

**Damage of reading Indonesian phrase with dislexic patients in Medan:
neuropsycholinguistics analyze**
*Kerosakan membaca frasa bahasa Indonesia bagi penderita disleksia di Medan:
Analisis neuropsykologuistik*

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ABSTRACT

The objectives of this study were (1) to classify the damage of reading Indonesian phrase in Dyslexic Patients (PDS) (2) Classify the disorder of neuropsychocognitive of Dyslexic Patients (PDS). Theoretically this research explains there is intervention and ability concerning memories, productions, thoughts, meanings, and emotions that are very influential in someone's reading because of disordering in the brain. Given this research is very complex, so this research apply research and development method (research & development). This research is oriented to a cycle that begins with the collection of information research results in the form of difficulty reading and neuropsychocognitive. Dyslexic patient in research subject are 3 peoples. Method used for data collection is test reading and memories. The basic technique is used by using tapping technique, ie tapping the PDS 1-3 taken from Medan Extraordinary School. Data analyzing in this research is to classified of difficulty of reading and memories and to classified long instruction in the sama time. The conclusions are (1) dyslexic patient could'nt read and thinking tree words or the complex words (2) dyslexic patient also difficult to understanding the long instruction, long term memories also damage.

Keywords: Damage Writing, Thinking, Dyslexic Patients, Indonesian phrase

ABSTRAK

Objektif kajian ini adalah (1) untuk mengklasifikasikan kerosakan membaca frasa Indonesia bagi Penderita Disleksia (PDS) (2) Mengelaskan gangguan neuropsikokognitif Penderita Disleksia (PDS). Secara teoretikal, penyelidikan ini menjelaskan adanya campur tangan dan kemampuan mengenai ingatan, produksi, pemikiran, makna, dan emosi yang sangat berpengaruh dalam pembacaan seseorang kerana gangguan dalam otak. Memandangkan penyelidikan ini sangat kompleks, jadi penyelidikan ini mengaplikasikan kaedah penyelidikan dan pengembangan. Penyelidikan ini berorientasi kepada kitaran yang bermula dengan

pengumpulan hasil penyelidikan maklumat dalam bentuk kesukaran membaca dan neuropsikokognitif. Pesakit disleksia dalam subjek kajian adalah seramai tiga orang. Kaedah yang digunakan untuk pengumpulan data adalah ujian membaca dan ingatan. Teknik asas digunakan dengan menggunakan teknik mengetuk, iaitu mengetuk PDS 1-3 yang diambil dari Sekolah Luar Biasa Medan. Analisis data dalam penyelidikan ini adalah untuk mengelaskan kesukaran membaca dan ingatan dan untuk mengelaskan arahan panjang dalam masa yang sama. Kesimpulannya adalah (1) pesakit disleksia tidak dapat membaca dan memikirkan kata-kata pokok atau kata-kata kompleks (2) pesakit disleksia juga sukar memahami arahan panjang, ingatan jangka panjang juga merosakkan.

Kata kunci: Penulisan dan Pemikiran Kerosakan, Pesakit Disleksia.

INTRODUCTION

Dyslexia is a reading disability that primarily concerns a particular language base, which affects the ability to learn words and compose words even though the child has an average or above average intelligence level, sufficient motivational and educational opportunities and normal vision and hearing.

Dyslexia comes from the Greek word "dys" which means difficulty and "lexia" which means words. In other words, dyslexia means difficulty in processing words. Dyslexia is an abnormality with the basis of neurobiological abnormalities and is characterized by difficulty in recognizing the word precisely or accurately in spelling and in the ability to encode symbols. There are two kinds of dyslexia, developmental dyslexia and acquired dyslexia. Dyslexia usually occurs in children with normal vision and intelligence. Children with dyslexia usually speak normally, but have difficulty interpreting "spoken language" and writing. Dyslexia tends to be lowered and more common in boys. Dyslexia is mainly caused by brain abnormalities that affect sound processing and spoken language. This disorder is a congenital abnormality, which can affect the decomposition of words as well as impaired spelling and writing. (Duff, F.J Fieldsend E, Bowyer, C, (2008).

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Some experts also define dyslexia as a condition of input processing or different information (from normal children) often characterized by reading difficulties that may affect the areas of cognition, such as memory, input processing speed, timing ability, coordination, and control motion. There can also be visual and phonological difficulties, and there is usually a difference in ability in various aspects of development. (Paris, S.G. (2005). Dyslexia usually occurs in children with normal vision and intelligence. Children with dyslexia can usually talk normally, but have difficulty interpreting "spoken language" and writing. Dyslexia tends to be lowered and more common in boys (Vandenberg B and Emery D (2009) . Dyslexia is primarily caused by brain abnormalities that affect sound processing and spoken language. This disorder is a congenital disorder, which can affect the decomposition of words as well as spelling and writing disorder [4] ([http:// www.dyslexia-indonesia.org](http://www.dyslexia-indonesia.org)).

THEORY

Dyslexia Symptoms

The symptoms of dyslexia may be difficult to recognize before the child enters school, but some early symptoms may identify the problem, such as irregularities perceiving other people's speech delivered to the patient, distortion of vision when looking at pictures around the patient, hearing aberrations of the songs that are heard in the sufferer and when the child reaches school age, the teacher of the child may be the first to be aware of the problem. (Ridge Way,A and Quinones, G (2012). Actually, dyslexic people have signs and symptoms that have a high risk such as telulang talking, adding vocabulary after being able to speak very slowly, experiencing difficulty "rhyming" (rhyme) when the child has not attended school. When the child has entered school the signs and symptoms have become more visible: (1) Reading at the level below what is expected for the child's age, (2) experiencing a disturbance in processing and understanding something that the child hears, (3) (4) experiencing interruptions in following instructions more than one at the same time, (5) experiencing interruptions to recite pronunciation of unfamiliar words, (6) experiencing hearing impairment (when at certain moments of hearing) can not make similarities and differences in the singing of words that are almost the same as "dess tyfu" for "beautiful dress", (7) experiencing impaired vision (see writing on the signboard for words in reverse (b for d or "bus" to "dus"). (8) Under 8 years of age, dyslexic children will continue to look reversed after their age and difficult to learn a foreign language. (Ali & Gustianingsih (2018).

Distractions that cause problems in speaking, listening, reading, writing or math skills, as well as specific developmental disorders. Learning difficulties are impairments in learning abilities including in terms of speaking, listening, reading, writing, or math skills. Children who experience learning difficulties can be seen from their academic ability a year or two under their age children with normal intelligence. Often these learning difficulties seem to coincide with other difficulties such as ADHD (Attention Deficit / hyperactivity disorder) caused by functional irregularities of certain parts of the brain. This is due to hereditary factors.

Learning difficulties are associated with brain dysfunction that affects basic skills such as perceptual sensory ability. In general, learning difficulties in the academic field include:

(1) Difficulty in connecting letters with sounds, (2) Difficulties in forming sillable, (3) Reversal of letter positions, (4) Speech disorder, (5) Doubt in words, (6)) Less understanding of the meaning of the sentence.

Dyslexia is a learning disorder, in which a person has difficulty reading, writing, or spelling. Dyslexic sufferers will have difficulty in identifying how spoken words should be changed into letters and sentences, and vice versa. Dyslexic, based on gender, male sex has memory memory disorders, knowledge, fine motor skills, body balance for a sample of 40 people from preschool shows 27.5% (11 adults) show symptoms at risk of dyslexia, but only 15% (6 people) indicates a very high risk of having a dyslexic symptom. Boys are more affected by dyslexia than girls. 40% more children fail to mention abaca / letters, 5% do not recognize rhymes / first letters, and 3% can not distinguish language sounds). The Malaysian Education Ministry disclosed that since 2001 many preschool-aged children were exposed to dyslexia of 290,000 school pupils from 4.9 million total pupils (KPM 2000). 4% of the world's population is significant to have dyslexic symptoms (Moses 2002). These special needs children include

dyslexic children who also need special education to be socially acceptable in a meaningful life. (Wang, Q.L. (2008).

Noorr Afzan, has budgeted 314,000 children who are studying in Malaysia Malaysia with dyslexia Setiausaha Parlimen, Ministry of Education in 2004 also reported that 5% of cases of dyslexia or one in 20 students are detected dyslexia compared with Down syndrome disease. which is about one in 600 people detected dyslexic disease and about one in 700 people increased sharply also reported by the President of the Malaysian Social Harmony Union (PSHM). Increasing dyslexia in Malaysia makes Malaysian government recommend to do research about dyslexia to be known early handling of dyslexia (Bentzen,F. (2006).

According to studies conducted by Meier, Hammond and Hughes, and Spaafford and Grosser, there are two factors that cause the emergence of this disorder problem, among which are genetic factors or heredity and biological factors. Studies have shown that dyslexia is caused by chromosomes 1, 15 and 16 that may be inherited from generation to generation. In most cases, there is a family expert having the same problem, the only thing that sets them apart is the stage of seriousness. While biological factors are an outcome factor that culminates with a preterm birth or an insufficient lunar birth, lack of oxygen at birth as well as birth complications. Damage to the brain during the birth process is also one of the impetus to the problems and disorders of the child in the learning process. (Meier, J.H. Prevalence. (2007). In fact, the child who faces this problem has a normal stage of intelligence and has no hearing and vision problems. Nor are they classified as weak and foolish. This problem can be overcome if the parents and teachers can recognize this disorder. Umar, Rahman, et al., Says that the Malaysian kingdom expects its people to be able to master 100% literacy capability by 2020. Nevertheless, the proficiency of reading, writing and guessing (3M) principles may be difficult to obtain. According to Julina, about 40% of students are not capable and do not master 3M due to students facing severe cognitive problems such as dyslexia. Dyslexia has a high population and may lead to various problems of individuals, families, communities and countries. 10% -15% of the world's population has dyslexic problems.(Carvalhais, Fernandes. (2009).

RESULTS AND DISCUSSION

Difficulty Reading Indonesian Phrase in Dyslexic Patients

(1) Researchers: Please read this phrase "jam baru"

PDS-1: "panu pam"

Researchers: Please read the "sepeda merah"

PDS-2: "daperah"

Researchers: and you read this "sepeda baru"

PDS-3: "daperu"

Researchers: and try read this " taman safari"

PDS-4: "tanam pari"

The above-mentioned PDS-1 reading events are very worrying for children with dyslexia. The words read do not match what is written. Some words are omitted and some phonemes swap, like [b] and are swapped to [p], [j] change to [p], and the [baru] changes to [panu], [jam] change to [pam]. The second words change to the first word. PDS-1 always changes

all fonem [b] dan [j] to [p]. So [jam baru] becomes to [panu pam 'baru jam']. PDS-1 read the words from back to front of. PDS-1 was damage for his eyes.

Different in PDS-2 whom reading the phrase from back to front of the words. The final cara membacanya kata pertama yang dibaca tetapi dimulai dari suku akhir, sehingga frasa [sepeda merah] dibaca dengan [daperah]. Element in word [se] and [me] are lost, and [sepeda] becomes [dape], and [merah] becomes [rah]. The phrase of [sepeda merah] is read as one word [daperah]. PDS-2 unreadable the phrase. The age of PDS-2 is 12 years old and in The Elementary School. PDS-2 has an interruption of reading one word. Certain sounds are exchanged by him and read them imperfectly. PDS-2 is enough to read a word. In Indonesia in general, children begin to enter primary school (SD) at the age of 6/7 years, so the age of 12 years actually the child is in the 6th grade elementary school. In grade 6 elementary school is basically children have read fluently long sentences.

For the case of PDS-3 apparently equates the sound of [se-] in the first word position is lost, the word [sepeda] is read to [dape] and the second word [baru] to [-ru], [ba] is lost. {sepeda baru} is read to [paderu]. This case same with PDS-2. As the elementary school PDS-3 also can't be read the phrase form, the patient only read one word

PDS-4, different cases of reading the child. Words that children read backwards, the composition of words is not systematically arranged, the way of reading there is at the lowest level and not in accordance with the age of children, children also disturbed hearing, so disturbed the process of language and language understanding, understand the instructions that very simple even disturbed let alone follow the instructions more than one at the same time, sight and hearing is also disturbed, so can not distinguish and find the similarity between the word one with the other word can not spell and can not learn a foreign language. PDS-4 has difficulty distinguishing [taman safari] wis read by [tanam pari]; or they misunderstand words that sound almost identical, such as [taman safari] is the name of garden and [tanam pari] is plant of vegetables. "taman" and "tanam" is very different form.

Handling

Children with dyslexia require individual teaching and treatment for dyslexia often involves multisensor education programs. Moral support from parents is also an important part.

The best treatment is direct instruction, which incorporates a multisensoric approach. This type of treatment consists of teaching sounds with different cues, usually separately and (if possible) part of the reading program.

Indirect instructions can also be applied. It usually consists of training to speak a word or reading comprehension. The child is taught how to process sound by mixing sounds to form words, by separating words into letters and by recognizing the position of sounds in words. (eg in recognizing parts or patterns and distinguishing different types of sounds) or problems with memories, conversations, thoughts and hearing.

Developmental Dyslexia is innate and due to genetic or hereditary factors. People with dyslexia will carry this disorder for the rest of their lives or can not be cured. Not only have difficulty reading, they also experience the barriers to spelling, writing, and some other language aspects. However, dyslexic children have normal or even above average levels of intelligence. With special handling, the obstacles they experience can be minimized. And acquired dyslexia is acquired due to interference or changes in the way the left brain reads. (Paris, S.G. (2005).

Assessment

Assessment of learning difficulties can be done by one or more of the experts, such as psychologists, psychiatrists, neurologists, and linguists. Assessment that can be done is through the IQ test to determine the verbal and non-verbal skills of children, projectif tests to evaluate the level of emotions, and tests language proficiency (reading, writing, speaking, and listening the language correctly and correctly).

Treatment

Basically the treatment for children learning difficulties is remedial education and psychotherapy. Both can be implemented simultaneously or one follows the other as needed. Remedial should be done individually with a tutor. The goal is to find and tear down the walls that cause learning difficulties.

Basically the most needed by children with learning difficulties is the affection, understanding and patience of the people around him, especially from parents. A few patient with dislexia always emotional damage. Emotional damage always relationship with fisiology reaction in human's body. As Zakaria, Zailani (2009) in Arbie Sujud (2014) said that emotional didnt separate with human' body. Fisiology and phsichology are seen throught face, eyes, language, saying, reading, writing and behavior. (Kembaren, M. M., Nasution, A. A., & Lubis, M. H. (2020). If we will be handling fisiological, maybe phsichological can be done proper handling. Universallity this case fisiology and phichology treatment relationship with teaching treatment in school and home. Teaching belonging more aspect of treatment in phsichologically (Kusom & Zulkifly Osman, 2018).

CONCLUSION

The conclusions that can be drawn from this paper are difficulty Reading Indonesian to Dyslexic Patients, not just reading phrase, but reading one word also difficulty. The phrase are read in reverse, the composition of the words is not organized systematically, the way of reading is at the bottom and not in accordance with the age of the child. Children also disturbed hearing, so disturbed the process of language and language comprehension.

Understanding very simple instructions once disturbed let alone follow the instructions more than one at the same time, sight and hearing is also disturbed, so it can not distinguish and find the similarity between words with one another. Children have difficulty distinguishing "panu pam" from "jam baru"; or they misunderstand words that sound almost identical, such as "taman safari" with "tanam pari". This difficulty is not due to hearing problems, but is related to the processing of inputs in the brain.

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