Beyond Specific Learning Disability Assessment: A Discussion on Effective Interventions

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ABSTRACT

Learning disability or specific learning disability (SLD) is a high-incidence disability with a prevalence rate of about 5% to 15% as per the various studies undertaken in India. Hence, conducting assessments to diagnose the condition is very important. At the same time, providing services to students with SLD should be considered as it impacts the students with SLD holistically. The purpose of this paper is to briefly review the literature about SLD from India and to identify the evidence-based practices (EBPs) that are effective in addressing the specific learning needs of students with SLD. The EBPs are a set of interventions that offer a wide array of targeted interventions for the range of challenges experienced by students with different learning disabilities. They aim to provide a supportive and effective educational environment for students with special needs, including students with SLD. However, their integration into the educational system faces several challenges, making it challenging to devote sufficient time to implement these practices effectively.

Keywords:

Specific Learning Disability, Intervention, Evidence-based practices

Introduction

Learning disability or specific learning disability (SLD) is a high-incidence disability (The University of Kansas n.d.) with a prevalence rate ranging between 5% and 15% as per the various studies undertaken in India. In India, SLD was recognized for the first time only in the year 2016 and the Rights of Persons with Disabilities Act (2016) defines it as "a heterogeneous group of conditions wherein there is a deficit in processing language, spoken or written, that may manifest itself as a difficulty

to comprehend, speak, read, write, spell, or to do mathematical calculations and includes such conditions as perceptual disabilities, dyslexia, dysgraphia, dyscalculia, dyspraxia, and developmental aphasia". However, it does not imply that prior to 2016, SLD was unheard of. It found a mention in the National Policy on Education (1986) when the policy highlighted the need for providing special education services to children with disabilities, including children with learning disability.

Assessment of SLD

Service provision for any disability warrants that the disability is correctly diagnosed. Conducting an assessment is thus the first step in recognizing and identifying children with SLD as well. In India too, tremendous efforts have been made to assess children with SLD. The tests and tools developed in the western countries were and are widely used for the said purpose. These tests include the Ann Arbor Learning Inventory, Comprehensive Test of Phonological Processing, Gray Oral Reading Test, Test of Written Language, Wide Range Achievement Test to name a few. In addition, the use of tools developed in India is seen. The National Institute of Mental Health and Neuro Science (NIMHANS) Index for SLD developed at the Department of Clinical Psychology at NIMHANS, Bangalore is the Indian government-accepted tool for SLD diagnosis. The use of the Diagnostic Test of Learning Disability (DTLD) and Behaviour Checklist for Screening the Learning Disabled (BCSLD) by Swarup and Mehta is documented as well. Another indigenously developed tool is DALI (Dyslexia Assessment in languages of India) developed by National Brain Research Centre Manesar. The DALI is available in four languages viz. Hindi, Marathi, Kannada and English. Apart from these tests and tools, many more have been developed albeit not employed widely. The thrust of these assessment tools is on screening and identifying children with SLD so that they receive a formal diagnosis of the condition. Screening and identification of disability are key purposes of any assessment and they are crucial from the perspective of providing timely intervention so that the secondary problems can be avoided or their impact reduced (Sanfilippo 2020). Assessment is crucial for identifying SLD, nonetheless focusing solely on assessment for identification and diagnosis might neglect the essential aspect of providing support for these students.

Practices to support students with SLD

The literature about SLD from India even today is predominantly focused on documenting the prevalence of SLD and the characteristics of children having SLD. A systematic review and meta-analysis (Scaria, Bhaskaran and Babu 2023) put the prevalence of SLD in India at 8% and concluded by stating that assessment using appropriate tools is essential for early diagnosis and disability certification. Hence, many clinicians direct their efforts in developing culture-fair tests for the diagnosis of SLD. These efforts though much needed are highly indicative of the medical model of disability which looks at what is wrong with the person rather than what the person needs (Social model vs medical model of disability n.d.). While assessment is crucial for diagnosis, it is remediation that truly empowers the students with SLD to thrive. The combination of both is fundamental to ensuring a supportive and effective educational environment for students with SLD. Service provision for individuals with SLD, thus now ought to be the focal point as this will help them deal with academic challenges like difficulties in reading, writing, spelling, and math; help them to build their self-esteem, promote their mental well-being, and maximize their potential.

Evidence-based practices (EBP) for SLD

Regarding providing services to students with SLD, educational services and educational interventions are important. Ignacio Estrada's quote in the context of educating and teaching students with learning challenges and disabilities, is very powerful; it says, "If a child can't learn the way we teach, maybe we should teach the way they learn." Teaching the students therefore requires planning and implementing various interventions, using various strategies, and developing support systems that are aimed at addressing the specific learning needs of students with SLD.

Special educators use remedial intervention / remedial approaches while working with students with SLD. Remediation involves a multifaceted approach, tailored to the individual needs of students. It could encompass using specialized teaching methods, assistive technologies, and individualized education plans. Special educators employ many teaching methods and programmes to

remediate perceptual deficits, deficits in literacy and numeracy skills, and the social-emotional domain. Furthermore, modifying the learning environments to make them supportive environments to cater to the unique learning needs of the students may be undertaken. Since the last 15 years, however, the discussion on whether the remediation, remedial strategies, and techniques are evidence-based is becoming important.

Evidence-based practices (EBPs) are proven practices, supported by empirical evidence, that are likely to produce desired results for designated students when implemented with fidelity (Cook, et al. 2015) and they could refer to educational programmes that encompass the whole curricula or specific practices within larger programmes or initiative (Cook and Cook 2011). EBPs are considered to make remediation effective as they provide a structured framework backed by empirical research, systematic observation, and documented outcomes. These practices are grounded in scientific evidence ensuring that interventions and strategies implemented for students with SLD are not based on assumptions of what will work but on proven methodologies. To identify the EBPs, data is drawn from research studies, meta-analyses, and data-driven research to establish the efficacy of different interventions.

Research has been able to identify EBPs that offer a wide array of targeted interventions for the range of challenges experienced by students with SLD. These include multisensory teaching methods, training in phonemic awareness skills, assistive technologies, direct instruction, explicit instruction, structured teaching approaches, peer-mediated instruction, and collaborative strategic reading (nuacresult 2023) for small group or individualized instruction of students with SLD. Additionally using differentiated instruction and universal design for learning frameworks are found to be effective for teaching students with SLD in inclusive classrooms. Specifically, some EBPs that have shown significant success for students with SLD are the use of Orton-Gillingham method of instruction for teaching reading and spelling to students with dyslexia, it indicates that the Orton-Gillingham instruction is evidence-based as it includes the five key components of reading instruction identified by the National Reading Panel viz. phonemic awareness instruction, systematic phonics instruction, reading fluency instruction, vocabulary instruction, and comprehension instruction.

Likewise, it displays the characteristics of structured literacy instruction (which is another EBP) and includes systematic, explicit, multisensory, and diagnostic instruction. On the other hand, practice like tailoring the instruction according to the student's learning style finds very limited evidence (Pashler et al., 2009) though it is extremely popular. Another programme that gained popularity is the Brain Gym. It includes a set of specific physical exercises that are claimed to enhance learning and academic performance by integrating brain functions. No clear-cut evidence for these brain gym exercises (Hyatt 2007; Kroeze, Hyatt and Lambert 2016) has been documented either.

The knowledge of such EBPs becomes important as it provides confidence to teachers and special educators to mindfully choose one instructional practice over the other.

Challenges in the implementation of EBPs

Despite the proven effectiveness of the EBPs, their integration into the educational system faces several challenges for special educators, administrators, and policymakers. The challenges could be more pronounced for a country like India. The challenges are a result of many factors at different levels like the individual level or even the school level (Domitrovich et al., 2008) and their interaction.

At the level of the individual, the implementing teacher or special educator may demonstrate resistance, or hesitancy to adopt new practices (though they are EBPs); this can impede implementation of the EBPs. There might be a reluctance to move away from the traditional and regularly used teaching methods or they may be skeptical about the effectiveness of unfamiliar interventions. Secondly, implementing the EBPs often requires specialized training and ongoing professional development for the teachers and special educators. The opportunities for attending professional development programmes might not always be readily available. Many of the programmes found to be effective need to be purchased and they are expensive. With limited access to financial resources procuring them is a challenge. Additionally, in the implementation and use of the EBPs, personnel, materials, and technological support is essential. Availing of these supports is a challenge. Since it is required that the EBPs be adapted to meet

the needs of individual students with SLD, they may require major adjustments and adaptations to different settings, individual student profiles, and varying levels of disabilities. How to make these adaptations can be challenging as there is a need for skilled practitioners. Furthermore, implementing EBPs demands time for planning, training, data collection, and ongoing assessment. However, most teachers and special educators face time constraints, making it challenging to dedicate sufficient time to implement these practices effectively. EBPs need to be implemented as per their protocols and thus require consistency. Ambiguity in understanding the practice and the implementation protocols, lack of supervision, or inadequate follow-through with fidelity to the prescribed interventions may render the practice ineffective. Accurately measuring the effectiveness of EBPs requires comprehensive assessment methods and data collection. However, collecting relevant data, analyzing it, and using it to guide decision-making can be demanding and require expertise. At the school level, school administrators may not wholeheartedly support implementation of the EBPs and this can come in the way of sustaining the EBP implementation.

Addressing these challenges requires a concerted effort from various stakeholders. Investing in professional development, providing adequate financial resources and support, fostering a culture of collaboration within the school system, promoting research dissemination, and aligning school policies to support the integration of EBPs are crucial steps toward overcoming these hurdles. Effective implementation hinges on recognizing and addressing these challenges to ensure that evidence-based practices can positively impact the education and outcomes of students with SLD.

Conclusion

There is no doubt that discussions about the assessment of SLD are important. It sets the stage for planning interventions for students with SLD. However, preoccupation with developing assessment tools and assessing for SLD in the student population needs to be reduced. What is critical is that there are more

conversations about ways to help and support students with SLD educationally. Though a lot of remedial and teaching strategies are used on a day-to-day basis, it is equally necessary to consider the implementation of evidence-based practices not because of any other reason but because they are backed by scientifically conducted and data-driven practices. Familiarizing the teachers and special educators with the EBPs, training them in the implementation, and evaluating the practices for their efficacy in our Indian contexts matters.

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