional imaging studies in children with SLD would unravel the potential biological basis. Prospective studies, multicenter collaborations and longitudinal research are the felt need of the hour to understand better and make children achieve their maximum potential.

Susanta Kumar Padhy et al (2015) aimed Prevalence and Patterns of Learning Disabilities in School Children. Objective: To assess the prevalence and patterns of learning disabilities (LD) in school going children in a northern city of India. Methods: The present cross-sectional study comprised of three-staged screening procedure for assessing learning disabilities of 3rd and 4th grade students studying in government schools. The first stage comprised of the teacher identifying at-risk student. In the second stage, teachers assessed at-risk students using Specific Learning Disability-Screening Questionnaire (SLD-SQ). The third stage comprised of assessment of the screen positive students using Brigance Diagnostic Inventory (BDI) part of NIMHANS Index of Specific Learning Disabilities for identifying the cases of LD. Results: A total of 1211 (33.6%) children out of the total screened (n = 3600) were identified as at-risk by the teachers at the first stage. Of them, 360 were found to screen positive on the second stage using SLD-SQ. The most common deficits were missing out words or sentences while reading, misplacing letters or words while reading or writing, and making frequent mistake in spelling while writing or reading. Of these, 108 children were confirmed to have learning disability on the third stage using BDI, which represented 3.08% of the total population. Conclusions: Learning disability is an important concern in young school aged children. Early identification of such students can help in early institution of intervention and suitable modifications in teaching techniques.

### 3. Statement of the Problem

**“Learning disability in ix class students of high schools in Chennai district”**

#### Operational definition

- **Learning disability**

A learning disability is a neurological condition which affects the brain's ability to send, receive, and process information. A child with a learning disability may have difficulties in reading, writing, speaking, listening,

understanding mathematical concepts, and with general comprehension.

- **High schools**

A secondary school that usually includes grades 9 or 10

### 3. Definition of Learning Disabilities

The term “learning disabilities”, sometimes referred to as specific learning disabilities, is an umbrella term that covers a range of neurologically based disorders in learning and various degrees of severity of such disorders. Predecessor terms include: minimal brain damage and minimal brain dysfunction.

### 4. Types of Learning Disabilities

Varied definition of the term learning disabilities has been given, beginning in 1962 with Samuel Kirk's effort to define the term, professionals, parents and governmental agents have been trying to develop a valid and widely acceptable definition.

The 1977 U. S. Office of Education for all handicapped children Act, defines- learning disabilities means a disorder in one or more of the basic psychologies

The term learning disabilities (LD) is used to describe a group of disorders that affect how someone learns. When you have a learning disability, you have difficulty in reading, writing, mathematics, listening, and/or speaking. There is usually a large difference between what is expected based on your intelligence and your actual performance.

#### a) Reading Disabilities

This is often referred to as dyslexia. Between 2 and 8 percent of school-aged children have a reading disability. Some of the common signs of a reading disability include: difficulty associating or recognizing sounds that go with letters and separating the sounds within words, difficulty sounding out words, trouble rhyming, problems understanding and using words and grammar, and poor spelling.

#### b) Writing Disabilities

Writing disabilities, called dysgraphia, affect a person's ability to express their thoughts in writing. Some of the common signs include: awkward or tight grip on a pencil, illegible handwriting, speaking the words out loud while writing, omitting words in sentences, difficulty with grammar and syntax structure, avoidance of writing tasks, problems articulating thoughts and ideas into written words, and difficulty organizing and planning thoughts when writing.

#### c) Mathematics Disabilities

Dyscalculia is a broad term for many different types of disorders that involve problems with mathematics. Some signs include: slow to develop counting and math problem-solving skills, difficulty recalling number sequences, computing problems, problems with time concepts, poor sense of direction, and difficulty completing mental math. A

child with math LDs might be able to complete math problems one day, but seem lost and confused when facing the same problems, the next day.

**d) Identifying Learning Disabilities**

If parents or teachers notice a child is struggling in school, in one area or in several areas, and his or her performance doesn't match intellectual level, an assessment is completed. There is no single test for learning disabilities. Instead, a series of assessments is done, which often include achievement tests, cognitive assessments (IQ tests), and tests related to reading, mathematics, and written expression abilities.

**5. Need and Significance of the Study**

Systematic planning, research and special education learning disabled are essential for the following reasons.

It will contribute directly to improve the retention of those who dropout during an academic session to poor achievement in reading, writing, and mathematics.

This study is aimed at identifying and assessing learning difficulties among high school students in Chennai districts. This study is essential as the learning difficulties are found in all normal high school students. They should be identified and assessed at an early stage and suitable teaching strategies may be used to reduce such disabilities

**6. Objectives of the Study**

- To identify and assess the children with Learning Disabilities in high school students.
- To detect the discrepancy between their (Learning Disabilities) students' level of intelligence (what one can do) and their actual level of overcoming learning difficulties (what one does at present)
- To assess the differences by gender, age, socioeconomic status in respect to overcoming Learning Disabilities of student at high school in Chennai district
- To develop detailed strategies, plans and materials to reduce Learning Disabilities.
- To assess the impact of teaching strategies on overcoming Learning Disabilities in the students.

**7. Hypotheses of the Study**

The hypotheses formulated for verification are

- 1) There will be no significant difference among the high school students in overcoming of Learning Disabilities with dyslexia with respect to their age
- 2) There will be no significant difference between boy and girl students in overcoming Learning Disabilities with dyslexia.
- 3) There will be no significant difference among the students in overcoming of Learning Disabilities with dyslexia with respect to their caste.
- 4) There will be no significant difference among the students in overcoming of Learning Disabilities with dyslexia with respect to their school management.

- 5) There will be no significant difference between English and Tamil medium students in overcoming Learning Disabilities with dyslexia.

**8. Sample Design**

The effective sample of the study consist 400, IX class students drawn from government and private schools of Tamil and English medium school located in Chennai district.

**9. Methodology**

The research methodology used in the study is survey method. The main objectives are to the study the impact of teaching strategies on learning Disabilities IX class students in Chennai district.

**10. Hypothesis**

**Factors affecting Learning Disabilities:**

**Age**

**Testing of hypothesis (H-1)**

ANOVA result in table-1 of the students, in overcoming Learning Disabilities with dyslexia with respect to their age, between groups and within groups, the df value are 2 and 397 and sum of square are 3.40

**Table 1:** Scheffe's post Hoc test: Analysis of variance (ANOVA) in overcoming Learning Disabilities with dyslexia with respect to their age.

Area	Age	N	Mean	Groups	Sum of squares	Df	Mean square	F-ratio
Students in Overcoming LD with dyslexia	12 year	10	1.8	between groups	3.40	2	1.70	0.71 <sup>NS</sup>
	13 year	370	1.31	within groups	957.04	397	2.41	
	14 year	20	1.55	Total	960.44	399		

NS: Not significant

**Table 2:** Scheffe's post Hoc test: significant difference between boy and girl students in overcoming Learning Disabilities of high school students in Chennai.

Area	Gender		N	Mean	SD	't'-ratio
	Gender	N				
Students in overcoming LD with dyslexia	Boy	200	1.44	1.67	1.35 <sup>NS</sup>	
	Girl	200	1.23	1.42		
Students in overcoming LD with dysgraphia	Boy	200	1.08	1.86	1.54 <sup>NS</sup>	
	Girl	200	0.08	1.71		
Students in overcoming LD with dyscalculia	Boy	200	0.85	1.40	2.80 <sup>**</sup>	
	Girl	200	0.48	1.23		

NS: Not significant

\*\*Significant at 0.01 level

**Table-2** depicts that the mean score of boy students with respect to Learning Disabilities with dyslexia is 1.44 which is slightly higher than the mean score of girl students (1.23). The 't' value is found to be 1.35 which is not significant at 0.05 level. Thus, there is no significance difference between boys and girl's students. There is no significance difference between boys and girls Learning Disabilities with

dysgraphia the 't' value is found to be 1.54. There is significance difference between boys and girls students. there is no significance difference between boys and girls Learning Disabilities with dyscalculia the 't' value is found to be 2.80. Which is significant at 0.05 level

**Table 3:** Scheffe's post Hoc test: "F" ratio for the difference between mean of demographic subgroup by caste analysis of variance in overcoming Learning Disabilities of high school students in Chennai.

Area	Caste	N	Mean	Caste		Sum of squares	Df	Mean square	F-ratio
				Groups	within groups				
Students in overcoming LD with dyslexia	OC	82	1.24	between groups	2.76	3	0.92	0.38 <sup>NS</sup>	
	BC	206	1.40	within groups	957.68	396	2.42		
	SC	62	1.19	Total	960.44	399			
	ST	50	1.36						

NS: Not significant

**Table-3** ANOVA result of the students in overcoming learning disabilities with dyslexia with respect to their caste, between groups and within groups the df values are 3 and 396 and the sum of squares are 0.92 and 2.42 respectively. The 'F'-ratio is found to be 0.38, which is not Significant at 0.05 level. "There is no significant difference among the students in overcoming learning disabilities with dyslexia with respect to their caste" (H-3) is accepted.

**Table 4:** Scheffe's post Hoc test: significant difference between Tamil and English medium students in overcoming Learning Disabilities of high school students in Chennai.

Area	Medium	N	Mean	SD	't'-ratio
	English	320	1.21	1.51	
Students in overcoming LD with dysgraphia	Tamil	80	1.45	1.94	2.89**
	English	320	0.81	1.73	
Students in overcoming LD with dyscalculia	Tamil	80	0.93	1.39	2.00**
	English	320	0.59	1.31	

## 11. Major Finding

There is no significant difference among the students in overcoming learning difficulties with dyslexia with respect to their age.

There is no significant difference between boy and girl students in overcoming learning difficulties with dyslexia

There is significant difference between OC, BC, SC and ST students in overcoming learning difficulties with dyscalculia There is no significant difference Tamil and English medium students in overcoming learning difficulties with dyscalculia

## 12. Suggestions

### Teachers

Teachers should interact with the parents of children and reveal the progress and the health of the LD children from time to time. The teachers who are expected to identify the children with learning difficulties must be properly trained

in such a way that diagnosis must be properly trained in such a way that diagnosis must be made more scientifically.

Teachers should concentrate on individualized instruction. tutoring in one-to-one or small group situation, evaluating children's progress periodically and if necessary, re-teach encouraging intelligence drill practice or repetitions, alternate materials and methods, using workbooks, supplementary materials and multi-sensory approach.

### Parents

Early detections and early intervention play a vital role in one's life. Early intervention is highly desirable because learning problems often become more complex and difficult to remediate over time. The involvement of parents and community at large can bring a drastic change in reducing the causes of disabilities.

## 13. Educational Implication

- The educational program of children must be provided optimum educational experience and remediation to overcome their lacunae.
- To impart special attention to these children, educational programs should be well planned with learning disabilities specialists and adequate infrastructure facilities
- Integrated education for disabled children programs. in this program, children receive special instruction from the learning disabilities.
- Education for all is the global strategies that advocates that inclusive education is the most appropriate method of extending education

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