



The Effectiveness of "BUVI" Learning Media for Early Literacy Skills in Kindergarten Children (Case Study at Aisyiah Muhammadiyah Kindergarten Banda Aceh)

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Abstract. Developments that occur in early childhood are obtained through maturity and learning. Language development in early childhood includes four developments, namely related to the child's ability to listen, the child's speaking ability, the child's reading ability and the child's writing ability. The purpose of this research is to see the effectiveness of BUVI learning media on early literacy skills in kindergarten children. The research design used in this study was a quantitative one group pretest posttest design pattern. The location of this research took place in the city of Banda Aceh with the subject of this study being Aisyiah Kindergarten students (TK Aisyiah) aged 4-6 years, both boys and girls, as many as 33 people, using a random sampling technique. The research instrument used in this study was the 2013 Curriculum early literacy assessment scale in the Regulation of the Minister of Education and Culture Number 137 of 2014. Hypothesis testing was carried out using different tests showing that there was effectiveness of BUVI learning media on early literacy skills in kindergarten-aged children with a level of significance of 0.01, meaning that there is an increase in the literacy skills of early childhood who learn to use BUVI learning media.

Keywords: BUVI, Early Childhood, Literacy, Learning Media

1 Introduction

Child development is one of the main targets that must be considered in educational activities. Developments that occur in early childhood are obtained through maturity and learning. Developments that must be developed at this age include the development of moral and religious values, social emotional, language, cognitive and physical motor (Masitoh, 2011). Language development in early childhood includes four

developments, namely related to the child's ability to listen, the child's speaking ability, the child's reading ability and the child's writing ability (Trisniwati, 2014).

The reading habit of the Indonesian people is very low and apprehensive. UNESCO (1999) released the reading rate of Indonesian society at only 0.001%, indicating that only 1/1000 of the population still wants to read books seriously. Therefore, it must be even more maximal in growing and improving the reading culture of the Indonesian people. Starting from increasing reading activities, both at school and at home, to providing facilities and infrastructure such as providing reading books, as well as increasing reading gardens. Therefore, the habit of reading must be introduced to children from an early age. Every child must be introduced to reading so that they quickly master the language and are proficient in reading (Permatasari, 2016).

Alwasilah (2012) defines literacy as the ability to comprehend, engage with, analyze, and change written materials. The ability to speak or communicate is intimately linked to a child's development of literacy. The purpose of communication is to fulfill the role of thinking and emotion exchange. Children's literacy levels have an impact on their cognitive, social, and emotional growth. Children's confidence will increase and they will be able to socialize and feel welcomed in their surroundings if they can communicate with their surroundings (Basyiroh, 2018).

Strong literacy abilities in preschoolers facilitate reading comprehension and raise academic achievement (Senechal & LeFrevre, 2002). Preschoolers' literacy abilities predicted later literacy abilities at moderate to high levels, according to the findings of a meta-analysis carried out by the National Early Literacy Panel (NELP) in 2008 (Ruhaena 2015). While research conducted by Basyiroh (2018) regarding early childhood literacy skills development programs shows that children's literacy skills include learning to read and write or recognize letters and words by playing such as playing cards, playing social gathering, playing straws, playing cubes, playing secret boxes, hunting for words and sticking letters, is one of the efforts to help develop literacy skills at an early age.

The Latin term *litteratus*, which meaning "marked with letters," is the source of the English word "literacy" (Toharudin, 2011). Understanding, utilizing, evaluating, and altering literature is what it means to be literate (Alwasilah, 2012). Emergent literacy refers to the literacy that is taught in early life. The process of learning to read and write informally inside the family is known as emergent literacy. Emergent literacy is generally characterized by the following: minimum yet direct instruction that is contextualized; interactive collaboration between parents and children; children demonstrating reading and writing; and instruction centered on everyday needs (Kharizmi, 2015).

The inside-out and outside-in domains are the two sets of abilities and processes that make up emergent literacy, according to Whitehurst and Lonigan (2001). Understanding the laws or converting writing into sound and sound into written form is the inside-out domain. The inside-out domain is particularly crucial for young children or beginning readers since it calls for the ability to recognize phonemes, letters, and words. In the meantime, reading instruction that seeks to comprehend the meaning and content of the text that is read places a premium on the outside-in domain. Media can be defined as delivering or carrying messages that can facilitate

the process of communication between senders and recipients of messages (Hashim, 2006). According to the Association of Education Communication Technology (AECT), media is any form of channel that is used in the process of delivering or distributing messages.

Meanwhile, according to Ali (1992) media are various types of components in the student environment that can provide stimulation for learning. Media is the plural form of the word "medium" which comes from Latin which literally means intermediary, namely the introduction of the source of the message to the recipient of the message. In the learning process in the classroom, the media means a tool that functions to provide knowledge information from the teacher to students. Fluency and success in a teaching and learning process is largely determined by the learning model and learning methods used.

Anything that is utilized to disseminate educational materials in order to elicit curiosity, attention, sentiments, and thoughts in order to accomplish specific learning objectives is considered learning media (Kustiawan, 20016). Using multiple mediums to display information is known as multimedia. Text, photos, animation, video, music, and graphics can all be included in this mix. However, the technology of today gives educators and students considerably more options than ever before for integrating, combining, and interacting with media. Vaugan (2011) explains that: "Multimedia is any combination of text, art, sound, animation, and video delivered to you by computer or other electronic or digitally manipulated means". Text, artwork, music, animation, and video combined with digital manipulation and transmission via a computer or other electronic device is called multimedia.

Munir (2013) divides multimedia into several types or categories, namely: multimedia in the form of network-online (internet) and offline/stand-alone (traditional) multimedia. There are two types of multimedia services, namely stand alone (offline/stand alone), such as conventional/traditional teaching and connected to a telecommunications network (network-online) such as the internet. A stand-alone multimedia system is a multimedia computer system that has a minimum of storage (hard drive, CD-ROM/DVD-ROM/CD-RW/DVD-RW) input device (keyboard, mouse, scanner and mic) and output device (speaker, monitors, LCD projectors).

Early childhood or often known as preschool age are children aged 4-6 years. During this period significant biological, psychosocial, cognitive and spiritual growth occurred. Children's ability to control themselves, interact with others and use language in interaction is the child's initial capital in preparing for the next stage of development (Adi, Astini, Maryati, & Kep, 2012).

According to Santrock (2007) preschoolers are active learners who can explore the world with their peers. Preschool children have the characteristics of rebelliousness, happy to oppose, difficult to manage, very strong emotions characterized by outbursts of anger, great fear and envy. BUVI learning media was created as a solution to explore the world of early childhood learning, because BUVI is equipped with learning videos that are easily accessible directly by teachers and parents via smartphones. This book is fun, because it contains a variety of activities, such as word processing, cutting, folding, coloring, which are contained in one book. This book is an innovation that makes it easier for teachers and parents to teach literacy to early childhood.

2 Method

This study employed a quantitative experimental approach as its research strategy. Experimental design is likened to a foundation in an experimental research. In designing an experimental research, it is necessary to consider the research subject, how to manipulate the independent variable, the treatment used and its validation (Pratisti, & Yuwono, 2018). The design in this study used a one group pretest posttest design pre-experimental research pattern.

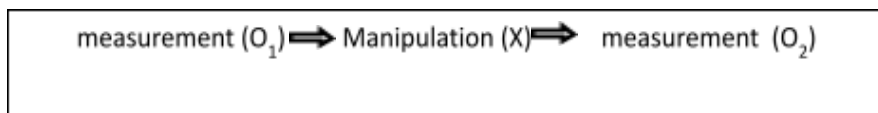


Fig. 1. Research Design One Group Pretest Posttest Design

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 (Seniati, Yulianto & Setiadi, 2007)

A tool for gathering data required to gather research data is the research instrument. This time, the research tool was an early literacy rating scale, which was chosen because it was the primary problem that needed to be studied.

The reading skills of kindergarten students (ages 4-6) are mentioned in the 2013 curriculum in the Minister of Education and Culture's Regulation Number 137 of 2014 as being familiar with language, number symbols, and letter symbols.

The paired sample t-test, which tests two interconnected or paired samples from populations with the same average, was the data analysis method employed. utilized most frequently in studies that compare outcomes before and after (before-after) (Pratisti, & Yuwono, 2018). A paired sample comprises two distinct treatments or measurements given to the same person. When comparing the differences between a given therapy and its aftermath, a paired sample t-test is employed. The results are then evaluated using a statistical software tool, such as the SPSS (Statistical Product and Service Solution) 22.0 for Windows program.

3 Results

Descriptive statistical analysis was carried out using the SPSS version 25 windows program. The description of the research data serves to find out the data with the research that has been done. The results of the analysis are shown in the following table:

Table 1. Frequency distribution of student data

| Gender | Amount | Percent |
|--------|--------|---------|
|--------|--------|---------|

| | | |
|-------|----|--------|
| Man | 17 | 47,22% |
| Women | 19 | 52,77% |

Table 2. Description of Research Data

| Description | Control | Treatment |
|-----------------|----------|-----------|
| N | 36 | 36 |
| Mean | 15,72 | 18,08 |
| Standar Deviasi | 3,68 | 1,61 |
| Minimum | 2 | 14 |
| Maksimum | 19 | 19 |

Based on the descriptive data above regarding the variable "BUVI" Learning Media Effectiveness, in table 1 it can be seen that the subject consisted of 17 male students and 19 female students. Then in table 2 it can be seen that the number of subjects 36 students in the control group has a mean value of 15.72 or rounded up 16, a standard deviation of 3.68 and a minimum value of 2 and a maximum of 19. Meanwhile in the treatment group it has a mean value of 18.08 or rounded up 18, the standard deviation of 1.61 and a minimum value of 14 and a maximum of 19. Table 2 shows that both groups had 36 samples each. The final test for the treatment group was higher than the control group as seen from the mean value of 18.08 and 15.72.

Based on the hypothesis testing that has been done, the researcher obtained a sig value of Because the sig value <0.05, it is possible to draw the conclusion that this study's hypothesis is true, indicating that literacy levels have increased of early childhood who learn to use BUVI learning media. For more details, see the following table:

Table 3. Independent Samples Test

| Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | | |
|---|-----------------------------|------------------------------|------|-----------------|-----------------|-----------------------|---|--------|----------|----------|
| F | Sig. | T | df | Sig. (2-tailed) | Mean difference | Std. Error Difference | 95% Confidence Interval of the Difference | | | |
| | | | | | | | Lower | Upper | | |
| Tes | Equal variances assumed | 8.090 | .006 | -3.523 | 70 | .001 | -2.36111 | .67021 | -3.69781 | -1.02442 |
| | Equal variances not assumed | | | -3.523 | 47.897 | .001 | -2.36111 | .67021 | -3.70874 | -1.01348 |

4 Discussion

The results of the research that has been done show that after giving the "BUVI" method, the average child has an increase in literacy skills compared to before giving the "BUVI" method. This is shown from the results of the different test, namely the t value of -3.523 and the sig (2-tailed) value of 0.001. With the criteria of $0.000 < 0.05$, it can be said that the research hypothesis is accepted. These results indicate that the "BUVI" method is an appropriate method for increasing children's literacy skills.

Children between the ages of 2 and 5 can demonstrate their literacy skills rather quickly, according to Snow (in Hoff, 2005). Children should be able to create letters, listen to stories, recognize books by their covers, and pretend to read by the time they are three years old. Then, 3–4-year-olds can identify simple handwriting, distinguish between various language sounds, make the connection between fictional worlds and the real world, and show an interest in reading. By the time they are five years old, kids ought should be able to dictate words and names and be able to predict the plots of books.

Preschool literacy activities are thought to lay a solid basis for reading development in children (Levy, Gong & Hessel, 2005). Early literacy skills include the preschooler's knowledge, abilities, and attitudes that serve as the foundation for reading and writing (Whitehurst & Lonigan, 2001).

Naturally, learning must be enjoyable for kids since education that does not make use of media or play techniques is less effective in maximizing kids' rapidly developing psychological, bodily, and sensory needs. According to Hopsari, Ruhaena, and Pratisti (2017), children require opportunities for exploration, movement, and play in order to satisfy their basic needs.

The learning process for children still uses conventional methods, namely parents or teachers teach children to memorize the names of the alphabet repeatedly with blackboard media and imitate the way the teacher pronounces them (Ruhaena, 2013). Therefore, this should be of concern to parents and teachers in order to introduce children to reading and writing activities using fun methods, such as the "BUVI" method. (2014). The principle of learning that involves various sensory modalities is expected to be able to provide the same results in terms of reading ability in children with different types of learning. The principle of learning that involves several senses will provide opportunities for children to explore their potential and abilities in accordance with the principles of early childhood learning (Rahmawati, 2016).

In this study, the "BUVI" method was carried out by providing writing and reading practice assignment books with pictures, song videos, and stationery. This shows that the results obtained during the posttest are better than during the pretest, so it can be concluded that there are differences in the administration of the "BUVI" method in increasing literacy skills in PAUD / Kindergarten children because there are changes before and after the administration of the "BUVI" method.

Researchers saw that children in Muhammadiyah Kindergarten on average have good literacy skills, although there are also some children who have difficulty reading. But children who have these difficulties can optimize their literacy skills with

literacy-related exercises. For parents and teachers pay more attention to the child, so it can help children overcome their difficulties. Parents and teachers communicate more often with children and provide stimuli that can stimulate children's literacy skills, such as reading story books, communicating with children, listening to illustrated videos and inviting children to cut paper with letters. This is done so that the child can remember the alphabet well.

The above opinion has been proven in the results obtained in this study which showed that there were significant differences in children's literacy skills before and after the administration of the "BUVI" method. This can be seen in the increase in children's literacy skills in the posttest compared to the results of the previous pre-test. The increase in children's literacy skills which is higher when the posttest is influenced by interventions in the form of giving the "BUVI" method. If children play and learn regularly and repeatedly with the "BUVI" method, they can improve their literacy skills. This is because every child has a different learning style, therefore the teacher must be able to optimize it through the provision of the "BUVI" method.

5 Conclusion

The results of the study showed that there were significant differences in children's literacy abilities before and after the administration of the "BUVI" method at Muhammadiyah Kindergarten in Banda Aceh. This is shown from the results of the different test, namely the t value of -3.523 and the sig (2-tailed) value of 0.001. In addition, the results of the final score on the posttest assessment table show that it is better than the pretest, so it can be concluded that there is an increase in children's literacy skills after giving the "BUVI". BUVI can be utilized by many Kindergartens and Early Childhood Institutions. It is hoped that BUVI can be adopted into the kindergarten or early childhood curriculum, thus providing a new method of learning literacy. BUVI will be published in the form of an e-book.

5.1 Suggestion :

For parents.

It is hoped that parents can provide games that can improve children's literacy skills at home, such as puzzles, picture story books, video songs, and so on. These activities will be more optimal if carried out regularly and continuously because the results obtained will develop for further researchers.

Research is better if it uses a control group, so there is a comparison group and it is also carried out over a longer period of time. Apart from that, the researcher should also control for environmental factors or the familiarity factor of the experimental media for the subject.

For Teachers.

It is expected to train children's literacy in the learning process by providing creative teaching methods and supported by teaching aids so that children do not get bored in the learning process.

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