

A STUDY TO ASSESS PRIMARY SCHOOL TEACHER'S KNOWLEDGE REGARDING LEARNING DISABILITIES IN SELECTED SCHOOLS OF ERNAKULUM DISTRICT, KERALA

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Abstract

Approximately 13% to 14% of India's student body deals with some kind of learning disability. Too often, schools just don't care enough to listen when students complain. These kids end up being stereotyped as failures because of it. The researchers in this study set out to determine how well primary school educators in the Ernakulum region of Kerala understood the topic of learning difficulties in their students. In order to propose a training programme to educate teachers about the identification and management of learning disabilities, it is necessary to first determine the level of knowledge among school teachers about learning disabilities. This will allow us to evaluate the attitude and degree of awareness among primary school teachers towards students with learning disabilities.

Keywords: School Teachers, Learning Disability, Knowledge.

I. INTRODUCTION

People have always been able to teach and learn from one another. The success of the teaching-learning process depends on the student's capacity to maximise his or her exposure to and use of the environment. The goal of education, therefore, might be the development of dispositions, knowledge, and abilities that allow us to successfully adapt to our surroundings. Acquiring new information is crucial. The knowledge explosion theory postulates that, throughout a student's time in school and beyond, he or she will acquire a quarter of their knowledge from classroom instruction, a quarter from independent study, and a quarter from real-world experience. In order to facilitate productive learning, an excellent educator is cognizant of each student's unique function and works to equip them to fulfill it. The ability to equip pupils to competently manage their obligations depends on the teacher's knowledge of certain learning facts or truths. A broad range of difficulties with learning are together known as learning impairments or disorders. Having trouble learning does not indicate a lack of drive or brainpower. Children who struggle academically aren't stupid or sluggish. The majority are equally intelligent as the rest of us. They just have distinct neural circuits in their brains. Because of this distinction, their information-processing abilities are different. A child or adult with a learning disability may have trouble seeing, hearing, or understanding what is going on around them. This might make it hard to take in new knowledge and put it to use. Difficulty in reading, writing, arithmetic, reasoning, listening, or speaking is characteristic of the majority of learning impairments. The phrase "learning disability" was first used in the 1960s. According to the National Joint Committee on Learning Disorder, a learning disorder is "a diverse group of disorders characterised by substantial impairments in the development and utilisation of auditory, visual, linguistic, reasoning, and numeric skills." An individual

may have trouble learning conventionally if they have a learning impairment (LD), which is a categorization that includes a number of conditions. People with learning impairments have trouble with the following: receiving, storing, processing, retrieving, and communicating information. These difficulties stem from variations in the structure and function of the brain. This condition may make it hard for the afflicted individual to learn new things at the same rate or with the same efficiency as typically developing individuals. Traditional methods of instruction and independent practice provide significant challenges for people with learning disabilities when it comes to mastering certain skills and activities. We still don't fully understand what causes these brain-based illnesses, but we've come a long way in identifying which parts of the brain are responsible for some of the LD symptoms. The majority of pupils who need special education assistance are youngsters with learning disabilities. According to the Individuals with Impairments Education Act (IDEA), 2.4 million kids in public schools in the United States are designated as having learning impairments. This is about 5% of the overall enrollment in public schools. Among the 5.7 million school-aged children with disabilities, 42% are covered by this category's special education programmes. Compared to overall special education, the proportion of pupils classified with learning disabilities fell by 18% between 2002 and 2011. A majority of kids with learning disabilities are male. Approximately 5% of students in public schools in the United States have a learning impairment, with reading disabilities accounting for 3-15% of those students, according to a study by the US Department of Education. In terms of NAEP scores, more than 40% of fourth graders fall below the proficiency threshold. The survey found that learning to read is very challenging for around 275 American children. Of those children, at least 20-30% consider reading to be one of the most difficult tasks they will ever face. As a "serious obstacle to child's development," the World Health Organisation has identified impairments as affecting one in five youngsters globally. An estimated 10% of children in developed nations like the US suffer from a chronic disease or disability. Twenty to thirty-three percent of school-aged children in India suffer from a diagnosable mental illness, says Dr. Prasad M. Developmental problems account for 7% of these cases. One in ten youngsters falls into this category due to a learning disability. It is estimated that between fifteen and twenty-five percent of children in any given Indian school section struggle to maintain a respectable level of academic achievement.⁸ An estimated 13–14% of India's school-aged youngsters have some kind of learning disability. The majority of schools, however, do not provide a sympathetic ear when they discuss their issues. Consequently, these kids are stigmatised as being unsuccessful. According to child psychiatrist Samir Parikh, learning disabilities are more of a chronic issue that requires constant attention and coping mechanisms. He maintains that people are capable of achieving their goals in life with the help of a good diagnosis, the right kind of education, perseverance, and encouragement from those around them. The findings acquired from formal testing processes are unstable, making it difficult to identify disorders prior to school age. Whenever a student is not performing up to expectations in class, it is usually the teacher who notices first. "Planning, monitoring, regulating, and scheduling" are challenging for kids with learning disorders, according to Shaw and Mac. In order to adjust to new learning environments, these children need ongoing support. Teachers and loving family members face a formidable obstacle when dealing with children who have learning disorders, according to Selvin's research on difficult behaviours in this population. How the school staff reacts to these students' needs will determine how well they do in school? If adults in the child's life aren't knowledgeable

of learning difficulties, they can mistakenly assume that their otherwise intelligent and imaginative youngster is unmotivated and uninterested. Schools, even in urban areas, are intolerant of students with learning problems and fail to see the signs of individual students' struggles in the classroom. Academic, emotional, and behavioural issues spiral out of control due to low self-esteem, lack of study motivation, and delays in referral and treatment caused by inadequate facilities for identification. School instructors sometimes fail to understand learning difficulties, which may lead to a negative attitude towards students who are diagnosed with them. So, the researcher has decided to use this study as a chance to find out how much primary school teachers know about learning disabilities and how they feel about students with these conditions. The goal is to see if there is a need for a training programme to help teachers become better at spotting and helping students with learning disabilities. Famous persons who overcame learning difficulties as children include Winston Churchill, Albert Einstein, Isaac Newton, Thomas Alva Edison, and a slew of Hollywood stars. Therefore, we will be responsible for the future loss of great men if we fail to identify and remediate youngsters with learning disabilities. A lot of the time, these kids end up being antisocial and criminals because their parents and school punished them for using their abilities differently.

Our goals of the study are,

1. To find out how much instructors know about kids with learning impairments.
2. Evaluate educators' understanding of how to support students with learning impairments in the classroom.
3. To link certain demographic factors with the expertise of classroom instructors. (such as Date of Birth, Gender, Marital Status, Level of Education, and Number of Years in the Profession at the 0.05 level of significance)

II. RELATED WORKS

The following is a compilation of research covering a range of topics related to informed attitudes and perspectives toward the inclusion of children with developmental impairments. Research in this area has focused on how various demographics see IE, including students, parents, administrators, and educators in both mainstream and special education settings. Eleven studies found knowledgeable attitudes and perceptions (Alghazo, 2002; Alghazo, Dodeen, & Al Attiyah, 2003; Almotairi, 2013; Almotairi 2013; Bradshaw, 2009); one study found positive attitudes and supporting views (Cook 2007); and one study found neutral or mixed attitudes and perceptions (Weber 2007). According to Fayez et al. (2011), a sufficient budget to support inclusion, reasonable teaching loads, school accessibility, teacher support, and specific sets of prerequisite skills by children with disabilities are some of the specific factors that contribute to positive attitudes and perceptions towards including children with developmental disabilities (Abu-Hamour&Muhaidat, 2013a, 2013b). Factors such as age, level of education, disability type and severity, and prior experience working with people who have impairments were shown to influence how people perceived and felt about IE in many research (AbuHamour&Muhaidat, 2013a, 2013b). According to two research, educators' perspectives on inclusion vary among Arab nations. Last but not least, research has shown that mainstream instructors' views toward LD are more favourable than special education teachers' attitudes

toward inclusion. However, some studies suggest special education teachers choose inclusion over general education.

III. METHODOLOGY

a. Selection of Area

“This descriptive, non-experimental research set out to characterise primary school teachers' familiarity with, and perspective on, students with learning disabilities. This research was carried out at eight chosen primary-level government schools in the Ernakulam region of Kerala. The educational institution that participated in the research was: The Greetings of the public school. Public schools in Cochin, the nation's first option, and the national system

b. Selection of Sample and Data Collection

All of the schools' headmasters gave their written consent before the research began. The research spanned from November 16, 2022, until December 4, 2023. The participants were informed about the nature and aims of the research after their self-introductions in order to ensure their full participation. They were given guarantees of privacy and secrecy. The participants were made to feel comfortable before they were asked to provide written consent. To ensure minimal disruption to their regular lessons, sixty primary school teachers from four chosen schools participated in the research by receiving a self-administered instrument during their lunch break. Every day, on average, four or five educators were given 30 to 40 minutes to fill out the tool. After the data collection was completed successfully, the heads of schools and instructors were thanked.

c. Selection of Tool

A data-gathering instrument was used, including three distinct sections:

Section I collects demographic data, namely age, gender, marital status, educational degree, and years of experience (5 items).

Section II is a questionnaire that focuses on general elements of learning impairment, clinical symptoms, and the diagnosis and care of children with learning disability.

Section III presents a structured attitude scale designed to evaluate the attitudes of instructors toward children with learning disabilities.

d. Analysis of Data

The data was analysed using both descriptive and inferential statistical analysis methods. The gathered data was encoded and converted into a master sheet for statistical analysis. An analysis was conducted to assess the degree of knowledge and attitude of primary school instructors towards learning disabilities in children. The analysis used statistical measures such as mean, median, mean difference, range, and standard deviation. The demographic data were described using calculations of mean, standard deviation, and mean percentage. A Pearson correlation test was used to determine the relationship between research and demographic data.

IV. PERFORMANCE ANALYSIS

Demographic variables refer to characteristics of a population that may be used to categorise and analyse different groups of people. These variables include factors

such as age, gender, race, income, and education level the current research revealed that among 100 primary school instructors, the majority of 27 (45%) fell within the age bracket of 41-50 years. The majority of the group, namely 34 individuals, were men, accounting for 57% of the total. The majority of the group, namely 40 individuals or 66% of the total, had postgraduate degrees. The majority of the 21 individuals (35%) had 6-10 years of experience. The vast majority, namely 55 individuals, which accounts for 92% of the total, were married. Primary school teachers' levels of knowledge the results indicated that the majority of school instructors, namely 44 individuals (73.3%), have a moderate level of understanding of learning disabilities. Among the 60 school instructors, 12 (20.0%) had insufficient understanding of learning disabilities, while just 4 (6.7%) had sufficient knowledge of the issue.

Teachers' attitude scores were shown to be statistically significant ($p \leq 0.05$).

Table 1: Frequency and Percentage Distribution of Research Individuals based on their Demographic Variables

"Demographic Variables	Percentage (%)	Frequency (F)
Age	21-30 Years	7.0
	31 – 40 Years	38.0
	41-50 Years	45.0
	Above 50	10.0
Gender	Male	57.0
	Female	43.0
Educational Qualification	10 + 2	12.0
	Graduate	20.0
	Post-graduate	67.0
	PhD	2.0
Years of experience	Up to 5 Years	17.0
	6-10 Years	35.0
	11-15 Years	25.0
	16 Years and Above	23.0
Marital status	Married	92.0
	Unmarried	7.0
	Divorced/ separated	0
	Widow/widower	2.0

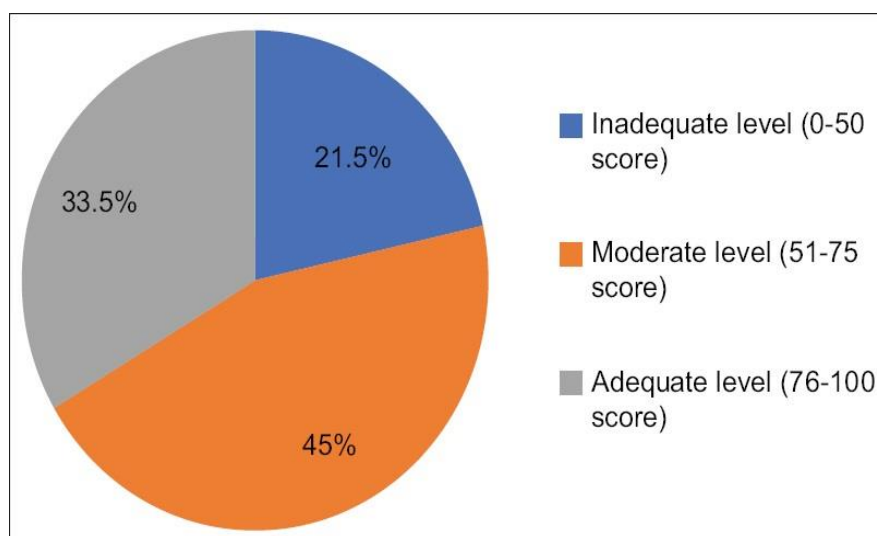


Figure 1: Analysis of the Knowledge Level

The research findings, as shown in Figure 1, indicate that a majority of the teachers (45%) had a moderate level of knowledge about learning disabilities. Furthermore, a significant proportion (21.5%) exhibited an insufficient level of information, while 33.5% of the school instructors demonstrated an appropriate level of knowledge on the subject of learning disabilities.

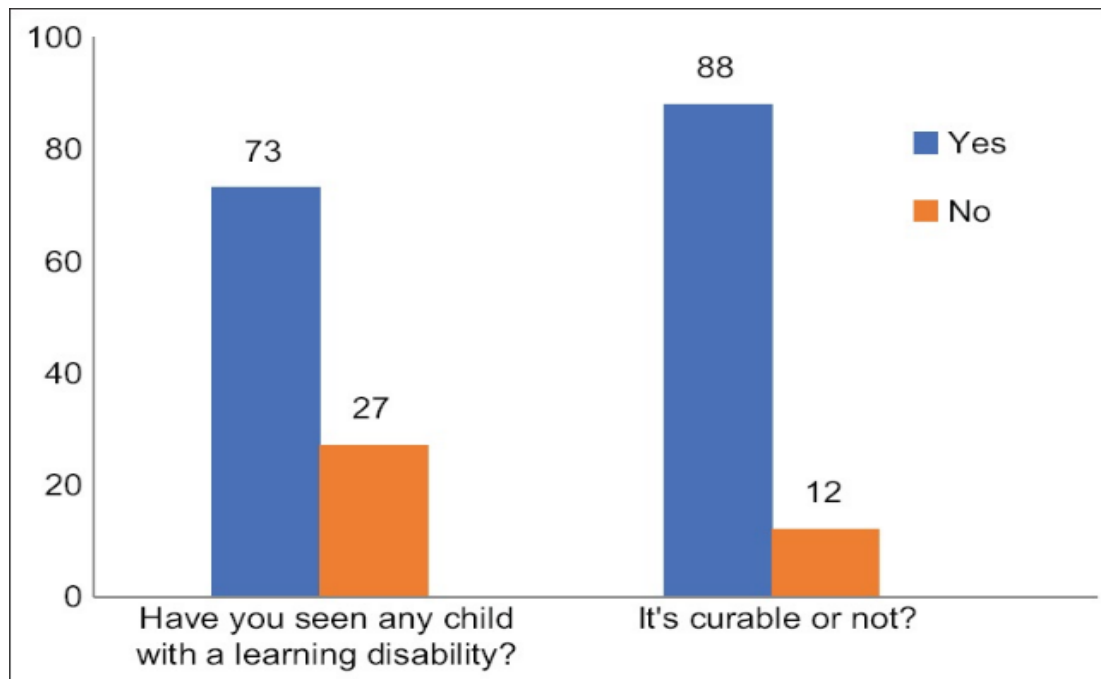


Figure 2: Disability Knowledge Analysis

According to the findings of the present research [Figure 2], a majority of school instructors (73%) reported having encountered a kid displaying indicators of learning impairments. The majority of school instructors (88%) indicated that learning disabilities are treatable, whereas a minority (12%) classified them as incurable.

The Chi-Square Test was used to examine the association between demographic variables (i.e. Age, Sex, Marital Status, Educational Qualification, and Years of Experience) and knowledge scores of school teachers. The results showed that there was no statistically significant association between these demographic variables and knowledge scores ($p \leq 0.05$).

Table 2: Frequency and Percentage Distribution of Research Participants based on their Knowledge Score about Learning Disabilities

“Knowledge Level	Frequency	Percentage
Adequate knowledge 24-30(>75%)	4.0	6.7
Moderate knowledge 16-23($\geq 50 - 75\%$)	44.0	73.3
Inadequate knowledge 0-15(<50%)	12.0	20.0”

Tables 2 and 3 indicate that the average score percentage for school teachers' understanding of managing learning disabilities was high, at 74.38%. Their expertise in the clinical symptoms and diagnosis of learning impairment was found to be the lowest, at 58.0%. The average score percentage for information pertaining to broad characteristics of learning disabilities was 59.03%.

Table 3: Mean and SD Distribution of Knowledge Score of Study Subjects on Various Areas of Learning Disability

Areas	Mean ± SD	Median Score	Maximum	Minimum	Range	Mean Percentage
General Aspects of Learning Disability	7.08 ± 1.53	7.0	12.0	4.0	8.0	59.03
Diagnosis of Learning Disability	5.80 ± 1.92	6.0	10.0	2.0	8.0	58.00
Management of Learning Disability	5.95 ± 1.51	6.0	8.0	2.0	6.0	74.38

Table 4: Frequency and Percentage Distribution of Research Participants based on their Attitude Scores Towards Learning Disabilities

“Attitude Level	Frequency	Percentage
Most favourable attitude 68-90(>75%)	56.00	93.30
Favourable attitude 46 – 67(50 – 75%)	4.00	6.700
Unfavourable attitude 0-45(<50%)	0.00	0.0”0

Table 4 reveals that a vast majority of school instructors (56 out of 93.3%), overwhelmingly, showed a positive attitude towards students who had learning disabilities. The percentage of positive attitudes among school instructors was 6.7%, while the percentage of negative attitudes was 0%.

Table 5: Participants' Average Scores on Knowledge and Attitude Tests Pertaining to Learning Disabilities, as well as the correlation therein.

“Pearson's Correlation	Knowledge Score	Attitude Score
Mean	18.80	76.50
SD	3.6510	5.5100
N	60.00	
Correlation	0.600	
Table Value	0.2540	
P Value	< 0.001	
Result	Significant”	

According to Table 5, there was a strong relationship between instructors' attitudes towards students with learning disabilities and their level of understanding of these conditions.

The table value was 0.254, and the correlation coefficient was determined to be +0.60 (P<0.001).

Table 6: Relationship between the Research Participants' Attitude Ratings and the Demographic Data They Provided

Variables		Levels of knowledge			Chi Square Test 10050	P Value
		Most Favourable 0	Favourable 4	Un favourable 0		
Age	21-30 Years	3.0	17.00	3.0	10.950	0.012*
	31 – 40 Years	0	21.00	6.00		
	41-50 Years	1.0	2.00	3.000		
	Above 50	2.000	25.00	7.00		
Gender	Male	2.00	19.0	5.00	3.283	0.070 NS
	Female	0	1.0	0		
Educational Qualification	PhD	0	6.0	1.0	0.956	0.812 NS
	M.Phil.	3.0	29.0	8.0		
	Post-graduate	1.0	8.0	3.0		
	Graduate	0	9.0	1.00		
Years of Experience	Up to 5 Years	3.00	16.00	2.00	7.643	0.054 NS
	6-10 Years	0	11.0	4.00		
	11-15 Years	1.0	8.00	5.00		
	16 Years and Above	3.0	41.00	11.00		
Marital Status	Married	1.0	3.00	0	16.972	0.000*
	Unmarried	0	0	0		
	Divorced/ separated	0	0	0		
	Widow/widower	0	0	1		

Key: * = significant NS = Not Significant

There was a significant correlation between school teachers' attitude scores and their age ($p \leq 0.012$) and marital status ($p \leq 0.000$), but no correlation between school teachers' knowledge and attitude scores and their gender, educational background, or years of experience ($p \leq 0.05$)”.

DISCUSSION AND CONCLUSION

Of the 100 educators surveyed, the majority (73.3% to be exact) had a moderate understanding of learning disabilities. Only four (6.7% of the total) educators surveyed had sufficient understanding of learning disabilities, whereas twelve (20.0%) lacked such expertise. A mean score of 18.83, a median of 18.5, and a standard deviation of 3.65 were also discovered. The results showed that most educators had a modest understanding of learning disabilities in students.

The majority of school instructors (56 out of 78) showed a positive attitude towards students with learning disabilities. The percentage of positive attitudes among school instructors was 6.7%, while the percentage of negative attitudes was 0%. A mean score of 46.47, a median of 78, and a standard deviation of 5.51 were also discovered. The majority of instructors had a positive attitude toward students with learning disabilities, according to the data.

The results highlight the critical need for educating educators about children's learning difficulties. In order for children with learning impairments to be treated more equitably in social settings, the government should implement policies that increase understanding of these conditions among parents, educators, and peers. Training programmes for educators should include this as well.

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Conflicts of interest: There are no conflicts of interest.

Ethical statement:

Institutional ethical committee accepted this study. The study was approved by the institutional human ethics committee. Informed written consent was obtained from all the study participants and only those participants willing to sign the informed consent were included in the study. The risks and benefits involved in the study and the voluntary nature of participation were explained to the participants before obtaining consent. The confidentiality of the study participants was maintained.

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Authors' contributions:

PROF.P.O. JANCY- conceptualization, data curation, investigation, methodology, project administration, visualization, writing—original draft, writing—review and editing; **DR. S. PARIMALA PH.D (N)** -conceptualization, methodology, writing—original draft, writing—review and editing; **MS. BLESSY KURIAN M.SC (N)** - methodology, writing—original draft, writing, review and editing. All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work. All authors have read and agreed to the published version of the manuscript.

Data Availability:

All datasets generated or analyzed during this study are included in the manuscript.

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