Reading Disabilities: Identification Causes and Remedial Strategies

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There is a group of students, which though normally intelligent, may not excel in academics. An invisible handicap does not allow the students to perform to their actual potential. They remain a puzzle to the parents and teachers and referred to as 'slow learners', under achievers of are called as learning disabled. Specific learning disability mean a disorder in one or of the basic psychological processes involve in understanding or in using language, spoken or written which may manifest itself in an imperfect ability to listen, speak or to do mathematical calculations. The awareness among such children that 'I am good in something 'boosts their self esteem. This in turn will help the child to cope better with his remaining specific learning disabilities. For this; his other skills like music, dance, drawing, painting, sports are to be encouraged. Parents need to identify these skills in which their child excels and progress in their life...Adequate opportunities is to be provided to nurture their skills.

The most exciting, confusing, and significant phrase 'Learning Disability 'have been brought in to lime light in recent year. There is a group of students, which though normally intelligent, may not excel in academics. An invisible handicap does not allow the students to perform to their actual potential. They remain a puzzle to the par-

ents and teachers and referred to as 'slow learners', under achievers of are called as learning disabled. Dr. Kirk (1963) introduce the phrase 'learning disability' to describe children "who have disorders in the development language, speech, reading and associated communication skills needed for social interaction.

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Specific Learning Disability:

Specific learning disability mean a disorder in one or of the basic psychological processes involve in understanding or in using language, spoken or written which may manifest itself in an imperfect ability to listen, speak or to do mathematical calculations. Specific learning disability does not include children who have learning problems that are primarily the result of visual hearing or motor handicaps, or of emotional disturbance or of environmental, cultural or economic disadvantage. But Specific learning disability is significant problems of synthesizing organizing, and memorizing.

Difficulties in reading spelling are termed as Specific learning disability or Dyslexia. Difficulty in reading is also considered as one of the disabilities among the population. Reading disability is found among people of all ages and in all socio economic classes. There are two kinds of dyslexia (a) Developmental phonological dyslexia -where one has a problem with non- word reading. Non ward reading is one changing the initial or middle letters of word. (b) Developmental surface dyslexia - where one is difficulties in reading irregular words. They violate English spelling to sound word rule .Approximately 75% of student's diagnosis with learning disabilities manifest social skill deficit that distinguish them from their non learning disabled peers. (Sridhar & Vaughn -2001)

The reading difficulties are not the result of generalized developmental delay & sensory impairment .(Lundburg & Hoien ,2001; Mather & Goldstein, 2001) Written expression disabilities and mathematics disabilities are commonly found in combination with a reading disabilities. (American Psychiatric Associa-

tion, DSM-IV-TR, 2000)

During the school years a child with non verbal disability may experience difficulties in Mathematics, science, printing and writing, logical ordering and sequencing, organizing information, and non verbal social skills. (Rourke, 1989, Thompson, 1997) Reading is a complex process made up of several interlocking skills and processes. (Tankersley, 2003) Reading disability in the population is normally distributed. (Rodgers, 1983; Shaywitz , Escobar , Fletcher , & Makuch , 1992) . The severity criterion for reading disability is arbitrary and varies somewhat across studies. The study reviewed below typically selected subject who were more than about 1.5 standard deviation below the population mean (i.e. below the 10th percentile) in their sampling areas.

Evidence from a number of family studies has shown that if a child is diagnosed with reading disability, there is a higher than normal probability that other family members will also be reading disabled. (C .f .,Finucci , Guthrie , Childs , Abbey , & Childs , 1976 ; Hallgren , 1950; Gilgar , Pennington , & Defries , 1991; Vogler , Defries , & Decker , 1985)

The exact probability seems to depend on a variety of factors, including the severity of the child's reading disability and the type of assessment from other family members 'reading skills. For example, when the parent's diagnosis for reading disability is based on self report, the familial incidence tends to be lower than when the diagnosis is based on the direct measurement of parents' reading skills .(Gilgir et al .1991).

Most studies of familial incidence first diag-

nose a child with reading disability using a severity criterion that would identify 5-10 % of children with normal intelligence and educational opportunity then the investigator attempt to use a .similar severity criterion to diagnose reading disability in the parents.

Evidence from the familial nature of reading disability is based on parental rates that are substantially above the 5-10% rate estimated for the population . Hollis Scarborough (Personal communication, 1997) Computed the average rate of reading disability among parent across eight family studies that include a total of 516 families. The rate across studies varied from 25% to 60% with a median value of 37%. All studies founds rate for reading disability among parents of reading disabled children were significantly higher than expected in the normal population . The median proportion of reading disability among fathers (46%) was slightly higher than the median proportion among mother (335).

A few studies have attempted to directly estimate this prospective risk when parental disabilities are identified first. (Finucci, Gottfredson and Childs 19858) It is found that 115 parent who had attended a special school for disabled reader when they were children, 36% reported that at least one of their children were reading disabled.

Scarborough's (1990) prospective studies of children with one or two reading disabled parents found that 31% of the second grade children were eventually identified by reading disabled by their schools. When the diagnosis of reading disability was based on Scarborough's extensive test results showing that reading was at least 1.5 standard devia-

tion below the population mean, the rate was twice as high (62%). A higher than school identification rate. When children are actually tested is a common result in large epidemiological studies .(Colson, Forsberg, & Wise, 1994; Shaywitz, Fletcher, & Escobar, 1990) In contrast, Scarborough found that only 5% of children were reading disabled if both parents were normal reader. Approximately 75% of student diagnosis with learning disabilities manifest social skill deficit that distinguish them from their non learning disabled peers. (Sridhar & Vaughn -2001). The reading difficulties are not the result of generalized developmental delay or sensory impairment. (Lundberg & Hoien, 2001; Mather & Goldstein, 2001) . Written expression disabilities and mathematics disabilities are commonly found in combination with a reading disability. (American Psychiatric Association, DSM-IV-TR, 2000).

Identification of Children with Reading Difficulty:

- · Difficulty in distinguishing between letters. Ex. 'b' from'd' 'I' from 'b M from W. etc
 - · Reluctance to read aloud.
- · A monotonous voice when reading (-no rising or falling intonations).
- · Does not follow the stress, punctuation in a sentence, paragraph and passage while reading.
- \cdot Tendency to follow the text with finger when reading.
- \cdot Does not focus attention on the text while reading; distracted or diverted by Surroundings \ thought.
- · Miss pronunciation of the words from the text while reading.
- · Lacks confidence and hesitates to read in class.

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- · Unable to read the letters or identify the alphabets. As a result cannot read words and sentences.
 - · Reading comprehension is poor.
 - · Takes more time to sound out a word.
- · In lower classes-unable to discriminate between sounds.
- · Repeats certain words again and again while reading.

Factors Associated With Reading Difficulty:

Anxious parents would like to know exactly why their child is not reading or spelling like other children there are several factor s of causes which are responsible for reading disabilities, out of which some are described below.

1. Neurological damage:

Children with difficulties share several characteristics found in persons with brain damage caused by injury or infection. Neurological damages can also occur during pre-natal and post natal periods. Other factors like labor, premature birth, use of drugs and alcohol are some of the variable associated with it. Through neuroimagin technique it has been determined that there are subtle structural and functional brain differences in individual with learning disabilities. (Kibby & Hynd, 2001).

2. Maturational Delay:

Bender, (1973) observed that if differential stages on the development of brain are delayed, there occurs a maturational lag .Some symptoms mentioned by Bender are –

- · Slow maturation in language skill.
- · Delay in development of motor skills.
- · Visual –motor problems.

De-Hirsch and Langford (1966) described

language deficits of reading, writing and spelling as developmental disturbances, reflecting an immature nervous system.

3. Genetic factors:

Hallagren (1950) found that 88% of families of dyslexia children showed similar learning problems. Hermann (1959) examined dyslexia in twins and reported that of the twelve sets of identical twins, all members were dyslexics. Developmental differences of the brain associated with learning disabilities are thought to be influenced by genetic factors. Genetic makers for reading disabilities have been identified on chromosomes 6and 15 (Kibby & Hynd, 2001). Learning disabilities may run in families, parents of a student with learning disabilities may indicate that they had similar learning pattern in school . However it is important to remember that parent's learning disability may manifest differently in the child.

4. Bio-chemical factors:

Chemical play an important role in brain activity. Absence or even excessive amount of bio chemical substance, which result in reading difficulties.

5. Nutritional deficiency:

A growing child requires adequate nutrition. Poor diet and severe malnutrition can reduce the child's abilities to read, write and learn or think by damaging inter-sensory abilities and delayed development. Feingold (1976) suggested that some individual might react to the presence of synthetic colors, preservatives, and other additives in foods. He claimed that, such foods increase hyperactive behaviors.

6. Environmental factors:

Environmental factors can be categorized in two aspects. Economical aspect, social and

culturally deprived home .In economically deprived homes, the child may not be exposed to adequate, sensory, linguistic and cognitive activities. An emotionally unstable home life may deprive the child from any motivation to learn. Social and cultural environment are also causes for reading disability .When there is no possible interaction with peers ,friends or relatives ,the child may not be able to develop his language which in turns affects his reading ,writing or spoken language .In the case of tribal people or minorities ,the students do not have exposure to the outer world; as a result of their cultural deprivation ,they may experience learning difficulties in language acquisition .

Other possible contributing factors including problems during pregnancy caused by the use of tobacco, alcohol, and other drugs . Mother who smoke may be more likely to have low birth weight babies who may be at risk for a variety of problems. Alcohol and drugs consumed by a mother during pregnancy transfer directly to the fetus. Environmental tonix are also being investigated as possible causes for learning disabilities. (Sousa, 2001).

7. School environment:

Some researchers (Bruner, 1971), (Coles 1987 and Durkin, 1980) believed that poor quality of teaching in schools can also cause reading disability. Very often teachers themselves are not equipped to teach a particular subject. A poor teaching style not giving time to the learner to acquire basic skills, moving first and failure to understand how best a child learns, use in appropriate material and curriculum are also the factors that lead to reading disability.

Role of Teachers & Parents in helping

their children with reading difficulties:

Reading is one of the important aspects of language learning skills. Reading poses a challenge not only to the learner but also to the teacher because it is not just a general ability but a composite of many specific abilities. It is generally perceived as a multidimensional skill involving perceptual, linguistic, cognitive and motivational components.

Reading is an integral part of school work, fun time, sports and a host of other activities of children and adult alike. So the pupils having reading difficulty must not be ignored by the parents and teachers.

Teachers must motivate and show a positive reinforcement towards the children. Special

Attention and care must be given to the child who faces a problem with reading. "Being

Misunderstand is more tragic than having a disability."

A teacher must show her kindness, patience and encourage the child who is found to be a little

Poor in his /her performance or disability is found in learning process.

Where a child sits in the classes is important .If he has a very poor concentration or is inclined to dream, he needs to be near the teacher so that his attention can be regained discreetly, if necessary.

You are lazy: 'You are not trying enough', 'You are stupid' etc are some of the ways

Parents and teacher greet children with 'specific learning disability.

Guidelines for parents:

Parents can give a child adequate reading practice at home.

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Encourage the child to read and it is best to use a book that the teacher suggests for reading. However, books with pictures are the best as they are enjoyable.

Parents must help the child in reading and discuss what the book is about.

If a child misreads a word that does not affect the meaning of a word, ignore it. If he misreads a word that affects the meaning of the text, encourage him to check the word that he reads.

If a child hesitate over an unfamiliar word , wait for a short time to see whether he manages to read it or not .If not encourage him to sound it out , else parents can read it loudly and clearly .

At the end of reading, parents must discuss the text with the child. Ask for his opinion about the story. It is a good idea to read the book page by page and observe the pictures.

Avoid negative comments.

Remedial strategies:

Remedial education is the main source of treatment. It includes

Improving visual discrimination.

Improving visual retention and visual sequencing memory.

Improving listening skills.

Improving auditory discrimination.

Improving reversal problems etc.

Conclusion:

The children with reading disabilities are acutely aware of their disability and feel sad about it. In addition remarks like 'lazy "not trying 'etc makes their self esteem dip. This is turning leads to psychological and behavioral problems, depression etc.

The awareness among such children that 'I am good in something 'boosts their self esteem. This in turn will help the child to cope better with his remaining specific learning disabilities. For this; his other skills like music, dance, drawing, painting, sports are to be encouraged. Parents need to identify these skills in which their child excels and progress in their life...Adequate opportunities are to be provided to nurture their skills. To sum up, all these procedures when followed will help to reduce the intensity of disabilities in children, which in turn helps the development of children.

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