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## Specific Learning Disabilities and Intervention Programmes

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### ABSTRACT

*Individuals with learning disabilities can face unique challenges that are often pervasive throughout the lifespan. Depending on the type and severity of the disability, interventions, and current technologies may be used to help the individual learn strategies that will foster future success. Depending on the type and severity of the disability, interventions, and current technologies may be used to help the individual learn strategies that will foster future success. Children learn language skills by following this hierarchical development. Each successive skill is built upon a firm foundation of preceding abilities. It is usually expected, for example, that a child will acquire adequate listening skills prior to developing the expressive skills of speaking. The focus on learning disabilities and the provision of accommodation in schools fails to acknowledge that people have a range of strengths and weaknesses, placing undue emphasis on academic success thereby making people receive additional support in this arena but not in music or sports. Researchers have pinpointed the use of resource rooms as an important—yet often politicized component of educating students with learning disabilities. Trained counselors are essential for the learning disabled. Regular classroom teachers should have information about the child's evaluation, the medicine he may be taking and any other special instructions and reinforcements that may motivate the child to learn.*

**KEYWORDS:** Specific Learning Disabilities, Intervention Programmes, Management Practices, Counseling Services.

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### Introduction

Specific Learning Disability is a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Disorders not included: When the term "learning disorder" is used, it describes a group of disorders characterized by inadequate development of specific academic, language, and speech skills.

The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantages (From IDEA). The "halo" effect of preconceived notions about learning disability children and responses set by parents and teachers alike is a major part of the problem of handling problem behaviours in learning disability children. Learning disabilities are often linked through genetics and run in the

family. Children who have learning disabilities often have parents who have the same struggle. Language-based learning disabilities, which refer to difficulties with reading, spelling, and/or writing, are evidenced in a significant lag behind the individual's same-age peers.

### **Statement of the Problem**

Most children with these learning disabilities are at least of average intelligence, ruling out intellectual impairments as the causal factor, most LD children have problems with word analysis and comprehension, some of the LD children have difficulties with rhyming words and some other students have auditory issue causing it hard for them to remember what they heard. Analyzing these disabilities observed in students suffering from language impairment and learning disabilities, it is visually seen that it is very difficult for these students to prosper academically.

### **Conceptual Review**

#### **Specific Learning Disabilities**

Learning disability, learning disorder or learning difficulty (British English) is a condition in the brain that causes difficulties comprehending or processing information and can be caused by several different factors. Given the "difficulty learning in a typical manner", this does not exclude the ability to learn in a different manner, some people can be more accurately described as having a "learning difference", thus avoiding any misconception of being disabled with a lack of ability to learn and possible negative stereotyping. In the United Kingdom, the term "learning disability" generally refers to an intellectual disability, while difficulties such as dyslexia and dyspraxia are usually referred to as "learning difficulties".

While learning disability, learning disorder and learning difficulty are often used interchangeably, they differ in many ways. Disorder refers to significant learning problems in an academic area. These problems, however, are not enough to warrant an official diagnosis. Learning disability, on the other hand, is an official clinical diagnosis, whereby the individual meets certain criteria, as determined by a professional (psychologist, pediatrician, etc.). The difference is in degree, frequency, and intensity of reported symptoms and problems, and thus the two should not be confused. Types of learning disorders include reading (dyslexia), arithmetic (dyscalculia) and writing (dysgraphia) (Childhood Voyages in Development, 2012).

The unknown factor is the disorder that affects the brain's ability to receive and process information. This disorder can make it problematic for a person to learn as quickly or in the same way as someone who is not affected by a learning disability. Some interventions can be quite simplistic, while others are intricate and complex. Teachers, parents, and schools can create plans together that tailor intervention and accommodations to aid the individuals in successfully becoming independent learners. A multi-disciplinary team frequently helps to design the intervention and to coordinate the execution of the intervention with teachers and parents (Reeder, et al 2011). This team frequently includes school psychologists, special educators, speech therapists (pathologists), occupational therapists, psychologists, ESL teachers, literacy coaches, and/or reading specialists (Dougherty & Katherine, 2016).

#### **Causes of Specific Learning Disability**

The causes for learning disabilities are not well understood, and sometimes there is no apparent cause for a learning disability. However, some causes of neurological impairments could be attributable to learning disabilities which include:

### ***Heredity and genetics***

Kids whose mother must have had less than 12 years of school are more likely to have a reading disability. Some children have spontaneous mutations (i.e. not present in either parent) which can cause developmental disorders including learning disabilities. One study (McRae, et, al, 2017) estimated that about one in 300 children had such spontaneous mutations, for example a fault in the CDK13 gene which is associated with learning and communication difficulties in the children affected (*Walsh, Fergus, 2017*).

**Problems during pregnancy and birth:** A learning disability can result from anomalies in the developing brain, illness or injury. Risk factors are fetal exposure to alcohol or drugs and low birth weight (3 pounds or less). These children are more likely to develop a disability in math or reading. Children who are born prematurely, late, have a longer labor than usual, or have trouble receiving oxygen are more likely to develop a learning disability (Johnson et al 2017).

**Accidents after birth:** Learning disabilities can also be caused by head injuries, malnutrition, or by toxic exposure (such as heavy metals or pesticides).

### **Identifying Children with Specific Learning Disability**

A child suspected of having a specific learning disability must be evaluated by a multi-disciplinary team. The team should include:

1. The child's regular classroom teacher
2. At least one person, other than the regular teacher, qualified to conduct diagnostic examination of children.
3. One team member, other than the regular teacher, to observe the child's academic performance in the regular classroom.

When the evaluation is conducted, the team should compile a written report of the evaluation, which includes a statement of:

1. Whether the child has a specific learning disability and the basis for the determination.
2. The behavior noted during the observation and its relationship to the child's academic functioning.
3. Relevant medical findings.
4. Whether there is a severe discrepancy between achievement and academic ability.
5. Whether there is any effect of environmental or cultural disadvantage.

The child is sure to have a specific learning disability if he has a severe discrepancy between achievement and ability in one or more of these areas:

1. Oral language expression
2. Listening and comprehension
3. Written expression
4. Basic reading skill
5. Reading comprehension

6. Mathematics calculation
7. Mathematics reasoning

At school these children exhibit impulsive and nervous behaviours. They have a short attention span, and have problems in collecting, sorting, storing, and expressing information. Yet, given an appropriate education and conducive environment, they may be able to learn at school as normal peers. The Nigerian Society for Handicapped Children, Department of Pediatrics, Lagos University Teaching Hospital, and the Special Education Centre, Otop Otop, Calabar, Cross River State, offer useful help on this kind of disability.

### **Counseling Services to Parent and Classroom Teachers of Learning Disabled Children**

The “halo” effect of preconceived notions about learning disability children and responses set by parents and teachers alike is a major part of the problem of handling problem behaviours in learning disability children. Anyone who has ever faced parents with the fact that their child has a diagnosed, or even suspected, specific learning disability, has seen diagnosing as a tedious work. To some, the diagnosis is like a death sentence passed on the criminal. The way in which they talk about it or request more information, and the expectations they had about the child all serves to influence, direct and sometimes rigidly channel their behaviours in directions which are not necessarily helpful.

For others, especially the teachers, it is a challenge for setting aside lesser goals in favour of a total attack on the deficit area. Some parents actively battle against inclination to reject their children under circumstances while others experience waves of guilt. Very often, signs or diagnosis of learning disabilities in a child is a stress, even when well handled, increases the probability of anxiety and stress in the child which in turn increases the likelihood of behavior problems occurring (through modeling on stress reactions if for no other reason) and sometimes decreases the ease with which such problems may be relieved.

Parents faced with these problems sometimes ask, “What could we have done to have this prevented?” Implicit in such a question is the double factor of unexpressed guilt or hostility and worry over potential problems of a similar nature for other children in the family. “Will her little brother have the same problems?” is another very common question provoked by their worries and concerns.

According to Idiong (2005), parents need effective counseling services. A guidance counselor, who is trained in a psychological perspective, should allay the fears of parents. The emotional health of the learning disabled child should be the primary focus of his concern. In addition to serving the child with learning disabilities by directly counseling him or her, many guidance counselors work indirectly by offering management suggestions to classroom teachers. Problems of a personal nature which are directly attributable to the home situation are always explored by the guidance counselor. They can initiate meetings of parent groups, share or discuss common problems as parents of learning disabled children.

### **Intervention Programmes in Specific Academic Areas**

Intervention strategies can be applied in some of these specific academic areas including:

- a) Language
- b) Reading
- c) Arithmetic

**a. The Learning Disabled (LD) Child and Language Problems**

Some LD child may have difficulties with language development involving skills in listening, speaking, reading and writing.. Most of the language problems had been discussed earlier, others include auditory, receptive language and expressive language.

***Auditory Receptive Language***

Auditory receptive language is the ability to understand verbal language. Children, with difficulties in this area usually hear what is said but they are unable to understand its meaning. The problem is not hearing what is said but processing it. For example, a child was asked during a diagnostic evaluation to describe his mother. The examiner asked the child, 'what is your mother like?' the child replied 'Rice and Stew'. The child understood the question to mean 'What does your mother like?' in the child's intervention programme he was taught the differences between "is" and "does". Other examples were included in the remedial programme.

Another symptom of auditory receptive language or auditory imperceptions is "auditory span", which refers to the ability to remember what we hear. Children who have impaired auditory span recall only a minimal number of words in a spoken message. In reading, this may show up as an inability to remember the sequence of sounds within a word. Wilkins (1969) research indicated that there are considerable interrelationships among auditory discrimination, auditory spans. This suggests that children experiencing severe difficulty with auditory span would not make much progress with a reading approach emphasizing letter-sound relationship (that is phonics) unless they are given intensive auditory training. Wilkin also observed that variability in auditory perception is present not only among children with learning disabilities but also among normal children. Tests can help to identify children who need to be closely observed in various language settings (Detheridge, 1997).

**b. Reading Disabilities**

Knowledge of the many possible causes of reading failure will aid the teacher in collecting data on a student's ability to read. Some of these causes may include poor family background which of course is outside the teacher's domain of responsibility. On the other hand, knowledge that a child is not making progress in reading because of an inability to learn by an auditory approach is extremely helpful to the teacher and within his influence.

The teachers should divide the class into groups, according to their strengths and weaknesses and should focus his programme on individuals according to need. The teacher should read informally with each child, encourage children to talk about themselves, school, interest and their attitude towards reading.

**Other Types of Reading Problems*****Visual Discrimination:***

Children with reading difficulties are unable to discriminate visually among various letters or words. Their difficulties may be with letters that look alike, such as h-n, l-j, v-w.

The concepts to be learned have nearly infinite numbers of examples. In a programme on "rhyming words", the concept of final letters being alike might be presented by models as follows:

**The teacher says:** “we have to make pairs of words in which the last letters are the same-like these: cot –cut, another would be: not- pot.

Cot-cut, hot –pot, boy-toy, are all models of the response the students will have to recognize or produce when he rhymes words according to final letters. The words would be left as model for the students to use when he is required to identify or say pairs of words like the models.

### **c. Arithmetic Disabilities**

Children with learning disabilities exhibit a number of different arithmetic disturbances. Their difficulties are in the areas of:

- (a) Shaped discrimination
- (b) Size discrimination
- (c) Sets and number
- (d) Counting
- (e) Place values
- (f) Computation skills

Some children have specific problems with the fundamental arithmetic processes of addition, subtraction, multiplication and division.

- (g) Measurement
- (h) Monetary values
- (i) Time telling
- (j) Problem solving skills

### **Diagnosis of Learning Disabilities**

Some specific learning deficits may be identified by regular classroom teachers. Repeating each step over until success is achieved.

### **Further Management Practices**



Spell checkers are one tool for managing learning disabilities (Bausch & Hasselbrig, 2004). Others are:

- ***Mastery model:***

- Learners work at their own level of mastery.
- Practice
- Gain fundamental skills before moving onto the next level

**Note:** this approach is most likely to be used with adult learners or outside the mainstream school system.

- ***Direct instruction:***

- Emphasizes carefully planned lessons for small learning increments
- Scripted lesson plans
- Rapid-paced interaction between teacher and students
- Correcting mistakes immediately
- Achievement-based grouping
- Frequent progress assessments

- ***Classroom adjustments:***

- Special seating arrangement
- Alternative or modified assignments
- Modified testing procedures
- Quiet environment

- ***Special equipment:***

- Word processors with spell checkers and dictionaries
- Text-to-speech and speech-to-text programmes

- Talking calculators
  - Books on tape
  - Computer-based activities
  - *Classroom assistants Note-takers (Dorman, 1998)*
  - Readers
  - Proofreaders
  - Scribes
- **Special education:**
    - Prescribed hours in a resource room
    - Placement in a resource room
    - Enrollment in a special school for learning disabled students
    - Individual education plan (IEP)
    - Educational therapy

Early remediation can greatly reduce the number of children meeting diagnostic criteria for learning disabilities. Some interventions can be quite simplistic, while others are intricate and complex. Current technologies may require student training to be effective classroom supports. Teachers, parents, and schools can create plans together that tailor intervention and accommodations to aid the individuals in successfully becoming independent learners. A multi-disciplinary team frequently helps to design the intervention and to coordinate the execution of the intervention with teachers and parents. This team frequently includes school psychologists, special educators, speech therapists (pathologists), occupational therapists, psychologists, ESL teachers, literacy coaches, and/or reading specialists (Dougherty, Katherine, 2016).

### **Conclusion**

1. The causes for learning disabilities are not well understood, and sometimes there is no apparent cause for a learning disability. However, some causes of neurological impairments could be attributable to learning disabilities which include: heredity and genetics, problems during pregnancy and birth, and accidents after birth.
2. Regular classroom teachers should have information about the child's evaluation, the medicine he may be taking and any other special instructions and reinforcements that may motivate the child to learn.
3. Current technologies may require student training to be effective classroom supports.
4. Trained counselors are essential for the learning disabled. Guidance counselors also serve as the liaison between the home and the school.

### **Recommendations**

1. Teachers should divide the class into groups, according to their strengths and weaknesses and should focus his programme on individuals according to need. The

teacher should read informally with each child, encourage children to talk about themselves, school, interest and their attitude towards reading.

2. Parents of learning disabled children need effective counseling services. A guidance counselor, who is trained in a psychological perspective, should allay the fears of parents. The emotional health of the learning-disabled child should be the primary focus of his concern. In addition to serving the child with learning disabilities by directly counseling him or her, many guidance counselors work indirectly by offering management suggestions to classroom teachers.
3. Remedial programmes on learning disabled children should be planned after careful diagnosis of the deficit areas.
4. Parents should be advised on how to handle simple educational task-related behavioural terms in order to avoid repeated failures by their children.

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