



A Summary of the Managing Learning Disabilities Using Advanced Technology

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Abstract:

In this study, we evaluate the research that has been done on the topic of 'learning disability' in India. The difficulties that learning handicapped people face in social and educational settings are investigated, and research carried out in India is broken down in terms of its diagnosis, evaluation, and potential solutions to these problems. The study takes an analytical look at how their teaching and learning process has evolved throughout the course of its existence. It stresses the role that special educators play in their education and investigates the influence that technology and certain teaching aids have on the education of students who have learning disabilities. In the latter portion of the article, the author sheds light on government policies for learning challenged individuals and seeks to interpolate the influence such policies are expected to have on the individuals' learning. The report wraps up with a discussion of potential remedies and student progress based on suggestions derived from an in-depth examination of the relevant literature.

Keywords: Educational Challenges, Indian Government policies, Learning Disability, Research on Learning Disability in India, Social Challenges.

Introduction:

The Learning Disability is a neurodevelopmental problem in which the student is generally seen to have a persevering battle in getting the hang of/utilizing a language or figuring out a numerical computation or to adhere to a progression of guidelines. Student tracks down it challenging to do some or the accompanying exercises in general: read smoothly, spell accurately, compose conveniently, rhyme, fundamental computation, word issues, give the current

time, adhere to plan guidelines, hold a pencil appropriately, disentangle, figure out a succession/example, and offer viewpoints notwithstanding having a typical knowledge. This condition is additionally alluded to as 'Explicit Learning Disability', 'Slow Learning' or 'Learning Difficulty' in some writing. [1], [3].The categorisation of Learning Disability is moderately another idea and generally distinctively talked about in specific pieces of writing. One of the characterizations is based on impacted

learning region, and is talked about beneath under following six sorts: I) Dyslexia, ii) Dysgraphia, iii) Dyscalculia, iv) Dysphasia or Aphasia, v) Auditory Processing Disorder and vi) Visual Processing Disorder.[6]

As per the 'Youngsters with Specific Learning Disabilities bill' (2016), Specific Learning Disability incorporates: I) Dyslexia, ii) Dysgraphia, iii) Dyscalculia, iv) Dyspraxia, v) Perceptual Disabilities, vi) Brain Injury, vii) Minimal Brain Dysfunction and viii) Development Aphasia.

It prohibits learning issues that emerge because of visual, hearing or engine incapacities, mental impediment, close to home unsettling influence, ecological, social or financial inconveniences. [5]

Dyslexia is a learning incapacity connected with memory, thinking, critical thinking, understanding abilities and language handling like phonological mindfulness, rhyming words and sentence development. Dysgraphia is an incapacity of composing which might incorporate composing expertise, penmanship expertise and articulation of considerations. Student finds it challenging to peruse and put his/her contemplations on paper at the same time. Dyscalculia is an incapacity of putting together, remembering and figuring out numbers,

images, and examples. Dyspraxia is a learning incapacity to design engine undertakings and body reaction requiring coordination and body development. [5], [6]. Dysphasia/Aphasia is language incapacity particularly with issues of discourse age and composing understanding because of cerebrum harm or mind infection. Hear-able Processing Disorder influences the handling of sound making it hard to decipher or find it. Visual Processing Disorder influences the comprehension of visual data. In India, educators and guardians are seldom mindful of learning handicap. Because of absence of mindfulness inside society, instructors and guardians, these students are treated as simple-minded, medically introverted or are confounded as ADHD or mentally incapacitated. This disarray is on the grounds that a student can have more than one learning incapacity that calls for proficient exhortation to analyze it. It is seen that 80% of learning incapacity cases have understanding issues (Dyslexia) and these cases might incorporate other learning inabilities as well. In India, research in learning handicap is restricted to Dyslexia, Dysgraphia and Dyscalculia, as these are generally normal and simple to analyze than rest. [6]. Studies uncover that 5-15% of students have learning incapacity somewhat. [3]. India being a place that is known for different dialects, social

foundations, convictions, and fluctuated financial status, evaluation of learning incapacity is basic. Accessibility of normalized devices in all dialects is a troublesome undertaking as 29 states and 7 Union domains of India communicate in around 780 dialects. English medium and territorial medium schools have a tremendous distinction in showing strategies and prospectus. English gets presented as late as in Grade 5 and just in 'Science' stream. The distinction in the prospectus of various schooling sheets, for example, CBSE, ICSE, ISC, State sheets, additionally impacts the advancement of normal evaluation apparatuses. Because of absence of appropriate data, society, instructors and guardians are uninformed about such students and their learning issues. [4]. There is an arrangement for an additional time frame of around 25% for learning handicapped in composed assessments, however without any legitimate determination devices and mindfulness, relatively few students can profit the benefit.[6]. As of late, India made its first 'test battery' for learning handicap named DALI (Dyslexia Assessment in Language of India) in Hindi, English, Marathi and Kannada. This evaluation apparatus for elementary younger students helps in diagnosing the learning handicapped at the essential stage. [16]

Literature Review:

The segment underneath goes through the cross-part of examination work completed around 'Learning Disability' well defined for India, incorporating various difficulties, status of current work, concerning innovation, instruments and offices and Government helps and arrangements.

Social and Educational Challenges for learning disabled in India:

John Whitney (1985) expressed that particular learning handicapped experience issues in handling the general media data. They need synchronized hearable, visual, kinaesthetic faculties to work as a solitary utilitarian unit to play out an undertaking. A decent informative program is equipped for uncovering a student's assets and imperfections. A productive instructor distinguishes best methodologies through which a student could gain proficiency with the best. [2] without any a compelling teacher and a reasonable educational program, a student is probably going to perform ineffectively in scholastics, and for the most part winds up as a drop out at school. [1] A report by World Bank (2007) recommends that the incapacitated are bound to exit after elementary school. [15].

As per Annual Status of Education Report (ASER) 2017, an overview on

28323 young people old enough (14-18) of 24 states recommends kids in primary schools experience issues in establishment abilities like understanding abilities and fundamental number-crunching computations and need pressing endeavors. 25% of them track down trouble in familiar perusing, 43% can't address straightforward division. 55% can't peruse an English sentence and 79 % of that 55% couldn't figure out the significance, 76% can't count cash, 40 % have inconvenience in giving the current time and half have issues in amounts of the unitary technique. [18]. Assistive devices and showing content could be an extraordinary arrangement here as John Whiting (1985) uncovers the positive effect of PC based instructional exercise in contrast with a human mentor. He uncovers that the mean scores and the level of students gaining from PC instructional exercise were higher than those gaining from a human educator. [2]

Diagnosis/Assessment Tools for Learning Disability:

As announced in certain explores, the left side of the equator of the cerebrum manages language abilities and right-gave individuals have more extensive left parietooccipital district. These investigates hint the conceivable outcomes of identification of learning incapacities by concentrating on cerebrum construction or

working. Since dyslexia is the most widely recognized learning incapacity, distinguishing such learners is simple. Dyslexia students were analyzed utilizing advancements, for example, Computerized Tomography (CT) and Magnetic Resonance (MR imaging) to figure out irregularities in cerebrum morphology, utilitarian Magnetic Resonance Imaging (fMRI) to recognize anatomic contrasts in learning handicap and Electrophysiological (EEG) and metabolic imaging procedures to concentrate on the human mind during mental cycles. Modernized EEG, Positron Emission Tomography (PET) and Single Photon Emission Computerized Tomography (SPECT) uncovers irregularities in these students however the exploration saw no deliberate anomalies. Erin D Bigler (1998) [10].

S.Karande, M.Kulkarni, R.Sholapurwal, M.Sasikumar, P.Karanth are ebb and flow Indian specialists who are working broadly in the field of learning handicap particularly Dyslexia and Dyscalculia. Evaluation apparatuses of western region of the planet are not similarly appropriate in that frame of mind of the extensive variety of disparity. A portion of the evaluation devices accessible in Indian dialects are Arithmetic Diagnostic Test for elementary younger students and Reading test in Kannada.

Jayanthi Narayan (1997) fostered a Grade level Assessment Device (GLAD) for Children with learning incapacity focussing on essential youngsters, evaluating English, Hindi, and Mathematics. The test could distinguish youngsters with Dyslexia, Dysgraphia and Dyscalculia. 1197 understudies from various sheets (CBSE, ICSE and Andhra State Board) took part in the underlying tests. It covered a large number of issues. [1]. Dr. S. Ramaa (2000) introduced a distinctive exploration on learning incapacity. The investigation of explores in the field of gaining handicap from 1980 to 2000, makes reference to that most examination work on learning incapacities was accounted for in South India and in South Indian dialects. The investigates are restricted to Dyscalculia and Dyslexia. As of not long ago, normalized apparatuses were additionally not accessible for evaluation of learning incapacitated. The review underscores on the way that different dialects in India and varieties in prospectus make it challenging to fabricate Standardized Assessment Tools. [4].

Chaitra Rao and her group got progress in making Dyslexia Assessment for Languages of India (DALI), which is first screening and evaluation apparatus created by National Brain Research Center (NBRC) in four Indian dialects Hindi, English, Marathi and Kannada with the

help from Department of Science and Technology (DST). It is accessible as a Junior Screening Tool (for classes 1 and 2) and Senior Screening Tool (for classes 3 to 5). This instrument has 9-Assessment Tests for phonological mindfulness, familiarity, quick naming and proficiency. [16]

Special Education in India and impact of technology in Learning:

Learning incapacity is additionally called an 'imperceptible inability' as a result of trouble to analyze and stirred up side effects. Instructors with solid perceptive nature can distinguish the side effects of learning incapacity. A review uncovers that evaluations of instructors for understudies are more encouraging indicators than the standard tests. Drinking spree (1992, 93) finishes up peer mentoring, direct guidelines, agreeable learning, visual symbolism, story planning as the best instructing methodologies. [1]. Incorporated Education for Disabled Children (IEDC) reconsidered conspire (1992), proposed one extraordinary instructor for each eight youngsters with exceptional requirements. [15]. A status report following one year of RTE by Ministry of Human Resource Development (HRD) concedes a deficiency of 5,08,000 educators in India and a sum of around 8.1 million offspring old enough 6-14 years don't go to class

because of different reasons. [17]. Sheila Saravanabhavan (2001) concentrated on the information about learning incapacity among 347 Indian instructors (for the most part female). She took 144 secondary teacher, 38 extraordinary teacher and 165 pre-administration educators in a metropolitan city of South India. Pre-administration instructors scored the most minimal. The review reasoned that being know all about learning incapacitated didn't influence information level, as the customary instructors scored better compared to extraordinary teachers. [8]. K. Parasuram(2006) concentrated on the disposition of instructors of Mumbai towards learning incapacitated and detailed that educators old enough 20-30 years and 50-60 years had a more inspirational perspective towards such students. Furthermore, female instructors or young ladies were relatively more certain. Postgraduates come out better compared to the alumni do, however the review accentuates that most affecting component was 'colleague' with the student. [13]

Madhuri Kulkarni and group (2006), introduced their exploration where they tried the impact of Maharashtra Government's arrangement on execution of 60 learning incapacitated at SSC board assessments. Learning-incapacitated understudies were allowed not to take

another dialect and to decide on poor quality maths for their discretionary subjects. The exclusion of one language or poor quality maths assists these students with scoring better in a discretionary subject. [11]. These arrangements assist these students with scoring great in board assessment and work with them in their schooling. In an exploration work on PC helped preparing, Barbara W. Insightful and group (2000) inspected 200 elementary school understudies and reasoned that PC helped phonological preparation of 27-29 hours emphatically affects perusing abilities of unfortunate perusers. They additionally saw that youthful perusers had high learning rates. [12]. This demonstrates that if a learning incapacity would be analyzed at an early age, therapeutic preparation will be more valuable. Bose (1996) sees that utilization of PC based therapeutic methodologies bring about 5% execution gain in science and a 7% presentation gain in English language. [14]

Government Policies For Learning Disabled:

In India, the meaning of Special Education Needs (SEN) has gone through a few changes throughout some undefined time frame. Until 2000, District Primary Education Program, DPEP included visual, hearing, locomotor and scholarly

incapacity as it were. Then, at that point, in Report of I Regional studio SAARC (2000) instances of youngster work, casualties, social contentions were incorporated. Afterward, in 2003, in a draft of Inclusive Education Scheme, Ministry of HRD included inside its review, the students with cerebral paralysis, chemical imbalance, mental impediment, different handicaps and learning incapacities [14]

Rehabilitation Council of India (RCI) ACT (1992) - The Rehabilitation Council was established on 31 January 1986 to guarantee the nature of schooling in the field of Special Education and Rehabilitation. Afterward, the Rehabilitation Council of India Act, 1992 gave it legal status. In 2000, the alteration was made in the RCI Act to make it more extensive. The Act gives inclusion to controlling and observing the preparation of restoration experts and work force, advancement of exploration in Rehabilitation and Special Education and support of a Central Rehabilitation Register (CRR). India has marked the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) on October 2007. [9]

Integrated Education for Disabled Children (IEDC) conspire

reconsidered (1992) - The IEDC covers 15000 schools including 60000 youngsters. It gives assets to overseeing needs of extraordinary youngsters at school covering costs connected with foundation, compensation for instructors, evaluation, showing helps and other help. [15]

Right to Education, (RTE 2009) - According to the Indian constitution Article 21 (A) instruction is an essential right of a youngster. RTE 2009 guarantees free and obligatory instruction for youngsters between ages of 6 to 14 years. The demonstration likewise restricts keeping down a youngster until consummation of schooling till appearance in board assessments. [4] This makes it challenging to analyze and remediate the learning incapacity at that age. S. Karanade (2010) recommends that there are better opportunities to learn at a more youthful age in contrast with more established age and alluded age 6-14 years as a significant time for therapeutic schooling [3]. In India, 95 % of youngsters go to elementary school between classes 1 to 5, however unfortunately, just

40% of teenagers go to auxiliary school, the classes 9 to12.

Sarva Shiksha Abhiyan (SSA) 2000- The public authority of India has joined the Sarva Shiksha Abhiyan (SSA) with the RTE Act, 2009 and has committed a measure of Rs. 2,31,233 crore for next five years in organization with the States. With zero dismissal strategy, Sarva Shiksha Abhiyaan guarantees significant and quality instruction for each youngster with extraordinary requirements independent of the sort, classification and level of incapacity. It additionally advocates showing in way the most appropriate according to the requirements of the learner.SSA gives up to Rs. 3000 for every youngster for the consideration of incapacitated kids, according to explicit proposition, each year. A few intercessions under SSA for comprehensive instruction are as per the following: distinguishing proof, evaluation, readiness of Individualized Educational Plan, arrangement of helps and machines, instructor preparing, asset support, examination, observing and assessment and

extraordinary spotlight on young ladies with exceptional needs.[7]

Inclusive Education for Disabled at Secondary Stage (IEDSS) 2009 - A plan for debilitated youngsters, to proceed with optional stage schooling (classes 9 to 12) in a comprehensive climate. The plan center extraordinarily around female students.

Children with Specific Learning Disabilities Bill, 2016 - The bill recommends development of asset room and prepared extraordinary teacher in each instructive establishment to distinguish learning handicap at the earliest age. The Principal, extraordinary instructors, class educators and guardians are coordinated to figure out Individualized Education Plan that ought to be reconsidered every once in a while. Each region is expected to have a Learning Disability Detection and Remediation Center.

Findings and Recommendations:

Research on learning incapacity has many obstructions like those of language, obliviousness and immeasurability of the educational program. Instructive establishments need progressed evaluation apparatuses to

distinguish learning handicap in youth, that is essentially as soon as could really be expected. In the schooling system predominant in the western region of the planet, learning methodologies like the Orton - Gillingham approach, Lindamood - Bell approach have conveyed critical outcomes, however students in India don't have same prerequisites. There is a dire need to foster an original learning approach and a particular arrangement of showing methodologies for offering getting the hang of as indicated by the student's need.

There is an absence of a tailor-made educational program in light of the requirements of the students. It is in any case unnecessary to make reference to that the job of extraordinary teachers is most significant piece of conveying fundamental schooling to these students. It is extraordinarily fundamental that they ought to be outfitted with present day showing helps, high level instruments, procedures, extraordinary and intermittent phases of preparation to work with compelling outcomes.

Conclusions:

Learning handicap is not generally a disregarded issue in India. Over the most recent twenty years, critical proportion of exploration has occurred in the space of evaluation and determination of learning

handicaps. Specialists are doing a few recognizable endeavors. Some evaluation apparatuses are accessible in scarcely any territorial dialects. Numerous administration arrangements are open for the upliftment and advancement of youngsters with extraordinary requirements. This sluggish however consistent development is supposed to convey promising outcomes in not so distant future.

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