

EFFECTIVENESS OF USING EARLY READING BOOK TO IMPROVE EMERGENT LITERATURE FOR CHILDREN WITH DYSLEXIA

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ABSTRACT

Dyslexia is a learning disability in children who have problems in written, spoken, expressive or receptive language. The most appropriate stimulation for dyslexia children is to provide an interesting and fun way of learning, especially because their age is still in the category of early childhood. The right stimulation can help dyslexia children solve their problems. Reading books that are fun will really help dyslexia children in learning to read. The purpose of this research is to create an interesting and fun learning media innovation, especially for dyslexia children to improve their early literacy skills. This reading book makes dyslexia children learn in their own way. This study uses the one group pre-posttest experimental technique, which is an approach that gives treatment to one research group, then the results will be calculated the difference. The number of research samples was 10 people, with dyslexia characteristics in the moderate category. The treatment used is to provide treatment in the form of reading exercises using reading books for dyslexia children. The significant value is $0.000 < 0.05$, meaning that there is a difference between before and after using reading books. The results of this study were dyslexia children who learned to use exercise books specifically designed for dyslexic children were quite effective, where they recognized letters more quickly and were able to read simple words. This study provides a very good improvement in reading skills in dyslexia children.

Keywords: Dyslexia children, Early Literacy, Reading Books, Learning Disabilities, Kindergarten

INTRODUCTION

Education is a human learning process that continues to develop according to the current era and times. The current era, namely education in elementary schools already requires students to be able to read and write. Thus, educators at the kindergarten level began to introduce letters. Early childhood education is the first step for a child to undergo the learning process, because learning is actually an educational process and not the result of education. This is in accordance with the mandate of law number 20 of 2003 concerning the National Education System which mandates that every citizen aged 7-15 years must attend basic education, including children with special needs. The law clearly states that learning is the right of all children, because learning is a lifelong process of seeking knowledge.

According to Bell Gredler (Winataputra et al, 2014) learning is a process carried out by humans to acquire various competencies, skills and attitudes, all of which are obtained gradually and continuously from infancy to old age. This continuous learning process is a capital for an individual to acquire knowledge. For a child, learning is a natural thing to go through in the development phase, which the children gets in an educational environment. In the learning process itself, problems often arise. Problems in learning that often arise in recent years is the problem of learning difficulties, One of them is difficulty learning to read or what is called dyslexia.

Djamarah (2010) states that a disorder that causes a person to experience learning difficulties can be in the form of a psychological syndrome which can be a learning disability. The ability to read for early childhood can enrich knowledge about science, social science, behavioral science, language, mathematics and other sciences that need to be learned by early childhood when sitting in formal school (Snow & Juel, 2005).

This study discusses early reading skills in dyslexia children aged 5 to 6 years. Some people argue that children cannot read yet, but actually children should be introduced to letters and reading (Cullingford, 2013; Lonigan, Shanahan & Cunningham, 2008). There is no standard time set when children start learning to read. Because in essence children are always learning, interacting with the environment and always looking for information from what is being discussed. As explained by Cullingford (2013), "reading ability" already exists in these children, they have a strong curiosity. From 3 to 5 years of age is a very good and sufficient time for them to start learning to read. This has been clearly outlined by Beaty and Pratt (2007), Ford (2010). At this age children use their experiences to learn to read and write. This is where the role of adults, especially parents and teachers, is to provide motivation and support for children to love reading and be able to read well.

The most appropriate stimulation for dyslexia children is to provide an interesting and fun way of learning, especially because their age is still in the category of early childhood. Various pleasant stimuli will attract children's attention and can increase their observation, such as large objects, changing situations, sounds and colors, music and movement (Hasnah & Habibah, 2010). The variety of stimuli given to dyslexia children will increase their multiple intelligences. Given that dyslexia children have different abilities from other children, dyslexia children have different ways of thinking, which they learn faster through visual or image media approaches. Through Gardner's (1999) theory of multiple intelligences which categorizes 8 types of intelligence in humans, namely verbal linguistic intelligence, musical intelligence, kinesthetic intelligence, mathematical logic, spatial intelligence, interpersonal intelligence, intrapersonal intelligence and naturalistic intelligence. intelligence for dyslexia children who have difficulty recognizing letters, kindergarten teachers need to increase interest in reading in children by introducing interesting learning materials to help children learn to read. dyslexia children will find it very difficult to learn to recognize letters, so an interesting method is needed using various media so that they can easily remember the letters that have been learned. The use of various learning materials will greatly help dyslexia children to easily remember the letters being studied.

However, in Aceh, Indonesia, there are currently no interactive learning materials that can help stimulate special literacy learning for dyslexia children. This study tries to create interactive teaching materials for dyslexia children who will learn to read from an early age by using interesting and fun multimedia that is adapted to the characteristics of dyslexia

children. all teaching materials can be used by children's teachers such as letter cards, songs, toys, picture story books, pictures, puppets, videos and interactive multimedia (Bishop, Yopp & Yopp, 2000). Kindergarten teachers should not give reading lessons to early childhood with lots of practice and writing homework, this will make children tired and bored. To make interactive learning materials for dyslexia children for children aged 5 to 6 years, they need to master the components of early literacy through visual processes, master spoken language, have knowledge of letters, understand letter concepts, can name objects, letters or numbers, have knowledge of letters and sounds letters (Lonigan & Shanahan, 2008).

Dyslexia comes from the word 'dyslexia' which comes from two Greek words 'dys' which means abnormal or handicapped, and 'lexis' which refers to language or words. According to the Orton Dyslexia Society (1994) dyslexia is a degenerative (neurological) disorder of the nervous system, which is associated with difficulties in language acquisition and processing. This happens because the brain is weak in processing information. Dyslexia is also defined as one of the characteristics of learning difficulties in children who have problems in written, spoken, expressive or receptive language. The problem that arises is that children will have difficulty in reading, spelling, writing, speaking, and listening. Dyslexia varies in severity, which is indicated by difficulties in the reception and expression of language, including phonological processes (learning sounds), in reading, writing, spelling, and is sometimes accompanied by difficulty in counting (Orton Dyslexia Society, 1994).

Sidiarto (2007) explains the classification of dyslexia as follows, namely the auditory type (hearing) and the visual type (vision) which is called dyslexia with the breakdown of the visual-auditory relationship. The ability to distinguish the same sounds from spoken words, or to distinguish parts of spoken sentences from other sounds that form the background of the dialogue when the sentences are spoken.

Literacy comes from the Latin *litteratus*, which means it is marked by letters, literate or educated (Toharudin, 2011). Literacy is understanding, involving, using, analyzing and transforming texts (Alwasilah, 2012).

In early childhood, literacy has begun to be given which is called emergent literacy. Emergent literacy is a process of learning to read and write informally in the family. In general, emergent literacy has characteristics such as reading and writing demonstrations, interactive collaboration between parents and children, based on daily needs and taught minimally but directly and contextually (Kharizmi, 2015). Whitehurst & Lonigan (2001) state that emergent literacy consists of two sets of skills and processes, namely inside-out and outside-in domains. The inside-out domain is knowledge about the rules or how to transform writing into sound and voice into written form. The outside-in domain is a source of information that comes from outside the writing that directs the understanding of the meaning of the writing. For children or inexperienced readers, the inside-out domain plays a more important role, because at that time skills are needed to identify phonemes, letters and words. While the outside-in domain becomes important in the reading learning period which aims to understand the content and meaning of the writing that is read.

METHODOLOGY

Research Approach

The research design used in this study was a quantitative experimental approach. While the research focus on qualitative research is based more on the level of novelty of information that will be obtained from social situations (Sugiyono, 2014). The following is an overview of the research design using the one group pretest posttest design pre-experimental research pattern.

Pretest (O₁) Treatment (X) Posttest (O₂)

Information:

O1: Preliminary observation/test (pretest) given to the subject

X: The treatment of giving the BUVI learning method

O2: Observation/final test (posttest) given after treatment

The research instrument used this time was an early literacy rating scale based on the focus of the problem needed in this study. The literacy scale used using the 2013 Curriculum in the Regulation of the Minister of Education and Culture Number 137 of 2014 mentions the literacy skills of kindergarten children (age 4-6 years) in the form of knowing vocabulary, knowing number symbols and letter symbols.

The data analysis used was the paired sample t-test, which is to test two interconnected or paired samples from populations that have the same average. Usually used in research that tests before and after (before-after). Paired sample is a sample group with the same subject but experiencing two different treatments or measurements. The paired sample t-test is used to test differences before and after being given a particular treatment or treatment, then it will be analyzed using a statistical computer program or the SPSS (Statistical Product and Service Solution) 22.0 for Windows program.

Research sites

This research was conducted at the Little Star Kindergarten on Bilal II street, Punge Blang Cut, Banda Aceh, Indonesia. The basis for conducting research at the Little Star Kindergarten is the presence of children with various levels of dyslexia, namely mild, moderate, and severe levels.

Population and Sample

The population is a group of subjects/objects that have certain characteristics that have been determined by the researcher (Sugiyono, 2017). The specific characteristics in question are children with indications of dyslexia, and early childhood. The research population at the Little Star Kindergarten was 10 people. The sample in the study is the part that represents the population. This is in line with Suharsimi Arikunto (2014) who revealed that the sample is part or representative of the population to be studied. The sampling technique or sampling technique used is purposive sampling, namely taking samples with certain considerations by researchers (Sugiyono, 2017). So that the sample taken is not done randomly but rather to the specific goals to be achieved by the researcher. Therefore, researchers must determine specific criteria, namely having dyslexia, and including at an early age for subjects in the population.

RESEARCH RESULT

Testing the effectiveness of reading book learning media was carried out by giving tests to dyslexia children after receiving learning materials for 30 meetings with 5 meetings in one week (5 meetings/week) for 1.5 months. Dyslexia children get treatment in the form of learning to use reading books. After the treatment was completed, the researcher was assisted by the teacher in giving the final test (posttest). Achievement scores and average scores of dyslexic children are in the following table:

Table 1. Paired Samples test

		Paired Samples Test							
		Paired Differences					t	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreTest - PostTest	-7.500	1.581	.500	-8.631	-6.369	-15.000	9	.000

Based on the table above, it can be seen that there is a difference before and after being given treatment, which can be seen from the significance value of $0.000 < 0.05$. This indicates that there is an effectiveness of early reading books given to dyslexia children. The results of this study indicate that there is an increase in early reading skills in dyslexia children using early reading books as learning media. Furthermore, to see the difference in the reading ability of dyslexia children before and after being given reading book learning media, it is explained in the following table:

Table 2. t-test

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreTest	5.10	10	2.283	.722
	PostTest	12.60	10	2.011	.636

The results of the table above show an increase in the mean value before and after the provision of reading book learning media. The increase in the mean score of dyslexia children at the time of the pretest was 5.10 and the mean score of dyslexia children who had undergone the posttest increased to 12.60. From this value, it can be seen that there is a difference in the average value of 7.5 which explains that there is an increase in the average value of respondents when participating in learning using early reading book learning media.

DISCUSSION AND IMPLICATIONS

Dyslexia children do have obstacles in recognizing letters, reading and writing. However, with an interesting and fun way of learning and the right method, dyslexia children will be able to learn well. The factor that most determines the success of a dyslexia children in being able to read and write is the right learning method and media. The use of media to learn to read using early reading books for dyslexia children is one way for dyslexia children to learn read and write as well as other children in general.

The results of this study show that learning to read early using reading book learning media can improve reading skills for dyslexia children, in accordance with the theory put forward by Edgar Dale, namely that it is estimated that the acquisition of learning outcomes through hearing is approx. 20%, about 30% through sight, and 50% through sight and hearing (Dale in Iksan, 2005). This is because the reading books used by dyslexic children to study are very interesting and fun because they are equipped with colorful colors and interesting pictures.

A neurologist researcher from Harvard Medical School, Dr. Albert M. Galaburda, MD concluded that dyslexia is a condition that is closely related to the nervous system, humans have two asymmetrical brain hemispheres, where the left hemisphere is larger while in the brain of people with dyslexia the brain hemispheres are symmetrical, (Olivia, B.H & Vica, C 2016). More specifically, the right brain of people with dyslexia is larger than the right hemisphere of humans in general, while the left hemisphere of the brain is smaller than the left brain of humans in general. The left side of the brain is related to order, linear thinking and language skills. With a smaller left brain size than normal humans, the language area of dyslexics is different from normal humans. This is what makes the ability to process language information so different. While the right side of the brain is bigger than most normal people, it makes people with dyslexia have power in the right side of the brain. The right part of the brain is related to intuition, creativity and visual abilities. This advantage is an advantage for people with dyslexia.

The results of the study which stated that there were significant differences in values for dyslexia children who learned to use reading books showed that learning with media and methods that were appropriate for dyslexia children would get good learning outcomes. Dyslexia children who like to learn with a variety of colors and pictures will do better if the teacher understands the way they learn, so that the process of learning to read for dyslexia children does not become something that is scary for them.

CONCLUSION

This research has succeeded in using early reading book learning media for dyslexia children. The reading book learning media is systematic and empirical because besides containing letters for practice it is also equipped with pictures. Another advantage of this book media that it is equipped with worksheets as a written learning. This learning media can be used by all young children, this media is more appropriate for dyslexia children because it has gone through the actual learning process. Researchers hope that similar research or new research can be developed related to this reading book, because it will have a positive impact on

dyslexia children according to the results of the research that has been done. The significance value in this study was $0.000 < 0.05$. Future research is expected to increase the number of samples used.

APPRECIATION

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