

A Study on the Education of Children with Specific Learning Disabilities in an Inclusive Environment in Secondary Schools

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Abstract

A learning disability is a neurological condition that affects how a person learns and processes information. It is related to the functioning of the brain in performing different tasks. It is a problem in one of the fundamental cognitive processes necessary for performing certain activities like language comprehension, language usage and mathematical thinking. When the problem of disability is confined to a particular or specific activity, it can be understood as a 'Specific Learning Disability' (SLD). Dyslexia, Dysgraphia, Dyscalculia, Auditory processing disorder, perceptual difficulties, and developing aphasia are some of the examples of common learning problems. These problems of children with specific learning disabilities can be addressed in an inclusive classroom using different intervention strategies. Teachers play a crucial role in bringing children with specific learning disabilities into the mainstream education. The teachers working in inclusive schools should have a positive attitude and right perceptions towards the education of children with specific learning disabilities (SLDs). The present study is an attempt to explore the influence of gender, teaching experience and type of school management on the attitude of teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools. Survey method of research was used for the present investigation. The sample of the study consists of 150 teachers (30 Headmasters and 120 School Assistants) from 30 selected secondary schools in Visakhapatnam district of Andhra Pradesh. The researchers used a self-developed questionnaire to collect data from the respondents. The data were analyzed using differential and inferential statistics. The findings of the study revealed that gender and Teaching Experience have no influence on the attitude of secondary school teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools. However, the type of school management has a positive influence on the attitude of teaches towards the education of children with SLDs. The study suggested that in-service training programmes are to be conducted for teachers on intervention strategies to overcome the problems of children with SLDs in an inclusive environment.

Key Words: children, disabilities, education, environment, inclusive, learning, teachers

Introduction

The educational scenario in the country has undergone major changes over the past several years resulting in better provision of education and better educational practices. 'Education for all' is the global movement led by the UNESCO aiming to meet the learning needs of all the children. The National Education Policy (NEP)-2020 emphasizes that, "Education is the single greatest tool for achieving social justice and equality", which has implications for the development of an inclusive community and society at large. The policy has a dedicated chapter on '*equitable and inclusive education*', focusing on issues, challenges and recommendations for bridging the gaps and reducing the disparities in access and participation of all learners in the educational process. The issues and recommendations for inclusion of underrepresented student groups including children with specific learning

disabilities (SLDs) have been subsumed in the policy. The NEP2020 advocates the provisions for Children with Specific Learning Difficulties (SLDs) as per the Rights of Persons with Disabilities (RPwD) Act, 2016. The policy recommends inclusion and equal participation of Children with Special Learning Difficulties across all stages of school education and to that end, endorses a whole school approach to inclusion such as resourcing school complexes and resource centers, engagement of special educators, capacity building of teachers and special educators, provision for teaching-learning materials and encouraging co-curricular activities such as arts, sports, vocational education etc., with a view to meet the learning needs of all students in an inclusive school in general and those with Specific Learning Disabilities in particular. With appropriate support and interventions, individuals with learning disabilities or specific learning disabilities can achieve success in their academic as well as personal lives. The teachers can use different intervention strategies in the classroom in order to make the students overcome the barriers.

THE CONCEPT OF ‘SPECIFIC LEARNING DISABILITY’ (SLD)

A ‘learning disability’ can be understood as a problem in one of the fundamental cognitive processes necessary for performing certain activities like language comprehension, language usage and mathematical thinking. Learning difficulties hinder the abilities of students to comprehend or use spoken or written language, perform mathematical computations, coordinate motions, or focus attention on a given task. The two terms, ‘learning disability’ and ‘specific learning disability’ are used synonymously or interchangeably on several occasions. When the problem of disability is confined to a particular or ‘specific’ activity, it can be understood as ‘Specific Learning Disability’ (SLD). It is the term used to describe the neuro-developmental disorders that affect how someone’s brain takes in and processes information. SLDs involve consistent difficulty in math, reading, or writing. Even though the specific learning disabilities affect very young children, learning problems are typically not identified until the kid is of school age. These issues may affect a student’s capacity for reading, writing, spelling, thought, speaking, listening, or mathematical computation. Dyslexia, dysgraphia, perceptual difficulties, and developing aphasia are examples of common learning problems. According to estimates, 6-8% of school-age children suffer from a learning handicap (**Mafuba, 2017**).

Learning disability refers to a heterogeneous group of disorders manifested by specific and persistent difficulties in the acquisition and use of efficient reading, writing or mathematical abilities despite conventional instructions, intact senses, normal intelligence, and proper motivation and adequate socio-cultural opportunities (**Demonet, J.F. et al., 2001**).

According to **Lere (2001)**, children who display a considerable educational gap between their expected intellectual capacity and their actual level of performance are those who have learning challenges. He observed that even though these children might not exhibit any symptoms of other disorders and functions properly in other domains, their academic performance in the classroom falls far shorter in those domains.

Lerner (2000) claims that children with learning difficulties have a gap between what they are capable of accomplishing and what they achieve. These kids struggle particularly to learn speaking and oral language, reading, math, writing, mechanics of handwriting, thinking, or psycho-social abilities. Students with learning disabilities need special attention to perform well in the classroom; and they can be placed in an inclusive classroom to make learning simple for them. Students with learning disabilities have neurological problems that affect the way they acquire information, retain information, process information, and impose meaning

to the information. These individuals can be seen in ordinary classrooms with inclusive practices, where they display a variety of traits that hinder learning. When inclusive classrooms are created in age-appropriate general education settings, the children with special needs, disabilities or specific learning disabilities (SLDs) can study along with normal children. In an inclusive education system, all students are accepted and fully included in the educational and social life. Teachers play a crucial role in mainstreaming children with specific learning disabilities in an inclusive school setting. Teachers' attitude has implications on students' own attitude and their learning outcomes. A teacher's attitude has the power to enhance or seriously harm the quality of life of students with learning disabilities. The integration of students with specific learning disabilities within the mainstream classroom depends on the attitude of teachers towards the education of children with SLDs, as they are considered as mediators in the inclusive education process (Campbel et al., 2003). Hence, it is the need of the hour to develop in the teachers positive attitude towards the education of children with SLDs.

TYPES OF SPECIFIC LEARNING DISABILITIES (SLDs)

The disabilities of students are classified into various kinds depending on the problems they face in performing specific tasks or activities. The following are some of the common types of learning disabilities.

- (i) **Dyslexia:** It is a language-processing disorder or disability that causes difficulty with speaking, reading, writing, or understanding words. It is the difficulty with reading, including decoding words, reading fluency and comprehension.
- (ii) **Dysgraphia:** It is the difficulty with writing, including handwriting, spelling and expressing thoughts in writing. The challenges include vocabulary, grammar, memory and critical thinking.
- (iii) **Dyscalculia:** It is the difficulty with math concepts and calculations, including understanding numbers. The challenges include counting money, reading clocks, mental calculations and reasoning.
- (iv) **Auditory Processing Disorder:** This disorder takes place when brain misinterprets auditory information. It is the difficulty in understanding the spoken language, even with normal hearing.
- (v) **Language Processing Disorder:** This is a subset of Auditory Processing Disorder. It is the difficulty in understanding and using the spoken and written forms of language.
- (vi) **Non-verbal Learning Difficulties:** It is the difficulty with non-verbal cues, social skills and visual spatial reasoning. This disability occurs when someone struggles in interpreting non-verbal prompts.
- (vii) **Visual motor deficit:** Visual motor deficit or visual perceptual disability occurs when someone has difficulty with hand-eye co-ordination and motor activities.
- (viii) **Attention Deficit/Hyperactivity Disorder (ADHD):** ADHD is a common neurodevelopmental disorder in children characterized by persistent problems with inattention, hyperactivity and impulsivity. These symptoms which begin in childhood, can significantly impact a child's daily life, affecting their performance at school, interactions with peers and family; and overall functioning. Children with ADHD find difficulty with homework, paying attention in the class and completing projects.

The teachers in an inclusive school are expected to use different intervention strategies to make the students overcome these difficulties. Further, the teachers should develop a positive attitude towards the education of children with Specific Learning Disabilities (SLDs).

ROLE OF TEACHERS IN THE EDUCATION OF CHILDREN WITH SPECIFIC LEARNING DISABILITIES (SLDs)

Teachers play a transformative role in the education of children with Specific Learning Disabilities (SLDs), acting not just as instructors but as advocates, facilitators, and emotional anchors. The teachers working in secondary schools should shoulder the responsibilities of providing education to the children with specific learning disabilities on par with other students in an inclusive environment. The following are the core roles of teachers while addressing the children with SLDs.

(i) Understanding SLDs:

- a) Initially, the teachers should be able to identify the specific learning difficulty of a particular child in the classroom and try to implement the relevant intervention strategy to overcome the deficiency.
- b) They should be able to distinguish between different types of disabilities such as Dyslexia, Dysgraphia, Dyscalculia, Auditory/Visual Processing Disorders and ADHD.
- c) Teachers should recognize that these are neurological differences – but not reflections of intelligence or motivation.

(ii) Early Identification:

- a) The teachers should be able to spot in the children signs like difficulty in reading, writing or math at an early stage.
- b) They should observe behavioral cues such as frustration, avoidance or short attention spans that persist among the children.
- c) They should refer the students for formal assessment when needed.

(iii) Individualized instruction:

- a) The teachers should design **Individualized Education Plans (IEPs)** tailored to each student's needs.
- b) They should use multisensory teaching methods to reinforce learning (e.g., visual aids, hands-on activities etc.)
- c) They should adjust pace and complexity of lessons to match student
- d) capabilities.

(iv) Creating inclusive classrooms:

- a) The teachers should promote empathy and acceptance among peers in an inclusive environment.
- b) They should adapt classroom environments to reduce sensory overload or distractions.
- c) The teachers should ensure equal participation of students in academics and
- d) social activities.

(v) Collaboration and Communication:

- a) The teachers should work closely with parents, special educators, counselors and administrators.
- b) They should share progress updates and strategies for reinforcement at home.
- c) They should advocate for necessary accommodations like extended test time or assistive technology.

(vi) Emotional support:

- a) The teachers should try to encourage self-esteem and resilience among students.

- b) The teachers should celebrate small victories to build confidence among students.
- c) The teachers should help students develop coping strategies for academic stress.

(vii) Professional Development:

The teachers should attend to Professional Development Programmes (PDPs) with a view to improve their own skills in teaching children with specific learning disabilities in an inclusive environment. They need on-going training in:

- a) Diagnostic tools and intervention strategies
- b) Inclusive education policies and legal frameworks; and
- c) Cultural sensitivity and differentiated instruction

REVIEW OF LITERATURE

The studies carried out earlier by the other researchers that aim at finding out the attitude of school teachers towards the education of children with specific learning disabilities (SLDs); and a brief review of the same is provided in the following paragraphs.

Elizabeth K. Thomas & Seema P. Uthaman (2019) conducted a study to determine the level of knowledge of primary school teachers on specific learning disabilities and inclusive education, to assess the attitude of primary school teachers towards inclusive education of children with specific learning disabilities, to study the association of teachers' knowledge and their attitude towards inclusive education with selected professional variables, to compare knowledge and attitude of primary school teachers based on educational sub-districts and teaching section, to find the relationship between knowledge and attitude of primary school teachers towards inclusive education of children with specific learning disabilities. The tools used consists of: (i) a questionnaire to collect demographic and professional profile and to assess teachers' knowledge of specific learning disabilities and inclusive education; and (ii) the teachers' attitude towards inclusive education scale (TAIS) to understand the attitude of teachers towards inclusive education. The sample consisted of 180 primary school teachers. The results revealed that 63% of participants have an average level of knowledge; and 51% of the participants have a positive attitude towards inclusive education of children with specific learning disabilities. The study also revealed that there is a significant correlation between teachers' knowledge and their attitude towards inclusive education.

Vranda, M.N. & Moothedath Shari (2016) conducted a study to assess the attitude of primary school teachers towards children with learning disabilities using "Primary School Teachers' Attitude about Learning Disabilities" (PSTALD) scale consisting of 40 items. The sample for the study consisted of 200 primary school teachers drawn from 16 selected primary schools in Bangalore South. The study revealed that the teachers had less favorable attitude towards inclusion of children with learning disabilities in regular schools. Female teachers had favorable attitude towards helping children with learning disabilities on overall scores of PSTALD scale compared to male counterparts. Apart from this, unaided school teachers and teachers with higher education had statistically significant positive ($p < 0.05$) attitude on all the domains of PSTALD scale compared to other categories. The findings of the study highlight the need for bringing awareness among teachers towards inclusion and bringing children with learning disabilities into the educational mainstream.

Tiziana Pasta et al. (2013) conducted a study to investigate teachers' perception of the relationship with primary school pupils in Years 2 and 3, who have SLD ($n = 38$) and to

compare it with that of pupils without SLD, with an achievement level that is the same as ($n = 38$) or the opposite from ($n = 32$) the achievement of their peers diagnosed or considered as having specific learning disabilities. Teachers' perceptions of relationships were examined using the Student Teacher Relationship Scale developed by Pianta, R.C. (2001), which was later adapted and validated to the Italian context by Fraire et al., in 2013). The teachers perceive a higher level of Dependency for pupils with SLD ($F = 14.252$; $df = 2$; $p < .001$), in particular for those who do not yet have an official diagnosis ($t = 2.529$; $df = 62.367$; $p < .05$).

The study revealed that the teacher's perception of the relationship with a pupil with SLD differs from that of low-achieving pupils. Specifically, the results highlight the fact that the certification of specific learning disabilities is connected to an improvement in the quality of the teacher's perceived relationship with the pupil. Certification, in fact, has advantages for both the child and the teacher, giving them access to individualized programs and teaching assistance that respond to the needs of the pupils and enable them to become more autonomous.

Woodcock, S. (2013) conducted a study to identify the attitude of trainee teachers towards students with specific learning disabilities and differentiation of the curriculum. The participants of the study include 652 trainee teachers (494 from primary education and 158 from secondary education) drawn from three varied universities across New South Wales, including urban, suburban, and rural areas. A survey questionnaire was used to collect data for the study. The findings of the study revealed that there were significant differences in the attitudes of primary and secondary school trainee teachers; and the influence of training. There were no differences in their attitude according to experience with students with specific learning disabilities. The findings have implications for teacher training programmes.

NEED FOR THE PRESENT INVESTIGATION

The education of children with Specific Learning Disabilities (SLDs) focuses on creating an individualized, supportive and multi-sensory learning environment through an individualized Education Plan (IEP), personalized instruction, assistive technology and collaborative partnership with parents and specialists. Strategies often involve breaking down tasks, using visual, auditory, kinesthetic and tactile (VAKT) methods and building foundational skills like phonological awareness and number syntax to address specific challenges in reading, writing or math.

In this context, the researchers felt that the teachers working in inclusive schools should have a positive attitude and right perceptions towards the education of children with specific learning disabilities (SLDs). Hence, it is proposed to study the attitude of teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools.

The present investigation is an attempt to study the attitude of teachers towards the education of children with specific learning disabilities in an inclusive environment in the secondary schools of Visakhapatnam District in Andhra Pradesh. Further, the study also takes into its purview the influence of certain demographic variables, viz., gender, Teaching Experience and Type of school management on the attitude of teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools.

OBJECTIVES OF THE STUDY

The main objective of the present investigation is to explore the attitude of teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools. The present study also aims at studying the influence of gender, Teaching Experience and Type of School Management on the attitude of teachers towards the education of children with specific learning disabilities in an inclusive environment.

HYPOTHESES OF THE STUDY

The following hypotheses have been formulated for the present investigation:

- (i) There is no significant difference in the attitude of male and female teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools
- (ii) There is no significant difference in the attitude of teachers with an experience of less than 10 years and those with 10 years and above towards the education of children with specific learning disabilities in an inclusive environment in secondary schools.
- (iii) There is no significant difference in the attitude of teachers working in Government and Private schools towards the education of children with specific learning disabilities in an inclusive environment in secondary schools.

DELIMITATIONS OF THE STUDY

The study is limited to find out the attitude of 150 teachers (30 Headmasters and 120 School Assistants) from 30 selected secondary schools in Visakhapatnam District of Andhra Pradesh towards the education of children with specific learning disabilities in an inclusive environment in secondary schools. The study is confined to know the influence of three demographic variables, viz., Gender, Teaching Experience and Type of School management on the attitude of teachers working in the secondary schools towards the education of children with specific learning disabilities in an inclusive environment.

METHODOLOGY

(a) Sample: The sample of the study consists of 150 teachers (30 Headmasters and 120 School Assistants) selected randomly from 30 secondary schools in Visakhapatnam District of Andhra Pradesh using Random Sampling method.

(b) Research Tool: The researchers used a well prepared questionnaire consisting of 33 items as the tool of research for the present investigation. After selecting the items for the tool, the researchers verified whether the tool prepared for the present investigation is in conformity with the conditions required by a standard measuring instrument. The tool was initially administered to 25 teachers (5 Headmasters and 20 School Assistants) working in 5 secondary schools located in and around Visakhapatnam city under pilot study. On conducting item analysis, the discriminating power of 30 items has been found positive and that of 3 items negative. The negative items have been removed from the pool; and the final form of questionnaire consists of 30 items which are foolproof in all respects; and this final form of the tool is a standardized tool.

(c) Administration of the Tool

The final form of the standardized questionnaire consisting of 30 items on various factors relating to the education of children with specific learning disabilities in an inclusive environment has been administered to 150 teachers (30 Headmasters and 120 School Assistants) working in 30 selected secondary schools in Visakhapatnam district of Andhra Pradesh. These teachers include male and female, working in Government as well as

Private schools.

STATISTICAL INTERPRETATION OF DATA

The data collected has been analyzed using different statistical techniques such as Mean score values, Standard Deviations and t-ratios; and is presented in the following table:

Table showing t-values of different variables relating to the attitude of teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools

S. No.	Variable		N	Mean	S.D.	t-ratio	Result
1	Gender	Male Female	70 80	101.93 102.50	25.14 26.94	0.13*	*Not Significant at 0.05 and 0.01 levels
2	Teaching Experience	Less than 10 years 10 years & above	90 60	102.28 99.83	27.10 27.07	0.54*	*Not Significant at 0.05 and 0.01 levels
3	Type of School Management	Government Private	80 70	104.50 93.36	26.72 25.53	2.61*	*Significant at 0.05 and 0.01 levels

FINDINGS OF THE STUDY

On the basis of the analysis and interpretation of data, the researchers have arrived at the following findings and drawn the conclusions.

1. There is no significant difference in the attitude of male and female teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools.
2. There is no significant difference in the attitude of teachers with an experience of less than 10 years and those with 10 years and above towards the education of children with specific learning disabilities in an inclusive environment in secondary schools.
3. There is significant difference in the attitude of teachers working in Government and Private schools towards the education of children with specific learning disabilities in an inclusive environment in secondary schools.

It is concluded that teachers working in Government schools possess a higher level of attitude towards the education of children with specific learning disabilities in an inclusive environment in secondary schools as compared to their counterparts working in Private schools.

Conclusion

The study concluded that Gender and Teaching Experience have no influence on the attitude of teachers towards the education of children with specific learning disabilities in an inclusive environment in secondary schools. However, the type of school management has a significant positive influence on the attitude of teachers towards the education of children with 'specific learning disabilities' (SLDs) in an inclusive environment. Teachers working in Government schools have exhibited better attitude towards the education of children with SLDs as compared to those working in Private secondary schools.

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