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EXISTENCE OF DYSLEXIA CONSIDERING THE STRUCTURE OF DIFFERENT LANGUAGES

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Abstract:
The existence of dyslexia is still an active debate. This discussion is mainly based on whether Dyslexia is created by unsuccessful teachers due to using the wrong teaching methods and comparing some countries` high literacy rate and whether their own countries ignoring other relevant dimensions in the language structures. Unlike mainstream views, many scholars state that dyslexia is a learning disorder (Elliott and Grigorenko, 2014, Rose, 2009) which negatively affects children`s reading, writing, and spelling improvement. Gabor (2010) stated that there are many indicators of dyslexia, such as decoding, comprehension, spelling, concentration, auditory, sequencing, motor skills and organization problems. Further, it is argued that spelling and reading comprehension are the main identifiers and these points are the most significant parts of dyslexia. This paper aims to reveal dyslexia is not a `fiction` and the high literacy rate in a different language structure do not mean whether dyslexia exists.

Keywords: dyslexia, literacy rate, reality of dyslexia

1. Introduction

Recently, there are some different views relevant to dyslexia`s existence and it has been created by unsuccessful school teachers. Teachers implement wrong teaching methods and cause to create another dimension of the disorder; dyslexia. Another issue related to this claim, the people who speak an opaque language such as English, compares their own literacy learning process and other transparent languages` literacy learning process such as; South Korea, Nicaragua or Turkish. According to this understanding; these transparent languages do not have this disorder, while English speaking countries have it. These assertions opened a discussion related to the reality of dyslexia and compared the languages` structure and literacy learning process. Many scientists have researched why children have dyslexia, how to overcome this difficulty and its causes. One of the

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most important current arguments is that dyslexia negatively affects children's reading, writing and spelling (RW/S) improvement (Tresman & Snowling, 2005). The main aim of reading is to understand the script, but many young people cannot completely accomplish this objective (Clarke, Snowling, Truelove & Hulme, 2010).

According to Gabor (2010), there are many indicators of dyslexia, such as decoding, comprehension, spelling, concentration, auditory, sequencing, motor skills and organisation problems. However, as can be explained in the literature, spelling (Gabor, 2010) and reading comprehension are the main identifiers, and these points are the most significant parts of dyslexia. These skills are also enchained to each other. Initially, children have to spell to comprehend the word's meaning, but children with dyslexia cannot link words and their meanings. They cannot recognise syllables or complex structured sentences, and have low auditory discrimination for letters, syllables and words (Baş, 2008). On the other hand, some are also faced with reading comprehension difficulties because of inaccurate and slow reading (Snowling, 2013). Whether dyslexia is real or not has been discussed for quite a long time. As can be understood from the last allegation, these people brought new hypotheses related to teachers' low school performance, and how the wrong teaching methods are being used in the English-speaking countries; and some countries, such as South Korea and Nicaragua, do not have this disorder. Although there are some critics of dyslexia's reality, many scholars show that dyslexia is a kind of learning disorder. This paper will discuss the reality of dyslexia considering the structure of the languages which affects the literacy process.

Initially, some claims about dyslexia are given. Additionally, different perspectives; the negative and positive sides of dyslexia's existence and teaching methods assumed to be unsuccessful will be evaluated with a few research evidence. Different ideas and claims will be discussed in order to eliminate prejudice, the rate of literacy in other countries will be demonstrated and the existence of dyslexia in those countries will be discussed, taking account of their literacy rates.

2. Reality of Dyslexia

There are still people who do not accept the existence of dyslexia because its precise causes have not yet been revealed. Furthermore, there is no exact definition of dyslexia. Even though there are many theories of its description, some are more acceptable in the scientific community (Guardiola, 2001). Scientists have tried to define dyslexia to properly learn about the disorder's symptoms since the end of the 19th century. According to scientists, once they had gained enough knowledge about its causes, more effective research could be done into how to overcome the disorder. Generally, almost all indications of definitions include RW/S. Accordingly; dyslexia is defined as a 'reading impairment' in the scientific community. However, Lyon, Shaywitz and Shaywitz (2003) identified a long definition, which covers its causes and results as far as is known: *"Dyslexia is a specific learning disability that is neurological in its origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling*

and decoding abilities" (p. 1). As explained in the definition as well, basic skills, which are RW/S for literacy, are influenced by dyslexia.

With regard to psychology, dyslexia is seen as a disorder of the language progression methods in the human mind (Hudson, High & Otaiba, 2007). Language progression also covers speaking. Dyslexia affects speaking skills in some cases, in addition to other characteristics, such as difficulty with RW/S (Williams & Lynch, 2010). Deliberating the next illustrations of fields which are difficulties for pupils with dyslexia. Firstly, the indication of oral language difficulties can be arrayed as a delay in learning to speak, problems with pronouncing expressions, challenging or not obeying instructions, problems with learning names and the alphabet (International Dyslexia Association, 2008). Problems related to dyslexia are indicated below:

- Reverse writing of letters, such as b/d, p/q, n/u,
- Some words are seen as fully reversed such as 'drib' instead of 'bird' (Marshall, 2013),
- Messy handwriting,
- The trouble with taking notes,
- Trouble with copying notes from board to notebook,
- Working memory difficulties (Vellutino, Fletcher, Snowling & Scanlon, 2004),
- A weak phonological realisation,
- Confusing time and tenses such as yesterday/tomorrow, before/after,
- Syllable problems,
- Difficulties in organising or planning ideas (Elliott and Grigorenko, 2014; Rondot-Hay, 2012).

As explained above, dyslexia is a difficulty, and in a sense, research into developmental dyslexia has been done as a result of that difficulty. Notwithstanding that poor teaching affects students' learning performance; some external and internal circumstances dramatically influence their learning capacity. Considering this, it can be seen that critics of the existence of dyslexia have not proved a lack of dyslexia, although there is no exact definition.

3. The Role of Teaching Strategies in Helping Dyslexic Children

The argument on the existence of dyslexia revealed that dyslexia is created by unsuccessful teachers and pupils cannot do well in RW/S due to the wrong teaching strategies being used. Wrong teaching methods negatively influence students' learning performance and academic knowledge (Peiris & Beh, 2006). Thomson (1999) also did some research into teaching strategies. Both Peiris and Beh (2006) and Thomson (1999) show the significance of teaching strategies for dyslexic children. These claimants are right in this case. Neither children with dyslexia nor non-dyslexic children can be well educated if the wrong methods are used. Teachers are required to determine their exact teaching strategies according to students' individual learning performance. Student performance could be increased thanks to the correct teaching style. However, the correct teaching style is not adequate by itself for teaching `reading skills`. The National

Reading Panel (2000) described pre-conditions for proper reading skills, for example, phonemic knowledge, decoding words, fluency, processing words, intellectual capacity, language knowledge, spelling and writing. If children do not have some of these skills, before overcoming their problems `reading skills` cannot be taught properly. Besides, some students could have difficulties in school. Teachers are required to take into consideration each student's learning capacity and need one by one while organizing the teaching sessions and activities. According to these claimants, literacy difficulties are caused by teachers and are not due to dyslexia, which is invented by poor teachers. Although they are completely right about inaccurate teaching methods, they miss out some points about dyslexia's reality. As defined in the previous section, dyslexia exists in the education environment as a type of difficulty. A considerable amount of literature has been published on 'dyslexia'. These studies mainly focus on the existence of dyslexia, how dyslexic people are affected by this difficulty and the effects of teaching strategies on dyslexia. Teaching strategies are significant as they are important causes of dyslexia.

As discussed above, these wrong teaching strategies are applied while teaching literacy. There are some ideas which are no need to have specialist teachers for dyslexic children and students could learn reading and writing by applying synthetic phonics. This understanding has also supporters. Reading and writing are taught with synthetic phonics in West Dunbartonshire in the UK. This idea has also been supported also by the UK Labour Party since 1998 (Gross, 2010). *"Synthetic phonics refers to an approach in which the sounds identified with letters are learned in isolation and blended together"* (Brooks, 2003, p. 11), for example, first, a syllable phrase is taught, such as 'cat'. This word consists of 'c', 'æ' and 't'. Those letters are identified and pronounced. Finally, they are blended as 'cat'. After they are put together, the word is read directly. When children learn how to read words, the next words are given respectively (Brooks, 2003).

English literacy provides 26 letters and 44 sounds. Those sounds are separated into letter groups. Groups have an average of six letters (Guyer & Sabatino, 1989). After giving other letters in different groups, new words are created from previous and new word combinations (Scottish Executive Education Department, 2005). Some scientists argue that the synthetic phonics teaching system is very effective (Purewal, 2008). Although there are many positive comments about using this system, children's performance and learning capacity should be considered individually. In West Dunbartonshire, synthetic phonics is not just a teaching model. This system is just one component of a ten-part programme, including 'one-to-one teaching time', 'early testing and intervention' and 'parental participation'. These programmes are engaged with each other (*The Telegraph*, 2009). Every child's learning style is different. However, the traditional intelligence approach assesses children in one dimension. Even though this approach provides great convenience, it does not help to learn students' weaknesses and strengths (Gardner, 1993) –'One size does not fit all' (Department of Education and Training, 2005, p. 76) which is ignored individual differences and focused on only synthetic phonics teaching technique rather than multiple teaching techniques considering the individual differences. According to Gardner (1999), there are eight

different types of intelligence approach. These are called 'multiple intelligence models', such as 'verbal/linguistic', 'visual/spatial intelligence', 'bodily/kinaesthetic intelligence' (Infed, 2005, pp. 5-6). Thus, children's ways of learning should be taken into consideration. Children with dyslexia have different learning styles to other children. Those children have some difficulties, as mentioned in Section 2, 'Reality of Dyslexia'. Therefore, specialist teachers should be educated in the field of dyslexia. Verbal, visual and auditory teaching methods should be chosen predominantly for proper reading achievement (Yazgünoğlu & Irmak, 2003). To sum up, these claimants` ideas are not completely wrong. They point out some useful ideas in terms of education, for instance using synthetic phonics, but Gardner's intelligence approaches should not be ignored. On the other hand, the views about dyslexia are at variance with the principle of equal opportunity in education. In the classroom, many students have different learning capacities. One or several of those students could have dyslexia or other difficulties. Accordingly, having expert teachers could help teachers with correct constructive supervision on how to teach and make sure how dyslexic and non-dyslexic students learn effectively.

4. Literacy in Different Countries

For many years, the education systems of certain countries have been discussed and compared with those of other countries. Generally, these discussions start when certain points come to somebody's attention. One of these controversial issues is also the reality of dyslexia. That is the reason we are going to compare some example languages which have different structures such as British literacy, South Korean, and Nicaraguan literacy for clarifying different arguments on dyslexia and the different language structures. These different ideas bring that the ratio of literacy in Nicaragua and South Korea is nearly 100 % due to the inexistence of dyslexia, argues that there is no logical explanation why dyslexia exists in a specific country such as Great Britain, while other countries do not have this difficulty. All of these points will be argued in detail.

First of all, Rose (2006) indicates in his report that students should be set stages for reading. Those stages should be engaged with children's interests. They also ought to be connected with useful information by taking their age into consideration. A great time for starting pre-reading activities is the age of five (Goswami, 2005; Rose, 2006). The majority of children may have an adequate background for reading their language, but some languages` literacy is learnt much quicker than others. There are two important issues: the first is phonological awareness; the second is orthographic competence (Goswami, 2005). One of the main pre-reading activities is systematic phonics. With the help of this technique, children possess phonemic awareness skills (Rose, 2006). However, in some languages, phonological awareness does not need to be taught early on. For example, Finnish students start literacy at seven years old (Goswami, 2005). It is less complex than English literacy. Beside this, Turkish students start literacy at five and a half, and they do not need to learn phonics in depth, because it has a quite simple structure for linking the letters and sounds. However, English

includes 26 letters and 44 sounds (Guyer & Sabatino, 1989). Accordingly, one phoneme has to correspond to at least two graphemes.

On the other hand, Finnish and Turkish phonemes correspond to one letter (Landerl, Wimmer & Frith, 1997). With the exception of just one point, which is the nasal phoneme /ŋ/, Finnish rules are the same as Turkish rules (Lehtonen, 2006). In addition to phonological comparison, orthographic adequacy is important to be able to read properly. Spencer (2000) indicates that orthographic incompleteness negatively influences reading skills in English-speaking children. It originates from the basic components of the English language. On the other hand, there are some transparent languages. As mentioned before, Finnish, Italian, Spanish, Dutch, Turkish and German (Ellis & Hooper, 2001, p. 573) orthographies are not as opaque as English or French. They are more transparent. In those transparent languages, the matching letters and sounds are steady (Ellis & Hooper, 2001). Nevertheless, in non-transparent orthographies, there are some different complex rules between words and sounds (Elliott and Grigorenko, 2014). For example, in English, there are lots of irregular phrases whose meanings are hard to engage and whose words are hard to recode into phonemes (Goswami, 2005). Considering this evidence, it can be seen that orthography transparency in language differences has a determining impact on 'ratio of reading attainment' (Ellis & Hooper, 2001), 'segmental phonological awareness', 'reading strategy' and 'reading disorder' (Ellis & Hooper, 2001, p. 573). Taking everything into consideration, the features of English language structure and literacy are ignored. Before criticising and comparing the British literacy system, the correlation between grapheme and phoneme need to be considered in dept. There are many rules that are only effective in English, such as irregular words. Also, other countries' phonological and orthographic rules should be known. Then, criticisms and comparisons between countries' literacy could, therefore, be more effective and constructive.

The rate of literacy in South Korea is over 96%, according to the UN Human Development Report (2011). There are some essential points about high levels of literacy. For example, the relation between letters and sounds has a significant role in literacy. The Korean language has a different alphabet from the Latin alphabet. The name of the alphabet is Hangul. The arrangement of the alphabet and syllables of Hangul is straightforward and well-organised (Daniels & Bright, 1996). "It is one of the most scientifically designed and efficient scripts in the world." (Daniels & Bright, 1996, p. 219). Cho and Ji (2011) suggested that the orthography of the Korean language has a consistent system. The phonemes and graphemes match in an exact composition in this system. To put it more clearly, each letter corresponds to a sound at the syllabic stage. Taking all these points into consideration, the structure of Korean literacy is similar to other easily learnable language structures, such as Finnish, Turkish and Italian. The literacy rate in the Korean language is quite high, thanks to the correlation between sounds and letters.

To deepen the subject, according to Stanford University, the rates of literacy in Nicaragua have been increasing year by year since the 1980s. The government has focused on increasing the literacy rate, which is now considered high. Gove and

Wetterberg (2011) demonstrate that the government and the Research Triangle Institute (RTI) have started to work together to increase the number of literate people. Their main aim is to increase awareness of the educational teaching system in terms of teachers and students. The government also aims to teach literacy at an early age and to teach classroom management (Gove & Wetterberg, 2011). Additionally, Nicaragua's educational language is mostly Spanish as a first language and their indigenous language just in some small rural areas. As mentioned earlier, Spanish is a transparent language. Spanish literacy is as easy to learn as Korean, Turkish or Finnish literacy. These language groups are not opaque like English. They are more consistent between the phonetic structure and graphemes. To put it another way, Spanish language phonemes can largely be estimated from graphemes. Taking these points into account, the main reasons for the high literacy rate in Nicaragua could be its easily learnable language literacy and intensive teaching system. While these countries are compared, the high rate of literacy in Nicaragua and British literacy, the properties of literacy and education system techniques are ignored.

Taking everything mentioned above into consideration, some encouraging information overlaps with the different ideas. As they discussed, the rate of literacy is extremely high in South Korea and Nicaragua as other transparent languages. Further, the construction of their languages, their alphabets, one-to-one corresponding sounds and letters, and efficient teaching systems are the basic reasons why the literacy rate is so high. However, it can be said that literacy learning is difficult in English. There is no correlation between sounds and letters (Elliott and Grigorenko, 2014). One letter can refer to multiple sounds. The letters in words are also read differently in English. The letters` phonetics differs depending upon whether they are used at the beginning, middle or end of the word or used with another letter. For example, when the letter 'c' is used as the first letter in words, it is read sometimes as 'k' as in 'cat', sometimes 's' as in 'city', sometimes `ch` /ʧ/ as in `child`, or sometimes ignored as in 'cnidaria'. Hence, English literacy consists of a much more complicated system.

On the other hand, the reason for accomplishing high achievement in South Korea is to have a more transparent language. When the rates of British and South Korean literacy are compared, however one point is missed about the situation of Korean language learnability. The Korean language is one of the easiest to learn and whose alphabet is known as Korean Hangul. This alphabet was originally created for learning the language in a simple way. In the case of Nicaragua, teaching Spanish is easier because it is a transparent language and Nicaragua's intensive teaching system has a very effective role in language learning. While discussing the existence of dyslexia, focusing on the countries literacy rate is not appropriate. At this point, it can be asserted that the phonological and graphical structure of a language affects children's learning performance. It is seen that language difficulties influence children with dyslexia's view, both prominently and negatively. While the existence of dyslexia is discussed above, it is indicated that dyslexia is not just about decoding words. It is also about spelling difficulties, oral language impairments and memory difficulties (Elliott and Grigorenko, 2014). All of these difficulties together constitute dyslexia. That

is why these points of view are not adequate to explain dyslexia in all its parts. Understanding the countries which have a high literacy rate does not have `dyslexia`, is not an appropriate way for the discussion of dyslexia`s existence scientifically. However, the high literacy rate correlates with the structure of language. It is a fact that literacy is much easier to learn in countries that have a well-developed education system and a transparent language. Consequently, there is not a precise correlation between a high literacy rate and dyslexia. This does not conform to the counter-arguments on the existence of dyslexia. Dyslexia comes up as an issue around the world whether language is easy to learn or not.

5. Conclusion

This paper argued that dyslexia is a learning difficulty; all the research focusing on the topic attests that it is a 'reality' contrary to what counter-arguments believes. Furthermore, as shown above, the exact or definite cause of dyslexia still has not been revealed properly. This inexistence of causes leads some scholars and society to think that the concept is not real. However, a significant amount of research has been applied and an adequate amount of outcomes presented since the beginning of the first scientific research done over 100 years ago until today (Lawrence, 1999). Studies have also revealed that there are at least two or three dyslexic children in every classroom (Dyslexia Action, 2010). These children have the same symptoms, even if they are educated in different conditions. This fact should lead society, researchers and authorities not to ignore dyslexia and say it is just a myth, but to consider it as a problem that needs to be widely focused on. In contrast, it is argued that dyslexia is created by unqualified teachers. It is not created by them, but they cannot help these children properly if they do not have any idea how to individualize and adapt the teaching sessions for them. Therefore, specialist teachers are needed to overcome this problem. Further, synthetic phonics is seen that it can be used for teaching English literacy and because this system is very efficient and can be useful for every student. It is a common fact that synthetic phonics is a very effective technique in reading and writing education. However, when it comes to English language, synthetic phonics would not be enough if it was used solely for every child due to the preferences of the language and children`s individual differences.

It is a common fact that every child has different learning abilities, which is explained widely by a good idiom: 'One size does not fit all' (Department of Education and Training, 2005, p. 76). In the application of this phenomenon, dyslexic children are a good example because the ways of teaching them need to be taken into account when they are educated. Gardner's multiple intelligence theory should also be used to educate children, especially dyslexic children. If these theories are applied in the field of education, the learning performance of both dyslexic and non-dyslexic children can significantly increase.

Moreover, there is an inappropriate comparison rate of literacy in other countries for the existence of dyslexia. if dyslexia is not a myth, how can one explain the highest

rates of literacy in Nicaragua, South Korea and Turkish? According to this understanding, if dyslexia really exists it should be seen in other countries who have a high literacy rate too. However, dyslexia exists in other countries, but the different aspects of the languages are not considered carefully. For example, South Korean, Turkish and Spanish languages are more transparent than English. this difference is not considered which is very important. On the other hand, when it comes to the English language it is seen as harder to learn than Spanish and South Korean. In addition, the alphabets of these countries are different and the consistency between phonemes and graphemes relatively higher than in English (Elliott and Grigorenko, 2014). To sum up, dyslexia is a learning disorder and even if there are views that contradict this opinion, its symptoms are obviously shown by children. These symptoms deeply and negatively affect the level of learning abilities of children. In addition, increasing the number of studies that are relevant to this topic depends on the refutation of criticisms on the basis of scientific facts.

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