

Development of learning disability inventory for teachers

Lidiya Silvester^{1*}

ABSTRACT

Learning disability is a condition in which the person might have inability to understand new or complex information, difficulties in writing, reading, mathematics and might also have impaired social functioning with average or above average intelligence. The information proves that there are not many questionnaires and inventories to assess the learning disability in India. Majority of the questionnaires and inventories are mainly screen whether the child has learning disability or the type of learning disability such as dyslexia, dyscalculia, dyspraxia, or nonverbal learning disabilities. So, the present study is to develop an inventory to find out the level of learning difficulty of the child. To establish content validity and reliability 600 students ranging from 7 years to 20 years were chosen by random sampling method. Based on the mean and standard deviation, the norms were established. As a result, the questionnaire can be used to measure the level of learning disability of students from 7 to 20 years.

Keywords: *Learning Disability, Dyscalculia, Dyspraxia, Dyslexia*

In Republic India, it is not an easy task to conduct Research on Learning Disabilities due to its multilingual and philosophical system background. At present, there are 28 States and 8 Union Territories has its own language and every language has several dialectical forms. There are 18 languages are used by the majority of the people and has its own writing system (Prakash and Malatesha, 1995). In fact, the state was shaped on the idea of the most Regional Language spoken by the majority of the individuals at intervals bound geographical boundaries. Every state has its own Regional Language and its Official Language. Typically, the language and the official language are one and the same. In Republic of India the bulk of the individuals speak Hindi and it is the National language. English is the Global language and it is additionally mandatory for the faculties. Majority of the states in India practices three language formulas. It implies that in these states the children are expected to talk, browse and write the Regional Language, Hindi and English. Due to migration for varied reasons, one finds that in any state the children have not learnt the regional language due to the restrictions will find it very difficult to learn the regional language at later years. In some families, the elders or close relatives are also fluent in numerous Indian languages as a result of they are from families who speak different languages or as a result of they lived in several states. Thus, in some families there will be

¹Assistant Psychologist, Dept. of Psychology, Avinashiligam Institute for Home Science and Higher Education for Women, Coimbatore, India

*Responding Author

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bilingualism or perhaps multilingualism. The child is also exposed to any or all of them at the same time at intervals by the family itself. Additionally, the college expects information of the Regional Language, Hindi and English. In some states solely the Regional Language and English are expected.

In India, there are 2 forms of faculties on the premise of the medium of instruction, viz. English Medium Faculties and Regional Medium Faculties. In English Medium Faculties, English is the main language and the students should have studied from the English Medium School and for the Regional Medium Faculties, the students should have studied from the Regional Language of the State. The child's first, second and third language are relying upon the medium of instruction. In Regional Medium Schools the children belongs to low socioeconomic status and rural children will be attending the schools. In English Medium Schools the children belongs to Middle and High Socioeconomic Status and Urban children will join the course and Hindi will be Third language from Grade I to Higher Secondary School in majority of the states. However, there are unit exceptions to the current rule completely different syllabuses, like the state syllabuses, the programme of the Central Board of Educational Activity and therefore the Asian Nation Council of Educational Activity might have completely different stress on the languages to be learned. There are exemptions for disabled children; therefore, for deaf children there is exemption to learn one language and similar provision for available for the Learning Disabled also. Minority Muslims children can learn the language of Urdu and Grade I to IV text books will be in their own language and the pattern of examination will be followed the system off the regional language of the actual State.

Zigmond (1993) described learning disability as “unanticipated learning problems in a seemingly capable child”. It is believed that 50% of the students suffer from learning disability problems. The word ‘believed’ used because the real pervasiveness on the underneath is method from clear. In developing countries, several sociocultural factors play a role. Most number of cases will go unnoticed, thanks to lack of awareness on a part of lecturers or persons. However even within the developed countries, the rife cases of learning disorder do not seem to be terribly clear as there is no clarity as way because the definition of the educational disability thinks about the most definitions of disorder square measure as follows; the ICD DSR is printed by the Globe Health Organisation. In keeping with it, learning disorders refers to a major deficit in learning, a person's inability to interpret what is seen and detected, or to link information from completely different elements of the brain. The definition of disorder as per the Diagnostic and Statistical Manual - IV (DSM) (American Psychiatric Association, 1994) is that ‘when the individual's achievement on the administration of standardised tests is substantially below the expected age, schooling and level of intelligence’. The learning issues considerably interfere with educational accomplishment or activities of daily living. According to Disabilities Education Act “specific learning disability” means that a disorder in one or additional basic conditions concerned in understanding or in victimisation language, spoken or written, that will happen in an imperfect ability to pay attention, speak, read, write, spell or to try and do mathematical calculations”. The term includes such conditions as sensory activity disabilities, brain injury, stripped brain dysfunction, learning disorder and biological process brain disorder. World Health Organization explained learning disabilities the primarily results of visual, hearing or motor disabilities of slowness, of emotional disturbances, or of environmental, cultural, or economic disadvantage and it was approved in India (Federal Register, 1977, P.65083) (Karanth, 2002). The Definition of Learning Disabilities (National Joint Committee on Learning Disabilities, 1990); may be a general term that refers to a

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heterogeneous cluster of disorders manifested by vital difficulties within the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical skills. These disabilities are intrinsic to the individual, plausible to ensue to central system dysfunction and will occur across the era. Issues in self regulatory behaviours, social perception and interaction might exist with learning disabilities and will not be considered as a disorder. Though learning disabilities might occur concomitantly with alternative handicapping conditions (for example, sensory impairment, slowness, serious emotional disturbance), or with extraneous influences (such as cultural variations, lean or inappropriate instruction), they were not the results of those conditions or influences.

Characteristics of Learning Disabilities

There are three characteristics a. Learning Disabled should have average or above average intelligence b. they should have adequate sensory acuity c. they should be achieving significantly but the composite of their intelligence quotient, age, and academic chance (healthy, accessibility of schooling, and cultural opportunity) would predict. Typically, this can be often mentioned as a major academic discrepancy.

Types of Learning Disabilities

Learning disabilities is roughly divided into three main types; Developmental Speech and Language Incapacity. This incapacity is especially associated with the child's visual and exteroception process. It is simply noticed within the organic process years. The sense organs area unit the most gates for all the incoming data and visual or exteroception senses area unit the prime senses required for learning. Learning disabled children will struggle to focus, establish and organize and difficulty in processing the information. Children with Visual Process Disorder has difficulty in decoding visual data such as numerous visual symbols like 'h' and 'n' or between '6' and '9', Maps, charts, symbols and footage etc. will be confusing to him. It is a sensory incapacity associated with process of data to understand, analyse and visually interpret the method others naturally do. It means that he fails to process the data in a correct manner and has problem in replication the matter too. Untidy written work characterized by writing outside the lines, poor spacing and several cancellations will be seen. Poor eye and hand coordination are seen during a manner he holds his pencil, cuts paper, attracts or keeps skipping words whereas reading. Since he has issues in judgment spatial relationships, he could mistake distance or depth too.

Auditory Process Disorder or Exteroception Process Disorder children will have issues in process the data that he hears and not associated with hearing impairment, in spite of loud or clear sound, they still face issues in obtaining the precise which means or pronunciation. He gets distracted by the background sounds and even fails to judge the direction from wherever the sound is returning and makes communication tougher. If the child fails to follow the directions given by a parent or teacher, he is also obtaining penalty for it and can be conjointly referred to as Central Exteroception Process Disorder. The eyes and ears are the main receptive channels for learning and gaining information. If the child tends to fail to completely differentiate between different words and sounds, the training maze starts obtaining additional and additional sophisticated. An issue with language expression is usually mentioned as brain disease whereas downside in reception of language is termed as dysphasia. Formation, expression, reception and implementation of the thoughts will be harder and he cannot fulfill the needs of others and even difficulty in the nonverbal communication will lead to low self-concept.

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Academic Skills Disorders will be divided into four types; language-based learning disability, non verbal learning disability, attention. They are referred as educational talent disorders as they are specifically associated with the relevant educational skills deficit hyperactivity disorder and autism. Dyslexia children will have problem in reading and comprehending the meanings and decrypt. They will slow in scrutinize and shatter to recall and place the word properly. There is no fluency in reading or spoken language. Language and communication ability depend on the ability to understand, organize the thoughts, put them into right words and then express them effectively and it is known as a languagebased difficulty. Unfortunately, this is the most common type of learning disability. Struggle with language surely makes the child's academic journey will be jagged and strident.

Dysgraphia children will be able totell the answer verbally and fails to write it down correctly and the calligraphy is scribbled and the thoughts are jumbled on paper. They will not be able to organise and write down the thoughts in a correct and meaningful way. Poor eye hand coordination, lack of neatness and consistency of writing are the other indicators. Speech and language disorders can be also called as dysphasia and aphasia. The writing capacity of the child is much lower than his age and intelligence. In the Indian Education System, exam performance is considered as a hallmark for learning and most of these exams are written. In such a scenario, it is obvious that a child with dysgraphia will be humiliated with failure and ridicule. The problem can be acute if he also faces sensory deficit too. The problem is not limited to children; adults seem to continue their struggle too. Hence patience and special help is needed.

Dyscalculia sufferers will struggle to domathematics and has poor number sense. He has special problem in recognising numbers and symbols that are used in mathematics. He fails to understand the basic concepts and reasoning. To solve a sum by mental calculation, recalling the order and sequence of steps is important but the dyscalculia sufferers will haveproblem and also telling time and handling moneyalos. But severity of learning disability in mathematics can differ depending on the child's other weaknesses like presence of language disability or information processing disorders. A child's ability to do mathematics will be affected differently by a language learning disability, or a visual disorder. Learning mathematics concepts related to quantity, value, time or number facts seem harder for a normal child too. So, for a child who is facing dyscalculia, no wonder they become still harder. As the grades rise, the concepts become more and more abstract like fractions, geometry etc and the problems become severe for most children. It shows up much early in life when simple and basic concepts are taught.

Dyspraxia children lack motor coordination and skilful movement. Fine motor skills are essential for the academic such as writing while gross motor skill like running, buttoning his shirt etc determine his everyday routine. Learning involves few stages, input, interpretation and output and sufferers will have difficulty in the output stage. The brain might give the order but the body fails to convey the message and implement it effectively. Obvious signs are clumsiness, untidy room or school bag. Although, it is not exactly a learning disability, it does affect learning because muscle control is important for learning too. It is taken under the broad umbrella of learning disability as it often coexists with core problems like dyslexia, dyscalculia or other nonverbal disorders.

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Nonverbal Learning Disorders

Reading, Writing or difficulty in mathematics are not the only learning issues that need to be addressed. There can be other related problems which can make learning difficult. Two main such problems are Attention Deficit Hyperactivity Disorder, Autism and memory problems.

Attention Deficit Hyperactivity Disorder

Attention Deficit Hyperactivity Disorder children fails to concentrate, focus or pay attention. They tend to daydream too. In classroom, they will find it difficult to stay still, follow instructions and is often poorly organized. He is always lagging behind the class as far as their class work or homework is concerned and it affects the performance. Their activity level is so high as if they are always on the go and has no control. They may not show normal conversation skill like waiting for his turn and can disrupt the conversation. They may ask many unnecessary questions and can have problems with his classmates too. Some of these signs are so common that it is difficult to diagnose the severity of problem easily, especially because some of them can be very articulate too. Nonlearning disorders often go unnoticed in the initial school years unlike academic disabilities which are clearly seen in the beginning itself. These problems surface in higher grades and mainly in the social context. Attention Deficit Hyperactivity Disorder may not be a learning disability but research shows that 30 to 50 % of these children also have some learning disability which makes learning extremely difficult.

Memory Disability

It is a major factor related to learning. Learning will lose all its value if an individual is not able to retain it. If he forgets most of the learnt one and he cannot use it for application or in relation to new learning. The three types of memories are short term memory, working memory and long term memory. If there is problem in any of these types, the child fails to create new memories, retain old ones or disability finds it difficult to memorize things, facts, formulas or homework assignments. He may forget simple things like instructions given 5 minutes before or may forget the new learning and the problem continues no matter how many times he has been taught. It is natural that the child as well as the teacher can get frustrated in such a vicious circle. Teacher must be patient and coolheaded to handle such children.

Autism

It is directly associated with lack of economical communication and social skills. Learning is commonly through communication channels and if the child fails to know the message, learning becomes troublesome. It is an organic process incapacity that generally seems throughout the primary 3 years of life and affects a person's ability to speak and act with others. The sufferers with this syndrome show specific sorts of issues like bother in human activity, reading visual communication, expressing emotions, creating friends and build eye contact. It is typically known as a 'spectrum disorder' that affects every individual sufferer at totally different levels and associated with retardation.

History of Learning Disability

The term world sightlessness is coined by Adolf Kussamaul, German Medical Specialist, 1877. Rudolf Berlin, German Doctor named reading issues as 'Dyslexia' and outlined it as 'a terribly nice problem in decoding written or written symbols'. James Hinshelwood, Ophthalmologist, continuing to check the alexia in children and recognised the importance of early identification and conjointly wrote a report in Medical Journal 'the lancet' in 1895. Dr. W. Pringle Morgan wrote in British Medical Journal a couple of case of 14year has alexia

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from his birth and conjointly wrote the answer that is recommended by the child's school principal that is that the oral instruction instead of visual in 1896. The report of childhood reading difficulty is printed by Dr. W. E. Bruner, Cleveland Eye Doctor. In 1963 the term upset was initially employed by the Priest in Church at a Conference in Chicago. Congress passed the youngsters with specific upset act, enclosed within the Education of the unfit act of 1970 that is taken into account because the firsttime support services for college kids with learning disabilities by federal law. In 1975 the Education for all unfit kids act that facilitates to induce a compulsory, free and applicable public education for all students. Interagency committee of learning disabilities needed the institution of centres for the study of learning and a spotlight in 1987. The term incapacity replaced by the term unfit, the new law needs transition services for college kids and syndrome and traumatic brain injury are additional to the eligibility take a look at in 1990. In 1996, to spot the brain areas that act otherwise in dyslexics are discovered by exploitation the tomography that is employed by Dr. Guinevere Eden and her team at the National Institute of psychological state. Attention Deficit Hyperactivity Disorder is additional to the list of conditions that might build a toddler eligible for services beneath the class 'other health impairment'. No child is left behind act is came out in 2004 and in 2006 by Dr. Jeffry Gruen and his analysis team found new genes that have patterns that cause learning disability.

Causes of learning disabilities

Genetic or Heredity Factors

Learning disabilities are genetically determined with genetic traits manifesting themselves within the anatomy and neuroscience of the child. These structuralphysiological characteristics are manifested as learning disabilities. The genetic theory research proves that learning disabilities run in families. The concordance rate is higher for identical than fraternal twins for reading disorder. The findings support that more than 15 genes in the body might cause reading disorder for minority of people (Pennington, 1991).

Neurological Factors

Neurological theories state that learning disabilities may be a reflection of structural harm or improper development of the nervous system. Such issues may occur throughout antepartum orpostnatal amount because the nervous system is developing and other factors may be head injury, lack of atomic number 8, exposure to toxins, seizures and nutrition deficiencies might contribute to central nervous system harm. There is empirical support for neurologic hypothesis that EEG abnormalities in visuospatial perception, perception, LTM and speech sound discrimination in the learning disabled children. The reading disorders children will have lefthemisphere deficits and a Dyscalculia child has deficits in the right brain.

Environmental Factors

Environmental factors also cause learning disabilities. Analysis shows that factors like deficiency disease, immaturity, poor antepartum and postnatal health care, stress, poor parenting and teaching will have a negative impact on the children while learning which might leads to brain dysfunction. Misuse like alcohol and different medicine, defective learning models, emotional disturbances, social and cultural deprivation will contribute to learning disabilities.

Learning disability is an enormous cross in grip in today's competitive society. However, it is negatively correlates with social emotional development. Even if the disabled student can learn using strategies, sometimes these strategies are most likely to breakdown when he or she is confronted with more challenging than the previous experiences (e.g. when going to

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college). This can be referred to as the 'dyslexia fuse effect', i.e. the learning disorder 'fuse' processing as an operator of the academic overload (Martin Turner). If they are not able to cope up with the expectations, their journey of education becomes a troublesome one.

In our country, awareness concerning disorder is not high and there are majority of them are first generation learners and their understanding of the matter is usually raw. Most feel that the child is not diligent and start punishing the child leads to more stress. The teacher expects a definite level of attentiveness, proper behaviour in the class and performance and child fails to do so, the parents will be blamed for it and leads to conflict and communication breakdown between them will hamper the general development of the child. He faces failure in appallingly early in life during the development of temperament will leave the negative mark and leads to low shallowness and low self-concept. He has not seen success in spite of his best efforts damage his self-efficacy and leads to cognitive distortion. He will be labelled by others that lazy, stupid, hassle maker, slow learner or perhaps people appear real to him will be resulted in no use of living leads to Anxiety and Depression will affect his employment prospects. Social Talent Deficit is seen in the child because of constant failures, humiliation and no emotional support from the environment where they reside. When they reach the adulthood they might face adjustment problem because they take longer to complete the work.

ASSESSMENTS

Cognitive Assessments

Learning Disability will be assessed by administering the Standardized Intelligence Tests. Wechsler Intelligence Scale for Children Revised (WISC-R; Wechsler, 1974) test is crucial within the identification of learning disabilities and is the most generally used test. It consists of 11 subtests measuring the verbal and performance. Sattler (1990) stresses that WISC-R subscales of Image Completion, Image Arrangement, Block Design, Object Assembly, Similarities, Comprehension, Vocabulary, Coding, Digit Span, and Arithmetic will be able to find out the learning disability. The best four tests type the Sensory Activity Organization (PO) issue and 2 of the toughest 3 subtests type the liberty from Distractibility (FFD) issue of the WISC-R. The foremost troublesome four subtests type the "ACID" (Arithmetic-Coding-Information-Digit Span) profile of sub-scales. Low scores on the ACID profile square measure thought about to be typical of learning disabilities. Children with learning disabilities tend to own higher Performance Intelligent Quotient than Verbal Intelligent Quotient and also the FFD score is usually lowest. If Intelligent Quotient is a smaller amount than 70 disorder cannot be diagnosed. Coloured Progressive Matrices (CPM; Raven, 1965) measures the clarity of perception and thinking in learning disabled. It is a nonverbal or performance test can be administered to an individual or group. Norm's square measure provided for children of 5-11 years old. Malin's Intelligence Scale for Indian Children (MISIC; Malin, 1969) test is Indian Adaptation of the Wechsler Intelligence Scale for Children with the age range of 6-15 years.

Educational Assessments

Assessment of the action level of the learning disabled is measured on academic tests. It involves the administration of academic tests in the areas of learning such as Basic Learning Skills, Reading Comprehension, Oral Expression, Listening Comprehension, Written Expression, Mathematical Calculation and Mathematical Reasoning. These tests are often standardized action tests and/or teacher created tests. Some samples of standardized action tests are:

1. Woodcock Johnson Tests of Academic Achievement- Revised (WJ-R, 1989).

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2. Limicoline Bird Reading Mastery Tests- Revised (WRMT-R, 1987).
3. Kaufman Playwright and George Simon Check of Academic Action (K-TEA; Kaufman and Kaufman, 1985).

Individual academics in the college level will be constructed by the faculty member. It will be often used for assessing the degree of accomplishment of an individual in the learning difficulty and incapacity. In extreme condition, if an individual with average intelligence lagging 2 years in the grade will be taken into account that the individual is having the learning disability.

BEHAVIOURAL ASSESSMENTS

Parent/Teacher Reports

Substantial proof exists that the learning disabled child will be having menace in behaviour. Conner's Parent Rating Scale-Revised (CPRS-R, 1997) and Conner's Teacher Rating Scale-Revised (CTRS-R, 1997) high scores represent the psychological characteristics of poor action at school, issue sustaining mental effort and a spotlight issues of the learning disabled.

Assessment of Specific Learning Disabilities

Besides the psychological and behavioural assessments many tests are often administered to see the strengths and deficits of the children in classroom skills. The tests exemplify the reading, writing, spelling and comprehension (Rozario, 2003). Electric Battery of Tests known as NIMHANS Index of Specific Learning Disabilities (SLD; Kapur et al., 1991) was developed at NIMHANS, Bangalore. The SLD battery has been developed to assess the children in the age group of 5 to 7 years by Level I and 8 to 12 years by Level II test. It consists of

1. Attention Check (Number cancellation).
2. Language Check (Reading, Writing, Writing System and Comprehension).
3. Arithmetic (Addition, Subtraction, Multiplication, Division and Fractions)
4. Visuo Motor Talent (The Bender shape check and also the organic process check of Visuo Motor Integration).
5. Memory (Auditory and Visual).

Remedial Programmes

The primary mode of treatment for learning disabled will be in special academic designing and alternative academic services. It represents regular education with modifications, cooperative consultation with education, co teaching resource space (part time special education), self-contained education, big day college or residential college (Hallahan, Kauffman & Lloyd, 1996). Focus has been placed on the importance of early intervention in recent years (Kirk, Gallagher & Anastasiow, 1997). Numerous special academic methods exist to move forward without much difficulty in the learning. In this method, they vary in looking whether or not the child has reading disorder, mathematical disorder, or disorder of written expression. They generally involve 2 intervention methods: a) modifying the training process to accommodate the child, e.g., longer on tests, giving less preparation, less stress on bound material etc. and b) requiring the child to place a lot of effort into remediating the areas of weakness underneath the management and teaching of special educators.

Reading

Current rectification interventions for children with reading disabilities aim to boost the child's sight reading and teaching reading. Sight reading (memorizing words by sight) is

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also self-addressed by vocabulary building exercises, sight reading exercises, learning word roots, prefixes and suffixes. Programmes to boost teaching reading (recognizing and basic cognitive process the association between letters and sounds) like Fernald-Keller Approach, Gillingham-Stillman approach generally gives the child with additional expertise that integrates many senses into sound awareness. For instance, the child selects a word that is written in gigantic letters in an exceedingly flash card. The child would possibly trace the word as he says the word sound and appears at an image of the word (tactile, auditive and visual senses). Alternative Teaching Reading Programmes (Clay, 1993; Iversen and Turner, 1993), use words with slightly completely different phonemes (e.g., cat-bat) to demonstrate sound variations in reading. This sounds-in words learning method generally take from starting wordsounds to ending word sounds to sequencing of sounds with each vowels and consonants area unit learned. Alternative positive headers methods embody tiny structured reading teams that provide individual attention and build it easier for a child to invite facilitate.

Mathematics

Treatments for arithmetic disabilities mix teaching arithmetic ideas with continuous follow in resolution science issues. A vital beginning would be to spot precisely wherever the child's errors are occurring within the science downside. The child might have problem with multiplication tables, conception of zero or conception of borrowing in subtraction. Once these errors are known many techniques could also be accustomed to make possible for the child to do sums. Concrete objects, pictorial representations like graphs, analogies and logical explanations are accustomed build abstract ideas important. Methods for translating word issues into arithmetic issues is directly tutored (e.g., the words and along sometimes mean that things are going to be value added e.g., what percentage pencils did Simi and Mohit have together). Learning Science Rules (e.g., BODMAS; the digits in multiples of nine invariably add up to nine or a multiple of 9), mathematical games, laptop games wherever the main target is on downside finding activities, together with word issues instead of solely computation could also be tutored.

Writing

Treatment for writing disability includes handwriting affect; direct apply in spellings and sentence writing yet as a review of grammatical rules. Orthography issues involved of deficits in phone awareness and word recognition and the interventions will be focused on mainly on orthography errors. Orthography skills are promoted by teaching the child of orthography rules e.g., i before e except once orthography of word roots yet as prefixes and suffixes and memo technical methods for basic cognitive process the orthography of specific irregular words. Methods to form orthography game like as an example, spell down, finding the hidden word and to market repetition learning are used for the child. If there is a deficit in written expression like communicating ideas in writing, methods like sentence combining, maintaining a diary, letter writing, writing invites or gift lists and alternative representational writing exercises are usually used. Learning to jot down a toplevel view before writing a story is employed to promote logical, sequential, comprehensive flow in writing. Children with sensible verbal expression and poor written expression a verbal-to-writing intervention will be used. Initially the child dictates to associate in writing, next he dictates to a magnetic recorder and later transposes own words into writing. Then he dictates solely many sentences into the magnetic recorder and writes the sentences before dictating loads of it. Once the step is over pat the magnetic recorder and removed it and he will say the words aloud, pausing to jot down them sporadically. Finally, he will explain the words step by step by himself while writing (but not spoken communication the words).

Atypical Learning Disabilities

Some children have psychological issues like difficulty in remembering and the treatment aims to produce external accommodations and skills to perform adequately within the room whereas rising their space of weakness and non verbal treatment will be successful (Rourke, 1995). Teaching the child in an exceedingly successive, predictable, committal to memory fashion will be encouraging the child to use acquainted downside finding methods to new things. Teach algorithms for managing new or foreign things. Directly teach applicable social and nonverbal material in an exceedingly committal to memory fashion with apply to form the child's learning a lot of fluid and automatic. Teach the child to attend to visual yet as auditive verbal data (Visual Structure Skills), appropriate use of verbal material in an exceedingly social context and encourage contact with novel things and issues in an unstructured, clear, goal orientated peer interaction and teach comprehension skills.

Behavioural Interventions

The child basic cognitive process and hyperactivity have social consequences and swing a strain on social relationships and cause negative self evaluation. Due to consistent reports from academics concerning the problems like frequent out-of-seat behaviour, agitation and alternative classifiable room behaviours and the training programme and relaxation coaching are known as comparatively non intrusive ways for managing it. Most of the studies have indisputable that training programme and relaxation will improve the behaviour and emotional wellbeing of the learning-disabled children (Amerikaner & Summerlin, 1982; Carter & Russell, 1985; Loffredo et al., 1984).

Learning disabled children are found to possess associate in external attention instead of internal locus of management (Short & Weissberg-Benchell, 1989) and it will hamper their tutorial activities. They have lot of doubtless to attribute their scholastic success to factors outside the external locus of management will result in less involvement with tutorial tasks to prevent it the Researchers suggested that they should attribute coaching within which they learn to attribute success to study time and energy (Hoy, 1986; Tollefson, Tracy, Johnson, & Chatman, 1986).

Social Skills Coaching

Maag (1989) stressed that the social skills directions should be valued by the learning disabled children within the setting. The nurture analyses of social behaviours opt for personal instructional programmes. Pray, Hall and Markley (1992) found that academically connected social skills (e.g., task connected skills like following directions or being on task) were far more outstanding than social skills (e.g., creating spoken language or accepting the authority). They recommended that interpersonal skills will be very effective. Peer interaction social skills will focus on four main areas such as spoken language skills (e.g., introducing oneself, asking and responsive questions), relationship skills (making friends, connexion cluster activities, giving help), skills for tough things (accepting and giving criticism, resisting peer pressure) and drawback determination skills (negotiating, persuading, inquiring for feedback). Bender and Wall (1994) believed that social skills coaching are booming in serving to students with learning disabilities.

Peer Tutoring

Several studies have canter on the effectiveness of peer tutoring (an tutorial arrangement within which the teacher pairs 2 students during a tutor-tutee relationship to market learning of academic skills) for learning disabled children. Peer tutoring has been found to boost educational skills, foster self worth, develop applicable behaviours and promote positive

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relationships and cooperation among peers (Mercer, 1997). The category Wide Peer Tutoring Programme has been found to boost the tutorial and social performance of scholars with learning disabilities (Maheady, Harper & Mallette, 1991).

Family Interventions

Parents and families facilitate the social, intellectual and physical wellbeing of their children. If the family members identified that their child is having problem in learning will be reacted with denial and if it continues will lead to depression and guilt. Depression leads to insecurity and they cannot fulfil their desires leads to guilt. Parents might exhibit external causative attributions to assist the child to deal with issues. The learning disabled child will show their anger towards the family members, faculty members and authorities and himself. At times, the anger will be suppressed by the use of defence mechanism if the child is overprotected and infantilized and it will inhibit the child's freelance functioning, they feel confused relating to what quantity freedom and independence. If the child is pampered by the parents it might generate feelings of enmity within the siblings. The learning disabled child might become discouraged, anxious and start to harbour feelings of low self importance. Further, the unmet high expectation of foyes with respect to the tutorial accomplishment of their learning disabled child will lead to worthlessness and guilt. Sharma (1993) found that elders of learning disabled child will have dreadfully poor or low expectation of them in the educational accomplishment and will perceive them as socially incompetent. Parental message and group psychotherapy would facilitate to boost patterns of communication inside the family members will facilitate positive self thought among learning disabled child.

Need and Significance of the Study

The information proves that there are not many questionnaires and inventories to assess the learning disability in India. Majority of the questionnaires and inventories are mainly screen whether the child has learning disability or the type of learning disability such as dyslexia, dyscalculia, dyspraxia or nonverbal learning disabilities. So, the present study is to find out the level of learning difficulty of the child. If the level of learning disability is assessed for the children and it will be easy to give the remedial programmes for the child. Sometimes it will be difficult to support their weaknesses and so, the Researcher has to work more on their strengths.

REVIEW OF LITERATURE

This chapter provides an overview of previous research on knowledge sharing and intranets. It introduces the framework for the case study that comprises the main focus of the research described in this thesis. It is important to set the context of the literature review work by first providing:

1. An explanation of its specific purpose for this particular case study
2. Comments on the previous treatment of the broad topic of knowledge sharing, and the role of intranets in such activity

An indication of scope of the work

The main purpose of the literature review work was to survey previous studies on knowledge sharing and intranets. This was in line to extent out for the data collection requirements for the primary research to be conducted, and it formed part of the emergent research design process (Denscombe, 1998). The approach adopted was in streak with current practice in grounded research work. It is now regarded as acceptable for researchers to familiarise themselves with existing research prior to collecting their own data (Easterby-

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Smith, Thorpe, & Lowe, 2002), even though this contradicts the advice of grounded theory as originally presented (Glaser & Strauss, 1967).

An appreciation of previous work in this area served three further purposes. First, through providing direction in the construction of data collection tools, it guarded against the risk of overload at the primary data collection stages of the project. Second, working the findings from in existence literature into a formal review helped maintain throughout the study a sense of the topic's perspective. Finally, this activity raised the opportunities for articulating a critical analysis of the actual "meaning" of the data collected when the data analysis stages of the research were reached. The reviews divided according to the following

1.Learning disability 2.Dyslexia 3.Intervention programme

Learning Disability

Bane et al. (2012) explored the perspectives of 97 participants consists of 52 women and 45 men to know about the about relationships and supports received by the learning disabled in the Republic of Ireland. A National research network consisted of 21 Researchers with learning disabilities, 12 Supporters and 7 University Researchers conducted the study in focus groups on "What makes a good friend?", "What do you think about having a boyfriend or a girlfriend?" and "What supports do you need to have a boyfriend or a girlfriend?". Findings suggested that learning disabled in the focus groups identified that they need more support from friends, family, and services staff to develop new relationships and keep their existing ones includes both emotional and systematic changes such as accessible transport, own housing and changed laws.

Ho and Siegel (2012) conducted three studies on learning disabilities among Chinese children. The first study aimed to identify subtypes of learning disabilities in reading among the participants. Based on the dual-route model of reading, words may be read using either a lexical (words are recognized as wholes) or a sublexical (words are recognized through grapheme-phoneme correspondence) procedure. Castles and Coltheart (1993) provided evidence for the existence of these two mechanisms in English reading. They suggested that deficits in one or the other mechanism would lead to different patterns of reading disability. Surface dyslexia resulted from an impairment of the lexical procedure with an intact phonological route to reading. Phonological dyslexia results from a deficit in the grapheme-phoneme transformation mechanism and had a higher percentage of surface dyslexia among the participants. In the second study, they analyzed the reading errors to support the existence of surface and phonological dyslexic patterns in Chinese reading. The results showed that students with surface dyslexic pattern made more phonological errors, whereas students with phonological dyslexic pattern made more semantic errors. These two studies indicated that students with learning disabilities could have different strengths and weaknesses and could have different preferences for recognizing Chinese characters and different responses to instructional methods. The third study was designed to test the effects of different teaching methods and different kinds of Chinese characters on students with learning disabilities. In general, the analytic method was found more effective for students with surface dyslexic pattern and the whole word method for those with the phonological dyslexic pattern. The findings showed that importance of identifying the strengths of the different types of learning disabled and the need to choose appropriate instructional methods accordingly.

Berninger and May (2011) conducted a study on Programmatic, multidisciplinary research provided converging brain, genetic and developmental support for evidence based diagnoses

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of three specific learning disabilities based on hallmark phenotypes (behavioural expression of underlying genotypes) with treatment relevance: dysgraphia (impaired legible automatic letter writing, orthographic coding and finger sequencing), dyslexia (impaired pseudo word reading, spelling, phonological and orthographic coding, rapid automatic naming and executive functions; inhibition and rapid automatic switching), and oral and written language learning disability (same impairments as dyslexia plus morphological and syntactic coding and comprehension). Two case studies illustrated how these differential diagnoses can be made within a conceptual framework of working memory architecture and generate treatment plans that transformed treatment non responders into treatment responders. Findings were discussed in reference to the importance of considering individual differences (diagnosis of impaired hallmark phenotypes) in planning and evaluating response to instruction and modifying instruction when a student is not responding; recognizing that teaching may change epigenetic gene expression at one stage of schooling, but not the underlying gene sequences that render individuals still vulnerable as curriculum requirements increase in nature, complexity, and volume in the upper grades; and using evidence based diagnoses of specific learning disabilities that are consistent across states for free and appropriate education K to 12 and for accommodations throughout higher education and professional credentialing. Evidence based diagnosis and treatment for specific learning disabilities involving impairments in written and/or oral language. Findings were discussed in reference to the importance of considering individual differences (diagnosis of impaired hallmark phenotypes) in planning and evaluating response to instruction and modifying instruction when a student is not responding; recognizing that teaching may change epigenetic gene expression at one stage of schooling, but not the underlying gene sequences that render individuals still vulnerable as curriculum requirements increase in nature, complexity and volume in the upper grades and using evidence based diagnoses of specific learning disabilities that were consistent across states for free and appropriate education K to 12 and for accommodations throughout higher education.

Carter (2010) examined the summer employment and community activities of 136 high school students with severe disabilities. The majority of youth was either not working (61.7%) or reported sheltered employment (11.1%) The most prominent predictors of summer employment status were holding a job during the spring semester and teacher expectations for employment. Recommendations for research and practice focus on increasing the capacity of schools, families and communities to support the involvement of youth with severe disabilities in meaningful summer activities.

Michael (2010) investigated whether curriculum modifications predicted student and teacher behaviours related to the general education curriculum with differences in ecological, student and teacher depending on the presence of such curriculum modifications among 45 high school students with disabilities to find out the instruction in core content areas. Findings indicated that there were significant differences in student and teacher existed if there were curriculum modifications in more academic related responses and fewer competing behaviours and teachers were engaged in fewer classroom management activities. Implications and recommendations from these findings are provided pertaining to the importance and implementation of curriculum modifications for students with disabilities in general education settings.

Simoncelli and Hinson (2010) exhaustive in their study, the methodologies that could be used to better deliver online course content to students with learning disabilities and whether the design of the course affects the students' attitudes and performance. It includes digitally

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delivered instructional audio, various textual interactions between the students, and other assistive methodologies. The methodology and pedagogical side of the delivery of the online course was found to be useful to students with learning disabilities.

Allen (2009) identified that a major factor that has a risk for a juvenile to become an offender is the presence of a mental disorder. Ranked among the most prevalent of disorders were learning disabilities. One hundred and three participants were randomly selected from an archival data set of 300 male juveniles that were taken from three separate juvenile halls in Los Angeles country and the mean age of the participants was 16.05 (SD 1.43) years. It identified that 2.3% of the male confined juvenile self report revealed that they were diagnosed with learning disability.

Lauren (2008) conducted a 2 year longitudinal study and examined the initial evidence of progress in reading for 1,512 children with and without identified Speech Language and/or Learning Disabilities (LD-SLD) in the context of the explicit literacy instruction provided in Michigan's Reading First schools. The findings suggested that children with Speech Language and/or Learning Disabilities labels demonstrated significantly slower growth compared to children without Speech Language and/or Learning Disabilities labels. Children considered more at risk also demonstrated slower progress in oral reading fluency (but not reading comprehension) compared to children considered less at risk.

Wilson and David (1994) evaluated the academic intrinsic motivation and attitudes toward schools and learning of the students with learning disability. Administration of two affective tests to 89 students with Learning Disabilities in grades 4-8 revealed that subjects perceived the school environment and academic tasks as two separate factors. Learning disabled students, compared to non disabled students exhibited more positive attitudes toward the school environment than for academic learning tasks. School attitudes improved as grade level increased. Students with high levels of Intrinsic Motivation performed better on academic tasks compared to low levels of Intrinsic Motivation students. However, there was a paucity of data on Intrinsic Motivation for several disability categories (e.g., intellectual disability). Correlation and regression models were used to determine factors that influenced teachers' perceptions of academic Intrinsic Motivation for students with disabilities. Controlling the external factors such as parental expectation of their child's academic career and teachers' pedagogical competence, attenuated gaps in teacher perception of the Intrinsic Motivation of the students with intellectual and learning disability. Including student classroom collaboration variables such as frequency of participation in peer work and classroom discussion to the model reduced disparities in teacher perceived academic Intrinsic Motivation between students with autism and learning disabilities.

Carlisle and Andrews (1993) found out the mainstreamed Learning Disabled students cope with their Science Classes by administering the paired questionnaires for teachers and students and a science Curriculum Based Assessment to 31 fourth graders (9 Learning Disabled) and 38 sixth graders (13 Learning Disabled). Results showed that the Learning Disabled students had significant weaknesses on some subtests of the science Curriculum Based Assessment relative to their peers; additionally, they rated themselves and were rated by their teachers significantly more negatively than their Non Learning Disabled peers. The results suggested that the potential value of monitoring Learning Disabled students in mainstream science classes. Case studies of Learning Disabled students revealed the mismatches in the perception of the student and teacher regarding the student's adjustment and classroom habits.

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Scott (1993) identified the rhyming skills differentiating among mildly mentally retarded, learning disabled and normally achieving students. The participants in the age range of 6 to 8 years were selected and the results showed that the rhyming ability of normally achieving students (N=33) and students with learning disabilities (N=33) was much higher than that of students with mild mental retardation (N=33). Most of the learning-disabled children could generate rhymes while most of the mildly mentally retarded students could not generate rhymes.

Coleman (1992) examined the distinctions in social competencies between children with learning disabilities and the children with academic difficulties. Eighty-five children with Learning Disability (54 males, 31 female) in Grades 3 to 6 from a large urban school district were compared to a group of low achieving peers matched on achievement as well as sex, race and grade. The participants were 42% black, 39% Hispanic, and 19% Anglo and they were administered by two self-concept questionnaires, loneliness scale and a measure of their social relationships outside the school. In addition, their classmates completed a peer rating scale and their teachers completed two ratings of the child's social skills. The results indicated that children with Learning Disability reported that they feel lonely. In addition, regular class children rated Learning Disabled Children were mostly liked than the low achieving children. The results highlighted similarities in the social competencies of children with Learning Disability and Low Achieving Children and suggested that special education classes may offer some social advantages to children with mild handicaps.

Hallahan (1985) concluded that the memory of learning-disabled children was very poor compared to normal children because of the failure to use the definite strategies and these could be taught to learning disabled children to experience success on the memory tasks.

Dyslexia

Kong (2012) explored the experiences of six students diagnosed with Dyslexia after joining their Masters Degrees. Their personal financial records were analysed using thematic analysis. The major themes identified were Distress, Self Doubt, Embarrassment, Frustration, Relief, Confidence and Motivation. It provided a deeper understanding of the consequences of a late diagnosis and highlights the need for management approaches to be individually tailored to specific needs. The findings revealed that being diagnosed with Dyslexia as an adult can be cathartic or devastating depending on the individual's current emotional status and personality.

Rose and Rouhani (2012) investigated the relative contributions of several cognitive and linguistic factors to be connected with the text oral reading fluency in adolescents with dyslexia (n = 77) and the effect of verbal working memory on connected text oral reading fluency was moderated by word level skills and/or vocabulary knowledge. The results suggested that many deficits associated with childhood dyslexia remain prominent in adolescence, but the nature of the relationships between key cognitive and linguistic predictors (i.e., word-level reading, vocabulary, verbal working memory) and reading fluency appear to be different in adolescence. For example, while word level skills remain a significant predictor, the strength of the effect was relatively weak. In contrast, the data supported that the increased role for vocabulary and verbal working memory, including an interaction between these factors. The presence of an interaction can be interpreted as evidence that the influence of verbal working memory on connected text oral reading fluency in adolescents with dyslexia depends on individual differences in vocabulary knowledge. The results supported the changing nature of dyslexia across development and

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suggested that researchers should study dyslexia in adolescents on its own terms, rather than treating it as an extension of reading problems in early childhood.

Van Bergen et al. (2011) showed that Familial Risk Children with and without Dyslexia differed in parental reading skills suggested that those who go on to develop dyslexia have a higher liability. The current study concerned about the comparison of three groups of children at the end of second grade and the intergenerational transfer of reading and its underlying cognitive skills from parent to child. Three groups of children were studied at the end of second grade: Familial Risk Dyslexia (n = 42), Familial Risk without Dyslexia (n = 99) and Control Children (n = 66). Parents and children were measured on naming, phonology, spelling and word and pseudo word reading. The Familial Risk Dyslexic Children were severely impaired across all tasks. The Familial Risk without Dyslexia children performed better than the Familial Risk Dyslexia Children but still below the level of the controls on all tasks; the only exception was Rapid Naming on which they were as fast as the controls. Focusing on the Rapid Naming subsample, parental reading and Rapid Naming were related to their offspring's reading status.

Dahle, Knivsberg and Andreassen (2011) focused on a small group of children and young adolescent with Dyslexia who have severely impaired reading skills despite prolonged special education. A clinical group of 70 students with severe dyslexia due to phonological problems and a control group of 70 without reading problems were selected for the study. The two groups were pair wise matched on age, gender, cognitive level and area of residence (Rural or Urban). The Mean age was 150 months and mean IQ was approximately 100 in both groups. Parents, teachers and participants provided information on behaviour through the Achenbach questionnaires Child Behaviour Checklist, Teacher's Report Form and Youth Self Report. The Behaviour was divided into eight syndrome areas called Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behaviour and Aggressive Behaviour. The three informant groups reported significantly more problems in the dyslexia group than in the controls in all the syndrome areas. The results reported significantly more problems in the Dyslexia group than the control group in all the syndrome areas. Parents reported that the majority of the Dyslexic children were anxious and depressed and had social and attention problems and also reported that 9 had suicidal ideations.

Friedmann, Tzailer and Gvion (2011) practised whether the syntactic structure of the target sentence affects reading in neglect dyslexia. Because Hebrew used to read from right to left, it enables testing whether the beginning of the sentence and its syntactic properties determine if the final, left most, constituent is omitted or not. The participants were 7 Hebrew speaking individuals with acquired left text-based neglect dyslexia, without syntactic impairments. Each participant read 310 sentences, in which they compared 5 types of minimal pairs of sentences that differed in the obligatoriness of the final (left) constituent. Complements were compared with adjuncts, obligatory pronouns were compared with optional presumptive pronouns, and the object of a past tense verb was compared with the object of a present tense verb, which can also be taken to be an adjective, which does not require an object. Questions that require a verb were compared with questions that can appear without a verb, and clauses that serve as sentential complements of a verb were compared with coordinated clauses which were not required by the verb. In addition, they compared the reading of noun sequences to the reading of meaningful sentences and assessed the neglect point in reading 2 texts. The results clearly indicated that the syntactic knowledge of the readers with neglect dyslexia modulated their sentence reading. They have

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a tendency to deep on reading as long as the syntactic and lexical-syntactic requirements of the sentence had not been met. In 4 of the conditions twice as many omissions occurred when the final constituent was optional than when it was obligatory. Text reading was also guided by a search for a “happy end” that does not violate syntactic or semantic requirements. Thus, the syntactic structure of the target sentence modulates reading and neglect errors in text-based neglect dyslexia, suggesting that the best stimuli to diagnose mild text-based neglect dyslexia are sentences in which the left most constituent is optional, and not required by syntax. Another finding of this study was dissociation between neglect dyslexia at the text and at the word levels. Two of the participants had neglect dyslexia at the text level, manifested in omissions of words on the left side of text, without neglect dyslexia at the word level (namely, without omissions, substitutions, or additions of letters on the left side of words).

Helland, Plante and Hugdahl (2011) focused on predicting Dyslexia in children ahead of formal literacy training. Because Dyslexia is a constitutional impairment, risk factors should be seen in preschool. It was hypothesized that data gathered at age 5 using questions targeting the dyslexia endophenotype should be reliable and valid predictors of dyslexia at age 11. A questionnaire was given to caretakers of 120 5-year-old children, and a risk index score was calculated based on questions regarding health, laterality, motor skills, language, special needs education and heredity. An at-risk group (n=25) and matched controls (n=24) were followed until age 11, when a similar questionnaire and literacy tests were administered to the children who participated in the follow-up study (22 at risk and 20 control). Half of the at-risk children and two of the control children at age 5 were identified as having dyslexia at age 11 (8 girls and 5 boys). The conclusion was that it is possible to identify children at the age of 5 who will have dyslexia at the age of 11 through a questionnaire approach.

McBride et al. (2011) identified the cognitive skills at age 5 best distinguished children with and without dyslexia at age 7, and examined how these early abilities predicted subsequent literacy skills. Forty-seven at-risk children (21 who were initially language delayed and 26 with familial risk) and 47 control children matched on age, IQ, and mothers' education were tested on syllable awareness, tone detection, rapid automatized naming, visual skill, morphological awareness, and word reading at age 5 and subsequently tested for dyslexia on a standard Hong Kong measure at age 7. The results indicated that the children with an early language delay, 62% subsequently manifested dyslexia; for those with familial risk, the rate of dyslexia was 50%. Those with dyslexia were best distinguished from those without dyslexia by the age 5 measures of morphological awareness, rapid automatized naming, and word reading itself; other measures did not distinguish the groups. In a combined regression analysis across all participants, morphological awareness uniquely explained word reading accuracy and rapid automatized naming uniquely explained timed word reading at age 7, with all other measures statistically controlled. Separate stepwise regression analyses by group indicated that visual skill uniquely explained subsequent literacy skills in the at-risk group only, whereas tone and syllable awareness were unique predictors of literacy skills in the control group only. Both early language delay and familial risk strongly overlap with subsequent dyslexia in Chinese children. Overall, rapid automatized naming and morphological awareness was relatively strong correlates of developmental dyslexia in Chinese; visual skill and phonological awareness may also be uniquely associated with subsequent literacy development in at-risk and typically developing children, respectively. Schmid, Labuhn and Hasselhorn (2011) investigated about response inhibition and its relationship to phonological processing in third-graders with and without Dyslexia. Children

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with Dyslexia ($n = 20$) and children without Dyslexia ($n = 16$) were administered a stop signal task and a digit span forward task. Results revealed phonological processing deficits in terms of a phonological short term deficit in children with Dyslexia but revealed no group differences with regard to performance on the stop signal task. There was no relationship between performance on the stop signal task and phonological short term capacity for the group of children with Dyslexia. In contrast, in the group of children without Dyslexia, there was a tendency that better phonological short term capacity was associated with faster primary reaction times on the stop signal task.

Veater, Plester and Wood (2011) compared 10 to 13 years Dyslexic children's use of text message abbreviations with that of reading age and chronological age matched controls. There were no significant differences in the proportion of textisms used between the Dyslexic children and the two control groups, although a preference for non-phonetic text abbreviations was observed in the Dyslexic group. Unlike the controls, there was little evidence of an association between phonological awareness and textism use in children with Dyslexia.

Batson (2010) assessed the validity of the Developmental Indicator for the Assessment of Learning (DIAL) language-based tasks in predicting future reading performance (as measured by the Terra Nova/2 Word Analysis and Reading Composite scores) and reading programme placement of first grade students. Developmental Indicator for the Assessment of Learning and Terra Nova/2 scores, reading intervention programme enrolment and selected demographic data were gathered from the archived records of 312 subjects in a suburban NJ school district who were administered the DIAL-R ($N=163$) and DIAL-3 ($N=149$) between the ages of 4 and 5. Bivariate correlation and multiple regression analyses confirmed that both phonological and non phonological tasks were moderately useful in predicting students' subsequent word analysis and reading comprehension abilities, even after controlling for age, gender, preschool enrolment and non verbal cognitive skills. More specifically, phonological memory was found to exhibit stronger predictive utility than letter naming. The analyses also indicated that phonological sensitivity, phonological access and phonological memory were independent constructs, with each exhibiting modest utility in predicting future reading performance. However, none of four composite models tested (DIAL R/3 total scores, DIAL R/3 factor scores, language and concept area combined scores, or reading correlated task scores) provided adequate sensitivity to predict a child's future need for placement in a reading intervention programme, indicating that Developmental Indicator for the Assessment of Learning screening should not be used as the sole method to identify at-risk children. In terms of theory development, findings comparing the predictive utility of phonological and non phonological tasks were inconsistent with both the phonological and the two path models of reading development. It supported the multifactorial model of reading with equal importance given to both phonological and non phonological language skills in the development of decoding and comprehension skills.

Zaidan (2009) investigated Gap Detection performance using the Gaps-in-Noise test in three groups of 30 children, aged 8 to 9 years. Gap Detection thresholds and gap identification scores (%) were determined for each participant. The three groups of participants included (Group I) children with dyslexia and phonological deficits, (Group II) children with dyslexia and no significant phonological deficits, and (Group III) normal reading peers. Repeated measures ANOVA showed that Gap Detection thresholds for the three groups were significantly different. Group I showed longer Gap Detection thresholds (RE, 8.5 msec; LE, 8 msec), than Group II (4.9 msec for both ears) or Group III (RE, 4.2 msec; LE, 4.3 msec).

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Close inspection of the threshold values for the three groups revealed that the thresholds for Group II overlapped substantially with those of Group III, but not with those of Group I. Similar trends were also noted for the gap identification analysis. From a clinical perspective, the majority of participants in Group II and all participants in Group III performed within normal limits on both measures (i.e., thresholds and identifications), while performance of participants in Group I fell below established norms on these measures. Finally, additional analyses revealed that Auditory Temporal Processing was highly correlated with phonological processing measures indicating a relationship between the presence of phonological deficits and Auditory Temporal Processing deficits. This study confirmed that Auditory Temporal Processing deficit is a factor to be considered in dyslexia and suggested that the Gaps In Noise test was a promising clinical tool that should be incorporated in the evaluation procedures for children with reading difficulties.

Facoetti, Corradi, Ruffino, Gori and Zorzi (2008) investigated three different neuro cognitive dysfunctions, before reading acquisition, in a sample of preschoolers including children with (N=20) and without (N=67) familial risk for developmental dyslexia. Children were tested on phonological skills, rapid automatized naming and visual spatial attention. At-risk children presented deficits in both visual spatial attention and syllabic segmentation at the group level. Moreover, the combination of visual spatial attention and syllabic segmentation scores was more reliable than either single measure for the identification of at-risk children. The findings suggested that both visuo-attentional and perisylvian-auditory dysfunctions might adversely affect reading acquisition, and may offer a new approach for early identification and remediation of developmental dyslexia.

Tressoldi, Lorusso, Brenbati and Donini (2008) tested whether older Dyslexic children may obtain fewer gains on fluency and accuracy with respect to their younger peers after specific remediation. Changes in accuracy and fluency of a group of children with a diagnosis of Dyslexia attending third and fourth grades were compared with those obtained by a group of children attending the sixth, seventh or eighth grade in two different treatments, one based on the Balance model (Bakker) and the second based on the automatization of syllable recognition (sub lexical). The outcomes suggested that, at least for the chronological ages and types of treatments considered in the study, older children with Dyslexia may obtain comparable gains to their younger peers, suggesting that "it is never too late" to remediate reading fluency and accuracy.

Gupta and Jamal (2007) examined word reading and spelling accuracy of dyslexic readers in comparison to Chronological Age (CA) matched skilled readers of Hindi and English. In case of spelling, both groups showed no significant difference between the two languages in terms of the represented proportion of letters of the target word 'stimuli'. Further dyslexics showed a significantly greater proportion of letters of the target word stimuli in their reading errors than in their spelling errors in both languages, whereas no such differences were seen in case of the skilled readers.

Tonnessen (1994) tested the Geschwind-Behan-Galaburda hypothesis of cerebral lateralization postulates an association between immune disorders and learning disabilities. The empirical evidence for such a relationship has been ambiguous. It was an attempt to investigate the hypothesis in a population where all the individuals were affected by immune disorders of 29 students in a special school for asthmatic children (total number of students in the school: 32). A number of reading tests with special focus on word decoding were administered. The parents filled in a detailed questionnaire on the prevalence of reading

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difficulties and immune disorders among the other family members. The proportion of students with reading problems especially phonological problems was much higher than would be expected in a normal population. Among the family members we also found an elevated incidence of both reading problems and immune disorders. A cautious interpretation of these findings leads to tentative and partial support of the Geschwind-Behan-Galaburda hypothesis.

Kathleen et al (1991) analysed the memory of specific learning disabled readers using the California Verbal Learning Test for children. A group of 73 normal children (ages 8 to 10) was compared to 49 age-matched developmentally dyslexic children of average intelligence on the California Verbal Learning Test for Children (CLVT-C) to determine if reading disability was associated with impaired verbal memory. Results indicated that learning disabled readers and normal children had the same rates of verbal learning, forgetting, and memory development, and were equally able to utilise semantic categorisation. Reduced memory efficiency in dyslexia appears to result from verbal encoding difficulties rather than memory deficit per second.

Intervention Programme

Wang, Huss, Hamalainen and Goswami (2012) explored the relationship between basic auditory processing of sound rise time, frequency, duration and intensity, phonological skills (onset-time and tone awareness, sound blending, RAN, and phonological memory) and reading disability in Chinese. A series of psychometric, literacy, phonological, auditory, and character processing tasks were given to 73 native speakers of Mandarin with an average age of 9.7 years. Twenty-six children had developmental Dyslexia, 29 were chronological age matched controls (CA controls) and 18 were reading matched controls (RL controls). Chinese children with Dyslexia were significantly poorer than CA controls in almost all phonological tasks, in semantic radical search, and in phonological recoding proficiency. Chinese children with Dyslexia also showed significant impairments in most of the basic auditory processing tasks. Results demonstrated that different auditory measures of rise time discrimination were the strongest predictors of individual differences in Chinese character reading and phonological decoding respectively.

Kast, Bascher, Gross, Jancke and Meyer (2011) developed an additional phonological code and an improved word selection controller relying on a phoneme based student model. They investigated the spelling behaviour of children by means of learning curves based on log file data of the previous and the enhanced software version. First, they compared the learning progress of children with dyslexia working either with the previous software (n=28) or the adapted version (n=37). Second, the spelling behaviour of children with dyslexia (n=37) and matched children without dyslexia (n=25). To gain deeper insight into which factors were relevant for acquiring spelling skills and analyzed the influence of cognitive abilities, such as attention functions and verbal memory skills, on the learning behaviour. All investigations of the learning process were based on learning curve analyses of the collected log file data. The results evidenced that those children with dyslexia benefit significantly from the additional phonological cue and the corresponding phoneme based student model. Actually, children with dyslexia improve their spelling skills to the same extent as children without dyslexia and were able to memorize phoneme to grapheme correspondence when given the correct support and adequate training. In addition, children with low attention functions benefitted from the structured learning environment.

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Messaoud, Hazan and Rosen (2011) investigated speech perception abilities impairment in 62 dyslexic children and 51 average readers matched in age. They tested whether there was robust evidence of speech perception deficits in children with dyslexia, speech perception in noise and quiet was measured using eight different tasks involving the identification and discrimination of a complex and highly natural synthetic ‘pea’-‘bee’ contrast (copy synthesised from natural models) and the perception of naturally-produced words. The results indicated that children with dyslexia, on average, performed more poorly than average readers in the synthetic syllables identification task in quiet and in across-category discrimination (but not when tested using an adaptive procedure). They did not differ from average readers on two tasks of word recognition in noise or identification of synthetic syllables in noise. For all tasks, a majority of individual children with dyslexia performed within norms. Finally, speech perception generally did not correlate with pseudo-word reading or phonological processing, the core skills related to dyslexia.

Sharolyn (2011) examined the effects of an intensive shared book reading intervention on the vocabulary development of preschool children who were at risk for vocabulary delay. The participants were 125 children were selected by the stratified by classroom and randomly assigned to one of two shared book reading conditions (i.e., the experimental, Words of Oral Reading and Language Development intervention; or typical practice). Results showed that statistically and practically significant effects for the Words of Oral Reading and Language Development intervention with no differential effects for children with higher versus lower entry level vocabulary knowledge. Results suggested that a combination of instructional factors may be necessary to enhance the efficacy of shared book reading for children with early vocabulary difficulties.

Milani, Lorusso and Molteni (2010) assessed the benefits of the use of audiobooks (both school-books and books of various genres, recorded on digitalmedia) could bring to preadolescents and adolescents with developmental Dyslexia. Two groups, each consisting of 20 adolescents, were compared. The experimental group used the audio books, while the control group continued to use normal books. After 5 months of experimental training, the experimental group showed a significant improvement in reading accuracy, with reduced unease and emotional behavioural disorders, as well as an improvement in school performance and a greater motivation and involvement in school activities.

METHODOLOGY

The construction and standardisation of the learning disability inventory for teachers was done following a systematic procedure, as given below:

- 1. Objectives, Function and Application**
- 2. Area**
- 3. Selection of the Participants**
- 4. Selection of the Tool**
- 5. Experimental Procedure**
 - A. Construction of the Test
 1. Definition of Learning Disability
 2. Identification of the Symptoms of Learning Disability
 3. Item Pool
 4. Item Selection
 5. Procedure (Item Try-out)
 - B. Standardisation of the Test
 1. Validity

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2. Reliability
3. Norms

Statistical Analysis of the Test

“As a first step, the test constructor must decide the purpose and uses of the test” (Anastasi, 1988). In line with this, the objectives, function and application of the test have been defined.

Objectives

1. To develop Learning Disability Inventory for teachers to identify the problem.
2. To standardise the Learning Disability Inventory.

Function

To assess the children will have learning disability and to predict the remedial teaching, if necessary.

Application

The inventory is intended to be used in educational institutions, mental health centres, counselling centres, clinics and research.

Area of the Participants

1. Coimbatore city, in Tamil Nadu was chosen for conducting the study. The reasons for selecting this area are as follows:
2. Easy availability of literates in the needed age groups.
3. Easy accessibility of the subjects.

Selection of the Participants

1. Three sets of samples were selected for the study:
2. For item analysis
3. For establishing validity and reliability
4. For selecting norms

Item Analysis

Simple random sampling method was followed to select the Participants. A simple random sample is subset of a statistical population in which each member of the subset has an equal probability of being chosen. In the process of the construction of the test, i.e., for item analysis 600 subjects 7 years to 20 years were chosen from the selected samples for ‘Item Try Out’.

Establishing Validity and Reliability

1. To establish content validity 10 experts who are familiar with the learning disability from Kerala and TamilNadu were asked to provide feedback on how well each question indicates the learning disability in the developed questions.
2. To establish reliability 600 subjects studying in Cognito Academy and Rashmika Centre for Learning Disabled Children, Coimbatore, were chosen by Simple Random Sampling Method.

Setting Norms

To set norms for learning disability inventory, 600 subjects consisting of students ranging from 7 years to 20 years were chosen from Coimbatore. The subjects were chosen by random sampling method.

Selection of the Tool

Learning Disability Evaluation Scale - Reformed (2011) was used to establish the validity of the newly constructed test. School version rating form consists of 88 items. There are four response choices namely not developmentally appropriate for age, rarely or never, inconsistently and all or most of the time.

The test can either be administered individually or in group. There is no necessity to complete the rating of a student in one day. Several days may elapse before the rater is able to complete the scale. Each item which is checked 'not developmentally appropriate for age, rarely or never, inconsistently and all or most of the time' is awarded score 0, 1, 2 and 3 respectively. The score of an individual would be total number of items checked positively. The Learning Disability Evaluation Scale has a validity of 0.70 and reliability of 0.83.

Experimental Procedure

Construction of the Test

1. Definition of Learning Disability

After the perusal of various definitions of learning disability, the investigator has given a functional definition. Learning disability may be defined as "a condition in which the person might have inability to understand new or complex information, difficulties in writing, reading, mathematics and might also have impaired social functioning with average or above average intelligence."

2. Identification of the Symptoms of Learning Disability

Literature on learning disability was reviewed in order to identify the important symptoms of learning disability. Some of the symptoms identified are:

- Difficulty following directions
- Inability to follow plans
- Difficulty to do daily activities
- No selfcontrol
- Restless
- Adjustment difficulty
- Trouble telling from right from left
- Clumsy
- Difficulty in understanding
- Cannot read other people's emotions
- Social withdrawal
- Immature behaviour
- Difficulty with sequencing
- Difficulty in understanding mathematics
- Trouble making cash transactions
- Difficulty in memorising basic calculations
- Gets easily tired while reading
- Can't hold pencil or pen properly
- Trouble writing down the thoughts
- Omitting words
- Bad handwriting
- Trouble spelling and punctuation
- Problems with grammar

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- Says words out while writing
- Reverse letters
- Poor reading ability
- Difficulty in understanding words
- Difficulty in making inferences based on what they read
- Difficulty in Encoding and Retrieving
- Easily get distracted
- Less attention
- Difficulty in expressing thoughts
- Difficulty in learning foreign languages
- Difficulty in eye hand coordination

3. Item Pool

Based on the definition of learning disability and the symptoms identified, items for the test were chosen. Fifty eight items related to the four types of symptoms of learning disability were selected as shown below:

Part	Symptoms	No. of Items
I	General	17
II	Mathematics	8
III	Reading	4
IV	Writing	12
V	Comprehension	6
VI	Attention	4
VII	Language	9

4. Item Selection

The initial set of 60 items were scrutinised with the help of Faculty Members of the Department of Psychology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.

1. Dr. Bright, M.Phil. (Clinical), Clinical Psychologist, INMIND Hospital, Thrissur.
2. Dr. Girish, M.D. (Psy), Psychiatrist, TIMHANS, Thrissur.
3. Fr. Girish, P. Ph.D. (Counselling), Counselling Psychologist, Santhwana Institute for Counselling.

With the guidance and judgement of the Faculty Members of the Avinashilingam Institute for Home Science and Higher Education for Women and experts from other Institutions, out of the initial set of 60 items, 58 items which were considered most suitable to assess learning disability were selected. To quote Kothari (1990) "the choice of an item depends upon the judgement of competent person as to its suitability for the purpose of the test.

Part	Symptoms	No. of items
I	General	17
II	Mathematics	8
III	Reading	3
IV	Writing	12
V	Comprehension	6
VI	Attention	3
VII	Language	9

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Each item was followed by 5 choices namely Strongly Agree, Agree, Not Sure, Disagree and Strongly Disagree.

5. Procedure (Item Tryout)

The set of 58 items related to the symptoms of learning disability was administered to the 600 subjects, selected by simple random sampling method from Coimbatore city. The responses of the subjects were scored by giving a score of 4, 3, 2, 1, 0 for Strongly Agree, Agree, Not Sure, Disagree and Strongly Disagree respectively. The subject's sum of the scores for all the items constituted the total score for the test.

B. Standardisation of the Test

Before a test can be used with some confidence that it is an accurate measure of the psychological construct it is supposed to measure, information concerning the validity and reliability of the test must be obtained. Furthermore, it is useful for the purpose of the interpretation to have available data on the performance of a large group of people who are representative of those with whom the instruments will ultimately be used. To accomplish this purpose, the test must be standardised (Gregory, 2005).

1. Validity Validity is the degree to which a test measures what it intends to measure (Anastasi, 1988). A test is valid to the extent that inferences made from it are appropriate, meaningful and useful (Gregory, 2005).

Content validity involves the examinations of a test's content to determine whether it covers a representative sample of the behaviour to be measured (Zechmeister and Shaughnessy, 1998). The content validity of the Learning Disability Inventory was determined by the judgement and consensus of the experts in the field.

2. Reliability Reliability refers to the consistency of scores obtained by the same person when reexamined with the same test on different occasions or with different sets of equivalent items under variable examining conditions (Anastasi, 1988). The most straightforward method for determining the reliability of test scores is to administer the identical tests twice to the same group of heterogeneous and representative subjects. If the test is perfectly reliable, each person's second score will be completely predictable from his or her first score (Gregory, 2005)

To establish reliability of the presently constructing learning disability inventory was administered on 600 students in the age range of 7 to 20 years were chosen from Coimbatore and was repeated after an interval of 20 days. Scores of the subjects in the first and retest were correlated to establish the reliability of the test.

3. Norms A standardized test has standard directions for administration and scoring. The standardisation of a test requires, administering the instrument to a large sample of individuals i.e., the standardization sample, selected as representative of the target population of persons for whom the instrument is intended (Shaughnessy, 1998). Norms serve as a frame of reference for interpreting scores of tests (Gregory, 2005).

To set norms for the learning disability inventory, the final form consisting of 58 items was administered to 600 students in the age range of 7 to 20 years were chosen from Coimbatore City.

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Administration

Any standardized test has standard directions for administration. Learning disability inventory should be administered in one sitting. The test can be used in the teachers of both girls and boys above the age of 6 years, with the ability to read and write English. To make the administration procedures standardized, uniform instruction was given to all the subjects before the administration of L.D.I.

The instructions given to the subjects were as follows: "In this Inventory, there are 58 statements, each followed by 5 alternatives 'Strongly Agree', 'Agree', 'Not Sure', 'Disagree' and 'Strongly Disagree'. Read each statement carefully and put a tick mark (□) in the column which suits you the most. The data will be used for scientific research, so be honest while answering. Please do not omit any item. All the information about you will be kept confidential. Do it as quickly as possible". The time requires to complete the test is maximum 30 minutes.

Scoring

The responses of the subjects were scored by giving '4', '3', '2', '1' and '0' for Strongly Agree, 'Agree', 'Not Sure', 'Disagree' and 'Strongly Disagree' respectively. The sum of scores of all the items constituted the total score for the test. The mean and standard deviation of the standardization sample in learning disability inventory were found out to set norms.

VI. Statistical Analysis of the Test

1. To determine the reliability by test-retest method, scores of 600 subjects in the first test and retest were correlated by the method of Pearson's Product Moment Correlation.
2. To set the norms for Learning Disability Inventory, Mean, Standard Deviation of the standardization of the participants(N=600) were taken into consideration.

RESULT AND DISCUSSION

A study was conducted to construct and standardize Learning Disability Inventory. The results are under the following headings and discussed.

A. Distribution of the Participants

B. Construction and Standardization of Learning Disability Inventory

1. Validity
2. Reliability
3. Norms

A. Distribution of the Participants

Table 1 Area Wise Distribution of the Participants for Construction and Standardization of the Learning Disability Inventory

School No.	No. of Subjects
1	250
2	350

Table 1 show that the distributions of the participants from 2 schools were selected. Six hundred participants were selected by simple random sampling method for item try-out (N=600) and standardization (N=600) from the Coimbatore city area.

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Table II Distribution of the Participants for Validity and Reliability

Criteria	N
Validity	10
Reliability	600

Table II, it can be seen that 600 subjects between the age group of 7-20 years were chosen by simple random sampling for establishing both validity and reliability. All the subjects were taken from Cognito Academy and Rashmika Centre for Learning Disabled Children, Coimbatore.

B. Construction and Standardization of Learning Disability Inventory

1. Validity

Table III Selection of Items with the help of Experts

Learning Disability Inventory	Experts	Total Items	Selected Items
	10	60	58

To establish content validity, the items selected for developing the inventory was given to 10 experts in the field which includes two Counselling Psychologists, one Clinical Psychologist, one Psychiatrist, two Teachers from Special Education Department, one Associate Professor and three Assistant Professors in Psychology from TamilNadu and Kerala. From the total 60 items 58 items were selected and corrected for further procedures.

2. Reliability

Table IV Correlation between First Test and Retest Scores in Learning Disability Inventory

	First Test	Second Test	Correlation Coefficient	Significant Level
Mean	101.78	101.95	0.9	0.01**
Standard Deviation	29.590	29.394		

** = Significant at 0.01 level

Test retest method was used to establish the reliability of the learning disability inventory. Six hundred students in the age range of 7 to 20 years from Cognito Academy and Rashmika Centre for Learning Disabled Children, Coimbatore were administered the Learning Disability Inventory twice with an interval of maximum 20 days interval between two tests. The first test was administered on 06.01.2020 and the retest on 25.01.2020. The scores of the 600 subjects in the first test and retest of Learning Disability Inventory were correlated by Pearson's Product Moment Correlation Method. The correlation coefficient score was 1 and it was significant at 0.01 level signifies that the two variables had perfect positive relationship. Thus, learning disability inventory have proved to be an exceptionally reliable tool.

3. Norms

Table V Mean and Standard Deviation of Standardization of Learning Disability Inventory

Number of participants	Mean	Standard deviation
600	101.97	29.35

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The learning disability inventory consisted of 58 items. The mean score of the 600 subjects who constituted for the standardization in Learning Disability Inventory and the standard deviation and the mean score were used to arrive at the norms.

Table VI Distribution of Scores of the Standardization in Learning Disability Inventory

Scores	Learning Disability Level	N	Percentage (Rounded Up)
88 and above	Profound	48	8
59-87	Severe	132	22
30-58	Moderate	200	33
1-29	Mild	120	20
0	Absent	100	17

Table VI clearly shows that 33% of the participants had moderate level of learning disability. They are likely to find it difficult to understand, learn and remember new skills. As a result, they will have problems with both the acquisition of skills and their application to new situations and only 22% of the subjects had severe learning difficulty. Mild learning-disabled students have attainments well below expected levels in all or most areas of curriculum, despite appropriate interventions. They will have much greater difficulty than their peers in acquiring basic literacy and numeracy skills and in understanding concepts. They may also have associated speech and language delay, low self esteem, low levels of concentration and underdeveloped social skills. Twenty percentage of the subjects had mild level of learning disability. Someone with mild disability may be able to live independently with minimal support.

Seventeen percentage of the subjects does not have any learning disability which will help them to lead a normal and independent life. Eight percentage of the subjects are having profound and multiple learning disability (PMLD) which is when the person has severe difficulties in seeing, hearing, speaking and moving. They may have complex health and social care needs due to these conditions.

Table VII Norms for Learning Disability Inventory

Scores	Levels of Learning Disability	Interpretation
88 and above	Profound	Severe difficulties in seeing, hearing, speaking, and moving. They may have complex health and social care needs due to these conditions.
59-87	Severe	Difficulty in acquiring basic literacy and numeracy skills and in understanding concepts and associated speech and language delay, low self esteem, low levels of concentration and underdeveloped social skills.
30-58	Moderate	Difficult to understand, learn and remember new skills
1-29	Mild	Mild disability may be able to live independently with minimal support with low symptoms of learning disability.
0	Absent	No learning disability

SUMMARY

Learning disability may be defined as “a condition in which the person might have inability to understand new or complex information, difficulties in writing, reading, mathematics and might also have impaired social functioning with average or above average intelligence.”

To construct and standardize the learning disability inventory based on the above definition, initially 60 items related to general, mathematics, reading, writing, comprehension, attention and language difficulties were pooled together by the investigator with the assistance and guidance of the Faculty Members of Department of Psychology, Special Education, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, and three experts from Kerala, Dr. Bright, M.Phil. (Clinical), Clinical Psychologist, INMIND Hospital, Thrissur; Dr. Girish, M.D. (Psy), Psychiatrist, TIMHANS, Thrissur and Fr. Girish, P. Ph.D. (Counselling), Counselling Psychologist, Santhwana Institute for Counselling. The initial set of 60 items are characterised as General (17), Mathematics (8), Reading (4), Writing (12), Comprehension (6), Attention (4) and Language (9). Each item had to be responded by choosing one of the Five alternatives namely, ‘Strongly Agree’, ‘Agree’, ‘Not Sure’, ‘Disagree’ or ‘Strongly Disagree’ which were given a score of four, three, two, one and zero respectively. Sum of the score of all the items will be the total score for the test. To establish the content validity, the guidance and judgement of the faculty of Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, and experts have sought out of the initial set of 60 items, 58 items which were considered most suitable to assess learning disability were selected. To quote Kothari (1990) “the choice of an item depends upon the judgement of competent person as to its suitability for the purpose of the test”. The final set of 58 items are characterised as General (17), Mathematics (8), Reading (3), Writing (12), Comprehension (6), Attention (3) And Language (9). To establish reliability of the presently constructing learning disability inventory for teachers was administered on 600 subjects consisting of students ranging from 7 years to 20 years were chosen from Coimbatore and were repeated after an interval of 20 days. Scores of the subjects in the first and retest were correlated to establish the reliability of the test. The coefficient of correlation was found to be 0.99 proving that the learning disability inventory for teachers is a highly reliable tool.

To set norms, the final form of learning disability inventory consisting of 58 items was administered on 600 subjects consisting students ranging from 7 years to 20 years were chosen from Coimbatore City. The mean and standard deviation were found to be 102 and 29 respectively. Based on the mean and standard deviation, the norms were established.

CONCLUSION

Learning disability inventory has 58 items, each followed by 5 alternatives ‘Strongly Agree’, ‘Agree’, ‘Not Sure’, ‘Disagree’ or ‘Strongly Disagree’. There is no time limit but the subject should be asked to do as quickly as possible. The average time taken by an individual to complete the test is 30 minutes. The test can be administered either individually or in groups. The instruction to the subjects is, “In this form, there are 58 statements, each followed by 5 alternatives - ‘Strongly Agree’, ‘Agree’, ‘Not Sure’, ‘Disagree’ and ‘Strongly Disagree’. Read each statement carefully and put a tick mark (☐) in the column which suits the student most. The data will be used for scientific research, so be honest while answering. Please do not omit any item. All the information about the student will be kept confidential. Do it as quickly as possible”. Scoring is done by giving ‘4’, ‘3’, ‘2’, ‘1’ and ‘0’ for Strongly Agree’, ‘Agree’, ‘Not Sure’, ‘Disagree’ And ‘Strongly Disagree’ respectively. The sum of

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scores of all the items constituted the total score for the test. The scores of the subjects in Learning disability inventory for teachers can be interpreted by referring to the norms.

Merits of the Learning Disability Inventory

1. It can be used for students above 7 years
2. It is easy to administer.
3. It is easy to score.
4. It is easy to interpret the results.
5. It is time saving, as it can be administered to a large number of subjects.
6. It is economical, as it is a paper pencil test.
7. It helps the Psychologist/Counsellor to assess the severity of the symptoms.

Limitations of Learning Disability Inventory

The test can be used only for teachers who can read and write in English.

Uses of Learning Disability Inventory

Learning Disability Inventory can be used in the following areas:

Educational Institutions
Mental Health Centers
Counselling Centers
Clinics and Hospitals

Implications

1. The Learning Disability Inventory could be translated into other Regional Languages
2. A similar Learning Disability Inventory could be constructed and standardized especially for children.
3. A culture-fair Learning Disability Inventory could be constructed and standardized.
4. Teachers and counsellors can be encouraged to assess the learning disability level of their students by using Learning Disability Inventory and provide necessary help to the needed students

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Conflict of Interest

The author declared no conflict of interest.

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