

Dyslexia and Foreign Language Learning

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Abstract : This study investigates the concept of dyslexia, the nature of problems and challenges that dyslexic student encounter during their studies, possible opportunities and the strategies how to support dyslexic language learners. Through conducting online research and review, it has been revealed that dyslexia is not a stigma nor a severe illness, though it was believed so, but it disclosed how one's brain can work differently and creatively than others'. Educators and parents have important roles in helping and supporting dyslexic students. Teachers should keep in mind that their helpful encouragement of dyslexic students in their learning process can support them in managing their study and learning habits.

Key words: dyslexia, creativity, language disability, multi-sensory approach and learning

I. INTRODUCTION

Not all learners learn exactly the same way. Every student is unique and has diverse talents and gifts. Learners have various learning abilities, preferences, interests, needs, and difficulties in one single language classroom. There are some students who struggle in their academic career who may have problems in reading, writing and speaking. These students might be deemed lazy or incompetent learners and it is assumed that this condition is due to a lack of intelligence or their carelessness. However, it is noteworthy that these learners need a little more time, effort and special care and attention from their educators and institutions because they are dyslexic learners.

The term dyslexia comes from Greek “dys” meaning impaired function or ‘difficulty’ and “lexia” meaning words or language (Stellpflug, 2008). As stated by Gobbo (2020), dyslexia was coined by a German doctor of ophthalmology Rudolf Berlin in 1887. According to the Cambridge Learner's Dictionary, “Dyslexia is a condition affecting the brain that makes it difficult for one to read or write.” Also, dyslexia is a kind of “language-based learning disability” which affects processing one or more aspects of a language in dyslexics (Knudsen, 2012). Dyslexia is a particular learning difficulty that causes dyslexics to encounter problems in pronunciation, reading, writing and grammar use (Stamboltzi & Tsiftopoulou, 2017). In a recent study by Habib (2021), dyslexia is defined as one of the common learning and neurological disorders causing impaired reading and low academic success and achievement.

Being dyslexic does not only mean experiencing reading, writing, spelling, communication, and math problems, but it has some positive sides as well. Many studies have shown the ways a dyslexic brain processes instructions and details differs

from a non-dyslexic student. Although these differences cause problems, they also make one intellectually gifted, creative and curious. A dyslexic person can be a good problem solver, a great imaginator, an amazing storyteller and a fabulous maker and inventor. (British Dyslexia Association, 2018).

There have been many real stories of dyslexic learners around the world who have been physically punished, prejudiced, deprived, humiliated, and labeled (as dumb, tardy and stupid). Not all educators are sufficiently prepared to assist dyslexic students, and therefore, the global understanding of dyslexia must be cultivated among educators, parents and peers, so that no student experiences insults from people around them anymore (Matter, White, Youman, 2020). Thus, the purpose of the current study is to delve into the concept of dyslexia and scrutinize some strategies to help this category of learners while learning a foreign language.

II. CAUSES OF DYSLEXIA

There are differing viewpoints regarding what causes dyslexia, and the exact cause is still unclear (Norton, Beach, and Gabrieli, 2014). Humans have two processes of conceptual interpretation. The first one is verbal, and the second is nonverbal. Verbal conceptual interpretation deals with oral and sound, while the nonverbal is concerned with mental images of thoughts and ideas. Since dyslexic learners learn more through images and pictures, their conceptualization is non-verbal. Therefore, it is easy for them to learn by seeing but every word cannot be visualized, which is one of the reasons why they would face difficulty while reading. When their minds delay producing images of words, they are not able to read properly (Davis & Braun, 2010).

As stated in many pictorial and imagery studies, not only does a dyslexic learner's brain work and functions differently compared to a non-dyslexic learner but their brain structure is also distinct. Every brain consists of two hemispheres (left and right hemisphere) each with its own functions. For instance, the left hemisphere is responsible for acquiring and learning languages, while the right hemisphere is responsible for problem solving, innovation and artistry (Goodwin and Thomson, 2006). One of the major roots of dyslexia is that the dyslexic brain cannot save the information in the appropriate hemisphere. In dyslexics, right hemisphere is “dominant” and the left hemisphere is “subdominant”. The information needs to be collected in the dominant hemisphere, but it happens vice versa (Stellpflug, 2008).

Two brain areas (namely the parietal and occipital areas) are considered to be responsible for reading fluency and word analysis. Based on imaging techniques (especially brain scanning technique in several studies), it has been confirmed that there is less activity in the parietal and occipital areas of a dyslexic brain than a non-dyslexic brain. In addition, a human brain consists of white and gray matters, each with a particular function. Studies have found that a dyslexic learner has less white and gray matter in the left parietal area which indicates anatomical difference (Habib, 2021).

Moreover, dyslexia is also related to genetics. Children who are born into a family with history of dyslexia will possibly be dyslexic (Lindgrén, 2012). Children born of two parents with dyslexia are more at risk for dyslexia (Michail, 2010).

III. SYMPTOMS AND FEATURES OF DYSLEXIA

Not all dyslexic learners experience the same symptoms; they can vary based on the intensity level of the dyslexia, time and individual differences (Knudsen, 2012). The following are some of the common features and traits.

It is not easy for dyslexics to memorize times tables, days of the week, months of the year and differentiate left and right. In addition, retrieving the right word is difficult for them and it takes a bit more time to recall. Furthermore, it is hard for dyslexics to manage their time and be organized (British Dyslexia Association, 2018; Knudsen, 2012). As stated by Kalsoom, Mujahid and Zulfqar (2020), due to poor reading skill and mispronunciation of words, dyslexic learners feel embarrassed while reading aloud in the classroom and they even feel that letters of words are moving while reading a text. They may need to read a passage several times to figure it out and they need more time to complete a task compared to their peers (British Dyslexia Association, 2018).

While writing letters they may confuse symmetrical letters like “b” and “d”, “p” and “q” and similar letters like “j” and “g”, “n” and “m”, and “v” and “w”. Additionally, most often these students’ handwriting is awkward (Habib, 2021). Moreover, dyslexic students can verbally explain in a good manner but when it comes to writing those explanations, they do not write the identical thought correctly. The way that they organize their ideas, spelling, choice of words, length of sentences, and word order may be problematic and they may exhibit several of these in their handwriting. Sometimes dyslexics cannot even read their own handwriting because it is messy, disorganized, and poorly spaced. It is also argued that listening and writing at the same time is very challenging for dyslexic learners. Also, they do not trust their own abilities, have low self-esteem and experience fear of failure (Goodwin and Thomson, 2006; Kalsoom, Mujahid and Zulfqar, 2020).

On the other hand, curiosity and inquisitiveness is one of the positive features of dyslexic learners. For instance, if a dyslexic hears an outside noise or if a student throws something from any location of class, the dyslexic student feels that something has happened, s/he wants to know what

that was, and tries to find it out. They can easily learn using their senses. They have abilities to tackle problems. They can understand how things are related and combined. They have good 3-dimensional ability. (Davis and Braun, 2010). Winston Churchill, the British leader; Albert Einstein, one of great scientist of his time; Walter Elias Disney, the writer, producer, entrepreneur and founder of the Walt Disney Company; Thomas Edison, the inventor and businessman; Jamie Oliver, a talented chef; Pablo Picasso, the well-known painter; Sally Gardner, the marvelous author; Johnny Depp, the versatile actor; Dr. Maggie Aderin Pocock, the skilled space scientist, and Steve Jobs, cofounder of Apple Incorporation are some of the most famous dyslexics who have overcome the challenges, become incredible people, and served the humanity around the world.

Dyslexic students are very creative; however, dyslexia does not make every dyslexic a genius. Kapoula and Vernet (2016) using the Torrance Test of Creative Thinking (TTCT) affirmed that dyslexic students are more creative than non-dyslexics. They stressed that school and “educational approach” had an effect on the creativity of these dyslexic students; the adaptive educational environment which meets the needs of dyslexic learners can develop their creativity.

IV. DYSLEXIA AND LANGUAGE LEARNING

Based on the discussions above, dyslexia is a type of learning disability that not only involves difficulty with words and spelling but also reading and writing. Rose (2009) defines dyslexia as a learning difficulty that affects the skills involved in accurate and fluent word spelling and reading. In this case, language learners suffer the most from this disability. Therefore, the effects of dyslexia cannot be neglected in foreign language learning.

Learning a foreign language requires an understanding of how one’s native language works so that then that knowledge is transferred to the new language. Dyslexic learners lack this ability and the understanding of their native language; therefore, they encounter difficulties when learning a foreign language. As a result, foreign language learning causes more problems for learners with dyslexia (Sucena, Castro and Seymour, 2009).

Dealing with dyslexia in learning a foreign language seems a challenge for most teachers and parents with dyslexic children. Arries (1999) outlines some methods and theories commonly known and used when teaching dyslexic students. Among these theories, it has not been proven which one is the most successful and will work the best for dyslexic students.

Suggestopedia or Total Physical Response (TPR) suggested by Dr. Asher (1960) is considered to work best for dyslexic students since dyslexic students learn best when they combine language studies with physical movement, such as art or music. While on the other hand, it is believed that dyslexic students are not given the chance and needed instruction to learn the phonetics and grammar of a foreign language by using a “whole language” approach. Mabbott and

Strohl (1992), professors in second language acquisition, believe that for dyslexic students, it is not imperative to focus so much on the grammar of a language but instead use their communicative approach, where the focus is more on speaking than reading or writing. This is more based on Krashen and Terrell's (1983) theories where it is believed that language acquisition is hindered by a grammar-based syllabus, defining acquisition discrete from learning, which is the conscious process of learning language structures and grammatical rules rather than the subconscious acquisition of the language.

However, it is also believed that the communicative approach has negative effects on dyslexic students' success in foreign language learning since in this approach the focus is more on speaking than other aspects of the language, such as grammatical rules as mentioned before. Ganschow and Sparks (1995) therefore believe that the Multi-Sensory Learning Approach (MSL) is the best way to help dyslexic students at different levels to learn a foreign language. This approach, which is one of the first programs created for dyslexic students, uses a mixture of senses to teach foreign language for dyslexic students and is based on the Orton-Gillingham (1966) approach.

MSL is one of the distinguished methods shown to be effective when teaching dyslexic students their native language as well as foreign language. MSL suggests that dyslexic students have a greater chance of accessing the curriculum if they use all their senses at the same time when learning a language, meaning that they should use their strongest senses and at the same time strengthen their weaknesses. Based on the Multi-Sensory Approach, the best way to help dyslexic students in the language learning process is to systematically build up associations between sounds and their representations in writing. Orton (1966) proposes that teachers must find the smallest unit of the language that the dyslexic learner can hold and gradually reconstruct the series or sequence from the smallest unit.

MSL includes a variety of strategies all based on the understating that the combination of senses in learning a language is vital. Specific strategies may include: Noticing and feeling the location of their tongue for pronouncing a particular phoneme, dividing words in different graphemes so that the students first see then say and write concurrently, color coding the vowels to notice the distinction, dividing the words into syllables, using vocabularies in context using flash cards for practicing the relationship between sounds and letters, explaining the similarities and differences of native and foreign languages using metacognitive strategies, using vocabulary in context by including images and pictures, acting out vocabulary and commonly used phrases through body movements and listening to audio books and audio CDs for reading assignments (Sparks and Miller 2000).

Even though the MSL approach has been proven useful for many dyslexic students, it is important to know that dyslexic students need extra help and support during their

class work and foreign language learning. Dyslexia not only affects students' ability to learn a language but also their appropriate use of study skills. Therefore, it is important that this fact be kept in mind when teaching a student with dyslexia. Arries (1999) outlines the following strategies pertaining to dyslexic students' study skills:

1. Dyslexic students need more explicit instructions especially for assignments given in written form.
2. Longer assignments should be divided into smaller steps so that it is easy for a dyslexic student to manage his/her time and plan.
3. To read and comprehend a text, reading assignments should be given a day before other students to a dyslexic student so that he/she has enough time for reading.
4. Tests should have the same structure each time for dyslexic students since it lessens their anxiety and makes clear the expectations of what to study.
5. The tests should provide examples so they know how they are expected to answer. This is helpful for dyslexic students who have difficulty understanding the instructions.
6. More time should be given to dyslexic students on tests since they take more time to process the information.
7. If possible, tests should be given separate to dyslexic students from the class to lessen their anxiety and not be distracted by others.

V. CONCLUSION

From the discussions it can be concluded that dyslexia is a condition affecting the brain that causes neurological and learning disorders leading to low academic success and achievement. Dyslexics commonly have difficulty in reading and writing. Therefore, dyslexia is defined as a "language-based learning disability" which affects processing one or more aspects of a language, in particular pronunciation, reading, writing and grammar use. Conceptual interpretation, brain structures and genetics are studied as the causes of dyslexia; however, there is still no consensus on what causes dyslexia. The symptoms are not the same in all dyslexic learners. They vary based on time, individual differences and level of dyslexia. Different language approaches such as Total Physical Response (TPR), the Communicative Approach and the Multi-Sensory Approach (MSL) have been found to be helpful for dyslexic learners. We conclude that educators and parents must be trained on the nature of dyslexia, the strategies to deal with dyslexics and must be committed to support the creative talents of dyslexics.

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