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Unlocking Learning Potential: Inclusive Approaches to Support Academic Success in Students with Dyslexia

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Abstract:

The primary areas of reading, writing, spelling, and language comprehension are all impacted by dyslexia, a neurological learning disorder that lasts a lifetime. Though environmental and traumatic factors may play a role, it is often inherited and not a visual or auditory problem. Instead of using the left hemisphere of the brain to absorb language, dyslexics usually use the right hemisphere. Problems include phonics, spontaneous reading, and letter recognition. Learning results can be greatly improved by early identification and specific teaching techniques. Despite these difficulties, research shows that because dyslexics have a dominant right brain, they frequently have higher levels of creativity, imagination, and emotional intelligence. Consequently, dyslexia should not be seen as a weakness but rather as a special method of seeing the world, which might occasionally turn out to be a hidden asset.

Key words: Dyslexia, Traumatic dyslexia, Cognition, Imaginative

1. Introduction:

Dyslexia is a learning disability, and it is a brain-based condition. People with dyslexia face difficulty in reading, writing, spelling, and understanding any foreign language easily. It is not a visual problem. It is a lifelong issue, and it runs in families. If any

of our family members or siblings have it, chances are that we may develop it. It has nothing to do with intelligence; rather, they may be smarter or more creative than anyone else. It depends on the structure and function of the brain. Signs and symptoms may surface even before the children start learning. It is a complicated process to recognize individual sounds and words. Most children can pronounce easy words like dad, but a child with dyslexia may not hear the sound. Children with dyslexia may have problems with basic language skills, which is called phonemic awareness. It may be simply rhyming or isolating a sound or word. It makes it difficult for them to match the sound with the word. Like how to pronounce the sound S or H. It is called decoding. We know we can help a lot for these children. The important thing is to check the specialized reading instructions. A well-known approach is called Orton-Gill Ingham. It helps children learn to break words down into their component sounds, match the sounds of the latter, and then land these sounds together. A reading program based on Orton-Gill Ingham used multi-sensory techniques. So, children may trace letters in sound or say letters in sound and clap as syllables as words. These methods are proven to be effective. There's also other software, like audio boxes, text-to-speech software, and reading apps. It helps children with dyslexia. We can help children at home by reading aloud every day. Choosing books of a child's interest can develop a passion for reading, and choosing rhymes can also be added. It helps children build early reading skills. Even though children don't develop dyslexia, they can still become skilled and strong learners.

Early detection is very helpful, and we can improve ourselves in most of the cases. It has been influenced by both environmental and hereditary factors. There are three types of dyslexia: primary, secondary, and traumatic. We cannot get rid of primary dyslexia. It will continue lifelong. Secondary dyslexia is related to the neurological development of a baby. If the baby faces any birth defect or neurological developmental issue, he may develop dyslexia. Traumatic dyslexia takes place after an accident, a reaction to drugs, or any other childhood trauma.

Dyslexia is nothing but a certain shift in brain activity. When most of the normal people use the left side of the brain's Broca's area in the frontal lobe for cognition, thinking, and memory, dyslexics use the right part of the brain. An MRI, CT scan, and ECG report of a dyslexic person show a

noticeable difference in brain activity. A person with dyslexia finds it difficult to recognize a few alphabets and phonics and read spontaneously. They may face difficulty with a few words or sounds as well. We can improve their reading, spelling, and other abilities stronger with vigorous practices. We can make them read aloud and write after each learning stage. It will make them more passionate about their reading skills and encourage them to practice them again and again. In educational institutions, we can also plan a specialized program to teach dyslexic students. Research evidence shows that dyslexic people are more creative than normal people. They are right-hand brain users, and they do possess these qualities, like being more creative, intuitive, imaginative, and emotional. So dyslexia is not a curse. Sometimes it works as a blessing in disguise. We must adapt to the situation and try to cope with it with an optimistic outlook on life.

Dyslexia is a neurodevelopmental condition marked by persistent difficulties in reading, writing, and spelling, despite adequate intelligence and instruction. It affects approximately 5–10% of the global population (Peterson & Pennington, 2015). Traditionally conceptualized through a deficit-based lens, contemporary research increasingly highlights the distinctive cognitive profiles and potential strengths of individuals with dyslexia, including heightened creativity, innovative problem-solving, and advanced spatial reasoning (Rappolt-Schlichtmann et al., 2018). Nonetheless, the educational and social experiences of dyslexic individuals continue to be shaped by stigma, insufficient support, and systemic barriers that compromise academic achievement and personal development (Pino & Mortari, 2014). This paper synthesizes findings from a range of empirical studies to examine the factors influencing success and adversity among dyslexic individuals across educational levels and cultural contexts. Particular attention is given to the role of support systems, coping strategies, and institutional accommodations.

Research consistently shows that early identification and targeted intervention are critical determinants of long-term outcomes for dyslexic learners (Pitt & Soni, 2018). However, delayed diagnosis—especially in under-resourced educational systems—often results in prolonged academic and emotional difficulties (Leseyane et al., 2018). For instance, Delany (2017) illustrates how parental advocacy, particularly by mothers,

can mitigate institutional shortcomings and cultivate resilience in children with dyslexia. Likewise, Avlidou (2015), in her study of Greek university students, highlights the significance of self-developed compensatory strategies and calls for higher education institutions to provide both emotional and academic scaffolding tailored to the needs of dyslexic learners.

The educational environment plays a pivotal role in shaping the experiences of dyslexic students. While targeted programs—such as the Success and Dyslexia intervention (Firth et al., 2012)—demonstrate the potential to enhance self-efficacy and adaptive coping, mainstream education systems frequently fall short in supporting neurodiverse learners. This inadequacy can expose students to peer bullying and teacher bias (Leseyane et al., 2018). Moreover, metaphor-based research (In et al., 2013) sheds light on the emotional and cognitive landscapes of dyslexic students, reinforcing the need for empathetic, student-centered pedagogical approaches.

At the postsecondary level, support for dyslexic students remains inconsistent. While some institutions provide effective assistive technologies and accommodations, others present barriers to disclosure due to persistent stigma (Pino & Mortari, 2014). Pitt and Soni (2017/18) argue that beyond formal accommodation, fostering self-advocacy and a positive sense of dyslexic identity is essential for academic success in higher education. In contexts where formal support structures are limited—such as in Mexico—Sudek and Encinas (2019) emphasize the importance of culturally responsive, multisensory instructional strategies.

Emerging strengths-based paradigms challenge deficit-oriented models and advocate for educational practices that recognize and cultivate the unique abilities of dyslexic individuals (Rappolt-Schlichtmann et al., 2018). Universal Design for Learning (UDL) offers a promising framework for achieving inclusive education by accommodating diverse learning profiles. Collectively, these studies underscore the imperative for systemic reforms, comprehensive teacher training, and inclusive policy development. By synthesizing this body of research, the present discussion aims to inform educators, policymakers, and families about evidence-based strategies for supporting dyslexic learners in varied educational and cultural contexts.

2. Research Objectives:

(i) To study various academic challenges of dyslexia students in mainstream schools.

(ii) To study various strategies for empowering dyslexia students in mainstream schools for their better academic performance.

3. Research Questions:

(i) What are the strengths and weaknesses of dyslexia students.

(ii) What are the various challenges that hinder the academic performance of dyslexia students?

4. Research Discussion:

4.1.What causes dyslexia?

Every individual is unique. Dyslexia is the outcome of individual differences in the parts of the brain that allow us to read. An MRI of a dyslexia patient shows that they mostly use the different parts of the brain to read or learn. While normal readers use the left brain's area to read and think, dyslexic people use the right part of the brain.

Dyslexia is believed to be caused by both environmental and genetic factors. Generally, it runs in families, and if anyone has this tendency, we can toss the other person to develop it, knowingly or unknowingly. Dyslexia seems to be connected to certain genes that will decide how it will affect how the brain processes reading and language. It may begin in adulthood as a result, a traumatic brain injury, dementia or stroke.

4.2 Types of Dyslexia:

There are three types of dyslexia:

1) Primary dyslexia: Primary dyslexia is the most common form and is passed along through genes. This kind of dyslexia doesn't change with age. It stays the same whole life and never goes away.

2) Secondary dyslexia: Secondary or developmental dyslexia is caused by brain development and starts in the early stages of pregnancy. It may cause impaired neurological abilities in words, recognition, and spelling. This diminishes as the child matures.

3) Traumatic dyslexia: Traumatic dyslexia usually results from an injury to the area of the brain that controls reading and writing. It may be caused by an infection or tumor present in that particular area of the brain. In this case, chances are that it will affect memory as well as other parts of the brain.

4.3. Other learning disabilities impaired by dyslexia:

Symptoms of dyslexia:

Dyslexia symptoms may be displayed at an early age, but they are normally present in children. Symptoms may be hard to recognize before a child enters school, but there are some clues that may include a problem. This may include learning new words slowly, taking longer to learn how to speak, and finding rhyming challenging. Inability to distinguish between different word sounds, such as reversing sounds in words or confusing words that sound alike. The symptoms may become apparent once the child is in school and may include difficulty spelling, avoidance of activities that involve reading, and spending a long time to complete reading or writing-related tasks. Reading below the expected level of age, difficulty copying from a book or a board, difficulty remembering or understanding what he or she hears, inability to pronounce familiar words, difficulty finding the actual words to express thoughts.

Dyslexia symptoms may be the same for teens and adults as those in children. Other symptoms may include:

1) Facing difficulty summarizing a story
2) Difficulty memorizing
3) Difficulty reading aloud
4) Difficulty learning a foreign language
5) Trouble understanding idioms.

4.4. Fascinating Hidden traits about dyslexia:

A few hidden facts about dyslexia may surprise us. We are all neutralized by the dark side of dyslexia and take it as a curse in our life. However, it has many bright sides as well. It is just an issue with learning abilities like reading, writing, spelling, and grasping a new language easily. It happens because of a shift in activities in the brain. Like when all of us use our left brain mostly to interpret things, read, write, or reason, dyslexic people end up using their right brain in most cases. As a result, sometimes things may appear to be reversed for them. A baby doesn't know anything about the external world. They use both brains to interpret external stimuli. However, as soon as they grow, they learn how to use and which part of the brain to use to interpret any stimuli in a logical way to get a better response in an appropriate way. So a dyslexic person can also train their brain in a proper way and lead a normal life. We can point out a few facts about dyslexia:

1 W. Pringle Morgan in Sussex, England, was the first person to use the term dyslexia in 1986. He wrote about Percy F, a 14-year-old boy who was very bright and intelligent, prompt in games, and quite competitive. He was struggling to read thoroughly and was having difficulty comprehending easily.

2 The word dyslexia has been derived from a Greek word. ‘’Dys’’ means poor or inadequate, and ‘’lexis’’ means words or language. It indicates difficulty in learning languages or a learning disability.

3 Dyslexia may vary from mild to severe. However, we can train our brain and manage it.

4 Dyslexia doesn’t mean it is a total disaster to learn a language. Rather, it is more specific and affects a few parts of it, like the phonological unit of the brain. Dyslexic people face difficulty pronounced words properly, and sometimes they miss out on a few letters and end up with a different sound, like they may not hear the cat sound and end up with at sound.

5 Most renowned figures like Albert Einstein, Bell, Thomas Edison, Benjamin Franklin, and John Lennon ended up with dyslexia.

6 Since in dyslexia, brain activities take place in a reverse way, it has the greatest advantage for dyslexics. They excel in solving puzzles. They use their right brain in such a way that they can have a better idea about spatial relationships. They can be good writers, artists, and poets, and they develop wonderful abstract thinking.

4.5. Diagnosis and Treatment:

Dyslexia is a difficult disorder to diagnose. There are many factors that the health care practitioner must review to diagnose the disorder. This may include:

1) Family history
2) Early development
3) Questionnaires to identify reading and language abilities
4) Neurological test
5) Psychological testing
6) Oral language skills

4.6. Treatments:

Early diagnosis and interventions are important. Early extra assistance can help kids develop their reading abilities to the point where they can do well in school. Without assistance from an early age,

children may struggle more to acquire reading abilities.

Specific educational techniques are required to treat dyslexia. Psychological testing will help the teacher develop a better-targeted program for the child. Teachers may use techniques that involve hearing, touching, and vision to improve reading skills. Guidance and support can help minimize any impact on self-esteem.

4.7. How to deal with dyslexic students in educational institutions:

1) Teachers can use the Orton-Gill-Ingham multi-sensory technique to blend the words, assist the children to pronounce the latters as components, and deliver it in an appropriate way.
2) Assist students in recognizing unfamiliar words.
3) Teachers can make the students read aloud so that they can rectify the problems of a dyslexic student.
4) Teaching materials can be more attractive with pictures and big headings so that students can recognize and memorize them.
5) Positive reinforcement does play an important role in encouraging a dyslexic student.
6) Writing is a wonderful technique to memorize quickly, not only for dyslexic students but for all.
7) Teachers can add more rhyming words to make the learning process more easy and fascinating.
8) Since every individual is unique, teachers can map out how to deal with a particular dyslexic student.
9) Rehearsing every day before starting a new topic is another effective technique to memorize.
10) Providing a checklist so that students can mark their progress.
11) Meditation and physical exercise will also be very beneficial. It will help the students refresh and increase their concentration.

5. **Systematic and designed program for dyslexics for better outcome:**

    1) Research evidence has shown that direct, systematic phonics can make things easy for dyslexics.
    2) Orton Gill Ingham multi-sensory technique is more effective to address the issues dyslexic people face in learning language, reading, or spelling.
    3) Dyslexic students score high when they get additional time and the chance to take the test orally.
    4) When the learning program is more easy and broadcasted in such a way that it can support the thinking and grasping power of a dyslexic, we can expect a better result.
    5) Vigorous practice and the split-up method of spelling also work fine to improve the passion for learning difficult things.

Since dyslexia is a complex neurological disorder, it won't go away within one day. We have to assist and support people to adapt to this situation. It is a lifelong disorder, and when people with dyslexia get all kinds of support at home, school, and outside, they can lead a normal life. Sometimes people do not understand at all, and they get diagnosed later in life. People with dyslexia possess a normal intelligent of intelligence, and sometimes they are very creative. It is because when their frontal lobe, which is responsible for cognition, memory, and thinking, is not working properly, other parts of the brain are active for them. It reflects in their creative work. This is the reason normal people cannot imagine; a dyslexic person can go beyond that, and all of this happens because of shifting brain activity.

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