

The Influence Of Visual Media And Learning Style On Early Reading Ability Of Children Of Kindergarten In Gorontalo

Pupung Puspa Ardini, Asra Biahimo, Rusmin Husain, Hijrah Syahputra

Abstract: This study was aimed at finding out (1) the differences in early reading ability of the children taught using flashcard visual media and those taught using letter poster, (2) the differences in early reading ability on children with visual learning style treated using the flashcard media and letter poster media, (3) differences on early reading ability of children with kinesthetic learning style treated using flashcard media and letter poster media (4) interaction of early reading ability with visual media and children learning style. This study was implemented on TK Al Ishlah Gorontalo. The number of sample in this study was 48 students of Group B kindergarten selected using random sampling technique. This study used factorial experiment 2×2 . The data were analyzed using two pathways ANAVA followed by Tuckey test. This study revealed: (1) there were differences in overall early reading ability between students with different learning style, where the $F_{\text{count}}=5.259$ and $F_{\text{table}} = 4.20$ (2) There were differences between learning style on early reading ability in children, where the $F_{\text{count}}= 4.720$ and $F_{\text{table}} = 4.20$ (3) The difference ability of Flash card media and letter poster media $Q_{\text{count}} \leq Q_{\text{table}}$, it was obtained that $Q_{\text{count}} = 5.63$ and $Q_{\text{table}} = 2.037$. (4) Interaction between learning media and learning style toward the early reading ability was calculated using $t_{\text{count}} = Q_{\text{count}} = 2.39$ and $Q_{\text{table}} = 2.037$

Index Terms: Learning Style, Media, Early Reading, Kindergarten, Hijaiyah.

1. INTRODUCTION

Early childhood children are individuals who are undergoing vast development process and fundamental changes for their further lives. In this stage of their lives, development, and growth process in various aspects are quickly changing. Dhieni [1] viewed that there was a strong correlation between language developments learning to read. The best way to help children to learn to read is through reading books for them and accompanying them in reading and having various interesting books in class. A wide extent of recent literature has proven that children can be taught to read before they reach the school-age (5-7 years old). Durkin, as cited in Dhieni [2], has studied the influence of early reading ability on children. He concluded that there were no negative effects on children who were able to read early in their age. Children who were taught to read before they enrolled in elementary school are generally more progressive compared to those who were never taught to read early.

The benefits of teaching children to read early based on the teaching and learning process were (1) fulfilling children's curiosity; (2) intimate and informal situation at home, learning group or in kindergarten; (3) early age children are sensitive in general, thus, easy to impress, and easy to manage; (4) children can learn something quickly and easily. From several arguments of the experts presented above, it can be concluded that developing early reading ability is an

appropriate and positive thing for children [3]. Reading is perceptive written language ability. Reading skill is a complex activity and involved various skills. Thus, reading activity is an integrated activity, which involves several activities, such as, recognizing the Hijaiyah alphabets, linking them to sound, meaning, and pronouncing those alphabets according to the way they are produced. To modify the running headings, select View | Header and Footer. Click inside the text box to type the name of the journal the article is being submitted to and the manuscript identification number. Click the forward arrow in the pop-up tool bar to modify the header or footer on subsequent pages. Hijaiyah alphabet (or Arabic alphabets, throughout this paper, will be referred to as Hijaiyah) is the alphabets in which the Qur'an was written with, consisting of 28–30 letters including the alif. Recognizing and becoming apt in reading this alphabet is an objective of learning in each educational institution, both formal and non-formal. Learning the hijaiyah alphabets are initiated with alphabets introduction, reading symbols (fathah, kasroh, and dhummah) and the way to pronounce those letters according to the way they are produced. Therefore, initial reading for hijaiyah alphabets is becoming essential for the Qur'an learning at Al Ishlah kindergarten of Gorontalo city. Reading needs visual assistance, which could help children, such as flashcard. Schramm stated that learning media is a message conveyor technology, which can be utilized for the needs of learning. In sync with this, Gagne wrote that media are various types of components in the learners' environment to motivate them to learn. The readiness for early reading means that mentally children are ready to learn to read. In general, children are ready to learn to read at the age of 6 years old. However, several studies pointed out that reading readiness has happened before children reach the age of six, or in kindergarten age. At this time, children are starting to become aware that words are statements of symbols that contain meaning. Thus, they will further start focusing their attention on two or more aspects of words and their pictures [4]. Based on the initial observation on Group B children, there were children who find it difficult to read the hijaiyah alphabets, even there were some who find it difficult to pronounce the hijaiyah alphabets. Children were yet able to recognize the entire

- Pupung Puspa Ardini is an associated professor of Early Childhood Education Department in Gorontalo State University, Indonesia, PH-+6282195521560. E-mail: pupungpuspa@gmail.com
- Asra Biahimo is currently pursuing masters degree program in Primary School Education in Postgraduate Program of Gorontalo State University, Indonesia, PH-+6285340016505. E-mail: asrabiahimo08@gmail.com
- Rusmin Husain is an associated professor of Elementary School Education Department in Gorontalo State University, Indonesia, PH-+6282145101613. E-mail: rusmin.husain@ung.ac.id
- Hijrah Syahputra is a teacher in technical engineering department in 3rd public vocational high school of Gorontalo, Indonesia, PH-+6281340059710. E-mail: hijrah_syahputra@smkn3gorontalo.sch.id

hijayah alphabet, thus their reading ability was low. This was due to several things such as, first, teachers were yet to use interesting media, activities were teacher-centered, more focused on using the student's worksheet, and lack of children's ability in memorizing the alphabets. Interview with several parents revealed that at home, children spent most of their time playing with their gadgets, as well as lack of repetition on hijayah alphabets, and early reading hijayah alphabets. Based on the description above, it was suspected that children early reading ability can be increased using the flashcard media. Thus, this study was titled, "the influence of visual media and learning style on the early reading ability of the Group B children at Al Ishlah Kindergarten Gorontalo City."

2 THEORETICAL REVIEW

2.1 The nature of early reading ability

Syaodih [5] revealed that kindergarten children are individuals who are undergoing various development processes, from physical, intellectual, social, emotional development, and language development. These various aspects of development could normally be developed when the environment also positively contributes to children development. However, in reality, there are children who experience obstacles that influence their development. Hurlock [6] revealed that kindergarten children are children age 4 to 6 years old, which is also known as the golden age. Such is due to the best development time of children in this phase, as the first five years of a child's life, which provided a critical foundation for the next stage of their lives. Children who experience a happy childhood and fulfilled physical and mental needs at an early age are more likely able to go through the next stage of development seamlessly. On the definition above, it can be concluded that kindergarten children are children age 4–6 years old who are undergoing development phase in all aspects of their lives. Children in their first stage of early reading (6-7 years old) or the initial stage of decoding. In this stage, children focus on the correlation between letter and sound and increase their knowledge of spelling. Children are fully dependent on written text. In this stage, children are able to hear the phonemes through words, increase their ability to describe words, and also to start to observe words from vocabularies, which can guide them to become competent readers. The description of early reading encompasses (1) focus on writing, meaning and knowledge from the story; (2) focus on the shape of words and sounds that are relevant to symbols; and (3) coordinate knowledge between writing and story. In the initial reading phase, children can start with reading a simple story [7].

Zuchdi and Budiasih [8] wrote that materials that can be taught in early readings are:

1. Pronunciation and intonation of words and simple sentences,
2. Letters that are mostly used in words and simple sentences that are familiar to students (letters are introduced gradually up to 14 letters),
3. New meaningful words (using familiar letters) such as a store, cassava, toys, eyes, guest,
4. Pronunciation an intonation of the familiar and new words (letters introduced from letter number 10 to 20th letters).

2.2 Visual Learning Style

Each child has visual potential as an ability to see and observe things, thus, obtained information on those things. Children with visual learning style would be quick to understand things being described by the teacher when they can see it directly, or through looking at the pictures and through reading (regardless that in kindergarten, reading is not the primary activity). Children with a visual learning style would find it easy to understand something through symbols or pictures. Children with visual learning style are easy to identify through their characteristics that eager to observe something, their interest in pictures and symbols. When learners have this characteristic, then the teacher is to select a learning strategy that draws their interest through pictures or symbols for them to easily recognize and memorizing something in relation to the intended learning objectives. Below are strategies that can be implemented by the teacher in learning activities for children with visual learning style.

The characteristics of this learning style are:

1. Always try to see the lips of the teacher while he/she is teaching.
2. When getting direction on how to do something, student usually will see how others do it before he/she does it.
3. Tend to use body language (to express and replace words) when describing something.
4. Dislikes speaking in front of the group and does not like to listen to others.
5. Usually less able to memorize oral information.
6. Prefer a demonstration than an oral explanation.
7. Usually able to sit peacefully among the noisy situation without feeling disturbed.

2.3 Visual Media

Visual media itself are media that only involves sighting sense. Several types of this media are printed-verbal media, graphic-printed media, and non-printed visual media. First, visual-verbal media are media which contains verbal message (linguistic message in the form of writing). Second, non-verbal graphic media is visual media which contains a non-verbal message such as, visual symbols or graphic elements, such as pictures (sketches, painting, and photo), graphic, diagram, charts, and maps. Third, non-verbal three-dimension media are models like miniature, mock-up, specimen, and diorama. As learning media in general, visual media also used various means to assist the learning process in school. Flashcard media is one of the visual media to develop early reading skill in children. According to Levie & Lentz (as cited in Arsyad) [9] there were four functions of learning media, especially visual media, such as (a) attention function, (b) affective function, (c) cognitive function, and (d) compensatory function. It can be concluded that flashcard as a visual media to develop early reading ability in children that visual signs or pictures can accelerate the achievement of the objectives to understand and memorize information or messages within the pictures. Indriyana [10] wrote that poster is a combination of clear, eye-catching, and interesting visual to attract attention. It means that a poster is a colorful and attractive picture that can be used by the teacher as a medium to deliver learning materials to be interesting for students and assist them in understanding the materials. Sudjana and Rivai [11] wrote that poster is a visual combination of strong design with color and message intended to attract people's attention for a long time to deliver

a memorable message to a person who sees it.

3 RESEARCH METHODE

This study used experiment method treatment level 2 x 2 of ANAVA which involved several variables categorized below:

1. Dependence variable (Y) = early reading ability
2. Independent variable (X) = visual media
3. Confounding variable = learning style

The sampling technique in this study was random sampling. The samples were 48 students in Group B of kindergarten treated using flashcard media. The score of the test from the instrument implementation was sequenced from the highest score to the lowest score. The score was classified into 33% of the upper group and 33% of the lowest group as sample. This study used inferential analysis to test the analysis requirement and hypothesis test, which consisted of : a) normality test with Liliefors test where the criteria was H_0 would be rejected when L_0 was larger than L_{table} and H_0 would be accepted when L_0 was less than L_{table} ; b) the variance homogeneity test using Barlet test with the criteria of H_0 would be rejected if X^2_{count} was larger than X^2_{table} and H_0 would be accepted if X^2_{count} was less than X^2_{table} and two pathways ANAVA test to test the research hypothesis and if there were interaction between learning media and learning style toward the early reading ability then the hypothesis test would be carried out by Tuckey test with the criteria of H_0 would be rejected when t_{count} was larger than t_{table} and would be accepted if t_{count} was less than t_{table} .

4 RESULTS

Based on the summary of ANAVA above, it can be described that:

1. The result of two pathways variance analysis between the columns obtains the $F_{count} = 5.259$ and was larger than the $F_{table} = 4.20$ in the significance level of $\alpha = 0.05$. This means that the noel hypothesis is rejected, hence the alternative hypothesis which stated that there were significant differences in early reading ability between the students taught using flashcard media and those taught using letter poster media is significantly accepted. As this difference has been pointed out, then the children's learning styles were analyzed. It is revealed that the average score for early reading ability on children taught using flashcard media (A_1) was 30.25 more visual than the average score of children taught using the letter poster (A_2) was 27.50. Therefore, the first hypothesis which stated that the initial reading ability on children taught using flash card media was more visual than those taught using letter poster.
2. The variance analysis result between B (learning style) showed that the value of $F_{count} = 4.720$ and was larger than $F_{table} = 4.20$ in the significance level of $\alpha = 0.05$. This means that the noel hypothesis was rejected; hence, alternative hypothesis stating that there were differences on the early reading ability of children who have visual learning style and those with kinesthetic learning style is significantly accepted. This learning media differences pointed out that initial reading ability of the children is more visual between the two treatments. The result of the analysis showed that the average score on the initial reading ability of the visual learning style children (B_1) was 31.00 higher than the

TABLE 1
RESEARCH DESIGN

Learning Style (B)	Visual media (A)	
	Flash Card (A ₁)	Letter Poster (A ₂)
visual (B ₁)	A ₁ B ₁	A ₂ B ₁
kinesthetic (B ₂)	A ₁ B ₂	A ₂ B ₂

average score in early reading ability of the children with kinesthetic learning style (B_2) by 28.44. Therefore, the second hypothesis stating that there was an interaction between learning style and early reading ability of the Group B kindergarten children is significantly accepted.

3. Based on the ANAVA test on significant interaction between learning style and early reading ability of the children, it is proven that there is a significant influence of the two variables on the early reading ability of the children, which further tested using the t-test.

Further analysis using Tuckey test for two groups of the compared subject reveals:

1. The T-test result for (A_1B_1) children with visual learning style shows that flashcard media is able to increase their early reading ability compared to the letter poster. This is evident in the $t_{count} = 5.63 > t_{table} = 2.037$ ($\alpha = 0.05$). Also, the average score of group A_1B_1 ($\chi = 5.63$) is higher than group A_2B_1 ($\chi = 2.037$). It means that the hypothesis is accepted or significantly tested.
2. The result for t-test for children in the group (A_2B_2) with a kinesthetic learning style showed that poster letter could increase early reading ability on children compared to the flashcard media (A_1B_2). This is proven by $t_{count} = 2.39 > t_{table} = 2.037$ ($\alpha = 0.05$). Also, the score from group A_2B_2 ($\chi = 2.39$) is higher than the group A_1B_2 ($\chi = 2.037$). This means that this hypothesis is significantly accepted.

5 DISCUSSION

Early reading focuses on children conditioning to initiate and recognize reading materials. It was yet to focus on the understanding of the reading materials, even more on comprehensive mastery of the materials and presenting the result from the readings. At the pre-school age, children are stimulated to be able to do an early reading. Early reading is taught on pre-school children. This program is a daily program on complete vocabularies, and meaningful within the personal context of the children and using the materials delivered through games and interesting activities as media of learning. Based on the description of this research finding, it is obtained that children that meet the indicator of recognizing the hijaiyah alphabets, linking them with their sounds in average have a good initial reading ability. The ability of the Group B children at PPIT Al Ishlah, as revealed in this study is that their early reading ability can be increased using flashcard media for those with visual learning style. Meanwhile, poster media was yet to significantly increase the children early reading ability. Based on the description above, it can be insisted that in general children ready to learn to read was at the age of 6 years old. However, several studies have pointed out that readiness to learn to read has happened before children reach the age of 6, which is on the age when children are still in kindergarten. At this stage,

children are starting to be aware of the words as a statement of the symbols which contain meanings. Further, they started to focus on providing various perspectives on children. Previous studies have found that almost all children have significant early reading ability than others. They are already able to read early correctly and fluently. These five children are more pronounced than others, they not only can read fluently and clearly but also they are faster in doing the tasks given by the teacher. In addition, there are only three children who have moderate early reading ability, regardless of the fact that their early reading ability is not as fluent as the other five. However, there is one child who experiences difficulty in learning and has less developed early reading ability. This is evident in the children who find it difficult to recognize the hijayah letters, linking them with sound. In the implemented early reading ability activity, the child is still in need of assistance. Thus, the result is yet as expected in completing the tasks given by the teacher. Based on the description on the result of this study discussed above, it points out that the average of the children are able to early read, their reading ability of the group B children at PPIT Al Ishlah has to be more effective. The readiness for early reading means that mentally children are ready to learn to read. In general, the readiness of the children to read happens at the age of 6. However, there are several studies which pointed out that the readiness to read happened before they reach the age of six, which is during the kindergarten age. This is supported by the theory developed by Ghabanchi & Rastegar [12] that IQ positively correlates with reading; therefore, further analysis was carried out on the early reading ability of the children based on their IQ and from the experiment carried out. Children with high intelligence tend to have high early reading ability. We found the interesting interaction where children with average intelligence can be optimized using the experiment with the flashcard method.

6 CONCLUSION

Based on the data analysis and the hypothesis test, the following conclusion is reached:

1. There is a significant difference in the early reading ability among students with different learning styles. This is according to the hypothesis criteria that H_0 is rejected. Further, it is obtained that the $F_{count} = 5.259$ and $F_{table} = 4.20$ this means that there are differences between children taught using flashcard media, which are more visual than those taught using the letter poster.
2. There are differences in different learning style on early reading ability of the children. This is based on the hypothesis criteria of H_0 is rejected. Further, it is obtained that the $F_{count} = 4.720$ and $F_{table} = 4.20$. This means that there is a difference between children with visual and kinesthetic learning style.
3. Differences in early reading ability of the children taught using flashcard media and poster media. Flashcard media is more visual compared to children taught letter poster with the testing criteria of H_0 is accepted when $Q_{count} \leq Q_{table}$. Further, it is obtained that $Q_{count} = 5.63$ and $Q_{table} = 2.037$ This means that hypothesis is accepted or significantly tested.
4. There is an interaction between media, learning style on the early reading ability. Flashcard media treatment, children with visual learning style has higher interaction than those with poster learning media. This supported

the testing criteria of H_0 is rejected as $t_{count} = 2.39 \geq 2.037$, and further, it is obtained that $Q_{count} = 2.39$ and $Q_{table} = 2.037$, which means that the hypothesis is accepted or tested significantly.

Based on the conclusion above, below are several recommendations of this study on learning.

1. To increase the early reading ability of the 5 – 6 years old children, the school can provide appropriate media for children their age.
2. Learning activity needs to use more interesting media. Thus the early reading ability of the children could develop.
3. Further study, could develop flashcard media toward other abilities such as cognitive ability, language, and moral ability.

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