Testing ICT-based Learning Model 'Creative Reading' as A Trigger of Children's Metalinguistic Awareness in Learning English

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ABSTRACT: This 21st century is known as a period in which access to information and communication technology (ICT) are widely open. This brings good in various fields, one of which is education. In relation to the use of technology in education sector, Kurniawan developed a learning model based on ICT that is a combination of the components of animation technology with aspects of English learning specifically reading comprehension. The model is called Creative Reading Learning Model aiming to increase vocabulary understanding, concept and the use of previously owned knowledge. The model emphasizes the role of educators in preparing learning and students in understanding learning through the help of animation technology that can arise prior knowledge to understand learning materials. This study aims to complete the Research and Development phase until the product is complete and analyze the pedagogical implications of the application of Creative Reading as a form of triggering metalinguistic awareness in the test group. Data obtained through observation. The results of this study indicate that children understand most of the vocabulary presented. Related to metalinguistic awareness, there are children who have used English intentionally with an understanding of form and meaning as the basis.

Keywords: *Creative Reading, English, Learning Models, Reading Comprehension, Vocabulary*

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1 INTRODUCTION

This 21st century is known as the century in which access to information and communication is wide open and allows humans to communicate and exchange information from one country to another in a matter of seconds. Of course, this brings good in various fields one of which is education. The wide-open access to information makes the process of education more helpful and richer. As stated in the U.S. education plan, U.S. Department of Education (2017) that broad access to information to support education is now possible through appropriate learning technology infrastructure.

The technology that has been stated earlier is used to support the process of preparation for learning by accessing information resources for a broad and complete study of data providers and global information sites such as Google, Bing, Yahoo, ResearchGate, Academia and so on. For processing and presenting of data, information technology is used such as Microsoft Word, Excel, PowerPoint, Adobe, media players and so on. Moreover, there is also a form of technology as a medium used in the learning and teaching process such as WhatsApp, LINE, Schoology, Edmodo which in one of the related studies was declared effective in supporting learning so that learning was more efficient, easily accessible, flexible and encouraged students to more active (Georgescu, 2010; Kurniawan, 2012; Kurniawan & Tanone, 2016).

Technology plays an increasingly important role in educational practice, including interventions for struggling students (de Souza et al., 2018; Torgesen, Wagner, Rashotte, Herron, and Lindamood, 2010). O'Brien, Habib, and Onnis, (2019) study focuses on the efficacy of tablet-based applications for the purpose of supplementing early English literacy interventions with grades 1 and 2 children. The results suggest the need to examine interactions between different types of technology-based interventions and individual differences in the learning profile. In connection with the use of technology that has been proven to bring effectiveness in the world of education, for the scope of English education, Kurniawan (2016) in his research, developed a learning model based on information and communication technology (ICT). It was the combination of components of animation technology with aspects in English learning specifically reading comprehension called Creative Reading Learning Model in order to improve understanding through mastery of vocabulary, concept of ideas and the use of previously owned knowledge. The model emphasizes the role of educators in preparing learning and students in understanding learning through the help of animation technology that can arouse prior knowledge as a means of understanding the material provided in the learning and teaching process (Flemban, 2018).

Based on the tendency that learning in the classroom still uses conventional models where the teacher gives lectures then followed by assignments in the form of reading questions (if focused on reading skills) on student worksheets. At an earlier level such as Kindergarten, a verbal translation model is still used that relies on students' memories without developing into a form that is felt to be more interesting and effective. These things are considered challenges in mastering English language skills. In line with this reality, Copland, Garton, & Burns, (2014) in their research stated that one of the challenging aspects of English learning is general category that includes disciplines, behaviors and classroom management.

In addition to aspects seen in terms of students, there are also challenges from the educator's side as stated by Masnan & Ngajib, (2016) that teacher competencies, learning models / methods and teaching materials are important things to consider. These components can be a challenge in learning English especially for Kindergarten students because of the ongoing development and learning that leads to the stimulation of aspects of development that are simultaneously carried out. Therefore, it is necessary to adjust the design of the model that can accommodate the needs and challenges of learning English.

In the Creative Reading learning model design, junior high school students are used as a testing group after the design is revised. However, this study wants to adjust test groups from junior high school students to early childhood / Kindergarten students. Some components that are included in the development of the model and need to be adjusted are presented in Table 1 below:

Table 1. Learning Model Adjustments

No	High School Aspects	Early Childhood Aspects	Adjustment

1	Visualization (image/video)	Visualization (image/video)	Ok
2	Text (Paragraph)	Text (words)	Adjustment needed
3	English course focus	In class learning focus	Adjustment needed
4	Reading comprehension	Vocabulary recognition question	Adjustment needed
5	Slides / Video presentation	Slides / Video presentation	Ok

Based on Table 1 Learning Model Adjustments, there needs to be an adjustment of what has been done in the process of developing the Creative Reading learning model to be tested on groups of early childhood / Kindergarten students. The aspect of the amount of text at the junior high school level ranges from three paragraphs adjusted to form the unit vocabulary up to 10 words for Kindergarten. The focus aspect of the trial model that was initially directed towards English subjects by following the subject matter of subjects was adjusted towards the general learning for Kindergarten following children's age level and the standard of language development achievement. Aspects of the form of assessment at the junior high school level are in the form of several open questions with the expectation of complete and detailed answers from the text understanding to be adjusted to questions that require Kindergarten students to repeat the vocabulary taught and understand the meaning of the vocabulary. The adjustment changes the content of the material but does not change the structure of the model. In this study, the Creative Reading ICT-based learning model will be adjusted in terms of the design of the use and teaching content for Kindergarten and then it will be tested in the teaching learning process. Finally, this research aims to perceive the process of testing Creative Reading learning model and get the ideas of what is happening in area of metalinguistic of early childhood students. It also proposes the answer for those who are still using conventional method regardless the recent need of digital natives that is the integration of fun and creative learning method, media and resources in a form of model. By highlighting those benefits, this research reaches its significance to contribute positively to recent dynamics in the area of early childhood language development.

2 THEORITICAL STUDY

2.1 *Characteristics and Learning Needs of PAUD English*

As is well known that early childhood is a period of human development when a lot of information from outside (the context outside the child's thinking) is absorbed so quickly and strongly that makes this period very important to consider and pay an attention. This characteristic of information absorption can be an opportunity to instill learning, knowledge and skills development if managed properly. Related to language learning in Kindergarten level, especially at the age of 5-6 who already have a basic mother tongue, they tend to be able to learn a second language, a language beside their firs known language or if in the context of Indonesia is still called a foreign language. The language stated refers to English. This condition needs to be addressed appropriately so that strategies for developing reading skills can be carried out during this golden period. It is just that, in fact, the golden period is still not used optimally in the process of improving the language skills of Kindergarten students. In general, there are still educational institutions that are still conventionally designing English language learning so that the visible approach is behavioristic. The approach tends to make the teacher as the center and students as objects of the transferring of knowledge through learning that tends to be one-way or learning that tries to react two-way, but the teacher is still too dominant. In Table 2, Cadena (2006) study presented a pedagogical process that occurs in the reality of current learning trends.

Table 2. Pedagogical process in Reading Process

	In-Class Approach	Reading Process	Reader's Role
Conventional	Behaviorism	Remember words/concept, learning material translation	Passive, information is provided to the reader

Modern	Cognitivism	Understanding gained from readers interaction to the readings, text, and class/learning context	Active, readers use reading strategies, information is formulated when readers undergo reading process

Learning tendencies that are only filled with memorization and translating activities will gradually bring unfavorable effects on the learning atmosphere that has implications for learning outcomes, namely the development of the child itself. In a study conducted by Kurniawan and Tanone (2016) it was found that learning especially for English for young children carried out with a conventional system tends to make children get bored quickly. Their concentration on learning becomes shorter and the atmosphere triggers children to look for activities that are fun even though out of context learning such as talking to classmates or playing with items close to them.

Children need a fresh method of learning where they tend to be more active and intensively involved. A fresh method of learning is obtained by creative innovation even though it is only simple in the preparation, implementation and evaluation of learning. A pleasant learning environment is very beneficial for students and teachers themselves. With the learning environment and the delivery of learning in accordance with children's learning styles, knowledge tends to be well received and effective (Masnan & Ngajib, 2016). The fun learning is then translated by applying various technologies; one of them is animation in English learning for Kindergarten setting.

2.2 *Development of Creative Reading ICT-Based Learning Model*

The Creative Reading learning model was developed based on the needs of the characteristics and needs of English language learning at this time where technology in particular that can stimulate students' thinking is integrated in learning English specifically reading comprehension. For the need of English reading comprehension skills, there are a number of things that should be noticed. Reading comprehension is an important part of reading skills. To build the skills, those who want to improve their skills need to extract and construct ideas according to the material presented as material from reading activities. There needs to be an active and free coercion so that the process of understanding a reading material can run well (McNeil, 2012). Reading skills especially in English also involve cognitive information processing in the brain so there is a need for coding so that readers in this case students can be interested in reading material and the atmosphere that exists when the reading process is carried out (Salazar, J. V. A. & Gallardo, 2017).

This Creative Reading learning model has a basis for creativity in reading. Reading itself has three stages according to Ceballos, Grenna, Joy, and Chall (2012). First, the pre-reading stage is the stage where students begin to read and, in the process, there is a connection of words, sentences or ideas that are read with bias knowledge that they already have before. This preparation stage for understanding continues to the during reading section. During reading phase is the stage where students try to understand part by part of the reading. If it relates to younger students, this section can be translated as the stage where the word is being understood, compared, and memorized to bring up an understandable concept. Meanwhile, at the last stage, after reading, students make improvements or confirm understanding through the help of questions, directions and / or activities that make the results of their understanding increasingly believed to be an appropriate understanding.

From the reading comprehension aspect of the Creative Reading learning model, it was found that there are several parts included in it and can be a concern in adjusting or granting the model in the future. There are aspects of language features or language components that are parts of the language involved in the process of understanding the meaning of reading. The parts included in Timothy (2019) research such as grammar (structure), and vocabulary (words) which are the basis for forming a more complex understanding. There is also an aspect of the question (an understanding confirmation tools) which is a form of assessment of reading comprehension and a form

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of reinforcement or emphasis of what has been understood. There are also aspects of text type (style and genre) or it can also be paired with essays (readings) which in this case are adjusted by using only some words in English for early childhood students. These aspects are adjusted and integrated with supporting technology in the form of animation material. It can be the use of other forms of audio and visual technology (Kurniawan, 2012).

For aspects of animation technology, there are three aspects contained therein. Audio and visual effects (the influence of sound and images) are part of the technology used as a presenter of the language aspects designed in the learning process. In addition, there are aspects of users who are individuals who use technology in the learning process. Another aspect is the suggestopedia effect which is the accompanying impact of the application of technology which is expected to make students more involved and find learning so enjoyable (Karavas, 2014; Kurniawan, 2012)

This model has six stages that is called model syntax. Later, this syntax will be the basis of applying Creative Reading learning model in student's teaching learning process. First, teacher prepare the teaching by planning the lesson. This stage should be done by adding some of amination technology integrated with reading comprehension aspect stated in the body of the model visualization. For student, in this stage, the generating the lesson that teacher initiate. This initiation bring student to the readiness of learning language. Second, after planning the lesson, teacher should find any sources supporting the theme/sub-theme. Teacher are guided to use internet, online resources and any related tools to help them get the best material for children language learning. In this second stage, students connecting what they learn with what they have learned before. This stage considered as the beginning of metalinguistic stimulation. Third, Teacher adjust the material get from resources with the need of real class intended learning. By doing so, teacher can suit the material with students need based on their study level or language development. Student, in this stage, start to analyze what the learn and they have known to get a fresh idea complementing their existing idea or replacing their miss concept idea. Fourth, teacher prepare the media by creating audio visual aid. This aid is made by considering animation technology aspects such as visual effect also known as motion pictures / videos, the level of its user and suggestopedia effect that will be one powerful aid. Here, student play their role to predict the result of their analysis. It means that new language that children learn, their previous experience related to that words and their new develop idea is predict and process within their mind before it is expressed. Fifth, teacher implement the learning lesson to the real practice in class. While I this stage, student execute what they have analyzed to the expression of language. The last, both student and teacher in their own phase will evaluate and reflect what they have done in class learning.
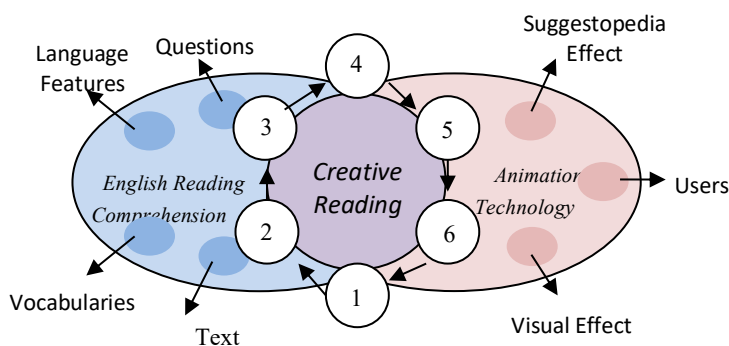

Figure 1. Creative Reading Learning Model (Kurniawan, 2016)

Meanwhile, the basis of creativity that underlies the making of the Creative Reading learning model is derived from the idea of creativity from Guilford (1977) which states that there are several stages to achieving a creative thought. The following stages of creative thinking developed by Guilford (1977) as follows: 1) fluency 2) flexibility, 3) originality, 4) elaboration, and 5) redefinition. From these stages, it is believed that in the process of reading, students can develop their creative thinking to create a thought of the collaboration of existing knowledge with the

meaning of the reading done. This is closely related to metalinguistic awareness which is expected to develop well in the application of this learning model. By understanding the form of language and its meaning, students are expected to learn language, in this case words, effectively optimally. That is why metalinguistic awareness need to be perceived by implementing this learning model.

2.3 *Metalinguistic Awareness in English Language Learning*

Metalinguistic awareness is a form of ability to think, analyze and express about language regardless of the concrete meaning of the language aspect itself. In general, this metalinguistic awareness can be perceived from the expression of vocabulary and its meaning. Language dominance predicts the transfer of lexico-semantic (cognitive) knowledge at the linguistic level, as well as multilinguistic awareness at the cognitive-language level (Robinson Anthony, Blumenfeld, Potapova, & Pruitt-Lord, 2020). Meanwhile, metalinguistic awareness is detected when someone views a form of language such as vocabulary in a decontextualized manner. Aspects of language are seen from the real or concrete scope to the more imaginative (abstract) scope. If related to the ability to read, this metalinguistic awareness is an ability of the reader who is able to capture another idea from the reading passage (from the smallest words to the wider words such as paragraphs) regardless of the original or real meaning of the passage.

Metalinguistic awareness is closely related to reading comprehension. In relation to the language to be learned or the literacy ability to be developed, this metalinguistic awareness has an important role. In developing reading skills, it requires at least phonological awareness and morphological awareness. Awareness of the mention of word forms, the meaning of words with language sound facilities becomes the main point of phonological awareness. While the formation of word structures, parts of words (such as decapitation) become the main point of morphological awareness. These two things combine and play a role in increasing metalinguistic awareness of reading content in a language (Li & Wu, 2015).

In English language learning for early childhood student, especially in reading comprehension, the language component used is still limited to words to a collection of simple words forming sentences. Especially in children aged of 5 to 6, the tendency of new vocabulary taught ranges from up to 10 words per day. At that age range, it is believed that it has also begun to show readiness to become bilingual speakers (Soesilo, 2018). At this stage of age, children begin to develop their abilities by taking on the role of listener and looking at forms of language (oral or written) in the perspective of parties outside the language user. Beginning with grasping the principles of language, then the child begins to understand that the form of language such as words can have two different meanings. The initial meaning tends to be already or is being understood and the second meaning is still related to the word. After understanding this principle, word confusion began to emerge due to lexical ambiguity. From that stage, begin to organize the correct ideas into an understanding of more than one meaning that is right on the same word. This section is the beginning of increasing metalinguistic awareness. It is believed that this metalinguistic awareness can be increased along with the increasingly meaningful language learning process that is well received by students. From the concept of lexical awareness that becomes one of the bases of metalinguistic awareness, children are stimulated by expanding the knowledge of vocabulary size, depth dan organization (Altman, Goldstein, & Armon-Lotem, 2018). Therefore, developments in the English language learning model are needed to achieve goodness in the process of learning and teaching languages especially for English as a foreign language in Indonesia at Kindergarten level.

3 METHODS

This research uses a Research and Development method. This method explores the potential and problems as the basis for the development of a design model which then through several stages a hypothetical model is developed that can be used as an alternative in the implementation of learning English. This study uses a developmental focus that is the development of English in children aged 5 to 6 in terms of vocabulary recognition. This research is a continuation of R&D research

that has been conducted by Kurniawan (2016) which has produced a validated Creative Reading ICT-based learning model.

The model was then validated by two practitioners who were experts in the field related to the design of this learning model. The two experts are a practitioner in the field of English who has been involved in reading comprehension and practitioners in the field of technology who develop their knowledge in the world of multimedia and animation in it. From the validation found some weaknesses that are outline, namely regarding the understanding of design that is less clear because there are no actual parts that need to be understood by the model user in designing learning with that model. Therefore, the Creative Reading learning model develops into more detail. The learning model was originally intended for high school students and later in this study wanted to be adjusted according to the content and design of learning for early childhood students aged 5 to 6 in Kindergarten school level. This study aims to adjust the design of Creative Reading learning models that have been developed with the Kindergarten student test group, finalize the Creative Reading learning model in English language learning, and analyze the pedagogical implications of applying Creative Reading as a form of metalinguistic awareness triggers in the test group.

In the Research and Development type of research, respondents to be examined are children aged 5 to 6 at a representative of the Kindergarten school level in Salatiga, Indonesia. The number of respondents was around 20 children; which is divided into two classes at the intended institution. There are no special requirements in the selection of research respondents. Respondents who have been determined will be the main data sources in learning activities. Researchers and teachers involved in learning become one of the data collectors in this study. The data in this study were obtained by various techniques in accordance with the expected data. Here are some data collection techniques used.

3.1 *Observation*

Data that is the activity of students in learning is collected by observation technique. Observation guidelines are made as a form of data collection in the model-testing segment in the field. Observation guidelines as a guide for this technique are prepared by taking into account aspects of language development in the age of 5 to 6.

3.2 *Rating Scale*

This instrument is used as a complementary form of observation which is a tool to measure or record the developments raised by students. In the recording process, students will have a condition of learning so that the data obtained will be authentic or natural. The results of the model trials were obtained from observational data and scale levels related to student behavior when there was a learning process with that model, the level of progress in students' language abilities (the scope of English vocabulary) and the final evaluation of the model of the results of the implementation of learning models in English learning. The results of data gathering then become the basis for giving the finishing touch and completing the creative reading learning model documents. Furthermore, the model is ready to be packaged in the form of a model description book that can be alternative in learning English.

4 RESULT AND DISCUSSION

In accordance with the stated research objectives, this study focused on the following matters: 1) adjusting the design of the Creative Reading learning model that had been developed with the Kindergarten student as the test group, 2) finalization of the Creative Reading learning model in English language learning, and 3) analysis of pedagogical implications by applying of Creative Reading learning model as a form of triggering metalinguistic awareness in the test group.

4.1 *Customization of the Creative Reading Model with Children's Characteristics*

Based on the initial review related to the suitability of the initial model with the target students, namely Kindergarten B (ages of 5 to 6), it was found that visual (pictures / videos) aspect of the

model could still be said to be appropriate if it was to be applied in learning at Kindergarten level. The visualization aspect was one aspect that triggers the development of children's potential in this case aspects of language. In the aspect of text or type of reading that was originally designed in paragraph form, it still needs to be adjusted, like by changing the form of text into word level or group of words because the child is still in the process of understanding words to simple sentences. Related aspects of English subjects, according to the characteristics of children's learning characteristics, this aspect needs to be adjusted to the form of learning English while doing activities or play activities. This is similar to learning content by using or introducing English that is generally included in the study of Content and Language Integrated Learning (CLIL) where content is taught in English or teaching English through content learning.

In the aspect of understanding texts, this model needs to be adjusted in relation to children's language understanding which in this case is directed to the form of repetition and vocabulary understanding. Children in the age range of 5 to 6 have not been familiarized with language learning in the form of many and complex reading texts especially for the introduction of foreign languages, one of which is English. Moreover, for the aspect of presentation in the form of PPT slideshow or video is still considered relevant because in children's learning, especially in the era of the industrial revolution 4.0, learning is directed at the introduction of technology including Information and Communication Technology (ICT) so that PPT slideshow and video can indeed be used. Therefore, based on this, lesson plan was prepared which refers to the reference to the process of preparation and implementation of learning with the Creative Reading learning model that is ultimately implemented in classroom learning. Table 3 showed the sample of adjusted lesson plan for early childhood students learning.

Table 3. Sample of Adjusted Lesson Plan for ECE Students

Theme: Nation – Indonesia
Indicator:
3.6   : Get to know the objects around him
3.12 : Get to know early literacy through play
4.10 : Demonstrate receptive language skills (listening and reading)
Purpose:
- Introducing child poetry in English
- Introducing some vocabulary in English
- Train children to read in English

	Activities	Media	Method
Pre-Teaching (15 min.)	- Pray - Dialogue about Indonesia - Sing a song 'Merah Putih'	- Audio play	- Dialogue
Whilst Teaching (90 min.)	- Introduce some vocabularies from song lyric - Arrange and introduce 10 English words taken from the song - Share the meaning of every English word for today's learning	- Marker - White board - Visualization from LCD - Video content / song - Pictures	- ICT based learning - Question and answer (interactive communication) –
Break (30 min.)	-	-	-
Post Teaching / Closing (15 min.)	- Question and answer from activity done before - Reading some word learned before - Mention some English vocabularies for today's learning		- Question and answer (interactive communication)

Assessment	- Children are initially confused because they have never spoken English before
	- In mentioning vocabulary there are some children whose pronunciation is clear
	- Children are very enthusiastic in reading the verses that have been provided

It is a lesson plan that is tailored to the child's characteristics. English learning that adapts learning characteristics in early childhood period produces some adjustments at the level of content being taught such as themes, sub themes and focus of learning. Including, there are adjustments to the type of language to be developed in this case the level of words that are the target of language learning at this level. These adjustments are summarized in the lesson plan designed so that it is clear that there is a reflection of the suitability of the content and type of reading that can be learned and later seen how far the mastery can be recorded. Based on that lesson plan, there are total of 10 words the teachers are intending to teach following Creative Reading learning model. Those words are red, white, flag, brave, holy, love, proud, country, Indonesian, and sky. Those words are chosen in line with the theme Nation – Indonesia. Those words are taught by integrating ICT like PPT slideshow and topic-related video.

4.2 *Creative Reading as a Learning Model for Reading English*

Existing Creative Reading learning models have been put into practice in learning settings in early childhood classes. In accordance with the concept of the model as presented as follows, we found several results of the application and the perspective of the teacher using the model. Teacher followed all six stages of Creative Reading learning model and find that the model is really useful. The usefulness of this model is more on giving teacher the procedure of preparing and integrating reading aspect and animation technology, so they are ready to teach language to children. While, there are also some result of children's improvement gained from the data analyzed.

In accordance with the results obtained by teachers when using this model in teaching learning process of early childhood level especially for Kindergarten B (ages 5 to 6) to improve English language skills particularly for children's vocabulary recognition. Ten English vocabularies are determined according to the lesson plan that has been designed. There are two phase application which are practice in lesson 1 and practice in lesson 2 in prior determined Kindergarten. From the implementation, the students' vocabulary recognition ability level is recorded as follows:

Table 4. Vocabulary Recognition Skill – Lesson 1

Name	Correct Answer (Vocab.)	Notes
Std B1	6	
Std B2	6	
Std B3	6	
Std B4	5	
Std B5	6	
Std B6	6	Total of correct answer:
Std B7	7	102
Std B8	8	
Std B9	6	Average of correct answer:
Std B10	7	6
Std B11	8	
Std B12	5	
Std B13	7	
Std B14	7	
Std B15	6	

Std B16	6

Table 5. Vocabulary Recognition Skill – Lesson 2

Name	Correct Answer (Vocab.)	Notes
Std B1	8	Total of correct answer: 126
Std B2	8	
Std B3	8	
Std B4	7	Average of correct answer: 8
Std B5	8	
Std B6	8	
Std B7	8	
Std B8	8	
Std B9	8	
Std B10	8	
Std B11	8	
Std B12	7	
Std B13	8	
Std B14	8	
Std B15	8	
Std B16	8	

Based on the learning results, it can be understood that there is an increase in post-modification of the use of animative media in learning to read word levels at the level of Kindergarten B. Including, the integration of animation technology especially visualization reference and reading aspects particularly English words, there are several notes such as:

- The model help teacher to prepare teaching learning materials easily creatively even though it takes a lot of time

- Evaluate the level of child development, for example English vocabulary spoken orally before applying the model and right after the model was applied

- In the first learning activity there are less activities (including attractive image, sound or movement) so that the children feel bored because they only sit and listen to the teacher facilitating the class. It would be better to be given a little attraction such as motion graphic, audio and visual games (specifically to help children recognize letters and vocabulary mastery) and the vocabulary given should be repeated

- In the second learning activity implementation there has been a development of the child (to remember the total of 10 vocabularies offered in class teaching learning process) because there has been a modification in the activities that are integrated with the animation giving the sense of realistic visualization including activities experienced directly from the animative images presented. Visualization is more alive with the help of the display on the LCD

In general, Creative Reading learning models that have been modified to be applied at the Kindergarten level are considered to provide positive things in learning for children. Meanwhile, it appears also that things are considered good by the teacher as a model user. The tendency of preparation to the assessment of structured learning, guided and well monitored preparation, the implementation of learning that emphasizes the improvement of children's development in terms of language skills in this case English vocabulary level. In addition, although this model is considered to be time-consuming, the teacher using the model experiences better benefits than preparing lessons to his evaluation without guidance or guidance especially in the integration of animation and linguistic aspects. Not all teachers know or are able to integrate because of their lack of understanding of the steps. Some teachers from observed school showed the difficulties to

prepare good English language activities for children. They did not have a plan or procedure to start preparing the lesson. In this case, the Creative Reading learning model is considered to be a bridge for teachers to understand more about ICT integration (animation) and aspects of reading through the Creative Reading learning model. By implementing stages in Creative Reading learning model, they solve some limitation or difficulties in teaching language for children.

4.3 *Pedagogical Implications of Creative Reading on AUD Metalinguistic Abilities*

The metalinguistic idea that is carried out in this study simply wants to look at the implications of what appears in the application of the Creative Reading learning model. The target subjects are children aged 5 to 6 at Kindergarten B school level. Metalinguistic levels as referred to from Wiig's idea (2016) which generally gives a picture that in increasing metalinguistic abilities begins with an understanding of the language (morphological, including phonetic) in its narrative when the focus is reading) which then continues on the meaning (semantic). Both of these will show how the child understands and uses language he understands intentionally. From this basis, this section is divided into three parts, namely the vocabulary of the presentation, understanding the form of language presented and understanding the meaning of the language presented. Table 6 below helps the three presentations to be more aligned.

Table 6. Analysis of form and meaning (metalinguistic awareness) understanding

Vocabulary	Form Understanding	Meaning Understanding
3 related words - 'red' - 'white' - 'flag'	The average student seems to understand the form of words presented together with the translation and visualization of the animated images that support the word	The meaning of the three words are well connected and the child can clearly understand the meaning of each word correctly
2 related words - 'brave' - 'holy'	Understanding these two words seems to be uneven even at the level of adjectives. 'Holy' seems more understandable and the form is memorized rather than 'Brave'. 'Brave' visualization is more clearly understood than understanding the form of the 'Holy'	For the meaning of these two words is difficult to memorize and understand. When given the meaning in Indonesian, children understand but do not completely memorize the meaning of the 'Holy' which is sacred
2 related words - 'love' - 'proud'	Understanding the following two nouns seems to be out of balance. The form of the language of 'Love' is more understood than 'Proud'. Visualization of 'Love' is also captured by children well rather than 'Proud'	The meaning of these words can be well understood by children especially 'Love' who appear to be given a detailed example explanation that illustrates the understanding and connection of language use experience in the previous time
2 related words - 'country' - 'Indonesian'	These two words are easy to understand from the level of the connected language and can be visualized even though the word 'Country' seems not well understood.	These two words are easily understood and easily memorized. When given the term country for children who understand can give other forms besides 'Indonesian'. However, this only happens to some children who do not inherit the whole
1 complementary word - 'sky'	This word can already be understood from the level of form and visualization of supporters	Understanding the meaning of this word seems good and is supported by the right thought patterns of what is 'Sky' and its characteristic is white.

Therefore, it can be said that children at this educational level have begun to develop a simple metalinguistic ability of the 10 vocabularies taught. Based on understanding the form and meaning of words, it is known that the children who were respondents in this study showed a progress in terms of understanding the form of words and their meanings. This metalinguistic awareness appears when children can explain the meaning of the word, they read is based on the form of words that have been taught with the help of the Creative Reading learning model. In line with Abdon et al., (2019) research which revealed that full bilingual learning has better performance than partial bilingual. This indicates the benefit of seeing the competencies of bilingual children in multilinguistic awareness. Of course, the association of meaning and form of simple words that are described in a brief explanation at the level of early childhood.

From this, it was found that the Creative Reading learning model for early childhood especially in language learning can still be said to play a good role. Apart from the limitations that seem like the syntax sequence of learning that may not be in accordance with the proposed model, but the flexibility of learning can be a supporter of the effective application of this model. an idea that also seems to be in line with the results of this study is the result of Kurniawan and Tanone (2016) research (2017 that the concentration of children when learning that affects the understanding of the form and meaning of words is also supported by the existence of learning innovations such as the integration of ICT in learning. The change from conventional learning to digital has a potential influence in determining the understanding of English that is being learned and is an interesting means for children to be actively involved in learning.

5 CONCLUSION

From the research results obtained, it was found a concept idea that learning English for kindergarten around 5 to 6-year-old children seems to have been well followed especially in the aspect of reading. This is supported by the teacher's understanding of the Creative Reading learning model presented which is considered helpful in guiding the preparation, implementation and evaluation of children's language learning. For the results obtained, it appears that children in Kindergarten B are mostly (8 out of 10) able to learn the vocabularies taught in terms of form and meaning. The metalinguistic ability which is apparent from the understanding of forms which is assisted by visual ICT integration (animation) gives a positive impression. Likewise, on the understanding of meaning, a child's tendency can already elaborate the contents of the mind and simple knowledge related to the words taught. Finally, it appears that Creative Reading learning model is a form of creative thought in mind that creates new ideas in an effort to enrich the characteristics of a word.

This study still seems to have limitations, especially when the implementation of learning is only limited to two lessons. Then, the materialistic aspects that appear are only in the form of an understanding of the form and meaning which finally reveal the enrichment of the English vocabulary characteristics taught. For further researchers, it is suggested to be able to add the time allocation of implementation of learning and expansion of aspects of metalinguistic studies. Metalinguistic which is limited to morphological / phonetic and semantic on improving children's creative reading ability only provides a general and basic picture while when this is expanded with the presentation of children's understanding, the relation of background knowledge and Creative Reading learning model facilities can become richer and deeper elaboration.

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Multi Perspectives on Play Based Curriculum Quality Standards in the Center Learning Model

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ABSTRACT: Playing curriculum development based on early childhood learning is a major issue in international early childhood education discussions. This study aims to look at the concepts and practices of play-based curriculum in early childhood education institutions. The study uses qualitative methods with the CIPP model program evaluation on play-based curriculum. Data collection techniques were carried out using participatory observation, document studies and interviews. Participants are early childhood educators, early childhood and parents. The results found that the play-based curriculum has not yet become the main note in the preparation and development of concepts and learning practices in early childhood. Play-based curriculum quality standards have not provided a solid and clear concept foundation in placing play in the center of learning models. Other findings the institution has not been able to use the DAP (Developmentally Appropriate Practice) approach fully, and has not been able to carry out the philosophy and ways for developing a curriculum based on play. However, quite a lot of research found good practices implemented in learning centers in early childhood education institutions, such as develop children's independence programs through habituation to toilet training and fantasy play.

Keywords: *Play Based Curriculum, Center Learning Model, Curriculum Quality Standards, Early Childhood Education*

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1 INTRODUCTION

Today special attention to improving access to early childhood care and education programs and producing high-quality educational experiences for children continues to grow throughout the world. Cortázar's (2015) study assessed the impact of early childhood education programs in Chile with the national Education Quality Measurement System (SIMCE). The findings show that not all children get the same benefits from attending Early Childhood Care and Education (ECCE). Many factors affect the success of improving early childhood education.

One reason is the knowledge of early childhood educators on what children need for future academic success in a play-based and child-centered program and not present in an early childhood program led by teachers and worksheets. One of the most extensive studies takes place in Washington, DC, D.C. over the past 5 years finding children in academic-oriented classes decreased in skills over the next few years to end up substantially behind their peers, and Kathy (2016) found a cause for this, namely child-centered (play based); teacher centered (direct academic instruction such as memorization and worksheets); and combination. Children learn in kindergartens, but decline by 22% in the relative skill level in elementary grades.

A consensus has now been established on quality of early childhood care and education (ECCE) services provided to all children, especially those in marginalized communities caused by social or economic disparities. However, the debate has shifted from access to quality. While all parties agree that quality ECCE services for children, debate about what makes up quality is ongoing. Quality in education is notoriously difficult to define, the reason being, among others, in many cases it is rarely monitored (Ejuu, Apolot, & Serpell, 2019).

Early childhood quality's education towards the concept of activity-based learning in early childhood, that the play basically refers to the way an activity out, an approach that advocates a play-based curriculum, means that learning in meaningful practices (practices that make sense culturally and personal) that follows the game format. The important and different characteristics of this approach emphasized briefly here. In this view, play-based curriculum is not just a curriculum that allows children to play for a while (apart from studying and working). In the play-based curriculum, Develop children quality's education is an important characteristic of all children's activities, and opportunities to teach embedded in these activities at times that make sense to students (van Oers, 2012).

Attention to the psychological and sociological values of per-toy based learning in early childhood is still minimal. Researchers from the fields of education and psychology have suggested 'playing' is a powerful mediator for learning various skills throughout one's life (Ali, Kaitlyn M, Hussain, & Akhtar, 2018). Mcginn (2017) examining the effects of game-based early childhood curricula on develop social and academic contracts for pre-schoolers found a positive correlation between free play in early childhood and future school success in terms of literacy and social development and recommendations for improving teacher practice and education policy.

Basically, curriculum development seen as a multi-faceted development trajectory based on play activities in early childhood education (van Oers, 2015). Such a curriculum offers (relative) freedom to educators and opens up introducing meaningful culture into children's activities and a curriculum that helps teachers to encourage meaningful learning for children is a play-based curriculum. Van Oers dan Duijkers (2013) explain the theoretical basis of the approach and how it is elaborated in a play-based curriculum for early classroom classrooms (ages 4-8 years). The findings show that teaching in a play-based curriculum not only makes theoretical and practical

sense, but also seems effectively useful for achieving positive outcomes compared to approaches that are solely driven by teachers.

Peng (2017) testing the understanding of twenty teachers about play-based curriculum and the relationship of play literacy. The findings suggest that Chinese kindergarten teachers need to balance various educational approaches, mediating benefits and conflicts based on the benefits of children's development through the professional development of kindergarten teachers. A similar thing happened in post-colonial developing countries such as Indonesia, it requires a complete understanding of understanding in early childhood teachers to master bring about educational aspects through an appropriate curriculum for early childhood.

Research has shown the development and educational benefits of the game. Apart from these benefits, academic instruction directed by teachers is very prominent in kindergartens. There is recognition in the curriculum and policy of the challenges posed by the lack of classroom play and the need to support academic learning using practices that are suitable for development. Pyle dan Danniels (2017) High resolution that focuses on playing as a practice for children, which teacher about this pedagogically agreed application. Research results on practice or policy on play-based learning consumption offer broader and more concrete play-based learning resolution to help teachers who approve this pedagogy and to improve play-based learning studies in year-long research early.

The latest debate on pedagogy in the early years addresses the challenges faced by teachers when they choose between teaching academic content through direct instruction or giving children time to engage in child-led play (Chien et al., 2010). Special emphasis in early childhood education about the play important. Faas, Wu, & Geiger (2017) look at various perspectives on learning to play. The focus is on strengthening practices that are suitable for development, child-centered learning and play-based learning, and early literacy, arithmetic, and natural science, all of which emerge as elements of international trends or international reform movements.

Based on various learning curriculum problems applied and various studies on play-based curriculum in early childhood education should play activities as a core part of the curriculum for early childhood education become the focus of research observations at the Ceria Educational Development Center for Children. Early Childhood Education Laboratory, Faculty of Education, Universitas Negeri Jakarta. As an academic laboratory, the TTKA Ceria service program should conduct learning by referring to the study of academic concepts and various good practices in the PAUD field. Therefore, it is necessary to check the laboratory program policies. The purpose of this study is through program evaluation to find the feasibility, usefulness and implementation of play-based curriculum that is a reference in organizing the TTKA Ceria Faculty of Education at Universitas Negeri Jakarta program.

2 THEORITICAL STUDY

2.1 *Play-based Learning*

Many researchers debate how to define the concept of children's play, and there is still a disagreement about what human actions are included in this activity, why children are involved in it, and how it impacts learning and development (Wallerstedt & Pramling, 2012). Children's games as something that freely chosen, actively involved, opportunistic, fun, creative, and more concerned with means than goals (Ashiabi, 2007; Sturgess, 2003). Although many of these ideas

lay the foundation for the conceptualization of different games, two types of games have dominated the focus of current research in education, children's play games and games guided by adults (Weisberg, Zosh, Hirsh-Pasek, & Golinkoff, 2013).

The term free play is often used to describe games with children as direct, voluntary, and flexible, such as involving pretend play (Fisher, Hirsh-Pasek, Newcombe, & Golinkoff, 2013; Holt, Lee, Millar, & Spence, 2015; Weisberg et al., 2013). Play is an activity that children as leaders separate from learning, whereas learning is the result of activities with the teacher as a leader and has a higher priority in classroom settings (Samuelsson & Johansson, 2006). Although conceptualizing games and learning in a dichotomous way is common, many researchers and professionals emphasize the idea that development and learning need play as a tool. Wallerstedt dan Pramling (2012) Will and Jon argue that in a child's early life and learning does not stop once the lesson is finished, because learning cannot separate play and learning.

Play-based learning as a teaching approach that involves elements that are fun and child-led with adult guidance and learning goals prepared in advance (Weisberg et al., 2013). In addition to the academic benefits of games, researchers have found a connection between games and social-emotional skills. For example, mock games have been found to support self-regulation skills (Berk & Meyers, 2013). Alternative perspectives describe play as an opportunity for children to internalize and explore academic concepts, where teacher involvement as an opportunity to improve children's learning achievement (Pyle & Bigelow, 2015).

This type of play-based learning is effective because it actively involves children in activities (van Oers & Duijkers, 2013; Weisberg et al., 2013) and the level of involvement in maintaining and implementing several elements with the teacher as the leader. In addition, there is evidence that emphasizes game-based learning as collaboration between students and teachers leading to positive academic outcomes (van Oers & Duijkers, 2013). therefore, researchers have begun to highlight the need to learn different types of games and the potential benefits of play-based learning for children's development and acquisition of important skills (Bodrova, Germeroth, & Leong, 2013).

Play is an important element in early childhood education programs, because it provides opportunities for young children to (1) express their ideas and feelings, (2) symbolize and test their knowledge of the world, and (3) get effective support for academic learning and non-academic. Through games, early childhood in active learning as they build their experiences, generate ideas, and test ideas. Teachers need to develop play activities that relate to the educational goals of the program. Play also allows children to integrate ideas and experiences so they build knowledge and make most of their goals (Saracho, 2010).

Books, research and theory prove the use of children's games as a curricular tool in children's education. Then suggest practical applications related to children's play for each area of aspects of child development and learning subjects. In the curriculum of the game, must handle various forms of knowledge and foster various forms of intelligence. As well as Requiring Ideas how teachers can choose the resources available to them, the resources of time, space, physical material, and human resources in building high-quality educational programs for children (Saracho, 2013).

Play-based learning is a type of early childhood education that is based on games led by children and open play. Playing itself is a fun voluntary activity without a goal or end goal. Activities

like these lay the foundation for a child to become a curious and passionate learner later on. Play-based learning helps children develop social skills, learning motivation, and even language and numeracy skills. Taking the initiative, focusing, and curiosity about the world are part of the game. Children are naturally prepared to do things that will help them learn and grow.

2.2 *Play-Based Curriculum*

2.2.1 *Conceptualize Play-Based Curriculum*

Planning curriculum development for early childhood, teachers must imagine and think about important theoretical concepts and the relationship between play and pedagogy. A model provides an opportunity for children to conceptualize the child's role as a learning leader, interpret games and pedagogy in original ways while discussing the teacher's role in framing, supporting, and balancing teacher interactions with children to plan to support shared thinking. Educator's Guide to Early Years Learning Framework (EYLF): Belonging, Being, and Becoming, gives educators the role of pedagogy in play-based curriculum documents. The framework says play provides opportunities for children to learn, when children find, create, improvise and imagine. The immersion or sinking of children in their play illustrates how the game allows children to simply enjoy being. However, ways educators immerse themselves in children's play and encourage children in 'being' remain open to further research (Ridgway & Quinones, 2012).

The concept in the play-based curriculum can involve 42 other concepts, Ridgway dan Quinones (2012) such as, everyday concepts, scientific concepts, experiences, spaces, materials, theoretical knowledge, interactions, environment, teachers, family culture, playing from the perspective of children, playing from the perspective of adults, learning, government framing, social dimensions culture, community, peers, thinking together on an ongoing basis, knowledge funds, rules of play, effective pedagogy, self-motivation, pre-school, initiated adults, initiated children, imagination, motives, culture, daily practice , inquiry, institutional practices, model movements, economics, creativity, symbolic meaning, rules, time and space, integrated learning, development, investment, freedom, and attraction.

The aim of the game-based curriculum is to transfer this important attitude to quality learning. However, the reality is that pseudo play with teacher's direction cannot make that goal. Wong, Wang, dan Cheng (2011) examined Hong Kong kindergarten children spending most of their school days after the teacher's instructions; there is little room for the free playful expression of children themselves. Game-based curriculum functions in a way that teachers need to listen to what children are saying and review curriculum and pedagogy. Games that are authentically initiated by children and motivated by themselves, children actively involved and benefit from them. Teachers need to follow the children's instructions and become observers sharp enough to find moments that taught and not impose a learning agenda on children. The results of this study also suggest continuing research to investigate how children's demographic backgrounds and school experiences influence their games.

2.2.2 *Supporting Factors for Play Based Curriculum*

Educators who apply play-based learning curricula now face the challenge of integrating academic standards in game-based pedagogy. While some researchers and educators have supported the viewpoint that play should stay an effort with children as directors, educators have reported concerns about meeting academic standards without being able to offer some direction

during play time. An integrated approach to play-based learning that addresses developmental and academic benefits is widely recommended (Danniels & Pyle, 2018). To integrate developmental and academic approaches, play-based learning conceptualized as a continuum that combines various levels of adult involvement in games.

Activities with children as leaders (free games) at one end of the continuum while games with teachers as leaders (learning through games) fall at the other end, with games that lead each other (collaboratively designed games) in the middle place. When implementing a game-based learning continuum, educators negotiate a balance between allocating time for free games without distractions and embedding or expanding academic content in different ways in fun activities to support children's learning. By providing various types of games in the classroom where educators take on various roles, to overcome the learning of developmental and academic skills in ways that are child-centered, interesting, and under development. This broader definition of play-based learning might help bridge the gap between developmental and academic perspectives in the game, and improve practice (Danniels & Pyle, 2018).

Some of the most helpful aspects in the school environment include having supportive leaders who are very understanding and passionate about classroom-based learning. Another aspect which is the play-based curriculum which is a challenge for educational institutions to organize a play-based curriculum include:

2.2.2.1 Resources

The challenge of using resources and availability when implementing play-based curriculum pedagogy. The teachers indicated more resources to run a regular play-based program with small groups participating in the center of learning or learning with the center model. The lack of other adult resources to help small group work impacts on the offer of this type of activity. Martlew, Stephen, dan Ellis (2011) in their research concluded that even when teachers want to apply new practices such as active learning to play in class, they need other resources and training.

2.2.2.2 Time

Play-based activities need more time in practice compared to structured teaching strategies. teachers need extra time to teach and then arrange children to learn exploration and extra time to follow the discovery of new things in studies of curriculum-based play. A dense curriculum design requires the teacher's expertise in finding time to adjust everything. When doing play based properly, children calmly play and learn, even though they spend most of the time but are effective for aspects of child development. Likewise changing teaching practices and pedagogy requires time and so to sustain them requires the much effort (Jay & Knaus, 2018).

2.2.2.3 Environment, Curriculum and Assessment

The environment for play-based curriculum is the main support for playing activities. These factors include the space in the classroom and the model of the surrounding centers, sharing available space with other classrooms and handling noise. The impact of organizational factors and 'space poverty' on the classroom environment is a problem and impedes opportunities to play a role (Rogers & Evans, 2007).

Other problems include a dense curriculum and the need to check according to National standards including requirements for moderation at all grade levels. Teachers find it difficult to adjust

everything they expect taught and this hinders their ability to start a play-based program. Standard principles of assessment urge teachers to make informed and balanced assessments that involve evaluating school performance and systems based on a variety of reliable sources of evidence that relate to not only academic goals but also include the main social-emotional goals of the school (Klenowski & Wyatt-Smith, 2012).

Assessing children's learning in game-based activities is quite difficult and good documentation and teacher observations are very important. assessments taken in play-based learning are rigorous and that with so many children, limited time, and limited adult help to assess all children during play becomes quite difficult.

2.2.2.4 Behaviour

In children's reaction to game-based programs, many teachers think that children seem to enjoy the experience and involve it in all activities. Some concerns about classroom behavior arise including children becoming overly excited when the teacher introduces new activities. Hope Children will behave well and continue to work on the task by developing collaborative skills. Sometimes some teachers are afraid of the possibility of "losing class control", while other teachers can turn it into a positive aspect of play-based learning by applying the learning center as a strategy to improve behaviour (Jay & Knaus, 2018).

2.2.2.5 Experience

The lack of teacher experience with play-based learning and the need to change their mindset has an impact on their experience. Teachers' attitudes to the value of games as authentic learning strategies, regardless of their teaching qualifications, develop when they engage with young children and teachers can improve their personal teaching approaches.

2.3 *Benchmark Play-based Curriculum*

Another challenge for implementing play-based learning is putting pressure on teachers from schools and system administration about standardized testing (Miller & Almon, 2009). One result of the National Assessment Program - Literacy and Numeration (NAPLAN), such as testing is to put pressure on teachers to meet targets and the effects of teaching ripples for examinations (Klenowski & Wyatt-Smith, 2012). The government needs to carry out an agenda like this to improve education quality and enable transparency and accountability(Thompson, 2013). Testing often results in narrowing of the curriculum which has a negative impact on the teaching and learning of certain content (Reid, 2009). The drive to improve test results has an impact on the school, even in kindergarten and pre-primary schools (Thompson, 2013). Alford, Rollins, Padrón, & Waxman (2016) point out that formal instruction has now become standard in the first year of elementary school. Observing early childhood completing the activities of the class while sitting at the table and the teacher commenting openly about preparing students for the exam. Taking into account the overall development of children, especially when applying to children in the early years, social-emotional development and attitudes towards learning in school. Research therefore recommends opportunities to learn through a more active play-based approach.

Benchmarking is a benchmark or benchmark for evaluating or measuring something (eg curriculum). Benchmarks for early childhood education curriculum refer to references from experts who concentrate of studies on the curriculum. Early childhood education experts have

various perspective perspectives related to the concept of play-based curriculum (Hennessey, 2016). Montessori is one of the figures who often becomes a reference (benchmark) in understanding the concept of playing-based curriculum. Some standard reference components in the Montessori curriculum include (1) philosophy about children, (2) learning objectives and principles, (3) learning content, (4) the role of the environment, (5) playing material, and (6) the role of the teacher (Özerem & Kavaz, 2013).

Preparation of curriculum standard references at PAUD Institutions in Indonesia refers to the national standards for early childhood education (SN-PAUD) by Minister of Education and Culture Regulation number 137 of 2014 and number 146 of 2014 about 2013 PAUD curriculum. Some reference standards (benchmarks) carry out play-based curriculum (article 9 of Ministry of Education and Culture 137 of 2014) has several components. The intended components include (1) institutional self-evaluation documents, (2) documents 1 KTSP, (3) documents 2 containing learning tools and (4) implementation procedures documents according to standards. Institutional self-evaluation is a process of analysis of the various components of the Institution which is a reference to close the Institute and the profile of the Institution. The self-evaluation process is usually carried out using context analysis using the SWOT analysis or SWOT analysis (S-Strength, W-Weakness, O-Opportunity and T-Threat). This approach analysis the Institute from aspects of the strengths and weaknesses of the Institution as well as the opportunities and threats of the Institution (Pendidikan & Kebudayaan, 2015).

The second part is curriculum level unit educator documents (document 1 KTSP). This document becomes a master document and a reference for educators in developing and developing learning tools and SOPs needed. The third part is a learning tool a micro curriculum document at the level of educators conducting operational learning in the classroom. These components usually include semester themes and programs, preparation of weekly learning plan implementation documents and daily learning implementation plans. In the fourth part is the implementation procedure document under the standard (Pendidikan & Kebudayaan, 2015).

3   METHODS

The method used in this study is a qualitative approach to the evaluation program design with the CIPP model developed by Stufflebeam (2003). This model starts from the view that various factors influence the success of an educational program, such as the characteristics of students and the environment, the purpose of the program and the use of equipment, ways and the implementation mechanism of the program itself. This evaluation program intends to compare various program dimensions with a number of specific criteria, to finally arrive at a description and judgment about the strengths and check the weaknesses of the program.

3.1 *Participant*

Participants are early childhood educators, early childhood and parents in TTKA Ceria class of 2018-2019. The research place is based on TTKA Ceria Institute as a program unit of the Faculty of Education at Universitas Negeri Jakarta program laboratory that serves the needs of parents in providing care, care and education for early childhood. Program evaluation on TTKA Ceria services focuses on the Implementation of Play Based Curriculum. Conducting research from April to October 2019.

3.2 *Data Collection*

This research data focuses on a some key aspects which are the basis for a play-based curriculum. The basic data types are (1) document data on the basis of curriculum development, (2) document data 1 curriculum at the PAUD Education unit level, (3) learning device data, (4) playing process implementation data, (5) spatial governance data in and outside, (6) data on the results of child development assessments and (7) annual Institute program data. Data collection using the method of observation, interviews, document analysis and questionnaires. Data sources are TTKA Ceria's head, Early Childhood Education study program coordinator, Educator, parents and students. Focus data collection techniques to see events in the field, with the aim of describing matters relating to nature-based learning center activities.

3.3 *Procedure*

Data collection procedures are as follows; (1) Submission of research objectives in the cheerful TTKA Institute, (2) Presentation, discussion and brainstorming about curriculum-based play, (3) Observation of learning activities, (4) Interviews with various sources, (5) Analysis of curriculum documents and learning tools, (6) Compilation of data coding and classification.

3.4 *Instrument*

Data analysis uses standard references (benchmarks) in evaluating variables. Evaluate variables according to the theoretical references as follows:

Table 1. Play-Based Curriculum Evaluation Instruments

Variable	Benchmarking
Institutional self-evaluation	ECE has a self-evaluation result which includes eight components.
	The results of the self-evaluation were compiled jointly by a team that involved the educator
	There is a process of analysing data on self-evaluation documents
	There are results of the Institutional self-evaluation in the form of institution status
The foundation of curriculum development	ECE institutions have academic manuscript documents that serve as a reference and foundation in developing the curriculum
	The foundation of curriculum development is in accordance with the needs, characteristics, vision and mission of the Institute.
ECE Education unit level curriculum	ECE institutions have Education unit-level curriculums that are self-developed and developed.
	Standard Competencies Program ECE has complete document contents, understood and used as a reference in carrying out learning activities.
Learning Tools	ECE institutions have a complete set of learning tools that serve as a reference for education to provide services to early childhood
The process of implementing play activities	Institutions show the learning process through the variety of play, play tools and duration of play.
Space management inside and outside	ECE institutions have spatial management inside and outside that meet the standards of infrastructure in accordance with the needs, characteristics and stages of child development.

Results of assessment of child development	ECE has a plan for conducting child development assessments and is reported according to the consensus of the time the results of the assessment are given
Institutional annual program	ECE has an annual program of Institutions that is carried out consistently and regularly
Standardized operational procedures	ECE institutions have various SOP on various aspects of service that are technical in nature

4 RESULT AND DISCUSSION (HASIL DAN PEMBAHASAN)

4.1 *Result*

4.1.1 *The Concept of Implementing a Play-Based Curriculum*

The Joyful Child Growth Garden (TTKA Ceria) is one of the laboratories education units for early childhood education of the Early Childhood Teacher Education Program, Faculty of Education, Jakarta State University. This institution was established in 2001 with the first goal of providing PAUD services for early childhood groups from marginalized families around the Universitas Negeri Jakarta. As an educational laboratory unit, TTKA Ceria has become an official laboratory that has had educational infrastructure and education staff since 2006. This laboratory unit has provided ECE services in the form of a Childcare Park program which often also gets the name day-care and ECE educators as educates.

The TTKA Ceria laboratory unit has placed the concept of emergent curriculum (emergent curriculum) and the concept of learning practices that are to the stage of child development (DAP). Emergent curriculum is a perspective and philosophy that places the learning process and curriculum planning which is focused on responsive attitudes to the interests and needs of children to gain meaningful learning experiences (play) in various classroom situations. Emergent curriculum philosophy has four main components as supporting pillars, namely (1) Environment, (2) Role of Educators, 3) Observation and Documentation and (4) project work and project practices.

The Development Appropriate Practice (DAP) concept is used as a platform to look at the interests, needs and stages of the child's real development which are the basis for developing programs and using proper learning practices. The use of the DAP concept is carried out through, among other things, developmental assessment activities and children's learning needs. The results of the assessment data form the basis for developing programs and learning activities for each child or several groups of children through learning centers.

4.1.2 *Implementation of Play Based Curriculum*

As a necessity, Faculty of Education at Universitas Negeri Jakarta program tries to design and develop an educational laboratory that used as a place to conduct various academic practices of lecturers and students, especially in testing and developing scientific knowledge and educational practices in early childhood. One of the academic and practical tasks, from TTKA Ceria is to compile, develop and make the concept of play-based curriculum as the main pillar of ECE experts in implementing the curriculum.

Play-based curriculum is carried out at the TTKA Ceria Institute through various forms of play-based learning planning and practice. In the planning stage, the choice and development of themes become the main activities carried out by ECE educators through discussion forums and workshops led by the coordinator in charge (coming from lecturers appointed by the head of the study program) and technical coordinators who direct and arrange technically with educators. In addition to themes, planning activities continued with a learning syllabus for each learning period on a theme. The ready syllabus has learning activities (play), learning content, competencies and indicators of development as well as the media and learning resources used. Based on this syllabus, educators compile and develop a daily activity plan that is prepared on an ongoing basis.

In the planning section, structuring the playing environment and playing tools is also a mainstay of implementing a play-based curriculum. Every educator and usually assisted by ECE Educator Program students try to work together to present a learning environment with themes being discussed. Attempts to present thematic nuances usually occur and are carried out since the entrance or entrance of the child. In the process, educators also usually try to display performances that are the themes discussed. In addition, in structuring the playing environment, educators also prepare play materials and play assignments to be carried out by children at each center. With a large increase in academic expectations and standards, educators face the challenge of integrating it into a learning experience that is developmentally appropriate for children in kindergartens. To meet this challenge, the role of playing in the classroom with an emphasis on practices that are appropriate to developments such as play-based learning (PBL). PBL is child-centered and focuses on children's academic, social and emotional development, as well as their interests and abilities through learning experiences that are mentally appropriate and develop. Like the results of Taylor & Boyer's (2020) research that explores the definition of play-based learning (PBL), the theoretical framework and historical research that has shaped PBL, the various types of games, PBL's social and academic benefits, and the ways in which educators can facilitate, support, assess, and use technology to improve PBL. The findings conclude by reflecting on how teaching practices can be informed by evidence-based research to improve children's learning experiences in kindergarten classrooms

4.2 *Best-Practice Findings*

4.2.1 *Modelling*

Modelling is one of the findings of good practice implement play-based curriculum in TTKA Ceria ECE Lab school, Faculty of Education, Jakarta State University. Modelling puts the teacher as an example of a model in various forms of speech, attitudes and behaviours that children refer to. To make this good practice, educators must first have an attitude of patience, remind children and tell children, and set good examples for children. The teacher gives a good and clear example so that the child can better understand what the educator means. If a child makes a mistake the educator tells the child that it is not good. The process is also through various forms of daily habituation in children.

4.2.2 *Fantastic Play*

When introducing firefighters, children are invited to know the story of George. The story of George with the yellow hat man. Based on George's story book, the teacher makes the story come true. The teacher makes it as if the child enters into the world of George, then he meets a man in

a yellow hat. The children are attempt, the contents are children making extinguishers. Hats to play fantasy again. Fantasy play in the form of continuous play activities (continuum play) between fantasy play activities on the first, second, third day and so on until the child has readiness to enter the proper thematic play activities. Fantasy play activities (fantastic play) offer a lot of influence for children on various aspects of knowledge, attitudes and behaviour. Educators are greatly helped by fantasy play activities (fantastic play). Children become more understanding, give more impression to children, and children's imagination is honed.

4.2.3 *Practical Life Training Programs and Practices*

Practical life training programs and practices are among the leading programs and best practices recognized by stakeholders, especially parents and educators themselves. Practical life training programs and exercises through various forms of habituation and exercise activities for each child with the aim that children can take care of their own needs. These practical life training programs and activities illustrate the following: (1) Toilet training; (2) hand washing; (3) Take off and wear shoes; (4) Take off and wear clothes; (5) Folding clothes; (6) Tidy up the bag; (7) Eating; (8) Bathing.

4.3 *Discussion*

4.3.1 *Play Based Curriculum in Context Analysis*

Context analysis is an approach and process that is carried out in conducting self-evaluation of an institution. ECE Ceria Education Institution (TTKA), Faculty of Education at Universitas Negeri Jakarta program does not yet have an institution's self-evaluation document, as well as the institution's operational permit from the education office. This is part of the weakness of the education unit from the fact at the heart of educational institutions. Thus, self-evaluation cannot yet become a foundation or footing to make sure compliance with the needs of the model and curriculum approaches in the TTKA Ceria ECE unit, Faculty of Education at Universitas Negeri Jakarta program.

4.3.2 *Platform for Play Based Curriculum*

The foundation of curriculum development has been stated in the TTKA Ceria of Faculty of Education at Universitas Negeri Jakarta program curriculum document, but it has not been compiled in the form of a separate academic text. This is still possible if the curriculum development foundation is laid out in a separate section or special chapter in the curriculum document. The foundation in developing curriculum based on play at the TTKA Institute tends to use an emergent curriculum or curriculum approach by adapting the needs and stages of child development. The teacher does not understand this curriculum approach conceptually or practically because of the lack of socialization and is not involved in the preparation of the curriculum development foundation. In addition to the approach, the TTKA Ceria also adopted the DAP approach. This approach seeks to develop programs and early childhood play activities that are appropriate to the interests, needs and stages of early childhood development. This DAP approach is in line with the emergent curriculum approach which has the same conceptual and philosophical basis.

4.3.3 *Play Based Curriculum in KTSP TTKA Ceria*

The concept of play-based curriculum does not explicitly specify and write it down in the KTSP TTKA Ceria document. The concept of playing-based curriculum is more implicit

explain the emergent curriculum approach and the DAP approach. The key concept using these two approaches is children's play programs and activities by analysing and adjusting children's interests, needs and stages of development. Contain the program for children's independence and fantasy play does not seem and is contained in the TTKA Ceria curriculum document. Educators have a relatively similar view that the advantages of the Institute are programs and exercises of independence in children. But the program is not listed in the vision and mission of the TTKA Ceria ECE Institution.

4.3.4 *Play-Based Curriculum Learning Tools*

The TTKA Ceria Faculty of Education at Universitas Negeri Jakarta program already has a learning device document in the form of developing themes, syllabi and daily learning implementation plans. In the document, the concept of play-based learning develop thematic activities and daily learning plan implementation documents, especially in the first column are play activities. The process of playing activities in two stages, namely playing the pre-theme and playing with the theme.

4.3.5 *Play Based Learning Process*

TTKA Ceria Institute presents play-based learning activities using the center model. The process of playing the center at the play center preparation activities, playing at the arts center, playing at the center of development and playing activities at the exploration center. In addition to core play activities at the center, play activities start when children come to the Institute and children play freely. Play activities are also seen in circle time by guessing, singing and telling stories.

In addition to play activities, learning uses habituation, especially habituation with the aim of building children's independence. Habituation activities start when the child comes to open shoes and bags and keep them in their place. Habitual activities also occur when children exercise to the toilet. Exercise to the toilet through taking off and wearing your own clothes, bathing and cleaning the body with own soap and shampoo.

4.3.6 *Management of Play Based Learning Classes*

Classroom management in general through a four center learning center model. Class management relatively does not change much from time to time except when changing themes. manage center classes, educators prepare types of play and tools by the theme.

4.3.7 *Results of Development Assessment*

The results of assessment of child development using observation and portfolio methods. Educators record and make descriptions of child development on indicators and aspects of development that arise and indicators with targets related to the theme. The results of describe child development are the basis for determining the level of achievement of child development. The results of child development achievements are used as material for child development reports for end of semester activities.

4.3.8 *Program Development in Play Based Curriculum*

Program development carry out the TTKA Ceria curriculum compiles and formulates the curriculum when work meetings take place ahead of the new school year. The results of the work meeting usually map and find the programs and activities in a year that support achieve educational goals in Ceria TTKA.

4.3.9 *SOP of Play Based Curriculum*

TTKA Ceria only has a number of standard operating procedures (SOP) on the main activities. Some SOPs are SOPs for accepting new students and SOP for reporting child development.

5 CONCLUSION

5.1 *Conclusion*

Play-based curriculum implementation is the choice of the main model in implementing learning in early childhood. The choice of the concept of playing into the spirit in the curriculum becomes the main agreement of early childhood education experts. On that basis, early childhood education services in units and types of programs must accommodate and adapt the concept of play-based curriculum. Likewise, the implementation of education in the Day Care education laboratory of TTKA Ceria ECE, Faculty of Education, Jakarta State University needs and must use concepts and models of play-based curriculum, especially learning models with full day concepts (full day school).

Evaluative research at TTKA Ceria concludes that curriculum benchmarks have not been compiled and developed through measurable academic ideas and concepts and implemented appropriately. The use of the emergent curriculum approach and the DAP approach need good understanding and mastery of teacher competencies in various ways, especially in mastering the development and learning of children, curriculum and learning models as well as assessment of child development.

The implementation of the play-based curriculum concept has not been clear and explicit and explicit in the TTKA Ceria curriculum documents. As a result, the development of learning tools also does not adequately accommodate the concept of play-based curriculum, especially in the commitment to provide adequate play density and play time for each child. The play-based learning process is already clear when children begin to enter ECE TTKA Ceria through free play activities and especially when children play at centers.

5.2 *Suggestion*

Based on the conclusions of this research, this study conveys the following recommendations:

- The coordinator of the ECE Educator Program study program needs to conduct a thorough evaluation of the place, function, concept and implementation of ECE services in TTKA Ceria. The recommendation aims to clarify the status of the TTKA Ceria licensing as an educational laboratory as well as the concept and model reference.

- The implementing coordinator and technical implementer of the TTKA Ceria laboratory need to have a planned, scheduled and ongoing discussion with lecturers who have the competence and experience in managing educational institutions. This aims to make sure the concept and implementation of the curriculum uses a clear and measurable academic footing.

- Educators need to recognize and reflect on their academic experience and practice while attending lectures at ECE Educator Program, Faculty of Education at Universitas Negeri Jakarta program. In addition, educators need to update their understanding of concepts and trends in the development of ECE concepts and practices that are developing.

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The Cognitive Style and Attachment on Early Childhood Speech Skills

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ABSTRACT: Concurrently with the rapid development in digital society, the demand for communication skills was clear in childhood. Early childhood education needs to pay attention to children's speech skills development. This study aims to determine the effect of cognitive style and attachment on the ability to speak in early childhood speech development. The method used is a 2 x 2 factorial comparison design which is divided into two groups namely independent and dependent fields involving 138 samples. Research findings about differences in the ability to speak early childhood who have independent field cognitive style and children who have field dependent cognitive style in groups of children with high attachment obtained (A2B1), obtained Q count = 9.39 and Q table (0.05; 4: 10) = 4 , 33. 4). Differences in the ability to speak early childhood who have an independent field cognitive style and children who have a field dependent cognitive style in groups of children with low attachment obtained (A2B2), obtained Q count = 4.39 and Q table (0.05; 4: 10) = 4 , 33. It show that early children who have independent field cognitive style have higher speech skills scores than early children who have field dependent cognitive style while early children who are independent field cognitive style with low attachment have lower speech skills scores than early childhood the field dependent cognitive style with low attachment.

Keywords: *Cognitive style and Attachment, Early Childhood, Speech Skills*

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1 INTRODUCTION

As a communication tool, language is an introduction when the environment tries to stimulate all aspects of child development. Communication and speech and language skills development have been on the research agenda for a long time. With regard to heredity and environment, about the relationship between thought and language and experience for meaningful thinking. At present two researchers (Piaget and Vygotsky) still influence views on child development and language in preschool in many countries (Brodin & Renblad, 2019). Piaget emphasized sensation and experience by focusing on cognitive models and mental structures driven by inherited capacities while Vygotsky focused on learning and zoon of proximal development (ZPD). He highlighted the socio-cultural context and emphasized that adults play a supportive role in social interaction. Evans and Jones (2007) have in the Editorial section collected 14 articles about speech, namely speaking and listening skills. The text includes theoretical and pedagogical aspects and an emphasis on language acquisition, language learning in different cultural settings and aspects of second language learning.

Platokhina, Samarina, and Abashina (2016), there are several important backgrounds for the process of speaking right in early childhood including speech maturity, emotional and auditory reactions to adult speech, understanding of speech for early childhood, the ability to distinguish between shapes, colors, sizes, sounds, and the sense of touch, objects, levels of attention, perception, memory and development of definite thought, active imitation of adult speech. In the research results of McLeod, Harrison, & Wang (2019) it is known that the ability to speak and language in early childhood can affect academic achievement in school. This was revealed in their longitudinal study of children 4-5 years and 6-7 years between children who were identified as developing with children who had problems with speech and language concern (SLC) which after look back when the children are 8 to 12 years. Machado (2012, p. 90), stated, 4-5 years has a vocabulary of more than 1,500 words using sentences of five to six (or more) words may use impact, shock, and forbidden words may use words of violence argues, convinces , and question correctness, knows address and phone number can retell main facts or happenings in stories using adult like speech.

Many children in preschool have speech and language disorders and poor communication development, and the need for support is very broad. Brodin and Renblad (2019) conducts research to find out whether and how to read aloud and storytelling can improve children's communication development. Eleven city preschools with 23 units of children (573 children) participated. The results showed that reading aloud and storytelling were used continuously, and staff believed that would help children to develop their communication both about speech and concept development. Staff prioritize literacy in preschool and have knowledge of how to use reading aloud and storytelling to support children's communication.

Emerging evidence suggests that general processes, including working memory, can contribute to a reduction in the production skills of speaking in young children. Waring, Liow, Eadie, and Dodd (2019) studies compare short-term phonological abilities (pSTM) and phonological working memory (pWM) of 50 children of English language skills between 3; 6 and 5; 11 with typical speech production skills and standard consonant true score scores (PCC) of 12 and above (n = 22) and speech production skills with standard PCC scores between 8 and 11 (n = 28). This research contributes to emerging evidence that shows the relationship between pSTM, pWM, and speech, but whether memory affects speech or speech affects memory needs requires further research.

According to the concept of Vygotsky with the concept of a proximal development zone where the child masters a concept because he gets help or guidance from an adult. The involvement of the environment in children's learning in the form of assistance to the child when performing oral and non-verbal tasks that cannot be done by the child alone so that the environment will interact with the child. This interaction can stimulate various aspects of child development and including language. Based on the geographical location of the City of Tangerang Selatan which is directly adjacent to the City of South Jakarta, DKI Jakarta, there are quite a lot of parents who work in DKI Jakarta and surrounding areas. They leave their children while they are working in additional family supervision (grandparents / siblings) of the child or caregiver, etc. With the limited interaction between parents and their children due to parents working or for other reasons, then parents

can replace this time with an emphasis on quality time when with children, so as to maintain the attachment between parents and the child. With this attachment, the interaction between parent and child continues to be awakened so that the child continues to get stimulation from his parents. Children who have independent and field dependent cognitive styles are what they have been born with. To find out whether the cognitive style of the child and the attachment of parents to the child will affect the ability to speak early childhood, it is planned to carry out this research. The novelty of the research to be carried out is to examine how the ability to speak early childhood who has cognitive style (field independent and field dependent) with a high or low attachment, and how the influence of cognitive style and attachment to the ability to speak early childhood, remembering to date These researchers have not found other studies linking cognitive style and attachment to the ability of speak of early childhood.

2 THEORITICAL STUDY

2.1 *Early Childhood Speech Skills*

Modern education situation in Russia shows that the number of children with developmental problems, including speech disorders in primary school, is increasing. Primary education began to focus on training and adaptation problems of senior pre-schoolers with speech disorders, preschool speech skills and full formation readiness for school. Language is human expression communication with which to share ideas, information, emotions, and beliefs. Usually developing children learn the basics of language and speech in the toddler-preschool era. Language and speaking skills serve an important role in learning and social relations. Delay in the first development of language and speaking skills, which is prevalent in the population, can affect several fields of activity. Factor analysis has shown that senior pre-schoolers with speech disorders are characterized by cognitive development and intellectual readiness for schools consisting of two factors: an understanding of quantitative and qualitative relationships as an important part of intellectual preparedness for schools and general awareness about vocabulary (Nussipzhanova et al., 2017).

According to Pudjaningsih (2013) language development in kindergarten is based on several theories, namely nativism, behavioristic, cognitive, pragmatic, and interactionist. Cognitive and language skills are assumed to occur simultaneously. A child born with the ability to learn languages, express language, and interact with their environment which includes imitation, reinforcement, reward and social roles. The interactionist experts explain that various factors such as social, linguistic, maturity, biological, and cognitive; influence each other, interact and modify one another, so that it influences the development of individual languages. Learning through play can improve language skills. Infants and young children develop knowledge about the world around them through listening and speaking. Because language is fundamentally embedded in children's daily relationships and experiences, adults play an important role in facilitating children's language development and literacy by providing language-rich environments, interactions and opportunities. Mahabbati, (2013) argues that language acquisition depends on the readiness of linguistic organs, so language development occurs following cognitive development.

This is reinforced by Otto (2015, p. 200) that one of the important things is how parents help the development of language through buffering language strategies (strategies used by parents to help children's learning by providing information and encouragement needed by children) by encouraging children's learning in the zone of proximal development (a zone where a child can master a new concept because of getting help or guidance from adults). With an environment for children's learning in the form of assistance to them when doing verbal and non-verbal tasks that cannot be done by the children themselves but implemented with games. This is also in line with the opinion of Madyawati (2016, p. 41), that language development is influenced by the child's environment and surroundings. Interaction with more mature people / more mature speakers plays a very important role in helping to improve a child's ability to communicate. According to Ormrod (2009, pp. 68–69) to be able to communicate effectively, children must master many aspects of language, including the meaning of thousands of words, a complex set of rules about

how to combine words, and social rules in interacting with people other according to the prevailing culture. Such knowledge and skills develop throughout the school years, often with the guidance of the teacher. There is no doubt that a child's environment plays an important role in linguistic development. Children can learn a language only if the people around them use that language routinely in conversation. When children hear more and more diverse languages, the child digests these words in his thoughts so that the child's vocabulary will increase as well. After the environment around the child both the home environment and the school environment provides conditioning and stimulation that encourages the optimization of the development of the child's speech ability, then it is then examined how the child performs his cognitive function (remembering, receiving, compiling, and organizing the information). The habit of children in using cognitive functions is called cognitive style.

Parents can stimulate the development of their children's speaking abilities. This is in line with the opinion of Otto, (2015, p. 200), one of the important things is how parents help the development of language through buffering language strategies (strategies used by parents to help children's learning by providing information and encouragement needed by children) by encourage children's learning in the zone of proximal development (a zone where a child can master a new concept because of getting help or guidance from adults). This buffering language strategy involves the environment towards children's learning in the form of assistance to them when performing verbal and non-verbal tasks that children cannot do alone but are carried out through various games.

Parents often think that by being with their children, the child will have the opportunity to talk. It is better if we really take the time to have a one-on-one conversation with children who will then be encouraged to have fun with adults. In such cases, adults must refrain from assuming that speech is not important to be heard or use baby language because this has been proven to inhibit the progress of normal speech. Parents often put a lot of emphasis on children's reading and schoolwork and forget the importance of learning to communicate (Lwin, Khoo, Lyen, & Sim, 2002, pp. 23–24).There is no doubt that a child's environment plays an important role in linguistic development. Children can learn a language only if the people around them use that language routinely in conversation. As children hear more and more diverse languages and digest these words in their minds, children will have more and more vocabulary. If we associate the ability to think with the ability to speak, then it is clear that at an early age children can express their thoughts, responses to an event or event, etc., in the form of speech or oral, then he uses the power of thinking to convey it verbally.

2.2 *Cognitive style and Attachment*

Shi's (2011) research it is known that cognitive styles have a significant influence on learners' choices of learning strategies. Synthesizing style, sharpener style, field-independent style and impulsive style of cognitive styles corrective clearly almost with every strategy presented in this paper, so they turn to be the most influential cognitive styles that have an impact on learners' learning strategy choices. It is concluded (1) cognitive style has a significant influence on students' learning choices; (2) Synthesize style, sharpening style (remembering something by retelling an event), independent ¬ dependent field style, impulsive style on cognitive style have a positive correlation with each learning strategy chosen by students. Another study found that there was an influence of interaction between play activity and cognitive style on early numeracy skills. It can be concluded that the activity and cognitive style affect the ability to count early, the selection and application of play activities and pay attention to the cognitive style of the child is very helpful. This research does not associate cognitive style with attachment and speaking ability.

Research on attachment was also conducted by Larasati & Desiningrum (2017) who examined the relationship between safe attachment to mother and emotional regulation. The results of their research are that there is a positive relationship between safe attachment to mother and emotional regulation. The higher the attachment to the mother's individual, the higher the level of emotional regulation experienced. However, the study did not highlight the interrelationship between attachment and speaking ability and cognitive style. In the study of Sumantri, Supriyati, and Nugroho (2015) with the title Effect of Clinging and Self Esteem on Spiritual Intelligence, this

study was a causal study on grade 3 students of Islamic elementary schools in Rawamangun in 2014 with a survey method with a path analysis technique. The results of the study are as follows: 1) there is a positive direct effect between attachment to a child's spiritual intelligence, 2) there is a positive direct effect of self-esteem on a child's spiritual intelligence, and 3) there is a positive direct effect of attachment on a child's self-esteem. The study examines the effect of attachment on self-esteem and interpersonal intelligence. However, the study did not highlight the interrelationship between attachment and cognitive abilities. While the research to be carried out is to determine the effect of cognitive style and attachment on the ability to speak early childhood.

Purnama and Wahyuni (2018) examined how attachment to mothers and fathers with social competence in adolescents. In that study it was concluded that there was a significant relationship between attachment to mother and father with social competence in adolescents, which means a higher attachment to mother and father, was higher to social competence in adolescents. This is also in accordance with the opinion of Boroujerdi, Kimiaee, Yazdi, and Safa (2019) this bond, which is built between an infant and his / her primary care giver within the first few years of life, becomes an important part of his / her personality. This means that this bond, which is built between the baby and his primary care giver in the first few years of life, becomes an important part of his personality.

Further about attachment was also investigated by Goodman et al., (2018) who examined the attachment of early childhood and suicidal thoughts in young Kenyan men. It was concluded in the study that warm feelings and attachment to safety in childhood can cause lower feelings of loneliness and suicidal ideation in adulthood. Research on attachment was also carried out by Ding, Xu, Wang, Li, and Wang (2014), researching the relationship between baby attachment with attachment and cognitive and behavior in early childhood concluded that the sense of security in infancy has an important impact on early childhood behavior problems, especially behavior aggressive where it is significantly more likely to occur in children who have insecure attachment in infancy than the type with safe attachment. Babies who have a secure attachment have a significant impact on cognitive development which is generally better than early childhood who has an insecure attachment during their infancy. However, the two studies did not highlight the interrelationship between attachment and cognitive abilities. The difference with the research to be conducted is that the researcher will examine the influence of cognitive style and attachment to the ability to speak early childhood.

Santrock (2011, p. 127), attachments refer to a relationship between two people who have a strong sense of each other and do things together to continue the relationship. So according to Santrock, attachment refers to a relationship between two people who have strong feelings for each other and do many things together to continue that relationship. According to researchers, that when children and parents do a lot of activities together, there will be interaction between them. During this interaction, verbal communication was established between them. This can encourage children to express their thoughts and desires. According to Holmes (2014, p. 67) attachment is an overall term which refers to the state and quality of an individual's attachment. These can be divided into secure and insecure attachments. Like many psychodynamic terms, 'attachments' carries both experiential and theoretical over-tones. To feel attached is to feel safe and secure. By contrast, an insecurely attached person may have a mixture of feelings towards their attachment figure: intense love and dependency, fear of rejection, irritability and vigilance. So according to Holmes, attachment is a whole term that refers to the status and quality of individual attachments. These can be divided into safe and unsafe attachments. Feeling attached is a feeling of security and comfort. Conversely, people who have insecure attachments may have mixed feelings towards their attachment: strong love and dependence, fear of rejection, irritability and vigilance. The young child's hunger for his mother's love and presence is as great as his hunger for food. Attachment Theory provides a language in which the phenomenology of attachment experiences is given full legitimacy. Attachment is a 'primary motivational system' with its own workings and interfaces with other motivational systems. This means that a child's hunger for love and his mother's presence are as great as his hunger for food.

Attachment theory provides a language in which the phenomenology of stickiness experience is given full legitimacy. Stickiness is a 'main motivational system' by its own way of working

and interfaces with other motivational systems. Attachment is a strong emotional bond that children develop through their interactions with people who have special meaning in their lives, usually parents. This is also in line with the opinion of Papalia (2008, p. 274), attachment (attachment) is a lasting and reciprocal emotional bond between baby and caregiver who both contribute to the quality of the caregiver-baby relationship. This means that when there is an interaction between the baby and the caregiver, a bond is formed where the quality of the bond runs parallel with the response between the two. This shows that babies or young children need a relationship that is consistent with certain people to develop. It is understood that the relationship between the two will affect infants and young children in their future development. This is also in accordance with the opinion of Boroujerdi et al., (2019) this bond, which is built between an infant and his / her primary care giver within the first few years of life, becomes an important part of his / her personality. This means that this bond, which is built between the baby and his primary care giver in the first few years of life, becomes an important part of his personality. Attachment is a bond or tie between an individual and an attachment figure. It means that attachment is a bond between an individual and his sticky figure. According Feeney (2001, p. 23), attachment behavior as any form of behavior that results in a person attaining or retaining proximity to some other differentiated and preferred individuals, usually conceived as stronger and / or wiser. This means that attachment is all behavior that results in someone achieving or maintaining closeness with other individuals who are different and preferred, usually considered as stronger or wiser, while attachment according to Berk (2007, p. 419) attachment is a strong bond of affection between the child and the parents or the people who are specialized in children's lives, which leads the child to feel comfortable when interacting with children. Attachment as a strong bond of affection between a child with parents or special people in a child's life, which leads children to feel pleasure when children interact with them.

According to Taylor (2010, p. 27) attachment is a pattern of organized behavior within a relationship, not a trail that children have in varying quantities. Attachments allow the child to feel safe in strange environments and to move away from the attachment figure, physically and emotionally, and explore. It means that attachment is a pattern of organized behavior in a relationship, not a trace that children have in varying amounts. Attachment that allows children to feel safe in strange environments even if far from physically and emotionally attached figures. According to Davis, (2011, p. 7) attachment is a strong emotional tie to a specific person that promotes the young child's sense of security. This means that attachment is a strong emotional bond with a certain person which increases the sense of security in young children.

Attachment is a strong emotional bond that is developed through positive interactions between the child and his primary caregiver, usually with his parents who are attached. Furthermore, Desmita (2010, p. 121) explains that attachment develops through a series of stages, which are determined in part by cognitive changes and partly by the truly natural interactions between infants and caregivers. There are four stages of attachment development and in the fourth stage (Goal-coordinated partnership from the age of two years onwards) this infant learns to negotiate with familiar caregivers and are willing to participate in give and take relationships. That is, children negotiate with caregivers they know and are willing to participate in giving and receiving relationships. In the interactions that develop between the child and the caregiver, the child builds an internal working model. If the interactions that occur between the caregiver and the child develop optimally, then two-way communication is developed. Parents (caregivers) will provide a conducive environment that can support the development of children's speech skills. The more interactions that occur between children and parents, the good communication will be built between them.

At the initial observation in one kindergarten in Banten Province, it was shown that not all children have equal speaking ability. There are still kindergarten children who are still not fluent, do not understand the words delivered by the teachers, and have difficulty communicating smoothly. In addition, there are also children who are still difficult for parents or caregivers to leave when attending school. There are even parents who come into the classroom to wait for their children to learn. The observation also shows that there are children who are very active, but there are also those who are solitary. There are children who actively ask their friends and teachers when facing an assignment or new things that they find, but there are also children who are silent and do the assignment alone.

3 METHODS

The method used in this study is the Ex-post Facto research method with 2x2 factorial design. Kerlinger (1990) states that ex-post facto research is a systematic empirical search where it cannot control its independent variables because events have occurred or because they cannot be manipulated. It can be concluded that the ex-post facto research in question means that the independent variables are not given certain treatments and cannot be controlled. In this study, we will look at the relationship between two independent variables with one dependent variable. Ex post facto research including quantitative research to examine events that have occurred.

3.1 *Participant*

Based on data from the ECE Directorate of ECE Development (2018) in 2017, the number of ECE institutions in Banten Province is 6,022 ECE institutions. Tangerang Selatan City, Banten Province as a city bordering South Jakarta City, DKI Jakarta Province has a Gross Participation Rate achievement of 70.60%. This figure shows the high enough of their parents to send their children to ECE institutions, amounting to 823 education units to get education.

Table 1. The distribution *of* ECE unit at Tangerang Selatan City.

Region/City	TK	KB	TPA	SPS	Total Education Unit
Tangerang Selatan	511	251	2	59	823

Based on the arithmetic process, the total number of samples that can be used as research subjects is 391 kindergarten students. Furthermore, a third group randomized sample was taken to decide which kindergarten would be selected to be the research site of kindergarten students who would be the research subject.

3.2 *Instrument*

Table 2. Early Childhood Speech skills instruments

No	Speech Skills
1	The child mentions one to eight verbs in daily activities
2	The child mentions nouns in the surrounding environment
3	The child shows the object he is mentioning
4	The child shows the movements he mentioned
5	The child does the activity he mentioned
6	Children tell about their activities in the morning with clear sentences
7	Children tell stories about their experiences
8	Children answer parents' questions with clear words
9	The child mentions the name of objects that are around him with the correct word
10	The child mentions the activities that he does at night with the correct words
11	Children speak using three or more words into simple sentences
12	Children tell about the activities they do in simple sentences
13	The children explain today's activities in the correct word order

To test the validity of the instrument the ability to speak by using the correlation coefficient between the score of the item with the total score of the instrument with the Pearson Product Moment. Thirteen statement items were tested and after analysing the validity test items did not obtain statement items that did not meet the requirements, because the r count was greater than r tables.

The results of the calculation of the reliability of the instrument the ability of speaking obtained the reliability value of the alpha Cronbach instrument $r_{11} = 0.908$. Thus it can be concluded that the instrument of speaking ability that has been tested has a very high reliability, the instrument can be used in research.

3.3 *Data Analysis*

Data analysis techniques include data management and data presentation, calculations to describe data, and testing hypotheses using statistical tests. Descriptive statistics are intended for the presentation of data descriptively to make it easier for readers to follow and examine the statistical data (quantities) that have been obtained based on statistical calculations. Inferential statistics by analysing the normality test using the Lilliefors test, homogeneity using the Barlett test both of these requirements (homogeneity) are carried out in each row column and each cell. Hypothesis testing uses the two way ANOVA and continued with the Tukey test. The Tukey test was used for the same sample size for each treatment. This data analysis technique was assisted with Microsoft Excel and SPSS applications.

4 RESULT AND DISCUSSION

The data of this study were grouped into eight data groups namely: (1) early childhood speech ability scores that have independent field cognitive styles (A1), (2) early childhood speech ability scores that have field dependent cognitive styles (A2), (3) scores of early childhood speech ability with high attachment (B1), (4) early childhood speech ability scores with low attachment (B2), (5) early childhood speech ability scores that have independent field cognitive styles with high attachment (A1B1), (6) early childhood speech ability scores that have a field dependent cognitive style with high attachment (A2B1), (7) early childhood speech ability scores that have independent field cognitive styles with low attachment (A1B2), (8) scores of early childhood speech abilities that have a field dependent cognitive style with low attachment (A2B2).

Table 3. Recapitulation of Early Childhood Speaking Score in All Groups

B \ A			A_1			A_2			Total	
B_1	ΣY_{11}	=	489	ΣY_{21}	=	412	ΣY_{B1}	=	901
	n_{11}	=	10	n_{21}	=	10	n_{B1}	=	20
	$\bar{Y}_{11}$	=	48,90	$\bar{Y}_{21}$	=	41,20	$\bar{Y}_{B1}$	=	45,05
	ΣY_{11}^2	=	23951	ΣY_{21}^2	=	17046	ΣY_{B1}^2	=	40997
	$(\Sigma Y_{11})^2$	=	239121	$(\Sigma Y_{21})^2$	=	169744	$(\Sigma Y_{B1})^2$	=	811801
	S_{11}^2	=	4,32	S_{21}^2	=	7,96	S_{B1}^2	=	21,42
	S_{11}	=	2,08	S_{21}	=	2,82	S_{B1}	=	4,63
B_2	ΣY_{12}	=	411	ΣY_{22}	=	447	ΣY_{B2}	=	858
	n_{12}	=	10	n_{22}	=	10	n_{B2}	=	20
	$\bar{Y}_{12}$	=	41,10	$\bar{Y}_{22}$	=	44,70	$\bar{Y}_{B2}$	=	42,90
	ΣY_{12}^2	=	16959	ΣY_{22}^2	=	20043	ΣY_{B2}^2	=	37002
	$(\Sigma Y_{12})^2$	=	168921	$(\Sigma Y_{22})^2$	=	199809	$(\Sigma Y_{B2})^2$	=	736164
	S_{12}^2	=	7,43	S_{22}^2	=	6,90	S_{B2}^2	=	10,20
	S_{12}	=	2,73	S_{22}	=	2,63	S_{B2}	=	3,19
Total	ΣY_{A1}	=	900	ΣY_{A2}	=	859	ΣY_T	=	1759
	n_{A1}	=	20	n_{A2}	=	20	n_T	=	40
	$\bar{Y}_{A1}$	=	45,00	$\bar{Y}_{A2}$	=	42,95	ΣY_T^2	=	77999
	ΣY_{A1}^2	=	40910	ΣY_{A2}^2	=	37089	$(\Sigma Y_T)^2$	=	3094081
	$(\Sigma Y_{A1})^2$	=	810000	$(\Sigma Y_{A2})^2$	=	737881			

$S_{A1}{}^2$	=	21,58	$S_{A2}{}^2$	=	10,26
S_{A1}	=	4,65	S_{A2}	=	3,20

Hypothesis testing in this study was carried out using two-way analysis of variance and continued with the Tukey test, if there were interactions in the test. Analysis of variance of two paths is used to test the main effect and interaction effect between cognitive style and attachment to the scores of speech abilities of early childhood. By using the two-way ANOVA table, the results are obtained as in table 3. below.

Table 4. Result of Two-ways Anova Analysis

Varians Resource	Df	NS	ANS	F_{count}	F_{table} $\alpha = 0,05$
Inter Groups	3	407,48	135,83	20,43**	4,11
Intra Groups	36	239,50	6,65		
Intra A	1	42,03	42,03	6,32**	4,11
Intra B	1	46,23	46,23	–	–
Interaction A x B	1	319,22	319,22	48,00**	4,11
Reduced Total	39	646,98			

Remarks:

**	= Significant
Df	= Degree of freedom
NS	= Number of Square
ANS	= average number of squares

4.1.1 *Differences in Early Childhood Speaking Ability in the Group of Children Who Have a Field Independent Cognitive Style and the Group of Children who Have a Field Dependent Cognitive Style*

Based on the analysis of the variance of the two lines between A line at a significant level $\alpha = 0.05$, obtained $F_{count} = 6.32$ and F_{table} (0.05; 1: 36) = 4.11, obtained $F_{count} > F_{table}$ then H0 is rejected so H1 is accepted. It can be concluded that there are differences in the ability to speak early childhood between groups of children who have independent field cognitive styles and groups of children who have significant field dependent cognitive styles. In other words, the independent field cognitive style ($\bar{Y}A1 = 45.00$) is higher than the field dependent cognitive style ($\bar{Y}A2 = 42.95$). This means that the research hypothesis which states that the ability to speak early childhood who has an independent field cognitive style is higher than the ability to speak early childhood who has a field dependent cognitive style can be accepted. This means that there are differences in the scores of early childhoods speaking abilities that have independent field cognitive styles and those that have field dependent cognitive styles.

Every child has their own cognitive style. So, in early childhood there is a cognitive style that they already have from the start. They receive, process and react to information, something that they already have. Cognitive style is the basis that distinguishes between individuals as they interact with elements of the situation and is also an important approach to understanding and personally thinking Sternberg and Williams (2009, p. 112). So, in early childhood there is a cognitive style that they already have from the start. They receive, process and react to information, a characteristic that they already have. This is in line with the opinion of Uno (2016, p. 191), cognitive style is given and can affect learning achievement. As a cognitive style possessed by early childhood from the outset and is sedentary, teachers should be able to devise strategies so that optimization occurs in learning.

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When a child in kindergarten receives a learning, he processes the learning information according to the cognitive style he has. When he has an independent field cognitive style¸ he will learn independently and have intrinsic motivation to explore this information in detail. The child prefers to learn on his own and interact with the teacher as needed. But because he studies a topic because he has intrinsic motivation, he will react to this learning with enthusiasm and a very large curiosity. This makes the child will communicate more often with his teacher. It is also possible that the child communicates with his friends to discuss the information he received.

Different things were occurred to children who have a field dependent cognitive style. On the other hand, children who have this cognitive style have characteristics that are willing to start learning when there are influences or orders from other people (teachers or parents). So, the child will see the surrounding environment or wait for instructions to learn something and not initiate themselves, how to think globally, enjoy an atmosphere of learning that involves others and motivation is external. In children who have cognitive style like this, the environment plays a very important role in optimizing all aspects of child development, one of which is language development.

In this study it is known that children who have an independent field cognitive style are more capable of speaking than children who have a field dependent cognitive style. This difference is shown by the average score of early childhood speech ability scores that have an independent field cognitive style of 45.00 and the average score of early childhood speech abilities that have a field dependent cognitive style of 42.95. This proves that the environment around children received by children at home and at school provides a condition and situation that encourages stimulation in optimizing the development of children's speech ability. When he has an independent field cognitive style¸ he will learn independently and have intrinsic motivation to explore this information in detail. Because he studies a topic because he has intrinsic motivation, he will react to that learning with enthusiasm and a very large curiosity. This makes the child will communicate more often with his teacher. It is also possible that the child communicates with his friends to discuss the information he received.

Curiosity caused by intrinsic motivation is what makes the child communicate with parties who according to him can exchange ideas with him about the topic. On the other hand, children who have an independent field cognitive style are less sensitive to criticism. This means that the child does not sulk quickly when the teacher or friend or anyone criticizes anything related to him. So, the child has no difficulty communicating with anyone even if he is criticized. This can be the cause of early childhood speaking ability scores that have a field independent cognitive style higher than field dependent where children with cognitive style have characteristics that want to start learning if there is influence or orders from others (teachers or parents). So, the child will see the surrounding environment or wait for instructions to learn something and not the initiative itself.

When the environment does not support the passive child, then the child lacks the initiative to communicate with teachers or friends, even though he is described as a child who prefers cooperation rather than alone, has broad interpersonal relationships, and has extrinsic motivation. This is in line with what was delivered by Borich & Tombari., (1996); Braune & Wickens, (1986, p. 3) states that children who have an independent field cognitive style have attitudes such as being independent, not influenced by the environment, less concerned with interpersonal relationships, happy working alone, can accept criticism. Conversely children who have a field dependent cognitive style have attitudes, among others, less independent, strongly influenced by the environment, a lot of attention to people, easy to cooperate, more sensitive to criticism, more sensitive, more able to establish interpersonal relationships. Learning models that provide opportunities for students to learn independently provide opportunities for independent field individuals to be able to succeed better. The reason is that, besides being inclined to work independently, they also tend to learn and respond with intrinsic motivation. Prioritized reinforcement in learning is intrinsic reinforcement, so attention to competition, ranking, and superior activity is very high.

4.2 *Interaction between Cognitive Style and Attachment to Early Childhood Speaking Ability Scores*

Based on the analysis of the variance of the two paths about the interaction between cognitive style and attachment to the scores of early childhood speaking skills seen in the two ways Anova calculation table above, that the price of F_{count} interaction = 48.00 and F_{table} (0.05; 1: 36) = 4,11, obtained $F_{count} > F_{table}$ then H0 is rejected so H1 is accepted. The conclusion that there is an interaction between cognitive style and attachment to the ability to speak early childhood. The interaction between cognitive style and attachment to the ability to speak early childhood can be seen in the following picture.
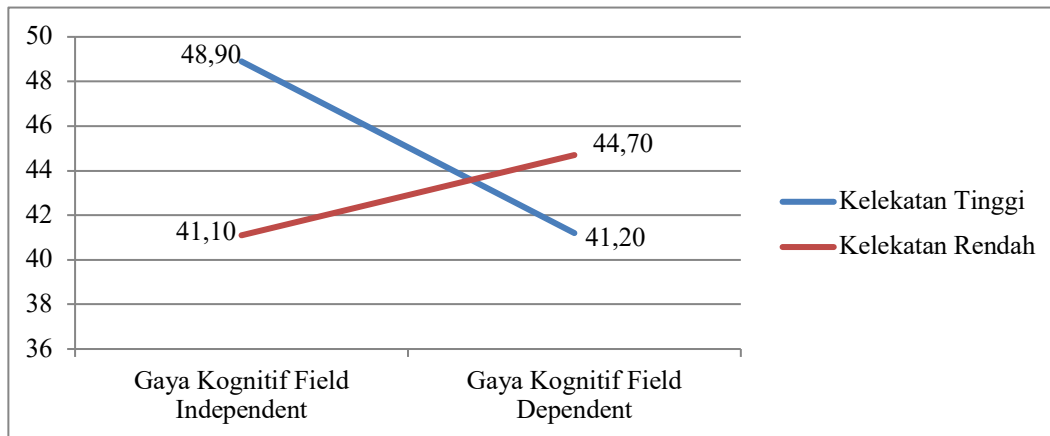

Figure 1. Field independentizing of the interaction between cognitive style and attachment in its effect on the ability to speak early childhood

The cognitive style and attachment interact with the scores on the ability to speak early childhood. And this is evidenced by the results of the analysis of the variance of the two lines in the Interaction line A * B found that the F_{count} interaction of 48.00 is greater F_{table} (0.05; 1: 36) = 4.11. This means that there is a significant interaction effect between cognitive style and attachment to the ability to speak early childhood.

With the testing of these interactions, then further tests need to be done. Further tests are intended to find out about: (1) differences in the scores of early childhood speaking abilities that have independent field cognitive styles and those that have field dependent cognitive styles for groups of children with high attachment (A1B1 and A2B1); and (2) differences in the scores of early childhood speaking abilities of children who have independent field cognitive styles and those who have field dependent cognitive styles for groups of children with low attachment (A1B2 and A2B2). A summary of the results of further tests with Tukey tests on the 2 groups of data compared can be seen in table 4.13 below. The calculation can be seen in the appendix.

Table 5. Resume of the result of Turkey Test Analysis.

No	Groups Compared	df	Q_{count}	Q_{table} $\alpha = 0,05$
1	A_1B_1 with A_2B_1	4: 10	9,39**	4,33
2	A_1B_2 with A_2B_2	4: 10	4,39**	4,33

Remark

** = Significant

This means that there is a significant interaction effect between cognitive style and attachment to the ability to speak early childhood. Because there is a significant interaction effect, it is followed by a Tukey test for the two experimental design cells. If parents and teachers can play a

role in creating a conducive environment, the ability to speak early childhood can develop optimally. This is in line with the opinion of Madyawati (2016, p. 41), language development is influenced by the child's environment and the surrounding environment. Interaction with more mature people / more mature speakers plays a very important role in helping to increase the child's ability to communicate.

Children learn by imitating. For that the way for children to practice their abilities by conditioning so that children can talk. Parents, teachers, caregivers, etc. should provide the broadest opportunity for children to talk. It is possible that the child has difficulty systematically stringing word for word, and it is possible that the child will use unclear expressions to convey his point. Parents and teachers, etc. can listen to the child and convey the use of wrong or unclear words into the right words. Furthermore, children will be able to remember the correct words and sentences that are arranged exactly when he wants to convey his intentions on another occasion. Parents, teachers, caregivers, etc. must provide enough time for the child and they can communicate both ways. With this, the child's ability to speak will be honed. Their desire to speak must be encouraged and supported by providing many opportunities to participate in various language activities such as singing, telling stories, following drama, and reading poetry.

Gandasetiawan (2009, pp. 31–32) age 3-6 years is a sensitive period for hearing nonverbal sounds and verbal auditory recognition. In this period, children are sensitive to use language. Some things that need to be done to optimally support children's mental-intellectual development, for example inviting children to color objects, letting children answer their physical needs, for example asking if the child is sleepy, hungry, thirsty, and cold; involve the child in conversation using simple sentences; ask the child to give his full name; learn to count; introduce opposite words to children; accustom children to express feelings of what is captured by the eyes, ears, nose; invite children to analyze the child's experience mentioning the names of animals, fruits, and vegetables, teaching children to answer commands, etc. In principle, it is trying for children to talk.

One way to improve children's speaking ability is to invite the child to communicate in two directions. When children express their thoughts and feelings, basically they are practicing their speaking ability. On the other hand, children who have an independent field cognitive style are less sensitive to criticism. This means that the child does not sulk quickly when the teacher or friend or anyone criticizes anything related to him. So, the child has no difficulty communicating with anyone even if he is criticized. Different things happen to children who have a field dependent cognitive style. On the other hand, children who have this cognitive style have characteristics that are willing to start learning when there are influences or orders from others (teacher or parents). So, the child will see the surrounding environment or wait for instructions to learn something and not initiate themselves, how to think globally, enjoy an atmosphere of learning that involves others and motivation is external. In children who have cognitive style like this, the environment plays a very important role in optimizing all aspects of child development, one of which is language development. So, when the environment does not support the passive child, then the child lacks the initiative to communicate with teachers or friends, even though he is described as a child who prefers cooperation rather than alone, has broad interpersonal relationships, and has extrinsic motivation. But the advantages of children who have a field dependent cognitive style like to pay attention to the surrounding environment. Because the child is a repeat imitator, when he pays attention to what is happening in the environment, then it will be recorded in the child's memory and the child imitates by practicing it.

4.3 *Differences in Early Childhood Speaking Ability that has a Field Independent Cognitive Style and Children who have a Field Dependent Cognitive Style in Children with High Attachment*

Children with high attachment influence the ability to speak the age of the child in terms of cognitive style. This is proven based on the results of further tests using the Tukey test the results are as follows:

Table 6. Comparation between Group A1B1 with A2B1

No	Compared Groups	df	Q_{count}	Q_{table} $\alpha = 0,05$
1	A_1B_1 and A_2B_1	4: 10	9,39**	4,33

Remark:

** = Significant

Early childhood speaking ability scores that have independent field cognitive style with high attachment (A1B1) compared to early childhood speech ability scores that have field dependent cognitive style with high attachment (A2B1), obtained Q count = 9.39 and Q table (0.05; 4:10) = 4.33. Thus, Q count is greater than Q table, so H0 is rejected, it can be interpreted that there is a significant difference in the score of early childhood speech ability with a high attachment significantly between independent field cognitive style and field dependent cognitive style. In other words, children who have an independent field cognitive style with high attachment ($\bar{Y}A1B1 = 48.90$) are higher than those who have a field dependent cognitive style with high attachment ($\bar{Y}A2B1 = 41.20$) on early childhood speech ability scores.

Children who have independent and field dependent cognitive styles have their own special characteristics or characteristics when children receive information, process it, and react to that information. Every child has their own cognitive style. So, in early childhood there is a cognitive style that they already have from the start. They receive, process and react to information, something that they already have. As a cognitive style that early childhood has from the beginning and is sedentary, the teachers should be able to formulate strategies so that optimization occurs in learning. The difference in characteristics is not explicitly owned by each child, meaning that all the characteristics are not always found intact in a child / complete in a child, but it is a tendency which is more dominant owned by children. Each trend has advantages and disadvantages of each. Therefore, the teacher who really knows the child's personality can accompany him in utilizing his strengths and overcoming his weaknesses.

In children who have independent field cognitive style, they have the characteristics of independent learning, and have intrinsic motivation to explore this information in detail. Because he studies a topic because he has intrinsic motivation, he will react to that learning with enthusiasm and a very large curiosity. This makes the child will communicate more often with his teacher. It is also possible that the child communicates with his friends to discuss the information he received. Curiosity caused by intrinsic motivation is what makes the child communicate with parties who according to him can exchange ideas with him about the topic. One way to improve children's speaking ability is to invite the child to communicate in two directions. When children express their thoughts and feelings, basically they are practicing their speaking ability. On the other hand, children who have an independent cognitive field style are less sensitive to criticism. This means that the child does not sulk quickly when the teacher or friend or anyone criticizes anything related to him. So, the child has no difficulty communicating with anyone even if he is criticized.

Different things happen to children who have a field dependent cognitive style. On the other hand, children who have this cognitive style have the characteristics of students who want to start learning when there are influences or orders from others (teachers or parents). So, the child will see the surrounding environment or wait for instructions to learn something and not initiate themselves, how to think globally, enjoy an atmosphere of learning that involves others and motivation is external. In children who have cognitive style like this, the environment plays a very important role in optimizing all aspects of child development, one of which is language development.

The environment does not support the passive child, then the child lacks the initiative to communicate with the teacher or friend, even though he is described as a child who prefers cooperation rather than alone, has broad interpersonal relationships, and has extrinsic motivation. Field dependent individuals tend to use a passive approach to learning, learning goals tend to be followed what the structure of learning material also tends to be followed as presented, so it requires learning materials that are well structured and systematic.

Tukey test results on the ability to speak early childhood with high viscosity obtained value Q count = 9.39 greater than Q_{table} (0.05; 4: 10) = 4.33. This means that there are differences in the ability to speak early childhood who have independent field cognitive style and who have field dependent cognitive style for groups of children with high attachment. Thus, it can be concluded that the average score of speaking ability of early childhood with high attachment, in the group of children who have an independent field cognitive style is 48.90 higher than the group of children who have a field dependent cognitive style of 41.20.

The higher score of groups of children who have independent field cognitive style that has a high attachment than the score of groups of children who have field dependent cognitive style shows that children who have intrinsic motivation and great curiosity about a learning topic, as well as their observations of something, then the children interact and communicate intensely with their parents and teachers. The intensity of communication, which is driven by curiosity, makes the child develop the ability to speak. This also happens to children who have a field dependent cognitive style. But children who have this cognitive style are so influenced by the environment to motivate them in learning something. Because he is being passive in receiving information, he is less able to explore this information with parents, teachers and those around him. Because the child communicates less, he less develops the ability to speak

Thus, the research hypothesis which states that the ability to speak early childhood with a high attachment that has a field independent cognitive style is higher than the field dependent cognitive style can be accepted. Differences in Early Childhood Speaking Ability that has a Field Independent Cognitive Style and Children who have a Field Dependent Cognitive Style in Children with Low Attachment. Children with low attachment influence the ability to speak early childhood scores in the presence of cognitive style. This is proven based on the results of further tests using the Tukey test the results are as follows:

Table 7. The comparation between group A1B2 and A2B2

No	Compared Groups	df	Q_{count}	Q_{table} $\alpha = 0,05$
2	A_1B_2 and A_2B_2	4: 10	4,39**	4,33

Remark:

** = Significant

Early childhood speaking ability scores that have independent field cognitive style with low attachment (A1B2) compared to early childhood speech ability scores that have field dependent cognitive style with low attachment (A2B2), obtained Q count = 4.39 and Q table (0, 05; 4: 10) = 4.33. Thus, the Q count is greater than Q table, so H0 is rejected, it can be interpreted that there is a significant difference in the scores of early childhood speech abilities with a low attachment significantly between independent field cognitive styles and field dependent cognitive styles. In other words, children who have an independent field cognitive style with low attachment ($\bar{Y}A1B2$ = 41.10) are lower than those who have a field dependent cognitive style with low attachment ($\bar{Y}A2B2$ = 44.70) on early childhood speech ability scores. Children who have independent and field dependent cognitive styles have their own special characteristics or characteristics when children receive information, process it, and react to that information. Every child has their own cognitive style. So, in early childhood there is a cognitive style that they already have from the start. They receive, process and react to information, something that they already have.

In children who have independent field cognitive style, they have the characteristics of independent learning, and have intrinsic motivation to explore this information in detail. Because he studies a topic because he has intrinsic motivation, he will react to that learning with enthusiasm and a very large curiosity. This makes the child will communicate more often with his teacher. It is also possible that the child communicates with his friends to discuss the information he received. Curiosity caused by intrinsic motivation is what makes the child communicate with parties who according to him can exchange ideas with him about the topic. One way to improve children's speaking ability is to invite the child to communicate in two directions. When children express

their thoughts and feelings, basically they are practicing their speaking ability. On the other hand, children who have an independent cognitive field style are less sensitive to criticism. This means that the child does not sulk quickly when the teacher or friend or anyone criticizes anything related to him. So, the child has no difficulty communicating with anyone even if he is criticized.

Different things happen to children who have a field dependent cognitive style. On the other hand, children who have this cognitive style have the characteristics of students who want to start learning when there is influence or orders from others (teacher or parent). So, the child will see the surrounding environment or wait for instructions to learn something and not initiate themselves, how to think globally, enjoy an atmosphere of learning that involves others and motivation is external. In children who have cognitive style like this, the environment plays a very important role in optimizing all aspects of child development, one of which is language development. So, when the environment does not support the passive child, then the child lacks the initiative to communicate with teachers or friends, even though he is described as a child who prefers cooperation rather than alone, has broad interpersonal relationships, and has extrinsic motivation. This is in line with the characteristics of individual dependent fields in learning also described by Borich and Tombari., (1996, p. 609) as follows: 1) accept concepts and material globally, 2) tend to connect the concepts in the curriculum with their own experiences, 3) seek guidance and guidance from the teacher, 4) require gifts to strengthen interaction with the teacher, 5) be sensitive to one's own feelings and opinions, 6) prefer to cooperate rather than work alone, and 7) more interested in the organization of the material prepared by the teacher. So, field dependent individuals tend to use a passive approach to learning, learning goals tend to be followed what the structure of learning material also tends to be followed as presented, so it requires learning materials that are well structured and systematic.

The results of the Tukey test on the score of speaking ability of early childhood with low attachment obtained the value of Q count = 4.39 is greater than the Q table (0.05; 4: 10) = 4.33. This means that there are differences in the scores of early childhood speech abilities that have independent field cognitive styles and those that have field dependent cognitive styles for groups of children with low attachment. Thus, it can be concluded that the average score of speaking ability of early childhood with low attachment, in the group of children who have an independent field cognitive style by 41.10 lower than the group of children who have a field dependent cognitive style of 44.70.

The lower score of groups of children who have independent field cognitive style that has a low attachment than the score of groups of children who have field dependent cognitive style shows that when there is a limitation of attachment between children and parents causes children who have independent field cognitive style have lower ability to speak. The home environment in early kindergarten influences language skills, so as to predict children's readiness to enter school (Santrock, 2011). Children who have an independent field cognitive style have characteristics including intrinsic motivation, lack of attention to those around them, lack of interpersonal relationships, independent, and a great curiosity about a learning topic, as well as their observation of something. But Lev Vygotsky and several other experts have explained how important an interaction of children with those around them and with the environment to improve children's abilities. When the child interacts and has limited communication with parents, the child lacks the opportunity to talk. On the other hand, the child's lack of attention to the surrounding environment in which people communicate and the child lacks socialization, causes him to be limited to practicing or imitating the words he hears. Even though the child is basically a great copycat. Even parents who have a low attachment to their children, do not motivate children to develop speaking skills. Whereas the intensity of two-way communication between parents and children, can occur when parents and children do activities together, for example when eating together, sleeping together, asking the child about activities at school, spending time playing with children, etc. When the child who has an independent cognitive field, style does not receive information on the information he received even though he has intrinsic motivation, then the child will have less opportunity to develop his speech skills.

Children with field dependent cognitive styles who also have a low attachment to their parents, have other characteristics that allow them to communicate more often than children who have

independent field cognitive styles. This is explained by Nasution (2011, p. 76) the characteristics of field dependent include: (1) Very much influenced by the environment / much dependent on education since childhood; (2) Educated to always pay attention to others; (3) Having broad interpersonal relationships. Children who have a field dependent cognitive style have the opportunity to communicate with their friends because they have characteristics that have broader interpersonal relationships. He prefers to work with his friends when doing something, this is different from children who have independent field cognitive styles who prefer to do things themselves. On the other hand, the characteristics of children with a field dependent cognitive style have attitudes to pay more attention to others than children who have an independent field cognitive style.

Because children are accomplished imitators, the child who has a field dependent cognitive style will pay attention to the words spoken by those around him and will imitate those words. Basically when a child who has an independent field cognitive style has an intrinsic motivation and is supported by an environment that facilitates children's curiosity (the teacher and parents), then the child has an independent character and when he wants to know more about something, he will take the initiative to ask , discuss and think critically. However, when the environment is less supportive (low attachment and lack of interaction with parents and teachers and peers), it is precisely the child who has a field dependent cognitive style with a character that pays more attention to his surroundings, even though he is silent but he will imitate the words around him. Because children are accomplished imitators. But if the child has an independent field cognitive style, then he is not paying attention to his surroundings so that the child is less able to develop vocabulary. This is supported by the results of this study that children who have independent field cognitive style with low stickiness have lower scores than children who have low dependent field cognitive style.

Thus, the research hypothesis which states that the speak ability of early childhood with low attachment that has a field independent cognitive style is lower than the field dependent cognitive style can be accepted.

5 CONCLUSION

There are differences in the ability to speak early childhood between those who have independent field cognitive styles with field dependent cognitive styles. This means that early childhood who have an independent field cognitive style has higher speech ability scores than early childhood who has a field dependent cognitive style.

There is an interaction effect between cognitive style and attachment to the ability to speak early childhood. This means that the cognitive style of early childhood and the attachment between early childhood and their parents affect the ability to speak at an early age.

For children who have high attachment, the ability to speak of early childhood between those who have a higher independent field cognitive style and a field dependent cognitive style. From the results of the study it turns out that early childhood cognitive field independent style with high viscosity has higher speech ability scores than early childhood children who are field dependent cognitive style with high attachment.

For children who have low attachment, the ability to speak early childhood among those who have independent field cognitive style is lower than the field dependent cognitive style. From the results of the study it turns out that early childhood cognitive style independent field with low attachment has lower speech ability scores than early childhood children who are field dependent cognitive style with low attachment.

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Recognize Geometry Shapes through Computer Learning in Early Math Skills

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ABSTRACT: One form of early mathematical recognition is to introduce the concept of geometric shapes. Geometry is an important scientific discipline for present and future life by developing various ways that fit 21st century skills. This study aims to overcome the problem of early mathematical recognition of early childhood on geometry, especially how to recognize geometric forms based on computer learning. A total of 24 children aged 4-5 years in kindergarten has to carrying out 2 research cycles with a total of 5 meetings. Treatment activities in each learning cycle include mentioning, grouping and imitating geometric shapes. There were only 7 children who were able to recognize the geometric shapes in the pre-research cycle (29.2%). An increase in the number of children who are able to do activities well in each research cycle includes: 1) The activities mentioned in the first cycle and 75% in the second cycle; 2) Classifying activities in the first cycle were 37.5% and 75% in the second cycle; 3) Imitation activities in the first cycle 54.2% and 79.2% in the second cycle. The results of data acquisition show that computer learning application can improve the ability to recognize geometric shapes, this is because computer learning provides software that has activities to recognize geometric shapes with the animation and visuals displayed.

Keywords: *Early Childhood Computer Learning, Geometry Forms, Early Math Skills*

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1 INTRODUCTION

Children in their early childhood is in a fundamental or sensitive period. During this period, child's potentials emerged and stimulation from the environment is vital. Education is one of the ways to provide stimulation to children to optimize their development (Suryana, 2013). At this age, what children acquire will contribute to the development of skills and intelligence (Edwards, 2009; Trawick, 2007). At the age of 0-4 years the child's intellectual development will be as much as 50%, which then increases to 80% when they are at the age of 8 years (Gardner, 2011), thus the activity to develop children's intelligence is necessary. Visual-spatial intelligence defined as the ability to recognize space, shape and colour is one among types of intelligence that need stimulation since early childhood which can be done through playing activities as one of the alternatives.

Related to children intelligence, there are a number of research and survey results that describe the level of intelligence of Indonesian children. Program for International Study Assessment (PISA) under the auspices of the Economic Co-operation and Development (OECD) report their survey results in 2015 in which the mathematical value of the State of Indonesia placed 63rd out of 70 countries in the world (Gurría, 2016). In addition, The Trends in International Mathematics and Science Study (TIMSS) which is incorporated in the activities of the International Association for Evaluation of International Achievement (IEA) presents the results of a survey of Indonesia's achievements which ranked 36th out of 49 in the 2007 TIMSS with the acquisition of an average value of 405 from the predetermined standard value of 500, which then the average value achieved by Indonesia decreased to 386 (Martin, Mullis, Foy, & Stanco, 2011). Prior to the reports of mathematical ability and decrease of achievement above, there is a need to improve student mathematical ability especially to preschool children in kindergarten. Introducing and inculcating the ability to recognize mathematical shapes will build meaningful experiences and substantial knowledge which will contribute to their development in the future.

The introduction of mathematics to children stimulate their ability to think logically, analytically, systematically, critically and creatively as well as the ability to work together (Feliyanah, Norman, & Yulidesni, 2014). Early mathematical skills are related to human thinking abilities embodied in the thinking concept of Bloom's Taxonomy an empirical basis in cognitive development. This concept of thinking consists of 6 categories including; remembering, understanding, applying, analyzing, evaluating and creating Anderson, Krathwohl, and Bloom (2001) divided into Lower Order Thinking Skills (henceforth, LOTS) and Higher Order Thinking Skills (henceforth, HOTS) thinking stages. The ability in this stage will be well-optimized if children receive proper stimulation. Touching upon the research reports on mathematical achievement above, it is necessary to stimulate early math abilities to children which is categorized in Lower Order Thinking Skills. LOTS are stages of the initial ability to think at the stage of knowing / remembering, understanding, and applying. Considering that early childhood is in a period of concrete preoperational thinking, the ability to recognize or remember is of the researchers' concern as the focus of intervention to prevent and solve potential problems related to mathematical ability and children intelligence. The ability to recognize in early mathematics through computer learning based is expected to train children in improving early mathematics as scaffolding to higher thinking skills or HOTS.

One of the subjects that can be taught in the introduction of early mathematics is geometry. Geometry is an essential scientific discipline for the present life and the future (Inan & Dogan-Temur, 2010). However, there are some problems in the ability to recognize geometric shapes in children according to several studies that have been done, including 1) the institution, adults or teachers often ignore children limitated ability to recognize the geometry, 2) children have difficulty to classify geometric shapes such as circles, squares, triangles and squares and have limitations in recognizing the slope and size of geometric shapes at 3-6 years of age; and 3) heavy reliance to books and worksheets instead of other approach in helping children to recognize geometry in kindergarten (Conorldi, Mammarela, & Fine, 2016; Norton & Nurnberger-Haag, 2018; Sarama & Clements, 2006)). Therefore, enjoyable and interesting learning is important to attract children interest (Siswono, 2012). For this reason, creating interesting and relevant learning is

vital to build early thinking skills for children in early childhood education which later could be enhanced to higher thinking skills or HOTS.

Computer learning is one of alternatives to improve thinking skills, for instance, the ability to recognize geometric shapes. Some studies have found that computers are a central point in the formation of human resources (HR) to create independent and skilful individual (Novitasari, 2010). Computer learning has been shown to have a positive impact on children's lives such as in math skills, memory strength, problem solving skills, language, social interaction and problems on cognitive development in early childhood (Gulay, 2011b; Mohammad & Mohammad, 2012). Software available in computer learning is an alternative that can have a positive influence in the education system in Indonesia (Vitianingsih, 2016). The limitations in exploring the ability to recognize geometry forms can be overcome by the presence of technology such as the computers. Computers could be a powerful learning tool for children in helping to recognize geometric shapes in classroom. Thus, teacher skills, the availability of facilities and computer software which support the implementation of learning is paramount important to improve the ability to recognize geometry shapes in kindergarten.

2 THEORITICAL STUDY

2.1 *Early Childhood Computer Learning*

In several aspects of early childhood development (cognitive, social and emotional), computers are considered as one of the media that can help children in raising awareness, especially in the development of technology and communication (Clements & Samara, 2003; Trifunović, Čičević, Lazarević, Mitrović1, & Dragovi, 2018; Wang & Kinzie, 2010), which is also a determining factor in achieving the success that children will have in the future (Ameliola & Nugraha, 2013). The software provided in a computer unit is considered as a learning tool that can help stimulate creativity and foster children's enthusiasm. Enthusiasm that appears in children is influenced by the color composition, visual images that are displayed, games in this era have also shifted to animation and visual forms (Delima, Arianti, & Pramudyawardani, 2015; Suwarna, 2010). Therefore, computer learning can be an alternative in creating varied learning in kindergartens.

Computer learning is usually done so that children can develop the skills of imagination, critical thinking and help children express from them in learning activities (Weil, Calhoun, & Joyce, 2011) and become a means of evaluation in the learning process that has been implemented. The results that have been obtained will be used as a reference for the improvement of the upcoming chase. Computer-based learning will make students active individuals because it also contains enjoyable experience for them. Learning with the concept of active learning and student centered will make children easier to understand the concept of learning (Zare, Sarikhani, Salarii, & Mansouri, 2016). Computer learning helps children to learn and carry out activities more effectively so that the skills and knowledge they obtain are in accordance with the learning objectives, optimized and beneficial for their future education.

Computer learning in early childhood depends on the skills teachers have (Couse & Chen, 2010; Gimbert & Cristol, 2004; Sufa & Setiawan, 2017). Educators on computer learning become role models for children in guiding them in implementing learning activities (Chen & Chang, 2006; Gimbert & Cristol, 2004). In Indonesia, the use of software is used as one of the media to stimulate or provide stimulation for children to recognize numbers and geometric shapes (Alia & Irwansyah, 2018; Putra & Ishartiwi, 2015; Rochanah, 2016). Opportunities and freedom in thinking, imagining and increasing children's motivation or enthusiasm in recognizing geometric shapes are felt in computer learning, this has been proven that computer-based learning can attract children to participate in learning activities (Shilpa & Sunita, 2013) and improve their cognitive abilities (Suziedelyte, 2012).

In learning activities using computers, early childhood teachers must have skills such as; 1) to develop a basic understanding of using technology and the potential they have as a contribution to education; 2) to show some skills in using the right technology in learning in the classroom as

support as learning media; 3) to implement the technology in the objectives of learning and learning activities in kindergarten. In addition, computers in early childhood education are used and designed for individual activities. The program that can be done as a basic skill for teachers in early childhood learning activities is a program of graphical separation, observing, sorting, determining the number of objects, geometric shapes that determine, think, talk, memorize, etc. Various alternative choices and difficulties that occur in the implementation of learning can enable teachers to adapt the activities given to the characteristics and age of the child.

2.2 *Early Math Skills*

Children from low-income families in kindergarten are academically behind their friends with higher-income parents, especially in math skills (Duncan & Magnuson, 2011). Some predictors of academic achievement of early math skills (in kindergarten) are the strongest predictors of future academic achievement (Duncan et al., 2007). Children with lower math scores in kindergarten entry, on average, will continue to score lower than their peers who have higher scores throughout grade 8, a trend that disproportionately affects children low-income and minority children (Schoenfeld & Stipek, 2011). Thus, there is a call to place more emphasis on STEM education (science, technology, engineering and mathematics), especially in early childhood illustrating the need for young children to have strong basic math skills. Various studies have shown a relationship between self-regulation and math skills in early childhood. The results showed that the relationships of pre-schoolers with others - interacting effectively with peers and teachers in the classroom environment - positively predict math skills (Mackintosh & McCoy, 2019). The number and quality of parents' mathematical speech is related to initial numerical knowledge. The results of this study indicate that children who are exposed to numerical speech and more advanced mathematical conversations at home have better mathematical knowledge and skills (Susperreguy & Davis-Kean, 2016).

The natural curiosity and willingness of the child to engage in learning-learning activities is the basis for the application of mathematical concepts in kindergarten (Charlesworth & Lind, 2010). The ability that can be done in stimulating the ability to recognize mathematics is the ability to think critically, logically and analyze. The ability to recognize mathematics in kindergarten includes geometry, numbers, patterns, problem solving, and measurements that can be used as provisions for the life they will live in the future so that mathematics can be said as one of the important sciences for children who are in kindergarten. The ability to recognize mathematics in early childhood includes; 1) algebraic patterns, including the use of symbols; 2) numbers and number operations include counting, classifying or grouping, correspondence, relationships, comparisons, digging and writing numbers; 3) Geometry and spatial include tracking, analyzing the shape and structure; 4) analysis of probability data including collecting and organizing individuals and the environment; 5) measurements include recognizing and comparing length, height and weight; 6) problem solving includes communication, connection reasoning and representation (Jackman, Beaver, & Wyatt, 2014).

At an early age, children have early mathematical ability standards (Jackman et al., 2014) including; 1) numbers and number operations, which relate to a concept of the ability to think about something, then discuss these thoughts continuously; 2) the concept of arithmetic, the activity of matching names on the numbers from the count operations; 3) correspondence, the activity of pairing one object to another object or group of objects to the same other group; 4) classifying or grouping, sorting objects that include general characteristics such as size, shape, color; 5) patterns, sequencing activities or movements that occur repeatedly color, sound; 6) seriation / sequence, activities place things in sequence (small-large; short-tall); 7) geometry of activities which include shape, size, position space and direction of movement; 8) spatial comparison of activities fostering self-awareness and objects in space (exploration of beams and boxes); and 9) measurement, the activity of comparing object sizes, perceiving object characteristics. So, the introduction of early mathematics for early childhood is always adjusted to the characteristics and age of the child so that the initial mathematical activities carried out can be optimized properly and in accordance with their development.

At an early age cognitive abilities of children are related to the ability to remember, the ability to think, giving reasons about something that has happened, the language abilities they have (Sujiono, 2014). Activities that are appropriate to the age and stage of development of children are very important in supporting their growth and development (Papalia, Old, & Feldman, 2009). Jean Piaget (Santrock, 2016) revealed that in a child's cognitive development there are four stages which include sensorimotor stages (0-2 years), pre-operational stages (2-7 years), concrete operational stages (7-11 years), and stages formal operational (11-15 years). In this study, the focus of research subjects was children aged 4-5 years in kindergarten (concrete pre-operational stages). Concrete pre-operational stages can represent their world through imagination, images and words. At this stage the breadth of thinking using symbol-symbols is not based on the breadth of thought they have, but what they know by their logic. The stages in concrete preoperational include symbolic and intuitive stages. Symbolic means that abilities relate to objects invisible to the child such as words, images and numbers. There are two stages of ability that occur in this stage, namely first, the symbolic child reaches the ability to represent invisible objects (words, images, and numbers); second intuitively, children begin to practice their reasoning primitively and are curious about what concerns them.

The concept of Bloom's Taxonomy in the realm of cognitive development relates to the basis in categorizing the goals of an education, preparation of tests and curriculum related to thinking skills (Gunawan & Palupi, 2012). Lower Order Thinking Skills (LOTS) and Higher Order Thinking Skills (HOTS) are the stages contained in the Bloom Taxonomy concept. At the Lower Order Thinking Skills (LOTS) stage, it involves 3 stages, such as remembering, understanding, and applying. Whereas in the Higher order thinking skill (HOTS) stage, it includes analyzing (evaluating), evaluating (evaluating) and creating (Anderson et al., 2001). The stages in the ability to think occur sequentially and structure between one another. The ability categories contained in each stage, including;

Table 1. Concepts of stages of Bloom Taxonomic thinking

Stages of Thinking	Information
C1 Remember	mentioning, pairing, differentiating, sorting, showing, identifying, imitating, finding, recording, memorizing, declare writing, numerating and giving code
C2 Understand	explaining, categorizing, estimating, changing, calculating, associating, characterizing, comparing, description, contrasting, discussing, exemplifying, exploring, simulating, solving, doing and tabulating
C3 Apply	assigning, determining, applying, classifying, assimilating, preventing, describing, submitting, questioning, producing, process, relating, compiling, predicting, performing, stimulating, relating, solving, and synthesizing;
C4 Analyze	auditing, analyzing, confirming, detecting, diagnosing, diagraming, correlating, testing, exploring, maximizing, ordering, measuring, choosing, training and transferring
C5 Evaluation	comparing, evaluating, concluding, directing, criticizing, deciding, separating, clarifying, defending, emphasizing, measuring, choosing, summarizing, supporting, proving, testing detailing, interpreting and directing
C6 Create	collecting, composing, connecting, designing, dictating, clarifying, enhancing, combining, formulating, facilitating, repairing, displaying, producing, preparing, creating, creating, combining, compiling, animating, and correcting.

Based on the explanation that has been described regarding early mathematical abilities in early childhood, the research subjects were 4-5-year children who were at a concrete preoperational stage. In the early mathematical abilities, they are in the Lower Order Thinking skills which must be well stimulated. The ability to recognize (remember) becomes a goal that will be improved especially in overcoming problems that occur in the introduction of early mathematics especially in the ability to recognize geometric shapes based on computer learning in kindergarten. Activities undertaken by children in learning in this study include the activities of mentioning, grouping and

imitating geometric shapes in each cycle of research conducted. The ability to recognize geometric shapes can familiarize children in the activities of classifying objects in their environment either through activities using computers in the presence of animation or audio that is displayed on software in a computer unit

2.3 *Ability to Recognize Geometry Shapes*

One of the mathematical abilities related to shape and spatial (two dimensions and three dimensions) is called geometry (National Research Council, 2009; Rich, B., & Thomas, 2009) which indirectly introduces children to shapes of different objects. in their environment (Ben-Yehoshua, Yaski, & Eilam, 2011). The aspects contained in this ability such as the introduction of forms, the appearance of these shapes, the science of topology and movements and the symmetry of geometric shapes (Asiye, Ahmet, & Abdullah, 2018). In this study, activities related to the topology aspects, which are aspects of geometry without prioritizing the calculation of numbers (quantitative) or measurements in the implementation of the introduction of geometric shapes in kindergartens. The ability to recognize geometry forms is only an introduction to the shape and nature of geometry (Aslan & Yasare, 2007).

Stages of the ability to recognize geometric shapes in each individual according to Van Hiele (Tatang, 2012) including; 1) recognition, relating to the recognition of shapes (squares, triangles, circles) but they have not been concerned with the introduction of the properties of these geometric shapes; 2) analysis, the activity of recognizing and then understanding the nature of the geometric shape being observed; 3) sorting, sorting traits which are then concluded in an informal manner; 4) education, children's ability to understand and draw conclusions; 5) accuracy, the ability of children to realize the accuracy of basic principles in a proof relating to high levels of thinking, complex and complex. The concept of familiar skills related to Bloom's Taxonomy such as the activity of mentioning, grouping and imitating various geometric shapes (triangles, squares and circles) through learning using computers in the software provided in the unit.

The National Council of Teachers of Mathematics (NCTM) believes that all preschoolers up to the second grade of primary schools should be able to recognize, name build, imitate, draw, classify and distinguish between two and three dimensions (Kennedy, Tipps, & Johnson, 2008). The ability of the child number and arithmetic math concepts unwittingly are also studied by children indirectly in the process of recognizing geometric shapes (Dooley, Dunphy, & Shiel, 2014; Sarama & Clements, 2006). There are various kinds of geometric shapes such as building spaces and flat shapes. There are also various geometric shapes including flat shapes (circles, ellipses, triangles, parallelograms, squares, squares and rhombus), triangles (arbitrary third, equilateral triangle, isosceles triangle, right triangle, taper and blunt), squares, squares, rows, rhombus, kites, trapezium, beams, tubes and balls (Djadir, Minggi, Ja'faruddin., Zaki, & Sidjara, 2017; Suharjana, 2008; Tarigan, 2006). Geometry is a branch of mathematics that is taught in every level of education (Mirawati, 2017), therefore it is a good idea to instill these abilities early on in children so that they can facilitate them in facing further education.

There are several geometric shapes that can be introduced to children such as circles, triangles and squares (Depdiknas, 2007). This is also supported by a number of opinions that such as circular, triangular, and rectangular forms which are forms of early geometrical recognition which are included in flat and outer shapes (Runtukahu & Kandou, 2014; Sarama & Clements, 2006; Sudaryanti, 2006). The geometrical forms introduced through computer learning in this study to improve the ability to recognize geometric shapes are circle, triangle and square.

3 METHOD

3.1 *Participant*

The subjects of this study were children aged 4-5 years who were in group A with a total of 24 children in one kindergarten *in Yogyakarta*. The teacher in this study acted as a learning activity implementer and the researcher as an observer who assessed the achievement of the ability to

recognize geometric shapes in computer learning. In addition, the teacher and observer designed the activities together to be carried out in improving the ability to recognize geometry in computer learning through software on computer units.

3.2 *Procedure*

The action research approach is used in the research implementation of this study to solve problems in learning geometry identifiers of children aged 4-5 years in kindergarten. Action research design is 'a small-scale intervention in the functioning of the real world and a close examination of the effects of such an intervention (Cohen & Manion, 1994, p. 186). Action research approach is chosen due to its rigour as a process for practitioners to examine problems scientifically for evaluation, improvement and changing for decision and practice (Corey, 1953). In this study, there are 2 research cycles with 3 meetings in the first cycle supplemented with the activities of watching videos and question and answer session. The second cycle is carried out through 2 meetings, at each of these meetings the participants carry out the activities individually by using computer software. In each cycle researchers measured the average value of test score of each cycle after giving the intervention.

3.3 *Instruments*

This study defines cognitive development in the concept of Bloom's Taxonomy in mathematical skills towards the ability to recognize geometric shapes. During the implementation, the children perform activities that based on the stages of Bloom's Taxonomy thinking such as the preparation or remembering which is included in the Lower Order Thinking Skills (LOTS) through the activities of mentioning, grouping and drawing geometric shapes in the form of triangles, squares and circles. The assessment of the ability to recognize geometric shapes in computer learning employed a 3-point scale assessment on each of the indicator. These indicators are as the reference of interpreting the ability to recognize geometric shapes (see table 1) for each cycle. In addition, each cycle only differs in terms of the activities for to ease the teacher and the observer in assessing the children ability.

Table 2. Indicators of Ability to Recognize Bloom's Taxonomy Geometry

Variable	Indicators	Assessment
Ability to recognize geometric shapes	• Mentioning geometric shapes (square, circle and triangle)	1. Children are able to mention geometric shapes 2. Children are less able to mention geometric shapes 3. Children have not been able to mention geometric shapes
	• Grouping geometric shapes (square, circle and triangle)	1. Children are able to group geometric shapes 2. Children are less able to group geometric shapes 3. Children have not been able to group geometric shapes
	• Imitating geometrical shapes (square, circle and triangle	1. Children are able to mimic geometric shapes without help 2. Children are less able to imitate geometric shapes 3. Children have not been able to imitate geometric shapes

3.4 *Data Analysis*

In analysing the data, the researchers employed descriptive statistics such as percentage and mean score. To ease the calculation a computer software of SPPS version 22 was utilized in calculating the scores in pre-cycle, cycle I and cycle II. The data of recognising geometric shapes

were obtained from observation and documentation during the implementation of computer learning. Then, the results of the ability to recognize the geometry will be assessed by indicators of three scale which in turn will be interpreted based on interval data representing the level of this ability. The criteria for assessing the achievement based on interval data is taken from Arikunto (2010) which include; 1) very good, if the average ability score is between 81-100%; 2) good, if the average ability is between 61-80%; 3) sufficient, if the child's average ability is between 41-60%; 4) Less, if the average value of a child is 21-40%; and 5) Very lacking, if the average is between 1-20% (Arikunto, 2010). The interval percentage will be deployed in interpreting the ability to recognize geometric shapes via computer learning in kindergartens.

4 RESULT AND DISCUSSION

4.1 *Result*

The results (figure 1) showed a significant improvement of the ability in recognizing geometric shape through computer learning. The improvement of this ability includes; (1) the ability to mention geometric shapes (triangle, square and circle) shown by seven pre-schoolers who performed well with interval data of 29,2%. After watching videos and question-and-answer session in the cycle one, the ability increased to 45,8% (11 children) and significantly went up to 75% (18 children) in cycle two after they followed individual activity by using computer software. (2) in the pre-cylce, 29,2% of the pre-schoolers or 7 children who did well which then increased to 25,7% (9 children) in cycle I then finally went up to 78% (18 children) in cycle II. (3) in pre-cycle of the ability to imitate geometric shape, seven children (29,2%) performed well, then became 13 children or 54,2% in cycle I and risen up to 79,2% (19 children) in the cycle II.
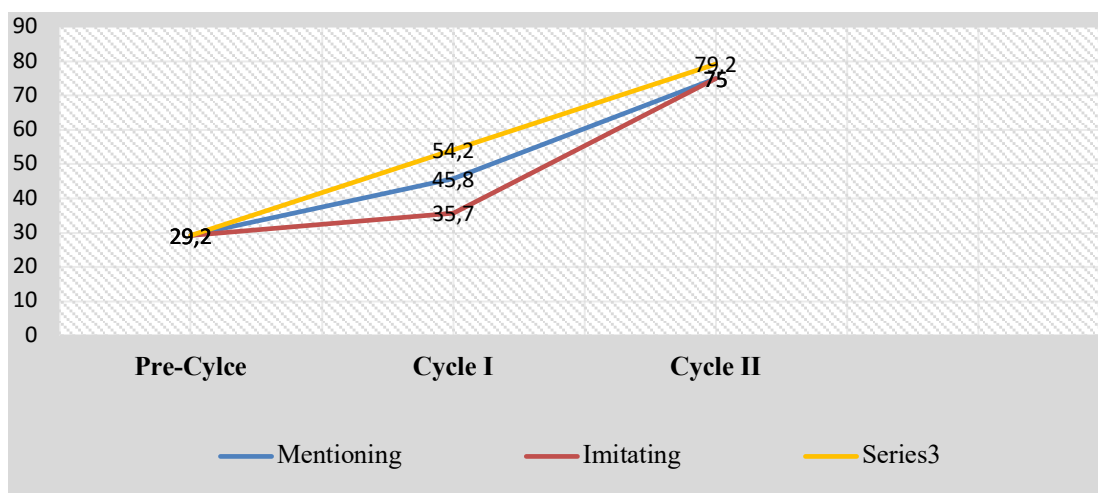

Figure 1. Graph of the ability to recognize geometric shapes in computer learning

The assessment in pre-cycle is performed by interpreting the learning conducting by the teacher. The activities of introducing geometric shapes were conducted using pictures of picture media or used magazine and draw the same shapes on the board by the students in group A in turn. The assessment in the observation suggested that there are some mistakes by the teacher where the explanation of the shapes was too brief without question and answer session. The following the result of computed learning in improving the ability to recognize geometric shapes in kindergarten:

Table 3 Percentage (%) of ability to recognize geometry shapes in pre-cycle

Variables	Assessment		
	Able	Less Able	Not

			Capable
Mentioning geometric shapes	29,2	70,8	
Grouping geometric shapes	29,2	45,8	25
Imitating geometric shapes	29,2	70,8	

Seven children are able to mention and draw geometric shapes while 17 children performed below average. Six students were not able to classify geometric shapes, 11 children perform above average and only seven children do well. In pre-cycle, the activities are too centered on teacher which might accounted as major cause to the results above. The availability of school facilities in the kindergarten such as computers are not utilized optimally by the teachers to create communicative and enjoyable activities to improve this recognizing ability. Also, the picture used as examples on the board and pictures for media are not similar which drive students confused. Moreover, monotonous learning dominated by teacher discourages student participation and only usual active students who participated duplicating the geometric shape. Thus, the result of in the pre-cycle is 27,8% average of the range between 21-4`% which is still less than enough.

The planning stage becomes the main stage carried out in cycle I, at this stage the activities include the preparation of the Daily Activity Plan (RKH), managing the learning environment, and equating perceptions between researchers and teachers regarding learning activities). The implementation of the actions in the first cycle carried out 3 times. The activity carried out in the form of showing a video about geometric shapes to children such as squares, triangles and circles on a computer screen on each unit for each child. After showing the video, the teacher questions and answers the child about the geometric shape. Based on the results of the observational assessment (Table 4), it was concluded that; 1) there are 11 capable children and 13 children who are still unable to mention the three geometric shapes; 2) 9 children are categorized as able, 13 underprivileged children and 2 children who have not been able to classify geometric shapes; and 3) 13 able children and 11 underprivileged children in imitating ge-ometry forms. The meeting which was held 3 times this time the teacher only displayed a video and question and answer about geometric shapes in order to deepen the child's knowledge of geometric shapes. The grouping activities are done by the teacher by giving examples of drawings from the computer, while the imitating activities are done by drawing geometry using Microsoft Word applications with examples of drawings as a child's help in remembering the shape of this activity takes about 20 minutes. From the results that have been described, the average value obtained in the first clusters was 47.2%. This shows that in the first cycle there has been an increase and the criteria for the ability to recognize geometric shapes of children in computer learning are in sufficient criteria, with an average value in the range of 41-60%.

Table 4 Percentage (%) ability to recognize geometric shapes in Cycle I

Variables	Assessment		
	Able	Less Able	Not Capable
Mentioning geometric shapes	45,8	54,2	
Grouping geometric shapes	35,7	54,2	8,2
Imitating geometric shapes	54,2	45,2	

In cycle II, the improvements made include providing opportunities for each child to be active in the introduction of geometric shapes. The introduction of geometrical features becomes the focus of the cycle in order to optimize children's understanding of geometric shapes through computer learning. The meeting was held 2 times in this cycle, the first meeting the teacher still showed a video about the shape of the geometry and then explained its characteristics by using computers. At the second meeting after the teacher shows the video, the teacher gives a concrete example of objects around the child that characterizes geometric shapes using a computer. The two meetings in this cycle require children to conduct question and answer activities, which are

then followed by activities grouping and imitating geometric shapes through applications (software) learning on computers that are carried out by children independently.

Table 5 Percentage (%) of ability to recognize geometric shapes in Cycle II

Variable	Assessment		
	Able	Less Able	Not Capable
Mentioning geometric shapes	75	25	
Grouping geometric shapes	75	25	
Imitating geometric shapes	79,2	20,8	

From the observations (table 5), there was an increase which included 18 capable children and 6 children who were less able to mention or classify geometric shapes. In the ability to imitate geometric shapes, there are 19 capable children and 5 children who are less capable of imitating geometric shapes using a computer on the software provided. These results indicate that the acquisition of the average percentage value of children obtained in this cycle 76.4% where the value is adapted to either criteria with a range of values of 61-80%. Obtaining these results states that there is a significant increase in class II of the ability to recognize geometric shapes in computer learning

4.2 *Discussion*

The increased ability to recognize geometry in this study shows that computer learning can be used as an alternative in improving the ability to recognize geometric shapes and overcome problems related to these abilities in learning. In the implementation of the second cycle, children use software related to activities on geometric shapes. In the activities of operating a computer, children have been given instructions on geometric shapes then moving onto activities using computer. They start by moving the mouse, turning on and off the computer, typing letters on the keyboard, etc. This illustrates that the ability of teachers to understand the potential in learning by using computers help children to utilize computer as learning media to develop their skills and knowledge (Paquette, Fello, & Jalongo, 2007). Teacher's ability to determine when and how to integrate and utilize computers in early childhood education make learning-learning activities interesting for children which build their experiences, creativity and skills to explore their lives in the future (Mohammad & Mohammad, 2012). The more children receive or carry out varied learning activities, the more knowledge and information they obtain. The results of this study indicate the importance of developing the ability to recognize geometry in kindergarten to stimulate early mathematical abilities as part of cognitive development that improves children's thinking abilities (Anderson et al., 2001). Thinking abilities in this sense refer to LOTS which later on could help children to level up their thinking abilities to HOTS.

The implementation of pre-cycle activities on the ability to recognize geometric shapes is still inadequate. Activities to improve this capability are carried out by carrying out computer-assisted learning. The first cycle of this research showed that there was an increase of ability after the treatment of showing a geometric shape videos on a computer and conducting question and answer within two meetings. In the second research cycle, children begin their activities by operating computer in carrying out applications on the introduction of geometric shapes. The result of this research is in line with Rochanah (2016) on improving mathematical abilities through computer media. Computers can be used as learning media, in which the ability of memorizing and understanding is proven to be better with the variation of learning using learning media compared to the traditional learning (Arsyad, Rahman, & Ahmar, 2017). The results of this research also demonstrated the emergence of children interest and enthusiasm in carrying out activities using computer media (Gulay, 2011a) The experience gained from activities that children do directly reinforces their knowledge lasts longer in a child's brain memory (Smaldino, Russel, & Lowther, 2014). In activities that support children's mathematical abilities, the implementation of learning should be meaningful for them through the activities that stimulate their mathematical abilities (Papadakis, Kalogiannakis, & Zaranis, 2017). In computer learning, the availability of software

that contains activities to recognize geometric shapes stimulates creativity and enthusiasm for children through animation and visuals that are available in a computer display (Delima et al., 2015).

The activities carried out by children in this research are associated with learning theories proposed by prominent educational figures, including; 1) Jean Piaget, on children's computer learning through research cycles that have been designed. This shows that the increase in ability occurs due to information processing carried out by children such as assimilation, accommodation and equilibration (Santrock, 2016; Sujiono, 2014). The process of assimilation refers to the process of new information which enters into one's cognitive structure. Secondly, the accommodation process is the process of adjusting new information with information that previously has been obtained. Third, the equilibration process is the adjustment of information from the assimilation and accommodation processes. The formation of this knowledge is achieved by constructing knowledge that children have through their experiences, as well as their activity in finding and obtaining information which means an action that supports the formation of knowledge with the activities they carry out in their daily lives; 2) Lev Vygotsky, computer learning is done with the help and direction of the teacher in operating the computer or direction in the implementation of the research cycle can improve cognitive abilities that children have cognitive abilities that children have. The Zone of Proximal Development (ZPD) illustrates this, whereby children's abilities can develop better if there are interactions with people who are more mature or more understanding (Santrock, 2016). The assistance provided is on the same level as children ability, then the assistance will gradually be released if the child has been considered capable of solving the problem independently (Zack, 2014, p. 3). John Dewey, the ability to recognize geometric shapes in children through computer learning as it has been explained that the activities in this study in the first and second cycles of children were more actively involved compared to activities in the pre-research cycle. Early childhood learning must be child-centered, where children do the learning process in obtaining information or knowledge (Santrock, 2016).

Based on the explanation above, there is a significant improvement in ability to recognize geometric shapes in children of ages 4-5 years in kindergartens. This improvement is the result of computer learning which involves children directly to recognize geometric shapes which also contribute to their engagement during the implementation of the activities. Thinking skills as described in Bloom's Taxonomy in Lower Order Thinking Skills (LOTS) which are embodied in the activities are parts of effort to level up their thinking ability to higher level which is Higher Order Thinking Skills (HOTS).

5 CONCLUSION

This study aims to solve the problems in the introduction of early mathematics, especially on the ability to recognize the geometrical shapes via computer learning. Computer learning and the involvement of children become proven to positively influence the improvement of their ability. Computer learning with animation attracts children participation during the implementation. A significant improvement has been demonstrated in pre-cycle activities with an average value of 27.8%, cycle I with an average of 47.2% and cycle II an average value of 76.4%. The ability to recognize geometric shapes is part of the mathematical ability in the cognitive domain of Bloom's Taxonomy with the assistance and active involvement of children in conducting learning activities as an effort to improve the ability to recognize geometric shapes in computer learning. The stages in Bloom's Taxonomy will help children to achieve the Higher Order Thinking Skills (HOTS) skills. Higher Order Thinking Skills are important for the child's thinking ability to solve and deal with problems in their lives which should be done gradually through different stages. Thus, the results of this research suggested that computer learning could improve thinking skills on the level of Lower Order Thinking Skills (LOTS) in recognizing ability to children aged 4-5 years in kindergarten.

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Operational Cost Requirements Analysis in Early Childhood Education

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ABSTRACT: The government is attempting to obtain the access of Early Childhood Education programs providing educational assistance. Unfortunately, the government has spent funds to calculate the unit costs that should not occur in the real world of education. In consequence, the aims of this study are to (1) calculate the amount of operational unit costs for Early Childhood Education programs, and (2) enumerate variations and projections of the amount of the operational unit costs in Early Childhood Education programs by region category. This study uses quantitative data with population of all Early Childhood Education institutions in Indonesia. The unit of analysis of this research is Early Childhood Education institutions consisting of kindergarten, Playgroup, Daycare, and ECCD units. The findings are that the highest operating unit cost is in TPA because there is a full day of service. Next is a Kindergarten institution because at this institution already has a special curriculum to prepare the child proceed to the level of basic education. Then the unit cost is the highest area in the eastern region. Recommendation in determining the amount of financial assistance it is necessary to consider the amount of operational unit costs so that the purpose of providing financial assistance is to improve access and quality can be achieved.

Keywords: *Early Childhood Education, Operational Unit Cost, Fund Aid*

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1 INTRODUCTION

Indonesia continues to show economic growth despite the recent global financial crisis and is currently classified as a low to middle income country (Denboba, Hasan, & Wodon, 2015). Such economic growth should provide the Indonesian people with better living conditions. However, the poverty rate still sits at 12.2% and with a population of more than 225 million this is equal to more than 27 million people living below the poverty line (Lovchinov, Mädge, & Christensen, 1984). Nakajima et al., (2016) provide evidence of the effectiveness of early childhood education in rural Indonesia. This document a substantial difference in school readiness between children aged 6 to 9 years. The analysis considers not only the sequence of services registered by children, but also the age at which they registered and the length of time they registered, and analyzes the cost effectiveness of various early education channels in Indonesia to show that providing access to play groups and kindergartens to children at an age appropriate to development can optimize public investment in early childhood education. The phenomenon of the high cost in education is a problem faced by almost all levels society, especially in schools which run by the private sector. The high cost of education also occurs at the level of Early Childhood Education. Lately, there has been a lot of discussion about the high cost of sending children to school in Early Childhood Education.

Hasan et al., (2019) studied the sustainability of early childhood education centers established under large-scale, donor-funded projects in rural Indonesia. Analysis of quantitative and qualitative data shows that 86 percent of education centers continue to provide preschool services three years after project funding ends. The centers balance the reduction in funding by introducing student fees. This study estimates a series of logistic regression models to predict central sustainability. Centers that increase their share of expenditure on teacher salaries during the project are significantly more likely to remain open. Often this is made possible by centers that change the mix of additional services they are provided. Centers that provide high-quality care, have more complementary services in the area, and have more parental involvement are significantly more likely to be maintained after donor funding ends. In contrast, centers with more substitute services in the area tend to survive.

Given the low level of public knowledge about the importance of Early Childhood Education and the low quality of management and the lack of infrastructure and many assumptions from the community that Early Childhood Education can only be achieved by economically capable people causing a lack of motivation to involve their children in the Children's Education program Early age. The results of Firdaus and Ansori's (2019) research revealed that the management process still did not meet the standards required by the government as an organizing program for Similar Early Childhood Education (SPS) programs. Therefore, managers must be able to define and find ways to achieve all the goals set through the implementation of effective Early Childhood Education management functions. Brinkman et al (2017) report the quality of early childhood education in rural Indonesia. The results found that centers established under the Indonesian Early Childhood Education and Development Project provide higher quality services than other types of preschool, as measured by comprehensive preschool quality instruments based on direct observation of classrooms in sessions. The findings also show that policies that only focus on hiring teachers based on experience and training will not be enough to improve children's learning. Instead, policies must address the quality of professional development activities for teachers.

Early childhood education and care (ECEC) has witnessed a dual trend of growth in international research along with global interest in the social welfare function of ECEC services. Global interest in ECEC quality is well illustrated by a report from an international organization that identifies ECEC services as contributing to the social welfare agenda to support the work of parents and provide early intervention to reduce the consequences of poverty (Campbell-Barr, 2019). Awareness of the importance of Early Childhood Education has been growing as a collective awareness between the community and the government. The fact in the real world shows that almost all of Early Childhood Education institutions and its kind are carried out on community initiatives and non-governmental organizations.

The policy of the Directorate General of Early Childhood Education and community education institutions is to escalate the quality of Early Childhood Education services through the availability of Early Childhood Education Units that are easily accessible, educators who are in accordance with the expected competencies, enhancing the quality of community participation in Early Childhood Education, and supports Early Childhood Education implementation from the Central, Regional, and the community. One indicator of the success of early childhood education program implementation especially for ages 3-6 years can be measured by the Gross Enrollment Participation Rate of Early Childhood Education program. Based on Figure 1 below, the rate of Gross Enrollment Participation Rate movement tends to diminish from 2015 at 35.18 to 2017 at 33.84 and has increased in 2018 to 37.92 and has decreased again at 36.93 in 2019.
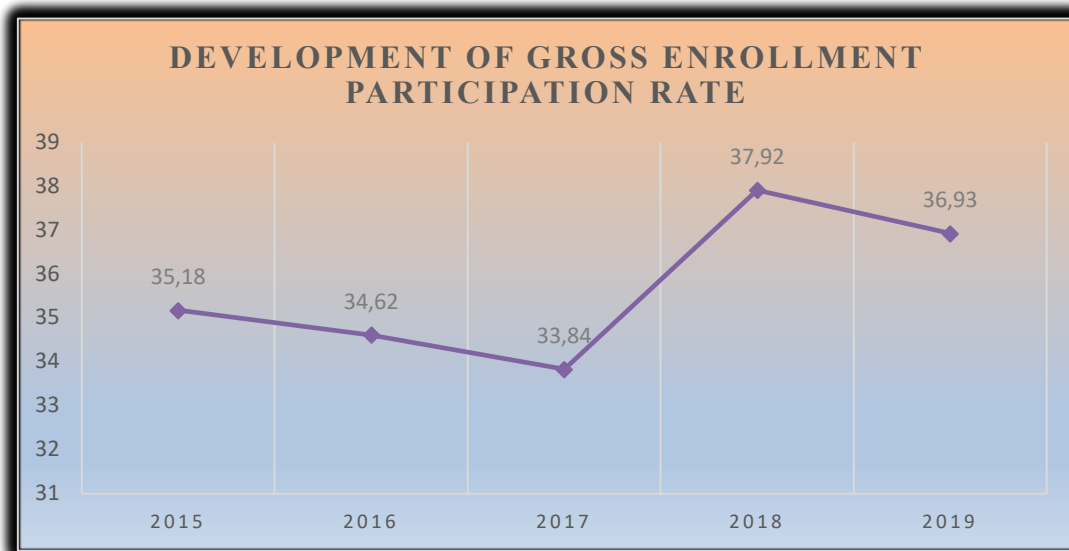

Figure 1. The development of Gross Enrollment Participation Rate for Early Childhood Education in 2015-2019 (Source: Central Bureau of Statistics in 2020 development of Gross Enrollment Participation Rate)

In order to escalate and expand quality of Early Childhood Education services, the government is allocating Early Childhood Education Operational Assistance Funds. The benefit of *BOP* is to reduce the cost of education for underprivileged children, so that they get higher quality Early Childhood Education services. The *BOP* program is aimed at children aged 0-6 years, with priority children from underprivileged families, special needs, and special services. BOP is given to children through Early Childhood Education institutions to support the operational learning process and to advocate personal costs for Early Childhood Education children.

The Ministry of Education and Culture has allocated budget IDR 4.47 trillion for operational assistance in the provision of early childhood education (BOP in Early Childhood Education in 2019). This number is up 10 percent compared to 2018 which amounted to IDR 4.07 trillion. Director General community education institutions Harris Iskandar of Early Childhood Education said that the assistance would be given to 7,459,167 children with a nominal value of IDR 600.000 per child. *BOP* Early Childhood Education is a government program to assist operational costs. The target of this program is Early Childhood Education institutions listed in the Early Childhood Education principal data and community education. *BOP* for Early Childhood Education has been regulated in Minister of Education and Culture Regulation Number 2 in 2018 concerning Technical Guidelines for the Use of Non-Physical Specific Allocation Funds for Operational Assistance for the Implementation of Early Childhood Education in 2018. According to these regulations, as much as 50 percent of BOP for Early Childhood Education funds must be used for learning and playing activities, such as buying paper, markers, crayons, and organizing family education or parenting activities. As much as 35 percent for supporting activities, among others, purchasing mild medicines, and increasing the transport costs of educators. While the remaining 15 percent for other activities, such as maintenance of facilities and infrastructure, pay for telephone, electricity, and the internet.

In providing assistance in the provision of Early Childhood Education, it is necessary to pay attention to the amount of funds to be provided, so that it can be used to finance Early Childhood Education operations throughout Indonesia. There are still many complaints in the community about the high cost of sending their children to Early Childhood Education proves that the amount of *BOP* funds given by the Government of IDR 600,000 / student / year is still insufficient. So, this is the right time for the Government to provide financial assistance based on the calculation of unit costs that actually occur in the field. Therefore, the research objectives are to (1) calculate the amount of operational unit cost *(BSOP)* for Early Childhood Education implementation, and (2) calculate the variation and projection of the amount of operational unit cost for Early Childhood Education implementation by region category.

2 THEORITICAL STUDY

2.1 *Early Childhood Education*

Early childhood is a child between the ages of birth and eight years, using the term "Early Childhood Care and Education (ECCE) refers to various processes and mechanisms that sustain and support development in the early years life, which includes education, physical, social and emotional care, intellectual stimulation, health care and nutrition including family and community support that needs to promote the development of children's health (UNESCO, 2013). The area of early childhood education and care is actually an absolute responsibility of parents, which nowadays is shifting to educational institutions that specifically serve the educational needs of early childhood due to the lack of parental time at home.

Chandrawaty, Ndari, Mujtaba, & Ananto, (2019) childhood period is viewed as a moment of a playing time, having fun, and without coercion. Children who outdoor activity are physic beneficial, especially in developing their motoric skills. Preschool is a broad term for pre-elementary school programs targeted towards young children. Parents, educators, journalists, researchers, and policymakers alike are increasingly interested in preschool as a means of investing in the future and, as Lamy (2014) puts it, untangling the "complicated knots" of chronic poverty. Early childhood programs aim to support all aspects of a child's development and have been identified as particularly beneficial for children with known disadvantages such as low income, ethnic minority, risk of maltreatment; (Belsky, J., Steinberg, L., & Draper, 1991; Heckman, Moon, Pinto, Savelyev, & Yavitz, 2010; Howard & Melhuish, 2017).

Keith's (2018) research explores the importance of high-quality early childhood education in the development of later secondary education, measures quality in early childhood education programs, and examines how teacher education contributes to the quality of early childhood education programs. The research found that early childhood education was positively associated with an increase in the percentage of eighth grade country proficiency in mathematics and writing summative assessment scores. The results also showed that teachers with a bachelor's degree did not significantly increase mathematics scores and initial student literacy as a whole compared to teacher students who did not have a college degree.

Law number 20 of 2003 concerning the National Education System (SISDIKNAS, 2003) states that early childhood education is an effort to foster children from birth until the age of six carried out through the provision of educational stimuli, to assist in physical and spiritual growth and development so that children have readiness to enter further education. Early childhood education is directed to facilitate the development of children in a healthy and optimal manner in accordance with the values, norms, and expectations of the community. Suyadi, (2017) states that children are individual and social beings who have the right to get education according to their needs and abilities. With the education provided, it is expected that children can grow and develop intelligently based on their potential, with the result that one day they are able to be quality children of the nation.

It deals with the various definitions described above, it can be concluded that early childhood education is a conscious effort created by parents, the community, and the government to provide

founding, guidance and stimulus for early childhood in accordance with the phase of child development so that it can grow optimally related to the potential possessed and have mental and physical readiness in entering further education. The implementation of this education must be done carefully, by providing all aspects of appropriate education so that the direction of learning can be justified with reference to the context of early childhood.

2.2 *Education Funding*

There has been a focus on policies relating to early childhood education and care in developed countries and especially in Europe. In the UK, there have been changes in policy along with increased investment. However, West, Roberts, and Noden (2010) believes that these changes may not be sufficient to meet the objectives in terms of quality or high-quality, affordable and accessible government policy objectives in early childhood education and care. There is a big problem that seems to hamper the achievement of these goals; this is related to the level of government funding and the regulatory context. There is also a difference between providers in terms of their own goals and underlying values which means that quality can vary and access to certain types of providers is restricted. These factors appear to conflict with the provision of universal quality education and early childhood care.

Pidarta, (2013) in his book explained that economic factors are enough factors that determine the success of education, because with an adequate economy, 1) facilities and infrastructure, media, learning tools, and others can be fulfilled, 2) teaching and learning processes can be carried out more intensively , because educators can focus without looking for additional work outside, and 3) the motivation and enthusiasm of the education personnel work increases, so they are also ready to improve the profession. The function of the education economy is to support the smooth running of the education process and as learning material for shaping economic people. Each educational institution must be able to seek educational funding to cover the needs of education services by searching from various sources other than the Government or foundations. The more funds obtained, the education will be held optimally, so that educational goals will be more easily achieved.

Education funds need to be managed professionally, their implementation is closely monitored, and accounted for legal evidence. All use of funds in every activity needs to be done efficiently and effectively. The concept of production must be held by educational institutions, for example the efforts to increase education efficiency including the use of funds, the process of activities, and the results of activities. Both of them must be done as well as possible so that there are no obstacles in achieving the agreed education goals. The function of economic production will be properly applied, if there is a guarantee that students work immediately after graduation. Education funding is an activity related to the receipt of financial income obtained by schools from the State budget, Local government budget and community or parent funds and is used to finance every education program designed (Akdon, 2015). Funding is the main element that is very important in the administration of education. The cost of education must be managed optimally to improve quality as expected. (Azhari & Kurniady, 2016).

West & Noden, (2019) argue that the transformation of public funding is associated with changes in government objectives with regard to the distribution of funds to providers. Focus on changes in public funding for early childhood education, shifting the balance between central and local governments, and changes in funding objectives. To understand the transformation of public funding that has taken place, by identifying three types of policy changes. The first level change involves adjusting the level or setting of basic policy instruments (or mechanisms). The second change involves the instrument itself changing due to dissatisfaction with past experience; however, the overall policy objectives remain the same. Third order changes involve changes in the level / arrangement of instruments, the instrument itself, and the hierarchy of objectives. Early childhood education and care funding between 1996 and 2017 illustrates various types of changes in funding goals, which peaked in 2017 with the introduction of the transformational Early National Funding Formula Year, third-order change.

2.3 *Early Childhood Education Cost*

Institute of Medicine (2009) explained, there are five steps to measuring cost accurately; 1) specify dimensions of quality; 2) identify resources requirements to meet goals for each dimension; 3) assess market and show cost for each resources; 4) aggregate for total and obtain average and marginal cost; 5) allocate cost burden among government support, private support, and client cost. A comprehensive list of the aspect of the program that contribute to its quality might include the time children spend in the program (e.g., hours per day, days per week, weeks per year), the personal ratios, the range of services supplied, facilities and materials, and so forth. Factors Affecting Child Care Budgets in New York City Each are 1) licensing standards (the number children exceeds the staff : child ratio); 2) child care is extremely labor intensive (personal costs will be the largest expense, frequently averaging at least 80% of total expenses); 3) the basic child care dilemma; 4) Important program objectives, identify key program, objectives before attempting to draw up a budget.

Some preschool studies use cost effectiveness analysis and involve cost-benefit analysis, which shows positive social returns for early children's intervention (Heckman et al., 2010). Cost-benefit analysis converts all policy and program inputs and outputs into monetary terms to answer the question of whether social benefits exceed social costs, as measured in monetary value (Aos & Pennucci, 2013). A particular program can be assessed in connection with social returns on investment. Cost effectiveness analysis of the results is not converted to monetary value but is instead reported in measures of student learning outcomes or other relevant results (Hollands et al., 2014). Cost effectiveness analysis is basically comparative because the costs of improving learning outcomes, for example, must be compared with some relative alternatives in order to have meaning (by H. M. Levin, McEwan, Belfield, Bowden, & Shand, 2017).

One of the strengths of cost effectiveness analysis is that it uses standardized methods which are, to some extent (Harris, 2009; H. Levin, 2001)(Harris, 2009; Levin, 2001). Cost effectiveness studies often use the standard deviation (SD) of student achievement, or effect size, to measure results. Review a series of educational intervention studies that include estimated effect sizes and information about costs. Informative ratios enable researchers to make comparisons of the cost effectiveness of interventions that are evaluated throughout the study. Although the prevalence of cost-benefit studies shows that preschool is a healthy social investment as a whole, there is no other research that uses cost effectiveness analysis to evaluate interventions designed to improve the efficiency of educational institutions.

2.4 *Previous Research*

In conducting this research based on several previous studies, including (Chrystiana and Alip (2014) aims to find out the cost components and operational unit costs of kindergarten educations in Depok, Sleman, Yogyakarta. This research was a descriptive qualitative study, data were collected purposively from three kindergartens in Depok, Sleman, Yogyakarta, in accordance to the amount of tuition fee and kindergarten program (half-day/full day). Two kindergartens (A and B) are the half day with tuition fee under IDR 400,000, while C is full day with tuition fee over than IDR 400,000. The data were collected through in-depth interviews and questionnaires. The results of the study show that cost components consist of: (1) the operational cost component for personnel in the form of salaries and (2) the operational cost component for non-personnel in the forms cost of: (a) educational process, (b) institutional, (c) school administration, (d) school committee, and (e) light maintenance and repair. The operational unit cost of the half-day kindergarten is IDR 1,270,038/year /student and IDR 1,454,389/year/student, while that of the full-day kindergarten is IDR 10,466,134/year/ student. The operational unit cost will increase in line with (1) period time and (2) the teacher-student ratio.

The subsequent research conducted by Tedjawati (2013) aims to describe the funding for early childhood education and the amount of funding from each source. This study used qualitative approach through case studies in eight districts or cities. Research methods used in the research are descriptive quantitative. The study results show that: First, early childhood education funding generally comes from the central government and the regions. However, it is still not sufficient

enough for the operational costs of early childhood education. During this time, local governments still prioritize compulsory education programs. Funds coming from the public and agency or business or industry are still limited and depend on the economic capability and willingness of agencies or business or industry. Funds coming from the providers are not sufficient, it is actually highly dependent on parents' income. Second, assistance from the government and donations from community institutions compasses of money, educator incentives, and educational toys, books, medicine, and health checking for students.

3 METHODS

This research on education funding uses quantitative approach. The sample selection method used is Random Sampling. The unit of analysis of this research is Early Childhood Education institutions consisting of Kindergarten, Playgroup as formal education and Day care, and also ECCD units (SPS). The population of this research is all Early Childhood Education institutions in Indonesia. The sample of this study is people who returned the online questionnaire sent. One of the main criteria of the sample is that it must be able to represent the population both in proportion and characteristic. After the questionnaire was filled out by Early Childhood Education institutions in each region, sampling was carried out at stages from the regional, provincial to district or city levels. Indonesia is divided into 6 regions, such as (1) Java; (2) Sumatra region; (3) Sulawesi region; (4) Kalimantan region; and (5) the Bali-Nusa Tenggara region, and (6) Maluku region.

3.1 Procedure

The research instrument was structured questionnaire that was developed related to questions and research objectives. The questionnaire component to determine the amount of operational funding for Early Childhood Education implementation comes from The Minister of Education and Culture Regulation 4 of 2019 on Technical Guidelines for the Use of Non-Physical. The data collection techniques by submitting an online questionnaire link (google form) that contains a wide range of components expenditure expenses to the implementation of ECE so that the institution can directly fill the cost of real expenses according to the components already provided in the online questionnaire. Furthermore, if the questionnaire is completed by the institution of the ECE then sent back that accompanied by the attachment of a scanned financial report of the institution in 2019. The Data obtained is sourced from the real financial statements at each institution, then clarified with the financial statements attached to match the currency suitability of the budget and the nominal cost included in the online questionnaire (equality of perception). If the data has been appropriately stated, then the next process is to calculate the cost of each institution. Calculations use Excel software by using the average function. Furthermore, after the data is completed, then presented according to the research purpose of the related (1) the cost of operational unit (BSO) of the implementation of ECE, and (2) variation and projection of the cost of operational unit of ECE implementation according to region category.

3.2 Participant

According to the results of the online cookies collected, there were several respondents including 577 Kindergartens, 434 Playgroups, 63 ECCD units (SPS), and 32 Daycares (graph 1). Based on graph 1, the highest Kindergarten accreditation status is B with 266 Kindergartens, most of Playgroup accreditation is not accredited with 255 playgroups, most *SPS* accreditation is not accredited with 30 ECCD units (SPS), and most of Day care parks accreditation is not accredited with the number 17 of them.
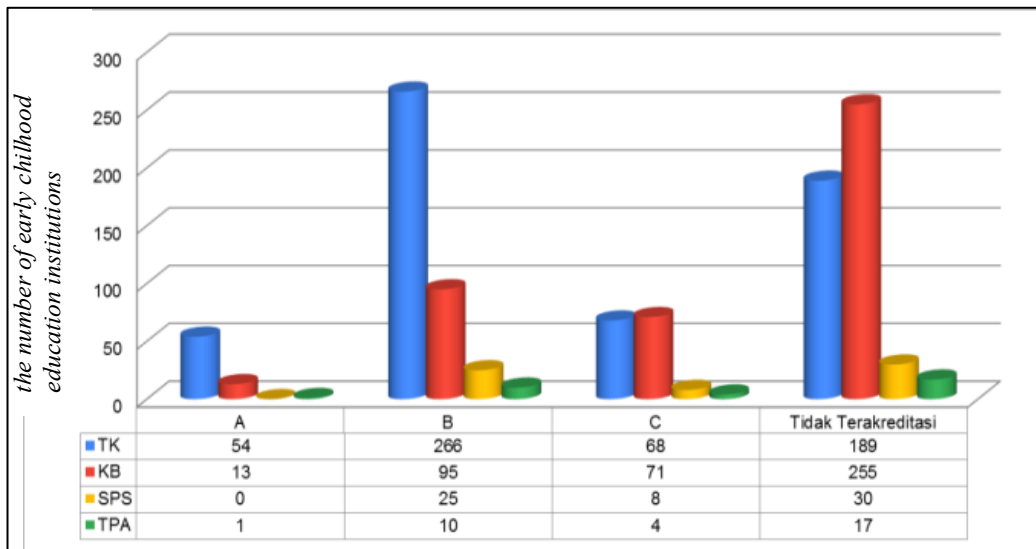
Figure 2. Profile of Respondents (Source: results of data processing)

	A	B	C	Tidak Terakreditasi
TK	54	266	68	189
KB	13	95	71	255
SPS	0	25	8	30
TPA	1	10	4	17

4 RESULT AND DISCUSSION

Equitable education includes two important aspects, they are equality and equity. Equality or equality implies equal opportunity to obtain education, while equity means fairness in obtaining equal educational opportunities among various groups in society. Coleman in Mujahidun (2016) in his book Equality of Educational Opportunity, that the concept of justice includes passive equality, which means justice that emphasizes equality in getting the opportunity to register at school, while active equality means equality in providing opportunities for students to get the highest learning outcomes. In this understanding, equality in education is comprehensive, encompassing several things, such as equality of access, equality of survival, equality of output, and equality of results. Thus, suggestions for equity indicators will become increasingly complicated and difficult for certain regions that are not supported by the education budget.

Considering the importance of equitable access to education, especially Early Childhood Education, this study provides a solution in determining the amount of operational costs of Early Childhood Education implementation that can be used as a reference for the Government in providing financial assistance to institutions so that there is no higher burden of Early Childhood Education costs to parents so that all early childhood children in Indonesia can get education in this stage.

Accreditation is very important especially for institutions because it can help to know how far he has met the quality criteria set by the government or the national education standards as minimum standards of quality; as a reference for all parties in the institution to conduct an evaluation of the institution's performance (institution's performance) and short-term and long-term planning; as a basis for making improvements and improving the quality of education in the future as part of sustainable quality improvement; and as a form of compliance with regulations established by the government and as part of public accountability. Considering the importance of accreditation for Early Childhood Education which actually has an important role in realizing the golden generation of the nation, institutions and the government should synergize each other to carry out the accreditation process of the institution so that education standards are enshrined in *Permendikbud* Number 13 of 2018 concerning School or Madrasah National Accreditation Board and Agency National Accreditation of Early Childhood Education and Non-Formal Education.

Application for accreditation of Early Childhood Education institutions from the Government has not been running optimally. This is evidenced by the profile of the institutions that are sampled in this research which concludes that there are still many Early Childhood Education institutions that have not been accredited. According to Bijanto (2018) some Early Childhood Education institutions and Non-Formal Education. have not considered how important accreditation is. Early

Childhood Education and Non-Formal Education accreditation is considered not to have a social effect. This condition is clearly different from the social influence of accreditation for primary and secondary education units and universities. Though there should be no reason for Early Childhood Education and Non-Formal Education to avoid the accreditation process.

4.1 *Early Childhood Education Operational Unit Costs*

Education costs are costs that must be incurred to finance activities related to education. Afmansyah (2019) mentions the costs in education include direct costs and indirect costs. Direct costs are all expenses that directly support the implementation of education. Direct costs consist of costs incurred for the implementation of teaching and learning process in the form of the purchase of learning tools, learning facilities, transportation costs, teacher salaries incurred by the government, parents, and students themselves. Indirect costs are expenditures that do not directly support the education process but allow the education process to occur in schools, for example student living costs, transportation costs of students to school, snack costs, and opportunity costs. There are several ways in estimating the cost of education, mentioning these ways include: (1) estimating costs on the basis of sources of funding, and (2) estimating costs on the basis of reports from educational institutions.

Based on the results of data processing, the operational unit cost for 1 year for Kindergarten is IDR 1,812,336, for Playgroup Rp1,009,309, for ECCD units (SPS) IDR 1,050,063, and for Day Care Park IDR 2,081,054. The highest Kindergarten and Playgroup operational components are used for other supporting activities (Kindergarten by 24% and Playgroup by 19%), for the highest ECCD units' costs are used for thematic learning materials (20%), and for the highest Day Care costs are used to provide transport for educators (19%).

Table 1. Early Children Education Operational Unit Costs in 2019 (Source: Data processing results)

PAUD OPERATIONAL COMPONENTS	2019			
	TK	KB	SPS	TPA
Thematic Learning Materials	326,220	161,489	210,013	374,590
Provision of Educational Learning Tools	199,357	121,117	105,006	249,726
Provision Of Teaching Tools For Educators	144,987	121,117	94,506	145,674
Supplying Additional Food	126,864	60,559	73,504	124,863
Purchasing Of Early Detection Equipment Tools Development, Purchase Of Light Drugs And P3k Contents	36,247	30,279	21,001	62,432
Meeting Activities With Parents	90,617	50,465	63,004	145,674
Giving Educational Transport For Teachers	126,864	100,931	115,507	395,400
Provision Of Administration Book	72,493	40,372	31,502	62,432
Other Supporting Activities	434,961	191,769	178,511	166,484
Infrastructure Treatment	126,864	60,559	52,503	124,863
Supporting The Provision Of Paud Publication Tools	54,370	30,279	52,503	83,242
Electrical, Water.Telephone Subscription	72,493	40,372	52,503	145,674
Operational Costs Need 1 Year	**1,812,336**	**1,009,309**	**1,050,063**	**2,081,054**

4.2 *Projected Unit Costs for Early Childhood Education Operations*

Based on the calculation of the unit costs of Early Childhood Education in 2019, then projections from 2020 to 2021 are calculated using the inflation rate for the previous 10 years. Based on the calculation, the ideal operational unit cost for Kindergarten in 2020 was IDR 1,935,009 and in 2021 it was IDR 2,057,963, for KB in 2020 it was IDR 1,077,627 and in 2021 it was IDR 1,150,569 , for SPS in 2020 amounting to IDR 1,121,139 and in 2021 amounting to IDR 1,197,027, and for TPA in 2020 amounting to IDR 2,221,916 and in 2021 amounting to IDR 1,372,313.

Table 2. Projected Unit Costs for Early Childhood Education in 2020-2021 (Source: Data processing results)

PAUD OPERATIONAL COMPONENTS	2020				2021			
	TK	KB	SPS	TPA	TK	KB	SPS	TPA
Thematic Learning Materials	348,302	172,420	224,228	399,945	370,433	184,091	239,405	427,016
Provision of Educational Learning Tools	212,851	129,315	112,114	266,630	226,376	138,068	119,703	284,678
Provision Of Teaching Tools For Educators	154,801	129,315	100,903	155,534	164,637	138,068	107,732	166,062
Supplying Additional Food	135,451	64,658	78,480	133,315	144,057	69,034	83,792	142,339
Purchasing Of Early Detection Equipment Tools Development, Purchase Of Light Drugs And P3k Contents	38,700	32,329	22,423	66,657	41,159	34,517	23,941	71,169
Meeting Activities With Parents	96,750	53,881	67,268	155,534	102,898	57,528	71,822	166,062
Giving Educational Transport For Teachers	135,451	107,763	123,325	422,164	144,057	115,057	131,673	450,739
Provision Of Administration Book	77,400	43,105	33,634	66,657	82,319	46,023	35,911	71,169
Other Supporting Activities	464,402	204,749	190,594	177,753	493,911	218,608	203,495	189,785
Infrastructure Treatment	135,451	64,658	56,057	133,315	144,057	69,034	59,851	142,339
Supporting The Provision Of Paud Publication Tools	58,050	32,329	56,057	88,877	61,739	34,517	59,851	94,893
Electrical, Water.Telephone Subscription	77,400	43,105	56,057	155,534	82,319	46,023	59,851	166,062
Operational Costs Need 1 Year	**1,935,009**	**1,077,627**	**1,121,139**	**2,221,916**	**2,057,963**	**1,150,569**	**1,197,027**	**2,372,313**

In this study also calculated variations in institutional operating unit costs by region, such as the territory of Western Indonesia, Central Indonesia, and Eastern Indonesia. The western part of Indonesia consists of the Special Capital Provinces of Jakarta, West Java, Central Java, East Java, Banten, Special Region of Yogyakarta, Nangroe Aceh Darussalam, West Sumatra, North Sumatra, Riau Islands, Jambi, Riau, South Sumatra, Bangka Belitung, Lampung, Bengkulu, Central Kalimantan and West Kalimantan. The central part of Indonesia consists of the provinces of Bali, North Kalimantan, East Kalimantan, South Kalimantan, Central Sulawesi, West Sulawesi, South Sulawesi, North Sulawesi, Southeast Sulawesi and Gorontalo. Eastern Indonesia consists of the provinces of North Maluku, Maluku, West Papua and Papua.

Table 3. Projected Unit Costs for Early Childhood Education Operations by Region, in 2020 (Source: Data processing results)

PAUD OPERATIONAL COMPONENTS	TK			KB			SPS			TPA		
	Western Indonesia	Central Indonesia	Eastern Indonesia	Western Indonesia	Central Indonesia	Eastern Indonesia	Western Indonesia	Central Indonesia	Eastern Indonesia	Western Indonesia	Central Indonesia	Eastern Indonesia
Thematic Learning Materials	355,593	364,347	526,684	176,030	180,363	260,725	228,922	234,557	339,066	408,317	418,369	604,777
Provision of Educational Learning Tools	217,307	222,656	321,863	132,022	135,272	195,544	114,461	117,279	169,533	272,211	278,913	403,184
Provision Of Teaching Tools For Educators	158,041	161,932	234,082	132,022	135,272	195,544	103,015	105,551	152,580	158,790	162,699	235,191
Supplying Additional Food	138,286	141,690	204,822	66,011	67,636	97,772	80,123	82,095	118,673	136,106	139,456	201,592
Purchasing Of Early Detection Equipment Tools Development, Purchase Of Light Drugs And P3k Contents	39,510	40,483	58,520	33,006	33,818	48,886	22,892	23,456	33,907	68,053	69,728	100,796
Meeting Activities With Parents	98,776	101,207	146,301	55,009	56,363	81,477	68,677	70,367	101,720	158,790	162,699	235,191
Giving Educational Transport For Teachers	138,286	141,690	204,822	110,019	112,727	162,953	125,907	129,007	186,486	431,001	441,612	638,375
Provision Of Administration Book	79,021	80,966	117,041	44,007	45,091	65,181	34,338	35,184	50,860	68,053	69,728	100,796
Other Supporting Activities	474,124	485,796	702,246	209,035	214,181	309,611	194,583	199,374	288,206	181,474	185,942	268,790
Infrastructure Treatment	138,286	141,690	204,822	66,011	67,636	97,772	57,230	58,639	84,767	136,106	139,456	201,592
Supporting The Provision Of Paud Publication Tools	59,265	60,724	87,781	33,006	33,818	48,886	57,230	58,639	84,767	90,737	92,971	134,395
Electrical, Water.Telephone Subscription	79,021	80,966	117,041	44,007	45,091	65,181	57,230	58,639	84,767	158,790	162,699	235,191
Operational Costs Need 1 Year	**1,975,515**	**2,024,149**	**2,926,024**	**1,100,185**	**1,127,270**	**1,629,534**	**1,144,609**	**1,172,787**	**1,695,331**	**2,268,428**	**2,324,272**	**3,359,870**

According to the results of calculations and projections, the operational unit cost for 2020 for Kindergarten in the western region is IDR 1,975,515, the middle area is IDR 2,024,149, and the

eastern area is IDR 2,926,024. Furthermore, for Playgroup in the western region is IDR 1,100,185, the middle area is IDR 1,127,270, and the eastern area is IDR 1,629,534 For ECCD units in the western region is IDR 1,144,609, the middle area is IDR 1,172,787, and the eastern area is IDR 1,695,331. Besides that, for day care Park in the western region is IDR 2,268,428, in the middle area is IDR 2,324,272, and the eastern region is IDR 3,359,870.

The results of these calculations correspond to some previous research such as Chrystiana & Alip, 2014; Tedjawati, (2013) and some educational funding concepts, namely about the difference in the operational costs of each institution. This is due to variations of activities organized by each institution. More and more program activities are organized by each institution then the greater the operational costs required. Addressing this, it is advisable that the Government be able to participate in supporting the implementation of teaching and learning activities in each institution by increasing the level of operational funding assistance given to the agencies according to the type of Institutions. The current condition of the amount of IDR 600,000 per student per year for all institutions is felt very less for institutions such as TPA or even Kindergartens that have different activity characteristics.

5 CONCLUSION

The conclusions of this study are (1) the operational unit cost for 1 year for kindergarten is IDR 1,812,336, for Playgroup is IDR 1,009,309, for ECCD units is IDR 1,050,063, and for Day Care is IDR 2,081,054, and (2) the amount of operational unit costs in 2020 for Kindergarten in the western region is IDR 1,975,515, the middle area is IDR 2,024,149, and the eastern area is IDR 2,926,024. Furthermore, for Playgroup in the western region is IDR 1,100,185, the middle area is IDR 1,127,270, and the eastern area amounting to IDR 1,629,534 For SPS in the western region is IDR 1,144,609, the middle area is IDR 1,172,787, and the eastern area is IDR 1,695,331, for Day Care in the western region is IDR 2,268,428, the middle area is IDR 2,324,272, and the eastern region is IDR 3,359,870.

The conclusion is that the highest operating unit cost is in TPA because there is a full day of service. Next is a Kindergarten institution because at this institution already has a special curriculum to prepare the child proceed to the level of basic education. Then the unit cost is the highest area in the eastern region. This is because the cost of life in eastern Indonesia compared with other regions so it can affect the operational cost of PAUD institutions in the eastern region. It deals with the results of these conclusions, several policy recommendations are given including: (1) in determining the amount of financial assistance it is necessary to consider the amount of operational unit costs so that the purpose of providing financial assistance is to improve access and quality can be achieved, (2) subsequent research in order to calculate Early Childhood Education investment costs.

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Trends of "Tahfidz House" Program in Early Childhood Education

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ABSTRACT: The enthusiasm in the Tahfidz House (TH) education program especially for children shows an increasing trend in Padang, a modeling city in developing Islāmic character for children. The purpose of this study was to investigate the Tahfidz House program trends development in early childhood in Padang. This study uses qualitative methods with data collection tools, namely interviews, direct observation, and document analysis. The results showed that: First, the Tahfidz House program attracted public interest because it offered dimensions of character formation such as increasing Intelligence Quotient, Emotional Quotient, and Spiritual Quotient. Second, there is a theological reason in the landscape of local people to think that the Qur'an offers a blessing concept in our lives. Third, Tahfidz House existences as non-formal education has two dominant affiliations, namely pure education and based on market interests or capitalization.

Keywords: *Early Childhood Education, Tahfidz House Program, Market Interest*

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1 INTRODUCTION

Education in Indonesia use dual systems, modern or conventional and traditional such as pesantren (Islamic boarding school). Pesantren appear to have metamorphosed toward the modern system. This adjustment is in order to continue to adapt the changing (Bashori, 2017). Changes in the contemporary world create a new cultural environment that transforms geopolitical boundaries, lifestyles and new perspectives in the world. This include the outlook on religion and education. This change presupposes the process of transformation and modernization in various lines. After facing the modern era some traditional Islamic School stop to operate. Those traditional institutions are suspended doe to the expansion of more secular and modern public school (Kirana, 2017).

The philosophy of education in the Middle East, Indonesia, Brunei and Malaysia is observed to be not too different. The Philosophy of Islamic Education itself is a continuous process of teaching knowledge until the knowledge is felt and absorbed into the mind, behavior and actions towards oneself, humans and the environment, in accordance with the role of humans to become worshipers of God, their leaders and scholars. If previously the flow of tahfiz was quite exclusive and could only be accessed by those in the field of religion specifically, but now memorizing the Koran is more open and inclusive for every student who is interested and this is also offered in every institution with adequate facilities provided for implementation Tahfiz program, both in pre-school, elementary school, secondary school and at the tertiary level in the form of certification, diploma and degree. The Ulf Albab Tahfiz Model (TMUA) curriculum is an example of a combination of the National Curriculum and the Tahfiz Integrated Curriculum (KBT) with the Koran, Encyclopedic and Ijtihadic approaches. Conduction of this curriculum is one of the government's vision to produce 125,000 hafiz in 2050. The flow of tahfiz is not limited to students in the religious field but is more open and inclusive for all. This trend has resulted in high support for the TMUA curriculum from the community (Ambo & Mokhsein, 2019).

The main problem of Islamic educational institutions is relatively related to the management system that affects quality (Tidjani, 2017). Three main factors cause a low Indonesian education quality The focus of the education outcome, central management, and low participation (Indrioko, 2015). This "death" basically has a strong relationship with the reality of the Islamic community itself which tends to be backward in various ways both in the economic, political, and the field of knowledge or education. There are a number of reasons for the fact of the backwardness of Islamic societies (Utama, 2016). One of them is because of the massive Western expansion. Even this expansion is not silent from various reactive responses from among the Islamic community, mainly can be seen from the political, economic and educational reform movement. The movement back to the kaffah Islam by conducting learning and "popularizing" Alquran be one way to restore the image of Islam. If historically, religious education is embedded in pesantren, in the present context the development of schools or religious education is no longer limited to pesantren schools. In the contemporary era, religious education has expanded to various forms of non-formal institutions, one of which is the House of Tahfidz program. And even interestingly, almost every school in Indonesia has its own Tahfidz program (Tadjuddin, M. S., Sani, M. A. M., & Yeyeng, 2016).

Tahfidz House program in early childhood has been becoming a trend in cation, especially in Islamic countries for the past several decades. Parents seem to be ignorant if they do not place their children in early education schools with home programs. Tahfidz House has become a new alternative this century and recorded more than 10.000 unit (The Ministry of Religion, 2018 and PPPA Darul Qur'an ,2017). In Indonesia there are more than 4,500 units recorded with more than 35,000 students. In this decade, the number of Tahfidz House has significantly improved. These tahfidz institutions, on the one hand, show a shift in the quality of the education of the Qur'an in Indonesia, from learning to read the Qur'an (through home study, kindergarten / TPA, TPQ, Early Madrasas, or qira'at pesantren) towards learning the Qur'an based on Tahfidz al-Qur'an. On the other hand, these institutions have been contributing to minimize the number of illiteracy of the Qur'an in Indonesia, there are more 56% of the population of Indonesian Muslims (Basyit, 2019).

This development in its continuation left a paradoxical thing, between the formation of Islamic character, humanism, and the desire to capitalize the education system. The capitalization emphasizes the context of producing knowledge systems by prioritizing market interests and the interests of the agencies that manage the realm of education. The program encourages the formation of the industrialization trend of religious education in early childhood. Departing from this postulation, this study breaks down a number of things which are formulated into three questions. First, why or what is behind the emergence of the trend of the Tahfidz House program is growing more rapidly. Second, what makes the Tahfidz House become popular among the people. Third, whether the program that develops is purely a matter of character building or precisely a demand for market needs. Some of these questions will be answered through several study approaches by considering the sociology and education view.

2 THEORITICAL STUDY

2.1 *Early Childhood Islamic Education*

Education is a form of transfer of knowledge, values, culture and religious are directed to an attempt to humanize humans. Asserts that education basically has a goal as a liberation process (Al-fadhil, 2016). While Gutek states that the education process is the process of giving the ability to give meaning to individuals and the environments. Education is a process of humanizing people appointment to the stage of *insankamil* (good human) so that it can complete human and cultivate cultural values.

The process of humanizing humans in education is considered as a series of processes in empowering the potency and human quality and beings. Education is also to elevate human life into a higher level of society as Clark reveals that education can be used to help people improve their living conditions to a higher level through their own efforts (Karsidi, 2017). The Early childhood education focuses on laying the foundation for physical growth and development called as motor coordination; intelligence in the form of thinking power, creativity, emotional intelligence, spiritual intelligence; socio emotional (attitudes and behavior and religion); as well as language and communication, according to the uniqueness and stage-stage of development through which early childhood.

Mahjoob, Nejati, Hosseini, dan Bakhshani (2016) examined the effect of listening to the Koran without its musical tone (Tartil) on the mental health of personnel at Zahedan University of Medical Sciences, southeast of Iran. The results showed a significant difference between the test and control groups in their average mental health scores after listening to the Quran (P = 0.037). There were no significant gender differences in the test group before and after the intervention was found (P = 0.806). These results indicate that listening to the Quran can be recommended by psychologists to improve mental health and achieve greater calm. This is a reference for the founder of Tahfidz House to offer the public the benefits of learning the Koran for young children, children can grow with good mental health.

As well as Ebrahimi, (2011) research that considers the art of the Quran in curing human psychological and spiritual disorders. Because the subject of the Quran and medicine are humans and the purpose of both is the health and well-being of the human body and soul, it is recommended that humans learn how to heal their psychological pain through the Quran. Research investigates the quality and effect of a healthy soul in view of the verses of the Koran. The results found that because human behavioral reactions are signs of a healthy or psychotic soul, those who seek peace in this world and salvation in the afterlife are advised to prevent and cure psychological problems and create a balance in their personalities by using the commands given by the Quran because of the purpose The Quran is maintaining a balance between various instincts.

Lubis and Ismet (2019) research describes the method of memorizing the Koran that is applied by the Tahfidz Center Darul Hufadz in the city of Padang. Supporting factors for memorizing the Koran program are conducive learning spaces, the use of media in memorization activities, and

parental support that helps the process of memorizing children at home. While the inhibiting factors are children who play or feel sleepy in memorizing activities, children who are late or absent from school, and parents are busy, so they do not have time to repeat children's memorization at home. Efforts made in achieving the success of memorization of the Koran program are procurement of muraja'ah books which are evaluated by parents every day, guidance and control of children's memorization while at home, school meetings with parents, parents' obligations to deliver children on time to school and limit the use of TV and gadget in children.

Early childhood education is a coaching effort aimed at children from birth until the age of six carried out through the provision of educational stimuli to help physical and spiritual growth and development so that children have readiness to enter further education (Nurani & Dwi, 2017). The educational conception mentioned above experience paradox when dealing with the world of globalization and education liberalization. The era of globalization threatens the purity of education as the number of schools are improved. Using the analysis of Marx as presented in (George & Goodman, 2012); (Marcuse, 2012), education as the part human live, contains essential role in improving the quality of human quality in terms of achieving their live and social skills. The role of education is also related to economic problems and even becomes a main factor to achieving educational quality. The role of technology in life has become a necessity for every user, including the use of technology in the management of memorizing the Koran. Currently there is even a trend to develop memorization of the Koran through the web system. The results showed that the use of the web in managing memorization of the Koran has provided various facilities for managers and their members. The web is used in a variety of memorization activities of the Koran ranging from announcements of student registration, notification of selection test schedules, announcements of completion test results, distribution of groups memorizing Al-Quran, final memorization tests, and appreciation activities for students who have mastered memorization of the Koran (Priatna, Nurhamzah, Suryana, & Nurdiansah, 2015).

2.2 *Trend of Tahfidz Learning for Early Childhood*

Current trends show that most parents are interested in ensuring that their children receive tahfiz education and the Koran. However, no matter how good the Tahfiz program is, they are incomplete without linking it to motivation. for this Nik Abdullah and friends explore the motivation behind memorizing the children of the Qur'an and the challenges and obstacles faced by them in fulfilling their duties. These findings suggest that feelings of empathy, parental prayer and advice, continuous repetition, morning practice, intelligent scheduling for memorization, having a partner to memorize, introspection, punishment and other learning materials help in overcoming obstacles in memorizing the Koran (Abdullah, Sabbri, Athirah, & Isa, 2019).

The quality of tahfidz learning in schools is an important factor in shaping students into full human beings with an attitude of optimism, religion, beliefs, noble morals, good morals for everyone. Formation of character through the Koran in the process of learning tahfidz. Educational approach, besides being part of the noble character formation process, is also able to be the main foundation in increasing the degree and dignity of students as children of the nation (Zulfitria, 2017).

Malikah, Hidayatullah, Asrowi, and Anitah (2020) investigate the concept of memorization learning that is applied in the field by various educational institutions, and to develop patterns of memorizing learning that are faster and more enjoyable. The results show that a learning model for memorizing Hadith or the Qur'an needs to be done, which can stimulate the active cooperation of students. Students' assumptions about teacher patience get a fairly high percentage. According to students, 90% of teachers have helped students if they have difficulty with repeating but did not provide easy memorization solutions.

Examples of special curricula for KKQ (Memorizing Al-Quran Skill) or tahfidz have been prepared by ministries with five priority areas namely 1) Ulum al-Quran 2) Tajweed 3) Hafazan verses selected 4) Qiraat Sab'ah and 5) Tarannum al-Quran. The KKQ curriculum is not only a theory but more practical and highly correlated, so that only selected students are eligible to attend this class, there are students who are gifted in the Qur'an, interested, have been able to do the

Khatam of the Koran and can read well. The implementation of KKQ depends on special teachers called KKQ teachers. The KKQ teacher is tasked with encouraging all the knowledge and skills contained in the KKQ curriculum. In this way, KKQ teachers must become educators who are proficient, mastering, astonishing, talented, and ready to train all the knowledge and skills of the Koran in principle and practice well. It is important to ensure that the abilities, talents, and achievements of KKQ students are also extraordinary and meet the KKQ goals that have been described (Latif, Jimaain, & Jasmi, 2020).

Another example of the integrated Islamic elementary school tahfidz program that provides an alternative to dealing with the quality of the tahfidz program by establishing learning tools in accordance with the achievement of tahfidz. For tahfidz Ibtidri Integrated Madrasah Elementary School Khoiru Ummah determines learning tools as guidelines and standards in the implementation of the tahfidz program in the Khoiru Ummah Islamic Integrated Madrasah Elementary School. And the design of learning tools becomes the initial foundation before learning begins. Learning Theory in Behavioristic Views, Learning is a change in behavior as a result of the interaction between stimulus and response. In other words, learning is the change experienced by students in terms of their ability to behave in new ways as a result of the interaction between stimulus and response. Interpreting design is a problem-solving process. The purpose of design is to achieve the best solution in solving problems by utilizing some of the available information. Thus, design arises as a human need to solve problems. Through design, people are accustomed to taking systematic steps to solve the problem at hand (Pramono & Sofyan, 2019).

2.3 *Market Interests in Early Tahfidz education*

Commercialization of education has means trading of education. The commercialization of education is a state of education that adheres to industrial society and market tastes (Rustiawan, 2015). The commercialization of education has transformed educational institutions based on economic efficiency into companies that provide elite community and work coolies. As a result, many educational institutions have adopted the economic paradigm of education. Many educational institutions ultimately fail to imply that the learning process is one of the main pillars in the humanization of human life (Rifki, 2017), (Pieterse, 2019) defines globalization from a different perspective. He said that globalization is a social process, where geographical boundaries are not important to the socio-cultural conditions, which ultimately incarnate into one's consciousness. This definition is almost the same as what was intended by (Hambali, 2017). Globalization is the interdependence of one nation with another nation, among human through trade, travel, tourism, culture, information, and extensive interaction so that national boundaries become increasingly narrow.

Globalization can also be defined as a process of growth and development of economic activities across national and regional boundaries. The indicators are the movement of goods, information, services, capital and labor through trade and investment. (Faturrahman, 2019) sees several definitions that are meant by globalization, including the following: a). Internationalization. Globalization is defined as an increase of international relations activities. Although each country still maintains its identity dependent on one another. b) Liberalization. Globalization is also interpreted as decreasing the boundaries of a country. For example, the issue of export / import prices, foreign exchange and migration. c) Universality. The wider spread of material and immaterial throughout the world is also means a globalization. An experience in one place can occurs in other places. d) Westernization. Westernization is a form of universality, in which the wider spread of culture and way of thinking that has a global effect.

One example of Islamic education institutions in Indonesia is Daarut Tauhid Bandung Boarding School is the first and oldest mixed education system in Indonesia. Many Islamic educational institutions in Indonesia today are promoting and developing the Tahfidz Alquran program, one of which is the Daarut Tawhid Islamic boarding school starting the Tahfidz Qur'an Program in 2015. The Daarut Tauhid Pesantren is inseparable from the role of the Ustadz Aa Gym which was pioneered together with teaching and entrepreneurship activities. together KMIW (Islamic Student Association) in 1987, then formed the Daarut Tauhid foundation on September 4, 1990. In 1993 the Daarut Tauhid Islamic Boarding School grew by building a mosque assisted by the local

community. Buildings in this region merged in boarding school community environment, anyone can enter the Daarut Tauhid boarding school environment, including learning in it. In addition to assimilation with the surrounding community, it allows the formation of shared spaces in the boarding school environment and the learning process can also occur outside the classroom or in the learning environment by utilizing the various learning resources available. The enthusiasm of the people in the Tahfidz program has developed this boarding school into a program that is in demand from all over the country (Firmansyah, Ismail, Utaberta, Yuli, & Shaari, 2020).

3 METHODS

This study used a qualitative method with a descriptive-analytical approach. This approach is intended as a way to analyze analytically about social phenomena. Descriptive research is intended as an effort to explore and clarify something about a phenomenon or social reality in this case related to the Tahfidz House trend which is growing more rapidly in recent decades. The approach of qualitative research is interpreted as a process of research and understanding based on the methodology of investigating a social phenomenon. (Moleong, 2017) suggests the notion of qualitative research methods as a form of research in understanding what phenomena experienced by research subjects such as behavior, perception, motivation, actions, and so on holistically, parsed in descriptive form through words and language in a special natural context and by utilizing various scientific methods.

This study takes place in Padang, West Sumatra. This city was chosen based on the criteria for the outbreak of the Tahfidz House program in various institutions, whether mosques or surau, schools, or the Tahfidz House program itself beside socio-cultural aspects of the city. The data collection technique was carried out by using three approaches. First, observation of the house and the Tahfidz House program in various units in Padang City institutions. Second, an interview with the leaders of the Tahfidz House. Third, secondary data in the form of reports and the results of previous research.

In this study the method is done by using interview guides, unstandardized interviews, and also structured (unstructured interviews), but still focused on the main problem being researched. Researchers are not equipped with the preparation of a patterned and systematic question list. Then, data analysis was carried out with a series of processes as can be seen in the figure below.
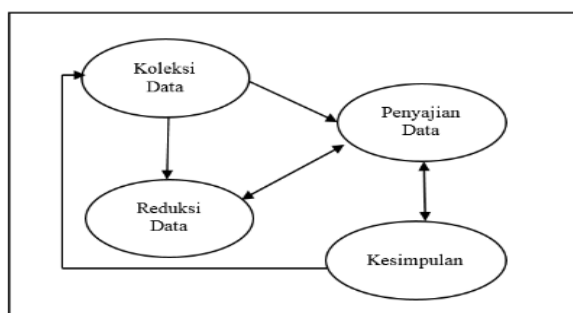

Figure 1. Data analysis, quoted from (Sugiyono, 2017)

4 RESULT AND DISCUSSION

4.1 *Tahfidz House As A Forum for Formation of Character Early On*

The issue of character building is a major issue in the realm in education. The formation of this character is realized effective since early childhood. The issue of character building is the setting in which the local community, especially the Muslim community, sorted to place the children they owned into the Tahfidz House. Al Quran education is seen as an appropriate vehicle for realizing a community of believers and pious, knowledgeable knowledge, and has a moderate character.

In Padang it was identified that the trends of Tahfidz House are triggered by several factors. First, social and cultural aspects. The citizens have a strong Islamic cultural background. Even some cultural philosophies that have awakened customs and religion as an inseparable thing. This cultural foundation encourages the local community to place the guidance of children from an early age so that they approach, understand the Qur'an in their daily lives. Surau as an institution of the Minangkabau community is a classic symbol where the values of the Qur'an are internalized to the community, especially to children from the early age. Surau acts as an educational institution in which there is Al-Quran education (Ahmadi, 2018) a. In the contemporary context the presence of the Tahfidz House is a reflection of the religious culture landscape of the local community. Second, theological reasons. This reasoning emphasizes the belief that the Qur'an does not only about transcendental life as it also contains a holistic and universal teaching value.

This social condition triggers the urgency of character education to respond to and deal with socio-cultural changes, currents of modernization, and currents of westernization that tend to ignore religious morality standards. Character education is a form of capacity development, character formation, and dignified nation civilization in its efforts to educate national life. Character includes three main parts (Yusuf, 2017). First, the formation and development of potentials which can then be empowered, behave and act in accordance with the philosophy of life as a nation and state. Second, to form and improve the negative-destructive human character, strengthen the role of the family, the ranks of education, the community, and the government to participate in a responsible manner in developing the potential of civil society towards a moral, progressive, independent, and prosperous nation. Third, as a filter; which is empowered to strengthen its own culture and to filter the various cultural values of other nations in its relation to an adaptation of an open, dignified, tolerant, moral, knowledgeable society and knowledge and faith and devotion.

The awareness of moderate values must be realized early. Psychologically, early age is seen as a golden age. The period in which the process of maturation of physical and psychological functions. Child's brain cells undergo significant development and are able to absorb various stimulants from their external self. Human intellectual development at an early age reaches 80%, and will reach 100% at the age of 18. Early childhood is those aged 0 to 8 years. At this age, children experience a main crucial age space in the education process which will have a significant effect on education in the next phase. Early childhood is important in developing the potential of children's intelligence as a psychological aspect that will affect an individual's intelligence and character as an adult (Sa'diyah, 2013).

Early childhood should be colored by Qur'an. Thus, a child will have the ability to balance social relations encountered in the environment. The influence of memorizing the Qur'an on self-development and scientific character formation was revealed by several researchers, who explained that memorizing the Qur'an has features that can nourish the soul or psychological. Qadhi (Taslama, 2014), through a study conducted at the Great Clinic of Florida in the United States, succeeded in proving that listening to the verses of the Qur'an - both those who understand Arabic and cannot - can feel enormous physiological changes such as decreasing depression, sadness , obtain peace of mind, and ward off various diseases. This research was conducted 210 times which were classified into two phases, namely reciting the Qur'an with tartil and reading Arabic which is not from the Qur'an. In conclusion, respondents who got peace of up to 65% when listening to the reading of the Qur'an and get calm only 35% when listening to Arabic that is not from the Qur'an (Taslama, 2014).

Reading the Qur'an in the community has to do with cognitive function. People who consistently and regularly read the Qur'an extraordinary cognitive abilities that are centered on the brain will increase. In other words, people who often read the Qur'an will increase their intelligence both intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ). Until finally able to influence human behavior and character that is stored strong in the memory of his brain. Parents place their children in early childhood education institutions aimed at optimizing themselves and children's talents (Nugraheni, S., & Fakhruddin, 2014). Character education is moral education plus, involving aspects of knowledge (cognitive), feeling (feeling), and action (action) that systematically and continuously based on values and norms prevailing in society sublime. Insight, character education is a process of understanding, living and practicing the

teachings of moral education. Therefore, character education includes knowledge and understanding of right and sink in, then do the right move and have value - moral values recognized by the community. Explains that character education can be defined in terms of relationship virtues (e.g., Respect, fairness, civility, tolerance); self - oriented virtues (self - discipline, effort perseverance) or combination of the two (Arief, 2014).

The existence of the Tahfidz House in the community has become a way in running Islamic character. Through memorizing the Qur'an, children can foster and increase their spiritual intelligence. The process experienced in memorization is a process carried out in totality by the whole body both affection and cognition. The routine of memorizing the Qur'an influences the child's development both in terms of children's intellectual or intelligence, emotional or spiritual. A child who accustoms himself to memorizing the Qur'an will experience the development of a good mindset and the development of noble morals.

In the Islamic concept, memorizing the Qur'an is not just a cognitive activity, but also an internalization of the value of the Qur'an into the hearts and behavior of humanity. One of the positive effects resulting from memorizing the Qur'an is that the increase of concentration in gaining knowledge, as well as shaping human character in a better direction. Reading Al Qur'an can boost morale and make move ghirah (spirit). The Tahfidz House program launched a memorization program of the Qur'an to form positive character as early as possible for students as a form of educational effort. In addition, education from an early age through tahfidz Qur'an is a means to fundamentally change human character, bringing radical individual changes. The influence of memorizing the Qur'an on the formation of students' character, in this case is considered to have a positive correlation. Tahfidz House program is also often in demand because it offers the sensation of a child become well-being, a relatively mild educational system and friendly style to children. The education system can be looked at as explained in the following section.

4.2 *House Education System Tahfidz*

The term tahfiz is terminologically as a masdar form of haffaza - derived from the word hafiza-yahfazu - which means memorization (Hidayah, 2016). These words beginning with the three letters which implies maintaining and supervising (Baihaki, 2017). From this meaning, the word memorization is then born, because the person who memorizes well maintains his memory. This word also means "not unmindful", in the sense that this attitude leads to nurture, and care.

According to Nawaz, N., and Jahangir (2015), tahfiz al-Qur'an can be defined as the process of memorizing al-Qur'an in the mind so that it can be pronounced or spoken out without reading it correctly in certain ways. Those who memorize it are called al-hafiz, and the plural form is al-huffaz. The definition contains two main things, namely: first, a person who memorizes and then is able to recite it correctly according to the recitation of the recitation of the recitation of the Qur'an. Second, a hafiz always keeps his memorization continuously because to avoid forgetfulness. People who have memorized so many juz of al-Qur'an but do not keep it, then it is not said to be hafidz al-Qur'an. Those who memorized some juz or some verses of the Qur'an, then are not categorized as hafidz al-Qur'an (Hidayah, 2016).

Memorization programs in early childhood have their own variation. Some schools of kindergarten probably more focus on social development, while others emphasize cognitive development. Some experts even believe that some kindergarten education today is fully loaded by an orientation towards achievement (Santrock, 2007). This includes an orientation that places more emphasis on the "good name" of schools which is imposed too early on children.

The method is a practical way used to implement a series of plans that have been arranged neatly and thoroughly in real activities so that goals can be achieved to the maximum (Majid, 2016). The method used in various fields including in this case is in the process of learning or memorizing the Qur'an. The method chosen to be implemented is based on various things, such as; suitability of material, goals, characteristics of students and so on. The results of the study illustrate that the methods used in memorizing the Qur'an are very diverse. This can be seen in the use of the method of memorizing the Qur'an in early childhood applying the talaqqi method.

The talaqqi method in memorizing al-Qur'an means the teacher gives memorization material by reciting verses while the students listen and follow the teacher's reading repeatedly. In addition, other Qur'an memorization methods include (Akbar, Ali & Islmail, 2016; Anwar & Hafiyana, 2018; Muslimin, 2015) namely; the kaisa method and the yadain method, the halaqah and recitation methods , the bi an-nadhzar , al-wahdah, takrir, and tasmi 'methods.

4.3 *Globalization of Locality Version*

The presence of the Tahfidz House is a reaction to the parents demands. As a way to dismiss it or as a reaction to maintain the values of religious locality, the approach to the Qur'an becomes an instrument for the Islamic community. On this plain there are two arguments that can be built. First, the rise of Tahfidz House as a consequence of "counteracting the flow of foreign culture or global culture. Secondly, the presence of the Tahfidz House as a "political economy of the business" in addressing the market struggle in the social reality of Muslim societies. Conceptually, globalization is an important issue that emerged in past decades. Globalization itself is a concept related to internationalization, universality, liberalization and westernization. In addition, globalization causes complexity of issues and values that spread and become universal (Battersby, Paul, & Siracusa, 2009). Within the three major groups of views of globalization, some define globalization as a new history of human life where the traditional state has become irrelevant and begins to turn into a business unit in a global economy (Samuel & Conley, 2019). With the change of the traditional state into these business units, the change in the direction of policies taken by a country will be more to the efficiency and economic orientation.

In fact, globalization is not entirely in the form of economic phenomena but also contained in it political and cultural phenomena. Globalization originated from the traditional market internationalization into the development of new models more emphasis on trade, technology and cultural exchanges (Hoffman, 2007). In addition, there are three factors supporting the globalization of the economy and world trade today, namely the revolution in the field of communication technology, the lower cost of transportation and the emergence of a liberal ideology (Samuel & Conley, 2019). With the changes brought about by the current of globalization, then changing patterns of social behavior in society especially if when the state does not have a strong filter. Socio-cultural changes that follow the emergence of globalization flows actually stem from the modernization/rapid development of information and communication technology built by humans. The term modernization is often "be opposed" with the traditional term. In other words, modernization means a change from traditional society to the form of a modern society. Thus, modernization is a process of a change when people who are renewing themselves try to obtain the characteristics or characteristics possessed by modern society.

Looking at the tide of globalization, Muslims have mixed reactions. The growth of Islamic revivalism is a reaction to the consequences of modernism and secularism in political and religious life. Modern-secular civilization is the target of criticism of Islamic revivalism, as stated by (Azra, 2017) that Islamic revivalism is a reaction to the failure of Islamic modernism because it is unable to bring people and the Islamic world to life that is better, according to Islamic teachings. Instead, Islamic revivalism bid to return to the source solutions Islam pure and authentic; reject everything that comes from the heritage of western modernism. Islamic neorevivalists who proclaim a new world order that is believed to be the order of God. The application of nizam al-Islami (Islamic order), hakimiyyat Allah (God's sovereignty), and global sharia as the highest idealism of neorevivalists. The order replaces the contemporary world order oriented to humanity, capitalism, modernity, and Western secular values that continue to emerge in Indonesia.

These reactions are locality reactions to the current of globalization. For the sake of embodying the value of this locality, the approach to the Qur'an with various variants is a choice. One way is to promote the movement of the Qur'an. Tahfidz House trends to early childhood gain   momentum considering this age is the easiest and most appropriate age to thicken fertilization in children for the future of religious life, nationhood, and nationhood.

4.4 *Trend Tahfidz House: Pure Religious Moral Education or Market Interests?*

Education as a way to create an environment that allows the development of children's potential early on, massive developing. Early childhood education since the last few decades has taken a central position in the social space of society. Essentially, education in early childhood as an effort to facilitate the process of child development. The socialization process has started early. The Tahfidz House normatively took this moment. As mentioned in the previous section, Tahfidz House developed rapidly in a relatively short time. According to the Ministry of Religion's records in the first semester of 2018 and PPPA Darul Qur'an (2017) in (Basyit, 2019), Tahfid al-Qur'an institutions (including Islamic Boarding Schools al-Qur'an, Madrasa al-Qur'an, Rumah al- Qur'an etc.) in Indonesia there are more than 4,500 recorded. In it, there are more than 35,000 students studying. In terms of numbers, this is a significant development compared to 10 years ago when the number of tahfidz institutions at that time numbered between 200-300 with only around 10,000 students. And, for the city of Padang as of 2017 there were 32 recorded in eight districts (Afriami & Rahmah, 2017). Based on an interview with one of the Tahfidz House managers (interview, March 2020), it was mentioned that the number of Tahfidz House in the city of Padang totaled more than 100. It's just not recorded in a structured and systematic manner by the city government. And, the tendency of Tahfidz House managers is non-formal, managed privately.

Tahfidz House Program trends in early childhood is strongly influenced by social situations and market situations. Tahfidz House usually offer and promote themselves with something unique that public schools do not have. Among those imaged are theological doctrines as a way to form a strong Islamic character, offer a lightweight and easy method for children, and provide care services to children. For the third category, the Tahfidz House functions is as a day care center for parents who are busy working outside the home. There is a business aspect behind various Tahfidz House programs. Tahfidz House to early childhood is not entirely pure education but is driven by the principle of capitalization or economic business aspects. The development of Tahfidz House opens up new employment opportunities in the informal sector. Moreover, the fees are quite large.

By supposing as a capitalization, it can only be enjoyed by certain parties who have capital to access education (Rosyid, 2019). The impact of the capitalization of education, the Tahfidz House, early childhood among them is to strengthen the relations of capitalism and urban education to produce school practices that have better support in economic control by certain groups, especially certain social classes. The relation of capitalism and science encourages the development of knowledge which only aims to obtain material profit compared to creating a better religious life for humanity. Educational capitalism creates a foundation for education that is oriented towards corporate values at the expense of the value of human dignity.

The existence of the Tahfidz House program in early childhood, thus, cannot dismiss the way of thinking and the flow of educational liberalism as a reflection of global education liberalization. As the WTO emphasizes, education is seen as one of the industries in the tertiary sector, because its main activity is transforming people who are not knowledgeable and people who do not have the skills to become knowledgeable and skilled people. Commercialization of early childhood education like this basically serves the interests of capital owners. Not as a means of human formation and increasing human dignity. P Education has three main tasks, namely, to preserve the, transfer and develop science, technology, art and culture. Education is also very vital role in transferring the values and national identity (van Glinken, 2014).

One manifestation of education globalization is the unlimited development of the education market. According to (Steger, 2017), globalization is asymmetric interdependence between countries, institutions and actors. Therefore, the interdependence between countries is more beneficial for the countries that have economic and technological advantages. In fact, at the beginning, globalization was aimed at opening up opportunities for developing countries to improve their welfare through global trade. Budged limitation of developing countries, increased demand for educational quality, and advances in information technology are three factors that drive the growth of the "borderless" market in education. Education has become very aggressive in exploiting the emergence of new market systems by offering a variety of educational services; not entirely with

philanthropic motives but based on profit considerations by accepting as many students as possible.

The main problem faced is the tension between the humanistic dimension of education and the practical demands of market interests. There is a tension between human education and the interests of the market economy. There is an imbalance or disconnect between the outputs of an educational institution with the demands that exist in the world of praxis.

Based on the objectives of early childhood education, several functions of the educational program can be explored (Sujiono 2009), namely: first, the function of adaptation; plays a role in helping children make adjustments to various environmental conditions and adjust to their own circumstances. Secondly, the function of socialization, plays a role in helping children to have social skills that are useful in relationships and daily life where children are located. Third, the function of development is related to the development of various potentials of the child. Giving children the opportunity to play by considering the right of children throughout their life span. Through playing, children explore their world and build their own knowledge, and, Fifth, economic functions; planned education in children is a long-term investment that can benefit - at the next range of developments. Moreover, investments made during the golden age will provide multiple benefits.

The success of education is determined by the education trilogy, namely: family, school and community, which makes students have holistic intelligence (intellectual, spiritual, emotional and social, and kinesthetic). The challenge faced is the increasing demoralization among children and adolescents, so that children need to have moral resilience to maintain the existence of personalities and moral superiority amid the diversity of moral values of other nations. Religious education as a subject in schools have an important role in instilling a sense of piety to the Deity, which in turn can cause a strong religious flavor and spawned acts - acts of worship are perfect as a provision for the hereafter. Religious education in schools should not only be given in the form of matter - matter alone, but also through the practice if anything to do with the act or worship, such as prayer, chanting and things - other things associated with the act in religious education (Murniyati, 2017).

Globally, the industrial world will be constrained if it is not accompanied by the presence of professionals who support their existence. The industrial world obtains reliable and skilled personnel from educational institutions. Therefore, the relationship between the industrial world and the world of education is absolute. On the other hand, even though educational institutions are the only place where industry can obtain a reliable source of professional staff, this does not mean that the goal of education is absolutely to meet market needs. In this framework, the relationship between education and industry is relative because education has broader goals than merely meeting the labor needs of the market.

There are two goals that need to be considered in responding their role in the world of education. The first is education which has more philosophical goals, directing itself to contemplate and find general ideas. Others have more mechanical goals in the form of applied practical knowledge of the world. Education that has philosophical goals assume that learning activities are valuable in themselves because human natural conditions require that he constantly learns continuously about many things; about themselves, the environment, the limitations and possibilities of their existence. Learning and seeking knowledge is one of the processes of authentic human self-actualization. Even if it does not have a practical interest in the ownership of knowledge itself. Being a person of knowledge is already a value in itself.

The desire to seek knowledge is a sign of the perfection of human dignity that is naturally provided by the Creator with reason. "We are all motivated to seek knowledge as high as the sky because every effort in pursuing perfection is a noble behavior, while mistakes, mistakes, ignorance, ignorance are defects and humility. There is also the desired knowledge even though there is no result whatsoever from the possession of that knowledge, it becomes a kind of treasure in itself, enough if it is considered as a reward for years of hard work. "It seems that this understanding of integral educational goals is not realized by decision makers when implementing the Link

and Match program by introducing Dual System Education. Dual System Education often popularly referred to as a learning model while apprenticeship is a form of organizing professional skills education that systematically and synchronously integrates school education programs and skills acquisition programs obtained through work activities directly in the workforce and directed to achieve a level certain professional expertise.

Basically, there is nothing wrong with Dual System Education. The failure is the aspect of values behind the ideological and ambiguity of the education behind the program being implemented. Link and match are heralded as a necessity that must be applied at all levels of education, from basic education to higher education. Link and match then became popular jargon. Everyone says it. Various kinds of cooperation that took place between the school and the business world were immediately labeled Link and Match. One cannot distinguish between Link and Match with free promotions and product publications targeted at educated people. This is the veiled violence of the industrial world which is left to impinge on our education world.

For that, creating a policy in the world of education so that its presence is still relevant in society is an urgent demand. However, education reform cannot be effective if it merely bases itself on a reactive attitude, limited educational horizons and errors in diagnosing problems. The education world has a more essential function in the process of humanization than just a robot factory that is ready to print the professional workforce needed by the market. Assuming that the purpose of education solely to meet practical needs for a moment, or even the world of education must 'devote themselves to the interests of the industrial world' makes the world of education lose relevance in carrying out the mandate of humanity, enhance the standard of life, and help humans maximize various kinds of potential and talents that are it has.

Linking educational progress criteria to the external dimensions of the material world is a manifestation of incomprehension in understanding the nobility of an educational work. The views Gramsci concerning the situation of education in Italy in the early 19th century, when conflict of interest between educational institutions and industry started confirming this fact. There are no external situations and material conditions that can satisfy an educational performance. Because educational work is an ethical reality, an intellectual event that touches human abilities at a higher level, and therefore cannot simply be a mechanistic reflection of a society. The world of fish education is not merely a reflection of the material needs of society, but a continuous performance, a renewal effort, requires continuous affirmation because the people involved are human themselves. Human should be the orientation of education, not the interests of the market. For this reason, reform in the field of education is hard work that is not easy (Ali, 2017).

The struggle against the ancient model of school is justified, but the reform movement is not easy to apply because renewal is not related to a systematic program, but relates to humans and related components, but rather the complexity of social problems in which humans are expressions. Confusion in the vision of education has resulted in the degradation of humanity. Educational institutions are not factoring that create people who are later placed in one of the functions of a large industrial machine, such as a chain, nut, or button that makes the whole machine function. Therefore, the first thing that needs to be clarified is an understanding of the vision of education in relation to market interests. Industrial world in a certain sense does have an absolute connection with education, but this is not the case with education.

5 CONCLUSION

Tahfidz House has become a new kind of educational alternatives in this century. This development in its continuation left a paradox, between the formation of Islamic character, humanism, and the desire to capitalize the education system. Capitalization itself emphasizes the context of producing knowledge systems by prioritizing market interests and the interests of the agencies that manage the realm of education. The existence of the Tahfidz House or program encourages the formation of the industrialization trend of religious education in early childhood.

The programs are also often in demand because it offers the sensation of a Salehah Child and a relatively mild educational system and friendly style to children. The education system can be

traced as explained in the following section. The presence of the Tahfidz House can be said to be a reaction to the demands of the times or global tend to be demurral. As a way to dismiss it or as a reaction to maintain the values of religious locality, the approach to the Qur'an becomes an instrument for the Islamic community. There are two arguments that can be built. First, the rise of Tahfidz House as a consequence of "counteracting the flow of foreign culture or global culture. The issue of character building is a major issue in this realm. The formation of the character is realized effective since early childhood. The issue of character building is the setting in which the local community, especially the Muslim community, sorted to place the children they owned into the Tahfidz House. al Quran education is seen as an appropriate way for realizing a community of believers and pious, knowledgeable, and has a moderate character. Especially in the midst of a thump of moral decline and character of society today which is almost inevitable. Secondly, the presence of the Tahfidz House as a "political economy of the business" in addressing the market struggle in the social reality of Muslim societies.

Tahfidz House trend in early childhood is strongly influenced by social situations and market situations. Tahfidz House usually offer and promote themselves with something unique that public schools do not have. Among those images are theological doctrines as a way to form a strong Islamic character, offer a lightweight and easy method for children, and provide care services to children. For the third category, the Tahfidz House Tahfidz House functions as a day care center for parents who are busy working outside the home. There is a business aspect behind various Tahfidz House programs. Tahfidz House for early childhood is not entirely pure education but is driven by the principle of capitalization or economic business aspects. The development of Tahfidz House opens up new employment opportunities in the informal sector. Moreover, the fees charged to each Tahfidz House child are quite large.

The impact of the capitalization of education, the Tahfidz House program, early childhood among them is to strengthen the relations of capitalism and urban education to produce school practices that better support economic control by certain groups, especially certain social classes. The relation of capitalism and science encourages the development of knowledge which only aims to obtain material profit compared to creating a better religious life for humanity. Educational capitalism creates a foundation for education that is oriented towards corporate values at the expense of the value of human dignity. The existence of the Tahfidz House program in early childhood, thus, cannot dismiss the way of thinking and the flow of educational liberalism as a reflection of global education liberalization.

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The Impact of the Whole Language Approach Towards Children Early Reading and Writing in English

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ABSTRACT: This study aims to determine the effect of the whole language approach to the ability to read and write in English in early stages of children aged 5-6 years in one of the kindergartens in the Yogyakarta Special Region. The population in this study were 43 children who were in the age range of 5-6 years in the kindergarten. Twenty-nine participants were included in the experimental class subjects as well as the control class with posttest only control group design. Observation is a way to record data in research on early reading and writing ability. The results of Multivariate Analysis of Covariance (Manova) to the data shows that 1) there is a difference in ability between the application of the whole language approach and the conventional approach to the ability to read the beginning of English; 2) there is a difference in ability between applying a whole language approach and a conventional approach to writing English beginning skills; 3) there is a difference in ability between the whole language approach and the conventional approach to the ability to read and write the beginning in English

Keywords: *Whole language approach, Early reading, Early writing, Early childhood*

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1 INTRODUCTION

The early reading and writing ability to read and write in the beginning are fundamental for children in using English because both of them are tools in communicating and expressing ideas in the language. Some organizations such as the International Literacy Association (LRA) and the National Association of Education of Young Children (NAEYC) are organizations that believe that the ability to read and write is essential to achieving future learning success (Saracho, 2017) and very useful for the life of the global community currently. According to several research survey results, Indonesia is a country with a low interest in reading and writing as a low English proficiency, more specifically; 1) low reading interest is in which the country ranks 60 out of 61 based on the Most Literate Nation in the World survey ranked (CCSU NEWS, 2019); 2) The United Nations Educational, Scientific and Cultural Organization (UNESCO) survey stated that only 1 in 10,000 people in Indonesia had an interest in reading and writing (Fat, 2015); 3) The Program for International Study Assessment (PISA) under the auspices of the Economic Co-operation and Development (OECD) published in 2015 shows that the ranking of language interest of Indonesian is 63 out of 70 countries in the world (Pellini, 2016). Besides having low interest, the ability to read and write in English also requires the skills of an educator; however, it has been found that preschool teachers lack competence and ability in teaching reading and writing English in kindergarten (Chodidjah, 2007; Sikki, Rahman, Hamra, & Noni, 2013; Suyanto, 2010)

Based on the explanation of the problems above, possible causes could be accounted by several issues such as; 1) lack of human resources which can teach English to students as early as (Sadtono, 2007); 2) the position of English which is not the first language in Indonesia where English is not used as a communicative language but only consciously planned to learn (Crystal, 2003); 3) the provision of reading and writing activities to participants is not balanced leading to low mastery (Hardinansyah, 2017). Thus, there is a strong need to enhance the ability of reading and writing in English in the Indonesian context. Teacher sufficient competence and skills could lead to engaging and innovative learning to grow children's interest in English reading and writing.

The mastery of English is essential in the life of society in the era of globalization, including in education. Reading and writing English can be increased by the awareness that is often known as "literacy" (Doman, 1985; Papalia, Old, & Feldman, 2009). This awareness can be interpreted as the ability of students to understand reading and expression through written media (Cahyani, Courcy, & Barnett, 2018). The development of English in early childhood requires optimal stimulation because the stimulation helps to maximize language proficiency, (foreign languages) in children's daily lives (Maulidia, Fadillah, & Miranda, 2019). This encouragement or stimulation can be incorporated into the context of reading in early childhood learning which includes raising some questions, expressing opinions and optimizing language development. The stimulation of this ability of data is done by full reading either through activities such as listening, speaking, reading and writing (Cahyani, 2019). The activities carried out in this learning will stimulate and optimize children's English language skills by getting new vocabulary in their daily lives.

The whole language approach becomes a learning approach that is often applied in language learning in countries that have high literacy abilities (Meha & Roshonah, 2014). The whole language approach is usually used to help children understand spoken and written languages. This language ability approach includes several things, such as; 1) real and natural, namely language as a function of communication in learning a language; 2) thorough (whole) means not separating language skills such as listening, speaking, reading and writing; 3) sensible; 4) interrelated (relevant), which is related to the child's experience; 5) interesting (interesting) and 6) children's learning (belongs to the learner) (K. S. Goodman, 1986). The language should be taught as a whole and not taught separately. In a whole language approach, the teacher indirectly learns a language in a natural and meaningful way and is integrated with life (Alhaddad, 2014; Mayuni & Akhadiah, 2016). The whole language is also considered as an approach that provides a learning environment for children with meaningful experiences and active involvement of children (Williams, McLeod, & McCauley, 2010). This approach is based on the theory of constructivism learning, Piaget said that learning constructively means involving the active role of children in integrated learning with the aim that children can build their knowledge independently (Oladele & Oladele, 2016;

Olusegun, 2015). The environment is a determinant in which the child's knowledge can develop well (Sani, 2013). In this approach, the teacher works as a person who facilitates teaching with letter-sounds, syllables, and sentences in a real situation, or with a complete language context (K. S. Goodman, 1986). The meaningfulness of the language applied in this approach is done in a whole or not fragmented way like small parts or not by introducing letters but as a whole (syllables or words in meaningful contexts) (Ling-Ying & Huang, 2014).

Whole language approach is considered as the right approach in stimulating children's English development because it has various types of language activities which include; 1) reading aloud, which is the activity of reading aloud by the teacher; 2) journal writing, which is the activity of expressing children's feelings or ideas into written form based on their development; 3) sustained silent reading which means the activity of reading in the heart when they have gained the ability to read; 4) shared reading, i.e. reading together from the reported activities; 5) guided reading, namely the reading activities that children do with facilitated by the teacher; 6) guided writing is the writing activities that children do with facilitated by the teacher; 7) independent reading, reading activities and choosing books to be the subject of their reading; and 8) independent writing, activities that stimulate the ability to write, think critically and improve writing habits by giving children the freedom to write (Routman, 2014). Activities carried out by children can be implemented sequentially in this approach, and the implementation of learning activities must be in accordance with the characteristics of the development possessed by students at every level of education. Improving the ability to read and write English, in the beginning, can be done by providing an environment for children to learn, the availability of a good environment including teaching aids / learning media and learning activities that interest children. Printed texts, performing activities which include demonstrating, interacting, having access to reading and the existence of effective instructions can affect children in improving these abilities (Dhieni, Fridani, Muis, & Yarmi, 2014). The effectiveness of the whole language approach has been proven both informal education and non-formal early childhood, and this approach helps children improve reading and writing abilities that children have in the age range 4-5 years (Aulina & Rezania, 2013), not only in the Kindergarten, the whole language approach also had been implemented for enhancing reading for students in grade four and five in elementary school level resulted in the increasement of children's learning interest (Aisyah, Yarmi, & Bintoro, 2018; Nirwana, 2015).

Therefore, introducing the English language as a foreign language in early childhood education in the Indonesian context should be taken into account. Based on the theory of second language acquisition, it is believed that children will learn a language better than adults due to children critical period for learning of ages 2-7. Second or foreign language learning should start as early as possible before children enter primary school (Hammerby, 1982) because during this period they are sensitive to language (Montessori, 1991) and it is easier to attract young learners' attention to language learning compared to adolescent or adult learners (Ur, 1996). It has been widely agreed by experts in second language acquisition that children of ages 2-9 have a special propensity for language learning (Ortega, 2009). Besides, the possibility to reach native-like ability in a second or foreign language is more open to children than adults (S. Krashen, Long, & Scarcella, 1979). Thus, considering the importance of introducing English to children by focusing on their early reading and writing ability and investigating the impact of the Whole Language Approach, the researchers were motivated to conduct this study.

2 THEORITICAL STUDY

2.1 *Whole Language Approach*

Whole language approach is interpreted as teaching about language by the presentation of learning as a whole and not separated (Froese, 1991; K. S. Goodman, 1986). Experts believe that language contains which system is complete and is interpreted contextually (Moats, 2007). According to (Goodman, 1986) reading and writing encourage children to learn in any social context that enables them to develop their literacy skills before including formal school instruction in

reading and writing. In applying this learning approach, children build their knowledge independently by having an active role in learning (Trask & Trask, 1996) and their motivation in learning is determined by the role of teachers and adults to provide a conducive environment for learning (Goodman, 1986). The whole language approach is very much at odds with conventional learning or traditional phonetic teaching. Conventional teaching is associated with teaching children's language separately in the presence of separate elements. This learning approach refers to the social skills and skills that children have (Dixon & Sumon, 1996).

As for several things that must be conditioned in improving children's skills, namely, the selection of learning materials. The whole language approach becomes a learning approach that is often applied in language learning in countries that have high literacy abilities (Meha & Roshonah, 2014). The whole language approach is often applied to help children understand spoken and written languages. This language ability approach includes several things, such as; 1) real and natural, namely language as a function of communication in learning a language; 2) whole means not separating language skills such as listening, speaking, reading and writing; 3) sensible; 4) interrelated (relevant), which is related to the child's experience; 5) interesting (interesting) and 6) children's learning (belongs to the learner) (Goodman, 1986). The language should be taught in its entirety and not taught separately. In a whole language approach, the teacher indirectly learns a language in a natural and meaningful way and is integrated with life (Alhaddad, 2014; Mayuni & Akhadiah, 2016). The whole language is also considered as an approach that provides a learning environment for children with meaningful experiences and active involvement of children (Williams et al., 2010). This approach is based on the theory of constructivism learning, Piaget said that learning constructively means involving the active role of children in integrated learning with the aim that children can build their knowledge independently (Oladele & Oladele, 2016; Olusegun, 2015). The environment is a determinant in which the child's knowledge can develop well (Sani, 2013). In this approach, the teacher works as a person who facilitates teaching with letter-sounds, syllables, and sentences in a real situation, or with a complete language context (Goodman, 1986). The meaning of the language applied in this approach is done in a whole or not fragmented like small parts or not by introducing letters but as a whole (syllables or words in meaningful contexts) (Ling-Ying & Huang, 2014).

As for some of the components contained in the application of whole language learning, among others (Routman, 2014)

Table 1. Components of the whole language approach

Components	Information
Reading aloud	Reading activities carried out for children with storybooks, reading media and others by reading aloud and good intonation so that it can bring out the child's interest. This activity can influence the increase in vocabulary that children have, listening skills, reading comprehension and interest in reading and writing
Journal writing	Safe suggestions for children in writing about experiences, feelings and events that occur around them. This activity can improve the ability to write, read, be brave in dealing with receipts, provide opportunities for children to think and foster awareness of the rules of writing and others
Sustained silent reading	Reading activities carried out in the heart and give children freedom in choosing reading material. This activity can influence children's awareness that reading is fun, understanding their own reading, practicing concentration and others
Share reading	Reading activities carried out jointly between children and teachers. In this step, each individual has their own reading book. This activity aims to improve the ability to listen, read and give children the opportunity to demonstrate reading and writing skills
Guided reading	A reading activity where the teacher has a role as a role model in reading, facilitating and observing. In this type of reading, the teacher discusses read books with the students and conducts questions and answers activity pertaining to the content of the books to measure student comprehension of the books
Guided writing	Writing activities that still need guidance. Teachers want more capable adults to

	still be mentors to their students. It is intended that children can practice in their writing abilities so they can write clearly and precisely
Independent reading	Free reading activities, where children have the opportunity to determine what they want to read. Children are given responsibility for their reading
Independent writing	Freewriting activities to improve children's writing skills and practice the ability to think critically in expressing their thoughts in writing. This activity is carried out without the intervention of the teacher. Activities stimulate writing skills, critical thinking and improve writing habits by giving children the freedom to write

In this study, researchers will apply the steps contained in the whole language approach component in learning children aged 5-6 years with English. English was chosen as the subject of learning activities because the Kindergarten Institute has an international standard making it easier for researchers to analyze the application of a whole language approach to the ability to read and write beginnings in English children aged 5-6 years in Kindergarten.

2.2 Early Reading Ability

Some education experts define ability is a power that aims to carry out both actions and training (Munandar, 2013; Semiawan, 1983). Everything related to the skills, knowledge, attitudes and values possessed by individuals as well as the results of their training can be defined as an ability (Siskandar, 2009). The existence of abilities manifested through the results of exercises such as learning (Gagne & Briggs, 1996), including; intellectual skills; cognitive strategies; the existence of verbal information; motor and attitude. While reading is interpreted as a description of the writing and symbols that must be understood (Morrow, 1993). The introduction of symbols contained in writing is part of the stimulus gained from the experience they have (Abdurrahman, 2003). So, the ability to read can be interpreted as the power possessed in interpreting symbols and writing both from the ability possessed and the exercises carried out.

In early childhood in kindergarten, children as individuals have the ability to read. The ability to read is seen from the ability of children to discriminate in a visual way, coordinate visual motion, obtain vocabulary, distinguish voices heard (Jamaris, 2006). The following are stages of reading ability, namely; novice reader; readership grows; early reader; expert reader (Solehudin, 2007). Jamaris, (2006) also explained that bringing children at the age of 5-6 years the child is at the beginning of the reading, he explained through the stages of reading early childhood including; a) awareness of writing; b) reading pictures; c) initial reading stages; and d) read smoothly. In this study, reading the beginning of the English language which became an indicator of assessment both in the whole language approach and the conventional approach is that the child shows the proper attitude while reading and the child can read in a loud voice.

One of the indicators of children mastery of language can be seen from their ability in reading (Solchan et al., 2008). In society development of the globalization era, the ability to read in the English language becomes a steppingstone for children in their journey to master the language. Tarigan (2001) states that the ability to read English can be practiced continuously and occurs sequentially, though; recognition of letters to children, recognition of the sound of letters, the pronunciation of sounds of letters and the speed in reading words. Therefore, teachers need to choose a learning approach model that is appropriate to the characteristics of early childhood to master the ability to read in English.

2.3 Early Writing Ability

Writing is an activity to convey an expression with paper media that contains meanings and messages (Tarigan, 2001). Beginning writing is a period where children begin to recognize writing instruments such as pencils, crayons and others. Activities carried out by children in the form of scribbling whatever they like. In this writing activity, children learn to grasp and learn to imagine (Musfiroh, 2009). As for activities that are included in the activity of writing the beginning of an early age, the children begin to write numbers and things that they like and activities expressing their feelings in written form. Suparno & Yunus (2007) stated several benefits arising

from writing activities, including developing intelligence such as creativity, developing aspects of development that children have, such as fine motor development from holding grinders, crayons and others while writing. The right method and approach can help children improve their writing skills over time. The things that will be an indicator of the assessment of the beginning of writing ability in this study include correct child when doing writing activities; children do activities to thicken and thicken letters, children to copy letters and children write letters with simple words and sentences.

Musfiroh, (2009) states that there are several stages of beginning writing in early childhood, including; a) scribble stage, which is marked using stationery. At this stage, children usually use floors, walls, paper and so on to facilitate themselves to write; b) repeated linear stages, related to horizontal forms of writing. Provision of facilities that children need in providing children's media to channel their writing activities such as bringing up children to like deaf-san, for example inviting children to act as doctors who write prescription drugs, write orders as restaurant waiters and others; c) random writing stages, activities carried out in helping children pour the ideas he has in the form of pictures into writing; and d) the stage of writing the name relates to the sound of the writing but this stage still needs help from adults and teachers to become a facilitator or person who helps the child through this stage so that he can properly possess these skills.

2.4 *Early Language Skills (In English)*

Language is an important aspect in a person's life, by mastering the language of an individual can interact with the people around him. There are two stages of language acquisition, namely the first language and second language. The first language is often interpreted as the mother tongue in which the child starts the first interaction with the mother. The second language is the language that children get after the first language they have; usually, the second language is known as English and Indonesian. Lenneberg in Novitasari (2010) explained that early childhood is in a sensitive period where children will learn a language faster than when they are in adulthood. So, the need for mastering English as a second language would be a good thing taught to children when children are at an early age.

The mastery of children in using English is determined by the ability of teachers and adults in introducing the language to children (Otto, 2015) The provision of activities and the selection of learning approaches is one of the efforts that can be done by teachers and adults in stimulating English language abilities to children (Musfiroh, 2009). The role of language as tool in expressing oneself and communication can help children gain skills in understanding one's feelings and thoughts. The function of language that acts as a means of communicating between humans, besides that the second language that children master can foster intellectual abilities and fundamentals for their livelihoods next (Gardner, 2013). In learning English in kindergarten, acquiring an ability and skills gained from activities that give children a full and meaningful experience (Papalia, Old, & Feldman, 2008; Papalia et al., 2009; Santrock, 2016) for this reason teachers need to be good facilitators in improving these abilities.

3 METHODS

3.1 *Participant*

The study subject population was three classes of study groups totaling 43 children. The random sampling method was chosen as a way to determine the research subjects, namely 29 people who were divided into experimental and control groups. The experimental group in this study amounted to 16 children and subjects in the control class were 13 children. The subjects of this study were children aged 5-6 years who were in group B in one of the kindergartens who had applied English in learning. The researcher acts as an observer in the implementation of teaching and learning activities carried out by the teacher in applying the whole language approach to the activity of reading and writing the beginning of English. The design of the application of this

approach also involves the teacher in giving comments and suggestions regarding the activities to be carried out.

3.2 *Instrument*

The ability to read and write the beginning of the English language of children aged 5-6 years in the Kindergarten Child who is the assessment on the application of the whole language approach (Table 2).

Table 2: Assessment of reading and writing skills beginning of English

Variable	Assessment Aspects	Indicators
Ability to read and write the beginning of English	Ability to read English beginning	• Children behave right when reading • Children act right when reading aloud
	Ability to write the beginning of English	• Children behave correctly when writing • Children copy and bold letters • Children copy letters • Children write letters (simple words and sentences)

3.3 *Research Design*

A quantitative research approach with an experimental method was chosen in this research to investigate the impact of the whole language approach. In experimental research designs, researchers are allowed to manipulate treatment and control variables to determine causal-like relationships between variables based on predetermined hypotheses (Phakiti, 2014). More specifically, the control group research design was the only posttest used as a procedure in conducting research to see the effect of the whole language approach on early English reading and writing skills in early childhood in kindergartens. Researchers chose the posttest only control group design because of limitations in comparing pre-test results before treatment. The independent variable is a whole language approach (x) which is applied to the experimental class, and the conventional approach is applied to the control class. The dependent variable in this study was the ability to read initial English (Y^1) and the ability to write initial English (Y^2). The collection of data on early English reading and writing skills was conducted by using an observation sheet based on the rubric of Early English reading and writing skills assessment.

3.4 *Data Analysis*

The use of the SPSS 22.0 application was chosen as a tool to analyze the data obtained in the research conducted. The research analysis was carried out in stages, which included describing the data, conducting prerequisite tests and hypothesis testing. The prerequisite tests in this study include the normality test of data distribution, the homogeneity test of variance and the correlation test between the dependent variables. There are three times the research hypothesis testing covering Anova one way there is the first and second hypothesis testing, whereas in the third hypothesis test the researcher uses Manova in analyzing the two dependent variables with the influence caused by one independent variable.

4 RESULT AND DISCUSSION

4.1 *Results*

The purpose of testing the research hypothesis is to answer the problem formulation contained in the research conducted. The difference between the ability to read and write the beginning of the English language in the control group and in the experiment was indicated in the hypothesis testing conducted. The following is the explanation of the results of the hypothesis test conducted by researchers, including

4.1.1 *First Hypothesis Test*

Anova A formula is employed as an analysis used in the first hypothesis test about the ability to read the beginning of English. Data calculations get the results (see table 3) that $F_{table} = 3.35$ (sign. = 0.036) while $F_{count} = 4.871$. From the results of these calculations the $F_{count} > F_{table}$ with sign = 0.036, which means that the ability to read the beginning of English in the class applying the whole language approach and conventional classes, there is a difference (accepted). The average result of attaining the ability to read the beginning that children get with the whole language approach is 90.31. In contrast, the ability of children to read the beginning of English with a conventional approach is an average of 85.04. So, the whole language approach is considered as a learning approach that affects the ability to read the beginning of English for children after 5-6 years in kindergarten.

Table 3. First Hypothesis Test Results

Source	Variable	Jk	Df	RJK	F	Sign
Delivery	Ability to read English begin-	203,893	1	203.893	4.871	0.036
In	ning	1130,245	27	41.861		
Total		1334,138	28			

4.1.2 *Second Hypothesis Test*

The research hypothesis still uses the Anova A formula in analyzing the ability to write English beginning children aged 5-6 years in kindergarten. In this study, the ability to write the beginning of English includes children to behave correctly in writing, children copy and bold letters, children copy letters, children write letters (simple words and sentences) through the whole language approach. The calculation on the second hypothesis test data analysis is $F_{table} = 3.35$ (sign. = 0.036) while $F_{count} = 25.78$. From the results of these calculations the $F_{count} > F_{table}$ with sign = 0.036, which means that the ability to write the beginning of English in the class that applies the whole language approach and conventional classes, there are differences (accepted). The average results of the achievement of the ability to write the beginning of English that children get with the whole language approach are 84.54, while the ability of children to write the beginning of English with a conventional approach the average is 77.72. So, the whole language approach is considered as a learning approach that influences the ability to write the beginning of English for children after 5-6 years in kindergarten (see table 4)

Table 4 Second Hypothesis Test Results

Source	Variable	Jk	Df	RJK	F	Sign
Delivery	Early Writing skills in Eng-	324,934	1	324,934	25,78	.000
In	lish	340,308	27	12,604		
Total		665,241	28			

4.1.3 *Third Hypothesis Test*

Analysis of the third hypothesis test researchers used the manova formula. The results of the analysis showed that the value of F Wilks' Lambda, Pillai's and Hotelling's Trace, and Roy's Largest Root showed significant values at 0.05 indicating a significancy (see table 5). The results of this calculation conclude that H_o in this study was rejected and H_1 was accepted. The conclusion that can be drawn is that there are differences in the ability to read and write the beginning of English in children aged 5-6 years in kindergarten by applying the whole language approach. So, there is a significant influence on the exposure of the whole language approach to the ability to read and write the beginning of English children aged 5-6 years in kindergarten rather than the application of conventional approaches.

Table 5. Third Hypothesis Test Results (manova)

Statistics	Value F	Significant Value (sig.)	Conclusion
Pillai's Trace	19,412	0,000	Significant
Wilks' Lambda	19,412	0,000	Significant
Hotelling's Trace	19,412	0,000	Significant
Roy's Largest Root	19,412	0,000	Significant

From the results of exposure to the analysis results in the first, second and third hypothesis tests it can be concluded that there are significant differences in the ability to read the beginning of English between classes that apply the whole language and conventional approaches to children aged 5-6 years in kindergarten; there is a significant difference in the ability to write English beginning between classes that apply the whole language and conventional approach to children aged 5-6 years in kindergarten, and there is a significant effect on the application of the whole language approach to the ability to read and write the beginning English language children 5-6 years old in kindergarten.

4.2 *Discussion*

The ability to read and write in English is interpreted as an ability to understand the structure and rules of language. In learning foreign languages such as English, there are several things that must be considered, including the status of the language in communication, the teaching techniques used by teachers which should be in line with the rules of language, the participation of teacher and students and the intensity of language use (S. D. Krashen, 1981). Therefore, the ability to read and write the beginning of English must be adapted to the implementation of learning and the characteristics of the early childhood being taught. Ability is a power that is owned by someone in doing something that is based on nature and training carried out by someone in order to have life skills that are adjusted and desired by that person (Munandar, 2013), whereas language is interpreted as a form of oral and written education consisting from various words with rules in varying or combining them (Santrock, 2016). At the beginning of language skills, includes four things; listening skills, speaking skills, reading skills and writing skills (Tarigan, 2001). In addition, there are three components in reading and menu activities; 1) recording, fixed on the words in the sentence; 2) decoding encoding aimed at the meaning of a series of graphics in words, and 3) meaning, understanding words (Rahim, 2015). From the results of the study, children in the age range 5-6 years are at the stage of reading and writing the beginning of English which is a period where children carry out recording and decoding activities on the reading given to them (Cahyani, 2019). Before the child learns to read and write, the teacher must ensure that the child masters the following basic abilities: the ability to distinguish auditory, visual discrimination, symbol-sound relations, motorized perception, spoken language, build a background of meaningful experiences, image interpretation, left-to-right progression, stringing ability, mastery of spoken language and literacy.

Basically, reading and writing the beginning in English is a series of reading and writing activities that are carried out gradually to the child (Dhieni et al., 2014). This relates to indicators used as assessments in the ability to read children, namely the introduction of letters, a series of letters (sounds), meaning and understanding of meaning in the context of the reading. The ability of

children to read and write the beginning of English includes stages that occur sequentially including; 1) magical stage (fantasy stage); 2) self-concept stage (stage of self-concept formation); 3) bridging reading stage (the stage of reading images); 4) take-off reader stage (reading recognition stage); and 5) independent reader stage (read fluently) (Dhieni et al., 2014). Supporting this statement, Susanto (2011) also expressed his thoughts on the stages of reading and writing that children go through; 1) awareness of writing, (for example; children see and flipbooks); 2) reading pictures, interpreting himself as a reader knowing the parts of the book (front, middle back; 3) recognizing reading (for example; rules of letter sounds, the meaning of words and sentence rules, and 4) stages of reading fluently. The factors that must be considered by teachers in reading and writing the beginning of early childhood, such as motivational factors, family environment, teachers, and influential adults (Dhieni et al., 2014). Therefore, adults around children and teachers need to take an effective learning approach in the implementation of the activities of reading and writing the beginning of English in young children, believing a varied method but still being adapted to the characteristics and needs of children, learning activities carried out by playing, creating a learning atmosphere that comfortable for children, the duration of the activity is not too long so that children do not feel bored, sensitive to the reactions that children cause in the activities of reading and writing the beginning of English and a good relationship between parents and teachers in supporting the ability to read and write the beginning of English.

The whole language approach that Goodman (1986) has put forward through the assessment of educators in learning activities for children, so they can explore and motivate children in these activities. This whole language approach upholds the activeness of children which includes learning that is integrative, real, functional and effective so that children can feel happy in learning and learning activities (Austring & Sørensen, 2012). The concept in this approach is to provide an environment that is rich in writing, then the child will learn through examples, the teacher provides the opportunity for children to explore the language they have, the child has responsibility for themselves, but the teacher still sets clear achievements on the child's ability to read in the beginning and provide positive feedback to children during the learning process they go through. However, activities in early childhood education, especially in children's language development, should be directly involved and provide tangible experiences for children. But keep in mind that in this study, the application of the whole language approach did not include instructions given but only targeted instructions (imitating and writing) (Musfiroh, 2009). The experience that children get in following the beginning of English reading and writing activities is done programmatically, including the introduction of symbols or symbols of numbers (words, letters, and syllables in reading). With the active involvement of children, educators and children will build and create good and effective learning programs compared to teachers who are more involved in learning or often referred to as teacher centers.

The context of early childhood education, especially reading and writing beginning in English based on the whole language approach refers to aspects of reading and writing activities. In the aspect of reading, there are skills in sequence at a low level (lower); introducing reading letters, introducing linguistic parts (sentences, phonemes, syllables, etc.) and higher levels (higher); understanding simple understandings such as rhetorical, grammatical and lexical, understanding eating or the purpose of reading content, evaluating the contents as well as the form and speed in reading and writing (Tarigan, 2001). In other words, the description at the beginning of reading and writing contained in this study is related to the lower reading level (lower). According to Ling, (2012) on the whole language approach, the teacher must provide more opportunities for children to do contextual understanding by means of discussion, retelling the subject of the text and asking children to create and design the context of the text in writing. In addition, this approach will be very effective if the availability of media and books that are good for children, so they will become good and smooth readers and writers (Oladele & Oladele, 2016). In this study, in learning activities, the teacher gives children the opportunity to do the activities that have been designed by the teacher in following the steps in the whole language approach that is adapted to teaching in kindergarten and the development of children aged 5-6 years.

By interpreting the reading and writing as a whole, the child can identify the letters in the reading. The activeness of children in the application of this approach must be given more attention by educators so that skills in learning activities can be conveyed properly and correctly to

children. This whole language approach claims that children are involved in meaningful learning activities with diverse and language-filled learning environments, as well as providing opportunities for children to foster a broad way of reading that can improve their language skills (Folkmann, 2010; Wright, Wallance, & McCAarthy, 2008). In accordance with the indicators that researchers have designed and become a reference in assessing the ability to read and write the beginning of English children's activities assessed include children being right when reading and children being right when reading aloud. Whereas the indicator of writing the beginning of English covers the child to be right when writing; children plagiarizing and repeating letters; children copy letters and write letters (simple words and sentences). In this study, the activities of teachers in the classroom as an opportunity for children to carry out learning activities that have been designed with a variety of materials. This makes it easier for researchers to see the effect that is given in applying this whole language approach. This activity is in line with Folkmann (2010) which states that active learning created must also include teachers in guiding and helping children if they need help. For children, a teacher is a person who always learns with children, for that teacher must foster an environment so that children can like the activities carried out in a whole language approach. The teacher and observer in this study became observers for children in their early reading and writing activities in English which they did. Recording problems in the learning process is useful in understanding the problems felt by children in implementing learning using this approach.

The support provided by the teacher in applying the whole language approach is needed by children. With the support done by the teacher, it can help children in achieving learning goals because it has been adjusted to the tempo and characteristics of each child (Flores, 2013; Wright et al., 2008), then the background and basic abilities that children have before the application of this approach must be fully accepted by the teacher without any complaints. Therefore, researchers and teachers in this study have planned carefully the fields and materials that are liked by children with a fun whole language approach so that they can optimize their early reading and writing abilities in English with their approach. Children will explore more if the activities and learning materials provided by the teacher are carried out in a variety of ways with fun learning in applying the whole language approach.

The results of this study demonstrated similar results to the research conducted on the whole language approach conducted on children aged 4-5 years in Kindergarten (Group A) but using the classroom action research method which was carried out with different material - different in each cycle of research conducted. The results showed that the ability to read and write the beginning of English in children aged 4-5 years in kindergarten increased by using this approach (Meha & Roshonah, 2014) The application of this approach can be used as a variation of learning that teachers can do to improve and improve the ability to begin reading and writing the beginning of English. Thus, the influence given by the adoption of the whole language approach in children aged 5-6 years has occurred significantly in the ability to read and write the beginning of English language children aged 5-6 years in kindergarten.

5 CONCLUSION

The results of data analysis and discussion that have been presented in this study can be concluded that there is a significant influence in the application of the whole language approach to children early reading ability aged 5-6 years in kindergarten. The ability of early reading and writing in English include the ability; a) the difference in the ability to read English beginning between the whole language approach and the conventional approach; b) there are significant differences in the ability to write the beginning of a child's English discussion on the application of the whole language approach and the conventional approach, and 3) there is a significant impact of the application of the whole language approach to children early reading and writing ability in English beginning aged 5-6 years in kindergarten.

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Parenting Strategy for Enhancing Children's Self-Regulated Learning

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ABSTRACT: Various self-regulated learning (SRL) problems often occur in early childhood during the transition from pre-school to elementary school. The ability to self-regulated learning is important for school readiness and success throughout life, requiring the ability of parents to encourage the development of these abilities. The purpose of this study is to develop childcare strategies on self-regulation, such as children's ability to regulate metacognition, motivation and behavior to reduce problems. Research produces certain products and tests their effectiveness. Respondents involved parents from 18 districts in 9 cities in the technique of data analysis using quantitative and qualitative approaches. The results showed differences in the average scores of children's independent learning both before and after parents learned and applied the contents of the manual book. The result of the effectiveness test is sig = 0,000 < α = 0.05. So, H0 is rejected, and the results of the chi-square test sig = 0,000 <0.05, then H0 is rejected. In conclusion, parenting strategies using manuals so that parents can improve competencies such as parents' knowledge, attitudes and skills, and prove effective in increasing children's independent learning.

Keywords: *Early Childhood, Parenting strategy, Self-regulated learning*

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1 INTRODUCTION

Independent learning has been identified as learning in which students set goals and then adjust their cognition and behavior to get those goals (Zimmerman, 2010). The child must recognize his lack of knowledge, recognize the need to learn, and decide to start learning or, in other words, begin to learn independently even if it is in an imperfect form. The current study will explore young people's knowledge-based understanding of learning and its relationship to their own learning (Jeong & Frye, 2020). Tobias dan Everson (2000) found that children who could recognize what they already knew and did not know became academically better and could learn more than children who had difficulty identifying their own level of knowledge.

The problem with children's self-regulated learning (SRL) is the inaccuracy of parents and their teachers in dealing with the transition, as parents want to go directly to results without seeing the children's processes. For example: parents are willing to summarize their children's problems at home without children's involvement and they don't teach their children how to summarize the subject matter; parents doing children's homework alone without the involvement of children to do their homework; and parents often tidy up their children's bags and desks without involving their children. Likewise, the teacher summarizes the subject matter and provides some exercises aimed at making their students get a high score. Inaccuracy in the behavior of parents and teachers in the learning transition of children is assumed due to the lack of knowledge and skills in educating their children.

Self-regulated learning (SRL) is defined as substantial competency for lifelong learning, which means that its promotion seems important in the early years. Venitz and Perels (2019) research aims to develop and evaluate interventions to improve SRL in preschool children. The influence of parents on the development of children's academic self-regulation. Preschool parents and teachers are involved in the intervention. The findings show a significant improvement in terms of support methods for adult levels. Previous research has shown that parents play an important role in the development of students' independent learning. However, research that focuses on parental involvement during middle school and the ways in which parents support independent learning at home is limited. Therefore, Thomas, Muls, De Backer, and Lombaerts's (2019) research explores the practices that parents use at home to support independent learning. The results showed that parents mainly guide student learning behavior and motivation.

Children's ability to play an active role in the learning process using thought processes (metacognition), motivating themselves, and controlling their learning behavior. The concept of talent has historically been shaped by IQ theory, creativity, and expertise (including the initial concept of metacognition). The social, emotional, and motivational qualities of talent are treated as additions, not part of the core construction. Newer, broader conceptions of the process of learning metacognitive, self-regulating, and self-regulating have attracted interest. Distinguishes between metacognition, self-regulation, and self-regulated learning, which links each with ideas about talent, highlights implications for practice, and especially highlights self-regulated learning as a valuable contributor to understanding talent and designing instruction in gifted education (Oppong, Shore, & Muis, 2019). Based on previous research, the purpose of this study is to focus on developing parenting strategies to improve children's self-regulated learning (SRL).

2 THEORITICAL STUDY

2.1 *Self-Regulated Learning in Early Childhood*

Self-Regulated learning describes the ability to begin the process of action independently, to adapt it continuously based on self-observation and reflect it (Zimmerman, 2010), in an academic context, SRL appears as self-generated thoughts, feelings and actions that are planned and adjusted to the achievement of self-goals (Zimmerman, 2010). Zimmerman's (2010) social-cognitive process model describes several processes that experience ongoing adaptation and optimization of learning behavior. The differences from the three main learning phases (the thinking phase, the performance phase, and the self-reflection phase) and related strategies are useful for better

structure for the unconscious learning process. This is a greater control than a single learning process that can be a useful aid for early childhood, so it is suitable to be a theoretical foundation for intervention for preschoolers and people they refer to.

To do certain tasks, the application of strategies for self-control is needed. These strategies contribute to maintaining a focus on handling tasks and handling disruptions (Zimmerman, 2010). In addition to theoretical assumptions, for the conceptualization of interventions to promote SRL in preschoolers, clarification must be given regarding the abilities needed for self-regulation present at this age. This strategy needs to be learned by parents and teachers. Self-regulated learning is closely related to the way in which people regulate their emotions, cognition, behaviors, and environmental aspects during a learning experience. Furthermore, we know that it's important to be able to control your mind in terms of learning processes. The sooner you learn to do it, the more successful and gratifying your educational experience will be.

SRL are autonomous, reflective and efficient with meta cognitive abilities (meta) and motivational beliefs and attitudes regarding understanding, monitoring and directing their own learning (Wolters, 2003). The concept of SRL consists of three main intertwined components: the metacognitive, behavioral, and motivational components (Zimmerman, 2010). The metacognitive component includes planning, setting goals, organizing, self-monitoring, and self-evaluation at various points during the learning process. The behavioral component refers to choosing, structuring, and creating an environment that optimizes learning. The motivational component emphasizes high self-efficacy, self-attribution, and intrinsic task interests.

Support must begin in the early stages of childhood to encourage appropriate learning behaviors and SRL as soon as possible (Perels, Merget-kullmann, Wende, Schmitz, & Buchbinder, 2009). Veenman, Van Hout-Wolters, and Afflerbach (2006) argue that the metacognitive abilities needed for SRL are not developed until school age (around the age of eight), but in other opinions the basic abilities for cognitive control and self-regulation processes already exist at preschool age (Whitebread et al., 2009).

Bronson (2000) shows that preschool-aged children increasingly gain the capacity for information processing that enables them to understand task demands adequately. Furthermore, at preschool age, intrinsic motivation is still highly developed, which facilitates the initiation and maintenance of learning actions (Carlton & Winsler, 1998). Significant progression to pre-school age in terms of attention control, monitoring behavior and adaptation strategies compared to infants and toddlers. Children aged 5-6 years already have the basic ability to monitor and exercise control over their intended learning actions, which are needed to complete tasks in accordance with predetermined goals (Zimmerman, 2010). Based on that opinion, the basic psychological-development abilities needed for independent learning already exist, to improve SRL at preschool age is possible and meaningful. Of course, children in this age period still often need help from interaction partners (Vygotsky, 1978), so the importance of the presence of parents with parenting strategies needs to be considered further in more detail.

Based on Schunk and Pintrich (2008, p. 154) the aspects of self-regulated learning consist of (1) metacognition is people's perception about their knowledge of the state, their own thinking processes and their ability to maintain and change it relating to the circumstances. The thinking process includes the ability to plan learning objectives, organize teaching materials, establish, and use learning strategies, self-instructing, monitoring and evaluation of learning activities; (2) motivation is a strength, energy, power, or a complex situation and readiness within the individual to work toward specific goals, whether realized or not realized. So, strongly motivated students have a lot of energy to direct and organize learning activities; and (3) behavior is an individual effort to organize themselves, to select and use the environment as well as creating an environment that supports learning activities. The actively regulate behavior in the learning include managing time and place of learning, regulating business, study groups and businesses looking for help in expediting the process of learning.

Bandura (1977) said that there are two factors that affect the self-regulated learning. It consists of; (1) external factors that are the environmental factors interact with personal influences, form-

ing one's self-evaluation standards. According to the experience of interacting with the wider environment, the child subsequently develops the standards that will be used for him; and (2) internal factors that come from self-inside such as intelligence factor, cognitive and metacognitive someone. Based on those theories above, it can be concluded that self-regulated learning is a combination of skills and will. Thus, self-regulated learning is the ability of individuals in directing metacognition, motivation and behavior in learning.

Based on Bandura (1977) opinion that the establishment of children's self-regulated learning is determined by internal factors, namely themselves, as well as external factors namely the family, school and community. The children's self-regulated learning is largely determined by external factors, especially the elderly as the nearest child's environment who have a large role in their development in term of parents' knowledge, attitudes, and skills influence tremendously in the formation of the children's self-regulated learning. Thus, the next theory that support this research and relate to family as the internal factor is about parenting and environment around them.
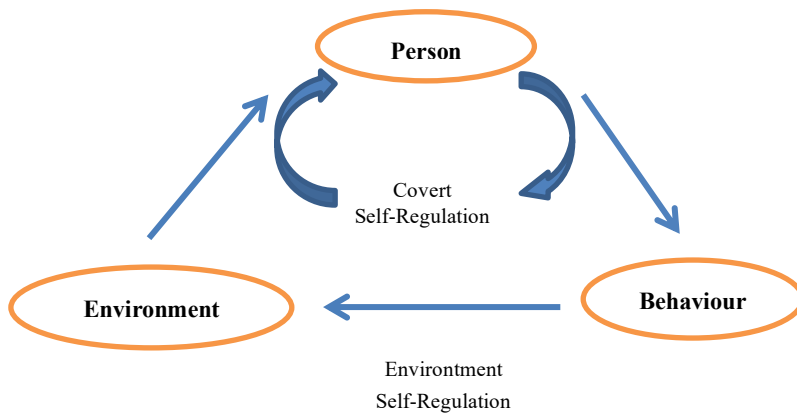

Figure 1. Triadic Analysis of Self-Regulated Functioning

Zimmerman's (2010) work started from cognitive modeling research in collaboration with Albert Bandura and Ted L. Rosenthal. Later Zimmerman began to explore how individual learners acquire those cognitive models and become experts in different tasks. Zimmerman's SRL model is organized in three phases: forethought, performance and self-reflection. In the *fore-thought* phase, the students analyze the task, set goals, plan how to reach them and a number of motivational beliefs energies the process and influence the activation of learning strategies. In the *performance* phase, the students actually execute the task, while they monitor how they are progressing, and use a number of self-control strategies to keep themselves cognitively engaged and motivated to finish the task. Finally, in the *self-reflection* phase, students assess how they have performed the task, making attributions about their success or failure. These attributions generate self-reactions that can positively or negatively influence how the students approach the task in later performances.
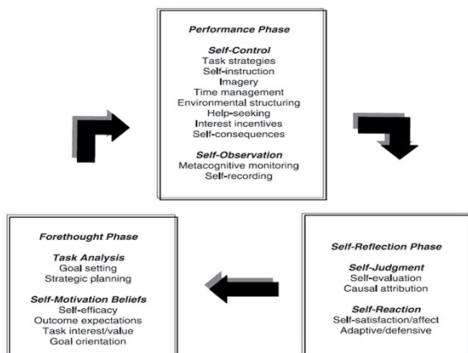

Figure 2. Self-Reflection Phase

Ben-Eliyahu (2019) research maps the academic emotional learning cycle from a theoretical and practical perspective through the lens of independent learning. The focus on children, with further repetition of the emotional dimension through a regulated self-directed learning model is articulated by considering the components of each individual system. Academic emotion is considered an important component of self-regulated learning, along with intellectual behavioral-cognitive goals, being explicit learning targets. An emotional learning cycle is presented, which corresponds to broader inclusions - hopes to experience certain influences or emotions - forming a relationship between emotions and self-governed emotions that occur during the learning episode. A parenting strategy for promoting self-regulated emotions is proposed for research and educational implications.

The ability to self-regulate has been proven to be closely related to academic success. There are various measurement tools for assessing self-arranged learning for students and students. Most important, preschool age marks a reasonable period for the maturation of self-regulated learning (SRL) and related abilities such as executive-control functions (EF). This is why the development of direct instruments that fit the specific characteristics of this age group is important. An adapted version of the Zimmerman (2010) process model can serve as a theoretical basis. This pilot study intends to develop and evaluate direct quantitative measurement tools to assess SRL online. Measuring instruments were tested in 183 German preschoolers in kindergarten. After detailed item analysis, reliability is estimated, and concurrent validity is checked. Statistical analysis shows satisfactory reliability for the overall measurement tool. In addition, validity is supported by a significant (small) overall correlation with external measures as well as EF measures. Nevertheless, the need for instrument optimization is clear and this study has important implications for further research. In general, the results show that it makes sense and possible to assess SRL in preschool children directly at the child level (Jacob, Dörrenbächer, & Perels, 2019).

Parenting styles affect self-regulation in school students, but their long-term influence on academic behavior is rarely studied. A pilot study was carried out on 83 college teacher students, who filled out a questionnaire that measured parental authority (PAQ) memory and self-regulation in learning (Motivation Strategy for Learning Questionnaire [MSLQ]). Authoritarian parenting is the only parenting style that correlates with motivation, self-efficacy, and cognitive strategies and is highly correlated with critical thinking. These results suggest new ways to evaluate the relationship of authoritarian parenting with academic skills (Seroussi & Yaffe, 2020).

Jittaseno and Varma S (2017) investigates the direct and indirect effects of parenting styles on self-regulated learning behavior, mediated by self-efficacy and intrinsic value. To meet this goal, quantitative research with a correlational research design through path analysis is used to build statistical associations between core variables. The study participants consisted of 206 male and female high school students from selected international schools in Bangkok, Thailand. The Parental Authority Questionnaire (PAQ) is used as a research instrument to test parenting style while the Motivated Strategies for Learning Questionnaire (MSLQ) is the research instrument chosen to measure intrinsic value, self-efficacy, and self-regulation. The results revealed the following main findings: (1) authoritative parenting style had a significant direct effect on independent learning behavior; (2) permissive and authoritarian parenting styles do not have a significant direct effect on self-regulated learning behavior; (3) authoritative parenting has a significant indirect effect on self-regulated learning, mediated by self-efficacy and intrinsic value; (4) permissive and authoritarian parenting style does not have a significant indirect effect on self-regulated learning, mediated by self-efficacy; (5) permissive parenting style does not have a significant indirect effect on independent learning behavior, which is mediated by intrinsic value; and (6) authoritarian parenting has a significant indirect effect on self-regulated learning behavior, mediated by intrinsic value.

2.2 Parenting Strategy

As a parent you give your children a good start in life you nurture, protect and guide them. Parenting is a process that prepares your child for independence. As your child grows and develops, there are many things you can do to help your child. These links will help you learn more

about your child's development, positive parenting, safety, and health at each stage of your child's life.

SRL has been proven to improve the performance of workers and students. Independent learners can plan, monitor and evaluate their learning. Further research is needed to identify factors outside school that can lead a person to become a self-regulated learner as an adult. Tiniakou's (2017) research investigates repetitive parenting patterns in highly independent professional lives, focusing on their childhood and adolescence, which may have an impact on developing their self-regulation skills. Based on the results, there are certain parenting styles in early childhood and adolescents that can influence one's ability to successfully organize their own learning. Parental involvement and especially mother involvement, positive parental attitudes toward learning and support for autonomy and freedom were found to be repeated as a common experience in most of the participants' life history. This research suggests investigating self-interest support, family activities and structured routines, encouraging education and developing early literacy as well as independence and freedom of choice in relation to independent learning skills.

Parental involvement and self-regulated learning are important predictors of student learning success. However, previous research on independent learning focused more on the school environment and did not focus on the home situation. In particular, investigations about the role of parents in self-regulated learning when children enter secondary school are limited. Thomas, De Backer, Peeters, and Lombaerts's (2019) research findings support the importance of parents in education in middle school age. Schools must recognize this and increase parental involvement in education and self-regulated learning stimulation in the home environment.

The capacity of individuals to regulate themselves about their cognition, emotions and actions are important life skills and development competencies that emerge both for children and parents. Individuals with better self-regulation can achieve more positive learning outcomes and tend to increase significant mental, social, and relationship health problems. The parenting support program that enhances positive parenting and parenting relationships provides a unique multigenerational context to promote the self-regulatory capacity of parents and children. Parenting programs provide meaning and many opportunities for parents to improve their self-regulatory capacity, including skills such as goal setting, self-monitoring, self-evaluation, self-efficacy, personal agency, and the regulation of thoughts and emotions that are, and enable independent problem solving and responsive care (Sanders, Turner, & Metzler, 2019).

Parenting programs based on social learning theory, cognitive behavioral principles, and development theory usually include structured session activities and homework assignments that can be optimized to promote parental self-regulation. This includes improving executive functions such as anticipating, planning ahead, following plans, and solving problems, so that parents gain greater cognitive flexibility, better impulse control, and are better able to generalize and apply the principles and childcare skills learned in out of their direct concern for the broader problem of children and challenging family and parenting situations. Sanders et al., (2019) illustrates how positive parenting principles and strategies can encourage improved self-regulation.

One key factor for increasing the SLR is parenting style, in particular, parental involvement in and children's learning drive. Parental involvement and especially parental involvement, positive parental attitudes towards learning and support for autonomy and freedom are found to be a common experience that recurs in most of the history of this very independent learner's life (Tiniakou, Hirschler, Endedijk, & Margaryan, 2018). Parents and the way they care for their children play a key role in developing the self-organizing capacity of young children. Morawska, Dittman, and Rusby (2019) provides an overview of the role of childcare in the development of child self-regulation and a summary of the evidence base for childcare interventions to promote self-regulation in children under the age of eight, focusing on childhood, the toddler / preschool period, and early school age.

Parental involvement is widely accepted because it is associated with better educational outcomes for children. However, the role of early school-based parent involvement is still established. Research investigates the mediating role of SRL behavior in the relationship between early school-based parent involvement and children's academic achievement. This relationship is

proven for children in all socioeconomic backgrounds. Although there is no direct relationship between parental involvement in grade 1 and arithmetic achievement in grade 3, parental involvement is indirectly associated with achieving higher child numbers through the regulation of children's learning behavior, although this relationship is stronger for children from middle and higher socioeconomic background (Daniel, Wang, & Berthelsen, 2016). Based on the theory of parenting, it can be concluded that the parenting is a process of interaction that takes place continuously and influence each other, where the process refers to a series of active efforts the parents in supporting the development of children. It means that children can develop optimally.

3 METHODS

Generally, the research conducted to create parenting strategies for enhancing children's self-regulated learning. In particular, this research aimed to: 1) identify the condition of enhancing children's self-regulated learning; 2) identify the relevant conditions parental knowledge of enhancing children's self-regulated learning; 3) design the parenting strategies for enhancing children's self-regulated learning; and 4) test the effectiveness of parenting strategies for enhancing children's self-regulated learning. The research was conducted in Karawang, on March 2016 until April 2017.

Based on Borg and Gall (1989, p. 721) the approach and method chosen a research and development. It is a type of research which is oriented to the creation or product development. Then, it was followed by the approach of ex post facto which is to see the impact of the research has been done before. The product establishment of parenting strategy was used to improve the children's self-regulated learning.

3.1 *Participant*

The sampling technique in this research used a multistage cluster random sampling by dividing the population into sampling units were large group called clusters, and samples were taken in multistage and random (Sugiyono, 2013, p. 212). From West Java Province's population, the researchers selected Karawang Regency by using purposive sampling that has a large area, which is 34 respondents. Furthermore, by means of cluster random sampling elected district, Klari District was chosen as a sample in this research. Instrument

The instrument used in the study originated from the arrangement of instruments that have been validated by early childhood psychology experts, which can be used to measure SLR of early childhood (see on table 1)

Table 1. Early childhood Self-Regulated Learning Instrument

1	Self-Evaluating
2	Goal Setting
3	Planning
4	Organizing
5	Monitoring
6	Self-Efficacy
7	Task Commitment
8	Effort Persistence
9	Self-Consequating
10	Seeking Information
11	Environmental Structuring
12	Seeking Social Assistance
13	Time Management

3.2 *Product Manual Book Parenting Strategy Design*

The second steps designed the product, namely manual book of parenting strategy for enhancing children's self-regulated learning. The product design is in below:
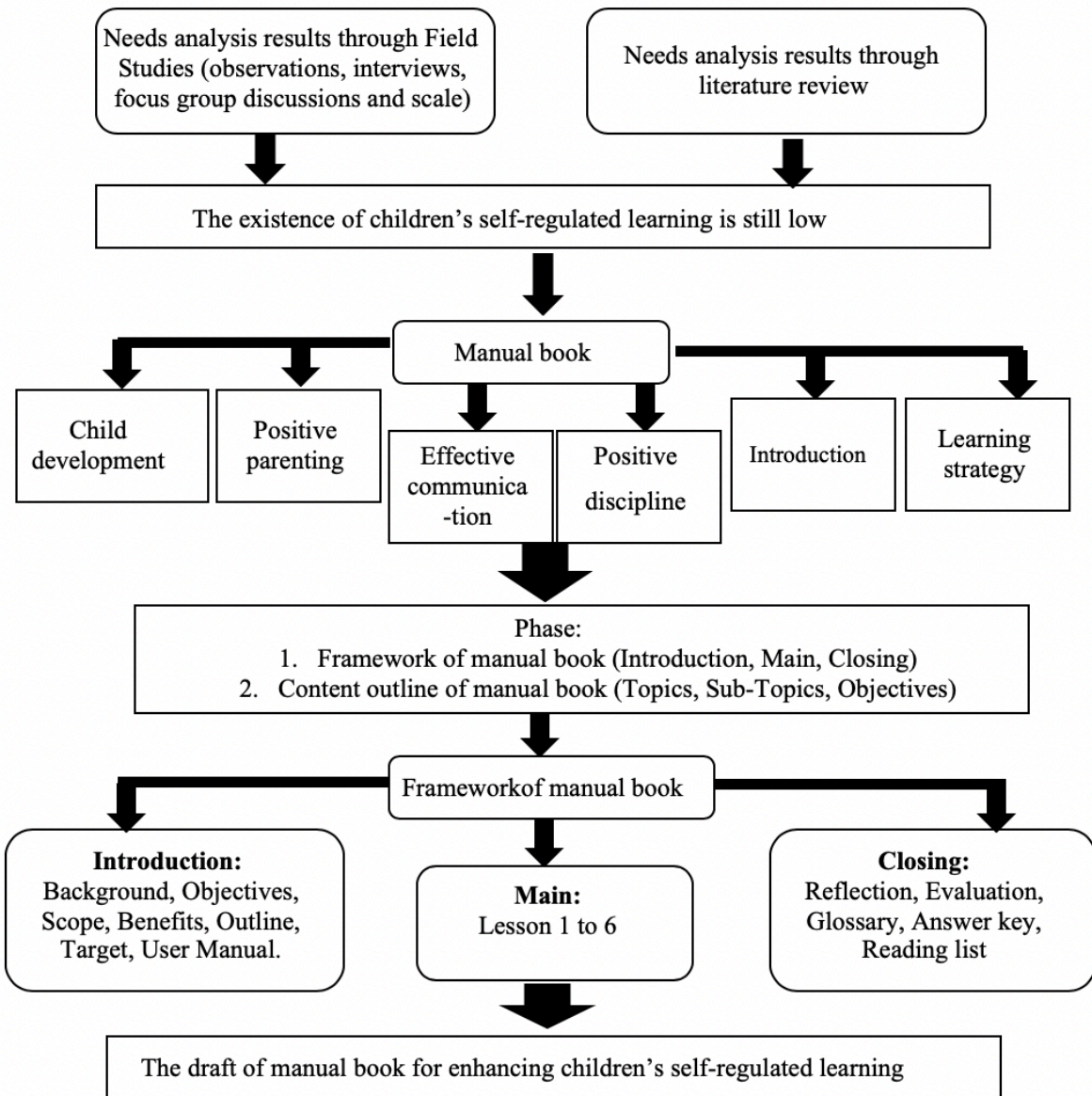

Figure 3. Product Manual Book Parenting Strategy Design

3.3 *Procedure*

This research began with collecting data in the field to see the problems that occurred in students of Islamic Primary Schools by using need analysis about children's self-regulated learning and level of parental knowledge related to the children's self-regulated learning. Then, the researchers conducted an initial development draft parenting strategy for enhancing children's self-regulated learning in term of parenting manual book development. The manual book drilled through the parent class or seminar. After the parents applied the knowledge that had been obtained from the manual book to their children, they did habituation or familiarity with their children. In brief, the children were expected to eventually enhance the children's self-regulated learning.

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After the prototype or design strategy is created, the next step was a review of the strategy. This research carried out by experts in various fields. Based on the test input of these experts, the model revised and performed the initial product trials by using one-to-one trying out of 3 subjects. Then, it revised based on feedback from the test one-to-one. Furthermore, the small group tryout involved 9 subjects. Then, it revised based on input from the small group tryout.. After a series of test experts and various trials, the final product established the manual book of parenting strategy for enhancing the children's self-regulated learning. The book implemented and used for the children. In brief, the children's self-regulated learning improved.

3.4 *Data Analysis*

Data analysis techniques used were a qualitative approach through naturalistic inquiry to obtain findings that can be used to repair strategies, and a quantitative approach (SPSS calculation) was used to perform descriptive analysis.

4 RESULT AND DISCUSSION

4.1 *Result*

A research and development are a study that started from the existence of a need that requires a solution through an innovative product that continues to be developed. In the process of research and development, there were some steps that the researchers did. The first step was collecting data, then analyzing data in order to know the need analysis. The data collection by the researchers showed that the child has a low self-regulated learning. It indicated by the behavior such as students do not have a home study schedule; students are lazy to repeat the subject matter at home that has been established at the school; students do not make a summary of the subject matter itself, tend to wait summed up by their parents; students do not clean up the bag and learning desk by their own; and students have a lack of the tenacity, tend to give up and lazily asked if faced with a difficult subject matter. The parents' attitude showed the behavior of usually making their children's a subject matter summary and complete the homework children. The parents are more oriented towards the children's learning outcomes to acquire high value rather than the right learning process.

The third step was experts' judgment. It conducted to assess the extent to which the product of manual book to meet the requirements of various aspects such as the terms of instructional material, media, and language. Then, carried out the revision, suggestions, or inputs from the experts. The results of expert judgement are revisions of layout, pictures of proportionality, font size, paper size and color cover, and language used in the manual book.

After the revision, the fourth step was one-to-one trying out test, small group trying out and field trying out. Based on results data of one-to-one trying out, it took from manual book notes, evaluation scores increased ability of parents, results of questionnaires and structured interviews. The researchers revised and prepared the manual book for the next try out that was the small group trial. The conclusion of one-to-one trying out was both quantitative and qualitative analyses. The results in the effective category or better condition had some inputs as follows: this manual book was very useful for parents that adds their knowledge related to the children's education; the change in the parents' knowledge of parents from nothing become something; the three respondents said that all these materials were helpful; the most favorite material that was different from the others was a matter of learning strategies; the easiest material to understand was a matter of child parenting or development; and the language to be more simplified in order to understand easily for the reader.

After testing one-to-one trying out, the researchers did some revisions based on those inputs. The next step was the small group trying out. Based on the results of the small group trying out through quantitative and qualitative analysis, the evaluation was in the effective category or better condition with some inputs. There are as follows: this manual book was very useful for parents that adds their knowledge related to the children's education; the change in the parents'

knowledge of parents from nothing become something; the nine respondents said that all of the materials were useful and important; and if it really can be applied to children, it will be a great and positive impact on children. However, it suggested in the words that tend to be difficult to understand and the foreign words should be given an explanation at the end of the guidelines.

After revising the small group trying out, the researchers carried out to a large group or field trying out. The results of testing a large group both quantitative and qualitative analysis, it obtained with the effective category or well condition. This result was reused to revise the manual book. A feedback from the results of a large group was the last foundation for the improvement and product refinement in the manual book. The feedback included: a manual book was very useful for parents that contained all of knowledge and skills needed by parents. So, it broadened the parents' knowledge related to the child's education. It started from not nothing become something and changed the parents' mindset to be better. All the material in this book was sufficient as for the most preferred material was the material of child development, positive parenting and child discipline. The material considered the most important was the matter of learning strategies. If all of the materials in the manual book can be truly applied by parents to their children seriously, it would appear positive changes in their children. Another input was in terms of the language, it would be more simplified and given an explanation for unfamiliar terms or words that are hard to understand at the end of the guidelines in the form of a glossary.

Based on the research steps, it was found the following results: (1) a conceptual model parenting strategy to enhance children's self-regulated learning. The conceptual model was designed based on the issue of children's self-regulated learning. The parents expected that can be an agent of the enhancing children's self-regulated learning. The lack of parental knowledge about the child development and education. A theory that can be used as a foundation in the development of models and results. The research can be used as a reference in developing product in the form of manual book. It examined the principles underlying theoretical and needed to develop children's self-regulated learning, set a goal to be achieved, set a target object and made an outline of the manual book contents. Furthermore, the researchers designed a variety of materials that will be developed into a parenting manual book; (2) procedural model of parenting strategies to enhance children's self-regulated learning. In this research, the procedural models were considered in accordance with need analysis of the model development. The need analysis referred to the Dick & Carey model which consisted of planning, writing, reviewing, testing and revision; (3) physical model of parenting strategies to enhance children's self-regulated learning. It was a physical form or a product that produced as part of the completeness and supporters in the system. It can increase the development of strategies for children's self-regulated learning. The main product that produced was "Manual Book for Parents to Increase Children's Self-Regulated Learning" and other ancillary products such as materials and instrumental in developing the parenting strategy (Dick & Carey, 2009).

Before the group difference test, the normality assumption test is performed first using the Kolmogorov Smirnov test with the following hypothesis. From the Test of Normality (see table 2) table using the Kolmogorov Smirnov method, Sig = 0.200 > α = 0.05, then H_0 is accepted. This means that the data distribution follows the distribution of the normal distribution (normality test).

Table 2. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Post	.100	18	.200[*]	.973	18	.850

The fifth step was to see the effectiveness of manual book and to see whether the manual book worthy or not used by parents, as well as increased or not parents' knowledge related to children's self-related learning. The effectiveness test was performed by using several instruments prepared by the researchers, namely: sheet structured interviews and questionnaires; evaluation sheets as

well as the pre-test and posttest in children's self-regulated learning. The result of the effectiveness test was in the table 3.

Table 3. Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Post Children	High	9	1.2533E2	7.98436	2.66145
	Low	9	1.0244E2	8.32333	2.77444

Based on the effectiveness test (see table 4), the result was sig = 0.000 <α = 0.05. So, H_0 is rejected. It means that the child score based on group of parents after learning manual book (A_1) was different groups of parents with a lower score (A_2). In brief, average> average. So, there is an influence or impact on the improvement of the parents' knowledge to enhance children's self-regulated learning after the parents have increased their knowledge. It can be concluded that the study of manual book improved the children's self-regulated learning.

Table 4. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Post Children	Equal variances assumed	.006	.941	5.954	16	.000	22.88889	3.84459	14.73872	31.03905
	Equal variances not assumed			5.954	15.972	.000	22.88889	3.84459	14.73758	31.04020

Table 4 shows that there is a mean difference in the scores of children based on a high group of parents and a low score of children based on a group of parents after learning a group handbook, where A_1 is not the same as group A_2. the mean / mean of children based on a high group of parents is 125.33 with a standard deviation of 2.66. Then the mean / mean of children based on a low group of parents is 102.44 and the standard deviation is 2.77. This means descriptively, the average self-regulation in learning (self-regulated learning) of children before and after the practice of manuals for parents there is an increase. From the similarity test variance or F test both groups of the level of self-regulation in learning (self-regulated learning) of children before and after practiced by the parent's manual in improving self-regulation in children's learning, with a score of 0.941 with sig. or p-value = 0,000.

Then the most important result in this table is the statistical value of t_{value} 5.94> t_{table} 2.04 with sig. p-value = 0.00 <0.05 or Ho in Reject which means, that there are significant differences in self-regulation in children's learning between before and after their parents are given a guidebook to improve self-regulation in learning, which means after parents study the guidebook and practicing to their children, there is a change in learning behavior in these children, where "children experience an increase in self-regulation in learning (self-regulated learning).

The table 5 shows that there are 9 children with low post test scores coming from parents with scores after studying the manual which is also low. There are no children with high post-test scores coming from low parents, and no children with low post-test scores coming from parents with high post-test scores. In addition, there were 9 children whose high post test scores came from parents whose post test scores were also high.

Then Chi Square Test is used to see the relationship between variables described through contingency tables (parents' scores and children's scores), the Hypotheses tested are: H0: There is no relationship between the parent's score variable with the child's score, or the parent's score and the child's score is independent (independent). H1: There is a relationship between the parental

score variable with the child's score, or parental score and the child's scores are mutually associated.

From the selected parents' score data (9 high scores and 9 low scores), it is obtained that their children's pairs are also grouped according to their post test scores. The contingency table of the two is as shown in the table 5.

Table 5. Parents' Group * Children's Group Cross Tabulation

Count

| | | Children's Group | | Total |
		Low	High	
Parents' Group	Low	9	0	9
	High	0	9	9
Total		9	9	18

The research result reinforces the theory that students who are in the early primary level classes are in the range of early childhood. Where in this age, all aspects of the child development were developing so rapidly. One of them is an aspect of children's intelligence. According to (Ormrod, 2009, p. 23) there are five factors that support the intellectual development / intelligence of a child, namely: 1) maturation; 2) physical experience; 3) logical mathematical experience; 4) social transmission, and 5) equilibrium or self-regulation. So, the critical process of self-regulated are taught from an early age.

Furthermore, the chi-squared test (see table 6) was used to know the relationship between the variables of contingency tables in the term of parents' score with children's score. From table chi-square tests, it obtained sig = 0.000 <0.05, then H_0 is rejected. It means that there is a relationship between variables parents' score with children's score. It can be concluded that there is a significant correlation between the score of parents' knowledge development against the scores of children's self-regulated learning.

Table 6. Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	18.000[a]	1	.000		
Continuity Correction[b]	14.222	1	.000		
Likelihood Ratio	24.953	1	.000		
Fisher's Exact Test				.000	.000
N of Valid Cases[b]	18				

4.2 Discussion

The children in primary school during the initial grade are at a stage of concrete operational thinking. In that grade, the children are able to think by a certain logic, can think towards more abstract, can regulate cognition, may incorporate aspects of a situation into consideration, and can organize what they learn from experience. So, they think towards more complex that reach a state of equilibrium or process self-regulated, a state of balance between the cognition structure and experience in their environment. At this age, the children have started to gravitate towards the achievement of learning outcomes and develop self-confidence about its ability to achieve the learning objectives that have been set forth (Bergen & Davis, 2011).

Furthermore, it also supports Bjorklund (2012, p. 417) who said that at the time of primary school age, children are increasingly able to regulate itself in learning. It is because this period as a transition time of coregulation. The parents and children are sharing power. The parents supervised the children while the children begin to practice regulated themselves from time to time. The parents only educate and discuss various issues in children and not much govern when compared with the previous period. So, the children begin to regulate themselves in accordance with

their will. Therefore, the appropriate stage of initial grade of primary school, the children are taught to regulate themselves in learning.

The ability of self-regulated learning does not happen automatically granted, but it is determined by various factors, both internal factors and external factors. This is consistent with the social theory of cognitive from Bandura (1977, p. 161) who explains that self-regulation is basically determined by external factors, such as the home environment, school and community, especially parents as the immediate environment of children. The attitude, parenting and parents' behavior is very affecting the child's growth and development. This is the importance of the parenting role in the form of children's self-regulated learning. Therefore, the necessary parenting strategies are to improve children's self-regulated learning, in this case the manual book that will be trained to parents and will be applied and accustomed to their child. In brief, the children's self-regulated learning can be improved.

So, the rule of Parenting is very important to build children's self-regulated learning. Therefore, the necessary parenting strategies are to improve children's self-regulated learning, in this case with the manual book that will be trained to parents and will be applied and accustomed to their child. In brief, the children's self-regulated learning can be improved by their parents with using manual book. So learning is more fun, and the goal of orientation education will be achieved.

4.2.1 *Benefit of Strategy Parenting Module*

The final result of this study is a product in the form of a guidebook for parents to be able to improve children's self-regulation in learning (self-regulated learning). In the process of developing a guidebook, of course there are some strengths and weaknesses encountered, such as: (1) guidance for parents to improve self-regulation in learning (self-regulated learning) this child was developed through a series of evaluations with four stages of the trial namely: expert testing / experts, one-on-one trials, small-group trials and large-group / field trials accompanied by revisions at each stage; (2) Handbooks for parents to improve children's self-regulation in learning (self-regulated learning), developed quite completely, consisting of: (a) Introduction section which contains (background, goals, scope, benefits, outline material, targets and instructions for use), then (b) Main Section of the handbook consisting of various materials such as (child development, positive parenting, effective communication, positive discipline, self-introduction and learning strategies, evaluation and reflection at each end of the learning material; and (e) Closing Section includes (glossary, literature, and key answers, reflection and evaluation of parents), (3) Assist parents in providing insight into knowledge, attitudes and skills of various things needed to be applied and accustomed to children in order improve self-regulation in learning (self-regulated learning) of children, (4) Guidebooks are prepared with sufficient written size, not too small . making it easier for parents to read it; (5) The pictures used in the guidebook as a whole are designed by visual experts, so that it attracts parents to want to read them; (6) The size of this manual is not too big or small, but it is enough. So, it is quite practical to be able to carry.

4.2.2 *Limitation*

In conducting research that starts from preliminary studies, design activities, procedures and evaluations, of course there are still many deficiencies or limitations found, including: (1) Guidebooks for parents to improve self-regulation in children's learning are not also trained on teachers , so that all components are less integrated in working together to improve self-regulation in children's learning, so that the results are less than optimal; (2) In terms of supporting theoretical models used in the development of the guidebook, researchers only arrive at formative evaluations, where researchers in this case do not carry out summative evaluations. This is due to time constraints in this study; (3) The absence of a control group in the study, so that the confounding group that is not expected can influence the results of the study. (4) Increasing the time allocation for conducting regular counseling activities given by researchers to parents needs to be held, related to obstacles or problems faced by parents when intervening (treatment) or habituation to their children in order to improve self-regulation in children's learning.

5 CONCLUSION

Based on the results and discussion, the conclusion can be formulated as follows: 1) parenting strategy developed to improve children's self-regulated learning, in this case parenting manual book that managed to improve the parents' knowledge, attitude and skills in improving children's self-regulated learning; and 2) there is a significant relationship between the increases of parental knowledge related to children's self-regulated learning.

There are several implications of this research as follows: 1) as an input in school policy makers related to curriculum or instructional design used; 2) ensuring that facilities and infrastructure in increasing parental knowledge related to children's self-regulated learning and children's competence; and 3) modification of the child's learning environment at school and at home to be more conducive. So, it can be holistic and integrative in improving children's competencies.

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The Implementation of Eating Healthy Program in Early Childhood

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ABSTRACT: Eating habits develop during the first years of a child's life, children learn what, when, and how much to eat through direct experience with food and by observing the eating habits of others. The aim of this study is to get a clear picture of the Eating program Healthy, starting from the planning, implementation, supervision, and evaluation as a case study of nutrition education; to get information about the advantages, disadvantages and effects of implementing a healthy eating program for children. This research was conducted through a case study with qualitative data analysed using Miles and Huberman techniques. Sample of children in Ananda Islāmic School Kindergarten. The results showed the Healthy Eating program could be implemented well, the diet was quite varied and could be considered a healthy and nutritious food. The visible impact is the emotion of pleasure experienced by children, children become fond of eating vegetables, and make children disciplined and responsible. Inadequate results were found due to the limitations of an adequate kitchen for cooking healthy food, such as cooking activities still carried out by the cook himself at the Foundation's house which is located not far from the school place; use of melamine and plastic cutlery for food; the spoon and fork used already uses aluminium material but still does not match its size; does not involve nutritionists.

Keywords: *Early Childhood, Eating Healthy Program*

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1 INTRODUCTION

Throughout the ages, malnutrition and food scarcity have been a major threat to children, healthy survival, and parental feeding practices have developed in response to these threats. Eating practices, including behaviors such as providing good food and in large portions, encourage children's habits to eat healthy, are still not effective in most cultures, despite the fact that in many areas the balance has shifted from food scarcity to excess food and excessive consumption. According to Birch, Savage, and Ventura (2007) healthy eating behavior needs to be taught and strengthened in the family, school and community environment throughout childhood and adolescence, because this context continuously has influence and interaction with the characteristics and behavior of parents and children. Early intervention alone is not enough; Effective prevention requires strategies that are consistent, sustainable and age appropriate.

Research related to the dietary habits of children in Indonesia carried out by Sekiyama, Roosita, and Ohtsuka (2012) to assess the impact of snack consumption on 154 children aged 1-12 years in rural villages in West Java, a 3-hour food withdrawal survey for all food and snacks consumed in seven consecutive days for each subject. Their overall prevalence is inhibited and less severe is 69.5% and 35.7%. There are 221 foods consumed by the subject, of whom 68 foods are categorized as snacks. Half the number of subjects who snacked more than the average amount consumed less carbohydrates and vitamin C than the remaining half. In addition, more and more groups are consuming snacks, low z scores for height (HAZ) among school children. To improve this nutritionally vulnerable situation, consumption of snacks must be replaced with non-snack foods that contain a much higher nutrient density. In addition, given the high consumption of snacks ≥7 In the school age group, an appropriate school nutrition program should be promoted.

Research on healthy habits of mothers in southern Tangerang, Indonesia by Usfar, Iswarawanti, Davelyna, and Dillon (2010). Most mothers associate the importance of food hygiene with the prevention of disease, pollutants, and health. Mothers assume that the importance of personal hygiene is to maintain health and hygiene. However, the majority of mothers wash their hands without soap after doing housework and cooking. Increasing mother's knowledge while incorporating existing perceptions can cause positive changes. Including mothers' knowledge about healthy eating programs in order to help the same program at school. Eating habits affect all systems in the human body directly or indirectly (Mitsopoulou et al., 2019) because optimal development and bodily functions depend on proper nutrition (Flynn, 2015). Developing healthy eating habits programs for the development of children's general health is very useful.

Another problem in children's eating habits is the temptation of fast food for children through online exposure and social media. Parents must take responsibility by considering their important role as gatekeepers of nutrition. Fast food consumption is positively influenced by broadcast media exposure among metropolitan children, and by online and social media exposure among suburban children. Mediation of active parents is very important in preventing the consumption of fast food. The media plays a key role in influencing fast food consumption, and hence, literacy education is important to reduce the adverse effects of exposure to junk food marketing (Lwin, Malik, Ridwan, & Sum Au, 2017). Many related parties need to have effective actions in overcoming this problem. In addition to parents, schools have a big role in improving children's eating habits through health programs at school.

Children who are picky about food can be associated with a higher risk of underweight and poor growth over time or vice versa, being overweight, this is another matter of eating habit. Taylor, Steer, Hays, and Emmett, (2019) study investigated whether children identified as food pickers showed differences in height, weight and body composition from their friends who were not picky. The results show the main effects on the choosy child are height and weight. More than two-thirds of food sellers are not skinny at any age. However, being a picky eater is predictive of being thin at some point in age.

Food picking is a common behavior in early childhood. There is no universally accepted definition of picky eating, nor is there agreement on the best tool to identify it. Causes for picky eating include difficulty eating early, late introduction of thick food when weaning, pressure to eat and be picky early, especially if the mother is worried about this; protection factors include providing fresh food and eating the same food as children. Consequences for children's diets including poor food variations and possible distortion of nutrient intake, with low iron and zinc intake (related to low intake of meat, and fruits and vegetables) should be of particular concern. Low-fiber food intake, as a result of low fruit and vegetable intake, is associated with constipation in food pickers. There may be developmental difficulties in some children with persistent picky eating. These children need to be identified at an early age to allow support, monitoring and advice to be offered

to parents. Strategies for avoiding or improving picky eating include repeated exposure to foreign foods, modeling parents eating fruits and vegetables and foreign foods, and creating positive social experiences around mealtime (Taylor & Emmett, 2019).

Based on the background issues of children's eating habits as well as some related research, not only at home, but also every school, especially the Early Childhood Education Institute, has an important role in stimulating children from physical to spiritual needs, including stimulation of healthy food. Stimulation of eating healthy food habits can also minimize the occurrence of eating disorders in young children, especially food pickers. If from an early age, healthy eating habits have been done and are used to it, it will form children to be more aware of their health. For this reason, Ananda Islamic School Kindergarten provides the Eating Healthy (EHP) program once a week.

The purpose of this study is to get a clear picture of the implementation of the Healthy Eating program (EHP), starting from planning, implementing, monitoring, and evaluating as a case study of nutrition education from a sample of children in kindergarten Ananda Islamic School; to obtain information on the benefits and limitations of the program from implementing healthy eating patterns and the impact of the Healthy Eating program for children.

2 THEORITICAL STUDY

School nutrition education programs that produce positive behavioral changes have used teaching strategies based on social cognitive theory (A Bandura, 1977). Social cognitive theories determine the mechanism in which they work, and optimal ways of translating this knowledge into effective health practices (Albert Bandura, 2004). Core determinants include self-efficacy (i.e. people's belief in their ability to successfully conduct behavior), expected outcomes (i.e. positive and negative consequences of behavior), knowledge of health risks and benefits of different health practices, and facilitator perceptions and social and structural barriers to the change they seek (Albert Bandura, 2004).

School education efforts to improve children's health usually produce weak results because teachers only provide factual information about healthy eating and exercise, while they usually do little to equip children with efficacy skills and beliefs that motivate healthy behavior and manage social and emotional impact on desirable health behaviors (Connell, Turner, and Mason 1985). School-based health promotion must operate together with the home, community, and community at large (Perry et al. 1992).

2.1 *Nutrition Education for Early Childhood*

Schmitt et al., (2019) research develops and evaluates nutrition education curricula to improve children's dietary behavior and nutritional and health knowledge. Children in the intervention condition showed higher scores on nutrition and health surveys and showed greater preference for fruits and vegetables in the post-test than in the control group. The findings show that short 6-week interventions that are in line with educational standards have the ability to significantly improve children's outcomes and thus can be a more viable option for teachers to include homework in their classrooms. The results achieved by the intervention program implemented in the Franciscato et al., (2019) study conclude an increase in knowledge about food and nutrition, which can lead to better food choices in the future.

Jung, Huang, Eagan, and Oldenburg (2019) examined the effectiveness of school-based healthy eating intervention programs to increase knowledge of healthy eating and healthy food choice behavior among elementary school students. Adopting social cognitive theory into the promotion of healthy eating strategies at school, this program helps children improve good health and nutrition knowledge, recognize the benefits of adopting healthy eating patterns, develop practical skills for reading food labels and make healthy food choices through direct observation and experience. The effect of positive interventions continues to be found on the behavior of school lunch choices. Positive findings from this study can be attributed to effective program design and curriculum content for teachers to implement the Healthy eating Program into their classroom curriculum.

The nutrition education program was developed and focused on changing beliefs, increasing nutritional knowledge and consumption of vegetables & fruits and dairy foods. Oh, Yu, Choi, and Kim (2012) study revealed that nutrition education for preschoolers is effective in increasing nutritional knowledge and perceived benefits regarding consumption of vegetables and fruits and certain eating behaviors. This study shows that more intensive education is needed to encourage changes in eating behavior. This program can be used in children's nutrition education at childcare centers or kindergartens.

Barriers and support for nutrition education in early childhood classes often occur in teachers in schools. There has not been much research to understand the perceptions of obstacles and early childhood educator support before entering the classroom. Resor, Hegde, and Stage (2020) resort identified barriers felt by pre-service teachers and support for nutrition education for pre-school children. Respondents' perceptions about how they will experience obstacles and support in practice vary, but teachers are generally positive about their ability to overcome potential obstacles and get the support they need. Relevant teacher and pre-service teacher training, integrating nutrition education into the curriculum, and developing teacher self-efficacy are needed to prepare teachers to overcome obstacles and support in early childhood nutrition education.

In addition to the family environment, early childhood teachers have the opportunity to act as role models and develop healthy eating habits in their students. Teachers can encourage the development of healthy behaviors in children's learning programs (Eliassen, 2011). For nutrition education to be successful in early childhood classrooms, it is important for teachers to understand how to deliver effective nutrition education lessons. Limited barriers and support for providing nutrition education in their classrooms may often arise. Previous research has shown specific factors that affect the behavior of teacher nutrition education in the classroom including time, availability and awareness of resources (human and material), community support, and professional development opportunities (Jones & Zidenberg-Cherr, 2015). While early childhood educators have the opportunity to interact fairly freely with children and parents to influence nutritional habits, it is unfortunate that teachers often do not have adequate educational backgrounds and / or exposure to professional development opportunities that will prepare teachers to effectively teach education nutrition to children in their class (Shor & Friedman, 2009).

Education staff or teachers can improve the quality of nutrition in childcare centers or kindergartens. Myszkowska-Ryciak and Harton (2019) study evaluates the effectiveness of multicomponent education programs to improve the nutritional value of preschool menus in Poland as measured by changes in nutrient content before (baseline) and 3-6 months after education (post-baseline). Samples of 10 daily menus and inventory reports that reflect food and drink served at 231 government-sponsored kindergartens. The ratio of nutrients to energy for vitamins A, B1, B2, B6, C, folate and minerals Calcium, copper, iron, magnesium, phosphorus, potassium and zinc increase significantly. The percentage of preschool children who applied recommendations for energy, fat, saturated fatty acids and sucrose as well as calcium, iron and potassium increased significantly. This study shows the beneficial effect of education in optimizing the quality of menus in preschool.

Children's attitudes and preferences towards different food tastes are formed at an early age, making early stimulation important (Sepp & Ho, 2016). Nutrition education is successful in the early years of life because children who are good, sensitive, and easily adaptable form habits (Unusan, 2007). Children are most easily influenced by the people closest to them, their parents and teachers. Childcare centers are ideal stimulation sites to explore children's health behaviors (Froehlich Chow & Humbert, 2014). The home environment, childcare facilities and educational institutions have continuous contact with children for almost the first 20 years of a child's life than any other arrangement. As a result, teachers have valuable opportunities to achieve and influence children's nutritional habits from a young age (Shor & Friedman, 2009). Educators have a unique opportunity to include and provide nutrition education into the classroom, which has a positive impact on children's basic knowledge for healthy eating behavior (Derscheid, Umoren, Kim, Henry, & Zittel, 2010).

2.2 *The Implementation of Eating Healthy Program in Kindergarten*

Nutrition education is effective when using social learning strategies (Unusan, 2007). Role modeling and self-efficacy are important in the learning and teaching of nutrition education. Social learning theory provides support for the idea that educators can influence nutritional knowledge and behavior. Utilizing Albert Bandura's social learning theory to understand children's experiences with learning nutrition provides context and reasons for how early childhood educators act as agents of change for children's nutritional habits (Bandura, 2004). Early childhood learning is an ideal place for children to observe and learn from their teachers and other classmates. In Bandura's (1977) social learning theory, observational learning is a powerful tool. Observations allow children to experience the consequences or rewards of a behavior when the child sees what others are doing (Crain, 2005). Parents and teachers often underestimate how much influence they have as a model. Children continually watch the actions of adults and listen to their commands (Crain, 2005). Teachers can influence children by setting an example and encouraging healthy eating in the classroom. Teachers can show positive messages about food through action if they have high self-efficacy. Observational learning contributes to self-efficacy, self-confidence in self ability (Crain, 2005). Self-efficacy is not made up and can be reinforced in teachers who lack faith in their ability to change their own lives and those of their students (Elliott, Isaacs, & Chugani, 2010).

A kindergarten curriculum for children created in 2013 by the University of Nevada Co-active Extension uses traditional Indian American knowledge about food and language to increase fruit and vegetable intake among kindergarten students. Nutrition education programs in schools integrated into overall school health and well-being will increase consumption of healthy food in early childhood (Mc Kenna & L, 2010). The program that can be emulated is the Veggies for Kids program created by the US Department of Health and Human Services & the US Department of Agriculture, in 2015 and the traditional knowledge of Tribes participating in Nevada. The core objectives of the Veggies for Kids program that can be adopted in a healthy eating program for children are: (1) Strengthening the importance and integration of nutrition education in schools, with lesson content related to Nevada education standards; (2) Increase the intake of adequate vegetables and fruits through improved diet in children; (3) Increase the use of water and low-fat milk as a choice of sugary drinks; (4) increase daily physical activity; (5) Strengthening cultural connections to traditional health, improving behavior through the use of traditional foods, food collection; (6) Provide an introduction to gardening through classroom and school garden experiences; (7) Involving parents through homework (Emm, Harris, Halterman, Chvilicek, & Bishop, 2019).

As a key to nutritional quality in preschool, the following are chosen; energy, total fat, saturated fatty acids, sucrose, dietary fiber, calcium, iron, iodine, potassium, vitamin D and folate. In accordance with the recommendations by Rizqie Auliana (2011), the full-board preschool menu must provide at least 70% of the daily energy and nutritional requirements for the children present, this level is adapted for energy, dietary fiber, vitamins and minerals. Because energy deficiency and excess can have adverse health consequences, a 10% error margin of the recommended value is adopted in the case of energy supply. In the case of fats, saturated fatty acids and sucrose, the recommended energy portion of this nutrient is used.

The school environment can positively influence students in areas beyond traditional academic achievement. The innovative program at Davis, Farm to School Connection, seeks to promote the development of lifelong healthy eating habits in children and to create a school environment that connects school parks, cafeterias and classrooms, and connects them with future local farming. This comprehensive program includes a farmer's market salad bar, class education, agricultural tourism and waste management. Graham, Feenstra, Evans, and Zidenberg-Cherr (2002) evaluates the effectiveness of the program through interviews and surveys of program leaders, teachers, and school staff. Participation in the school lunch program increased with the addition of salad bars, and many partnerships were developed between those involved. The Farm to School Connection component provides evidence to support a comprehensive school nutrition program and its positive impact on the school environment.

In implementing a healthy eating program, successful strategies for increasing children's food neophilia (willingness to try new foods), and acceptance of a variety of fruits and vegetables include: initial and repeated exposure, food tasting related to positive food experiences, and good role models (Holley, Farrow, & Haycraft, 2017; Nekitsing, Hetherington, & Blundell-Birtill, 2018). The greatest increase in vegetable intake and intake occurs with repetitive taste stimulation (Nekitsing et al., 2018), but a moderate increase also occurs with stimulation using other senses - touch, vision, hearing, and smell (Helen Coulthard & Sealy, 2017; Holley et al., 2017). Based on these findings, sensory-based food education in research by Gucciardi et al., (2019) has been developed to introduce healthy food to children by enabling them to interact with and explore food through various activities that use their five senses (H. Coulthard, Williamson, Palfreyman, & Lyttle, 2018; Hoppu, Prinz, Ojansivu, Laaksonen, & Sandell, 2015; Witt & Dunn, 2012). Songs, games, stories and other creative activities have been used to make sensory-based food education fun and interesting (Dazeley, Houston-Price, & Hill, 2012). Sensory-based interventions have been found to be most effective with children under six years (Moffitt, 2019); results include reduction of food neophobia, short-term increase in food neophilia (Battjes-Fries, Haveman-Nies, Renes, Meester, & Van'T Veer, 2015; Hoppu et al., 2015; Mustonen & Tuorila, 2010; Park & Cho, 2016) and greater knowledge about and positive attitudes towards unknown foods, vegetables, and healthy foods (Battjes-Fries et al., 2015).

3   METHODS

This study uses qualitative research with a case study approach conducted at Ananda Islamic School Kindergarten in 2018. The objective to be achieved in this research is to understand in depth of research on the application of Eating Healthy Program (EHP). Specifically, the purpose of this study is to thoroughly examine the implementation of the application of EHP, the advantage and disadvantage of the application of healthy eating and also impact of healthy eating in Ananda Islamic school kindergarten.

The data collection technique used is observation, interview and documentation, where the sources are from the kindergarten head, teachers, children and the application process of eating at school. Data were analyzed by reducing data, displaying data and verifying data using the Miles and Huberman analysis technique. Data validity test is carried out by extending the observation, increasing perseverance and doing data triangulation, by checking data from various sources, ways, and of existing theories.

4   RESULT AND DISCUSSION

Based on the findings, the application of food for children in Ananda Islamic School kindergarten is semi-commercial (only a small profit to cover the need for details). This is because the cost of Healthy Meal includes in annual fee. Furthermore, the Head of Kindergarten receives an amount of budgeting in a year from the management department. The head of kindergarten together with educators then prepares a menu of food that is in line with the budgeting that has been established. In doing so, the menu can change from time to time depending on the availability of food that is found in the market.

The frequency of Healthy Meal at the Ananda Islamic School kindergarten is once a week, which held every Friday at 09.45 with a varied menu on a weekly basis. All parents and students are informed about the program since the first year of school. Parents have got a menu schedule in the new academic year which is called Parents Teachers Meeting at Ananda Islamic School Kindergarten.

The Parents Teachers Meeting is also a place for the head of the school to give a strong understanding of a health for children and the importance of providing healthy food and balanced nutrition for young children. The head of kindergarten and education encourages the parents of students to prepare healthy food for their lunch box and pay attention to balanced and healthy food and not allowing the children to bring snacks. This counseling still needs to be reviewed because schools do not involve people who are authorized by doctors or health care workers as health companions, as stated in the guidelines for the development of health education for children in

the Ministry of Health Republic of Indonesia Regulation No. 66 of 2014 about the monitoring, growth, development and disruption of growth and development of children (ditjenpp.kemen-kumham.go.id, 2014, No. 152), which states that the school can corporate with every aspects of students social life to give information to parents about nutrition education and growth in kindergarten children and parents.

The food provided by the school has fulfilled the criteria of healthy food. Every week healthy diet consists of basic foods such as rice, side dishes (both with non-animal and animal-based foods), vegetable soup or curry. Food menu includes, rice with chicken soup; fried vermicelli with carrot mix; yellow rice, egg and cucumber; rice, spinach and corn soup, tempeh / tahu bacem; pudding; corn-milk-cheese; mung bean porridge; coco crunch with milk; sandwich with eggs, bread, cheese and tomatoes. The menu schedule is given in a continuous manner each week. However, food and drinks such as juice, milk and mung bean porridge are given as a supplement to the main foods.

On its application, from Monday to Thursday before they are doing a meal together, they wash their hands and pray before having the meals. Washing hands before eating whether after doing activities or not, is one of the efforts to habituate healthy living in school and a culture of clean living will prevent a person from being exposed to the source of infection. Next, educators ask the students to take the food that has been prepared and brought from home by their parents. Educators help the students to open children's' rice box in class. When educators find out that the children bring unhealthy snacks, educators give understanding to the child to not eat it and not to bring it as a food at school because it is an unhealthy food and their body doesn't need it by explaining the food content in the package. What teachers do when reading food labels in packaging is in accordance with the general message of the Minister of Health of the Republic of Indonesia in the guidelines for balanced nutrition No 41/2014 (Menkes, 2014). Educators then ask others to share the food they bring with them and then remind the parents by the time they pick them up or contact the parents by phone. When there are children who bring healthy food and eat it up, educators should give reward by giving compliments or stickers so they can put it in the class.

The implementation of eating activities in class, cooked food can be distributed to children by way of suspension, prepared from the kitchen in plates and brought to classroom or food with the container brought to classroom and placed there; children take themselves from food containers in the classroom. This cooking activity is supported by Jarpe-Ratner, Folkens, Sharma, Daro, and Edens's (2016) opinion that to improve healthy behavior can be done as in cooking activities, fruit and vegetable intake, and communication about healthy eating in children with cooking experience and nutrition education courses led by chef instructors. In the context of education, chef instructors are effective in providing nutritional knowledge and bringing about behavioral change. This program has the potential to work together and support school and other community-based strategies, including strategies that combine gardening and physical activities.

Children aged 5-6 years especially in Ananda Islamic School Kindergarten is still applying healthy eating activities every Friday using the way the food containers carried by the classroom staff and assisted by the educators in the classroom. Age 5-6 years is the ideal age to be accustomed to and taught about responsibility to themselves in accordance with Government Regulation No. 137/ 2014 (Pendidikan & Kebudayaan, 2015) concerning the standard level of achievement of the socio-emotional development of children aged 5-6 years which is about a sense of self responsibility; knowing their rights and obligations, regulating themselves and taking responsibility for their behavior for their own good. This is like doing nutrition education to build healthy eating habits in Japan, one of which is introducing soy products to children. Osera, Tsutie, and Kobayashi (2016) study examined the effects of using soy products at home and reducing children's dislike of soy products. Health education involving soy programs can lead to increased thinking about 'respect for food' among kindergarten children and increased knowledge giving to their careers.

Figure 2: The educator distributed the food

Through this activity, the educators can teach the children how to manage in taking the food they need. The children are learnt to take the responsibility for the food they took. So, children do not only get education about healthy eating but also to be familiar to be responsible and is able to regulate themselves for their food needs.

Before educators distribute food that has been prepared in class, the educator explains in advance what food menu is given on that day, what nutrients in it and why our bodies need them. It can also be seen that educators sometimes eat the food, especially when the food menu on Friday is vegetables. This is in accordance with the guide from Health and Nutrition Directorate of Early Childhood Education Directorate General of Early Childhood Education and Community Education Ministry of Education and Culture (Prima et al., 2017), which is to train children to eat fruits and vegetables, teachers can give example of eating the food themselves so the children have the perception that healthy food is delicious to eat.

In the application of healthy eating, Ananda Islamic School kindergarten is very much concerned about hand hygiene, children must wash hands before and after eating, pray before and after eating, sit when they eat, eat simultaneously. The children are also encouraged by educators to finish their food, they are also taught to eat using good cutlery, not scattered outside the plate, cutlery and mouth do not make any sound, sit quietly and do not disturb friends, tidy up the utensils after eating, clean his desk and bring the cutlery to the proper place.

Figure 3: The situation when the children eating

Each activity requires an oversight for each step of the activity. Supervision of the application of healthy eating is carried out by management staff in which the head of the kindergarten and cooks. The head of kindergarten is responsible for the preparation of the menu. To standardize the quality of food and the flavor as well as the efficiency and effectiveness for the use of funds is the responsibility of the cook so that the cost of implementing healthy eating can be reduced as low as possible. In addition, nutrition education for children, caregivers and teachers has been seen with serval programs, such as the Child Care Food Program, where a large selection of learning tools and resources are provided to improve health and well-being (Noura, 2018). This includes recipes and cooking techniques. The curriculum structure includes teacher training sessions, teacher guides and children's learning tools, which are very good for general use containing activities, and exercises. This is a great resource to start building a healthy eating curriculum program.

It is also seen from the results of observations, supervision during the implementation of the application of healthy eating in group B Ananda Islamic School Kindergarten was conducted by the head of kindergarten and also educators. The head of the kindergarten supervises the available food menu that day according to the schedule that has been determined beforehand. The head of the kindergarten does not appear to be supervising the process of cooking the food as it is done in the kitchen of the Foundation's house which is located not far from the location of Ananda Islamic School kindergarten

Furthermore, supervision was also carried out by educators in the class regarding the level of cleanliness, the amount of food provided, the discipline in the classroom and of course the child's response to food; whether the child likes it or not, which child has difficulty eating and does not want to eat, oversees the portion of food provided, whether it is in accordance with the needs of the child in the class. Educators are seen to persuade the children by giving clear understanding to children who do not want to eat.

The assessment is also carried out starting from the planning, implementation and supervision stages. The head of kindergarten conducts an assessment from class to class, asking educators in class how is the food menu on Friday?, do the children like the food?, does the method of distribution to children correct?, does the children follow the procedure of eating? and is there a problem while the children are eating?. Then the Kindergarten Head discusses and writes it down in the weekly meeting agenda book which is held every Friday after school hours. It's also seen that the chef or food manager visits each class to assess the food menu that was prepared on Friday.

4.1 *The Advantage and Disadvantage of the Implementation of Healthy Eating Program*

Food plays an important role in daily life and the welfare of children. Children's food experiences are important guidelines for eating behavior in adults. Food is full of the qualities we feel with the sense of smell, touch, hearing, sight and taste. We live in a world of individual senses, and our food perception processes are also individual. Children actively investigate food during eating and cooking. By encouraging their journey to the world of food culture and food activities, supporting them in expanding their food preferences (Sandell et al., 2016). The advantage of implementing healthy eating at Ananda Islamic School Kindergarten is that the diet is quite varied and can be regarded as healthy and nutritious food. Even though the implementation is still once a week, it is carried out consistently and continuously, starting from the smallest class like Nursey A (2-3 years), Nursery B (3-4 years), KG A (4-5 years), and KG B (5-6 years). Healthy eating activities are also carried out in each class so that children with small ages can feel comfortable.

The disadvantage of applying healthy eating at Ananda Islamic School Kindergarten is that there is not yet an adequate kitchen available for cooking this healthy food, so that it is still done by the cook themselves at the Foundation's house which is located not far from the school location. The issue happens to be the use of melamine and plastic cutlery for eating. As we know, equipment made of plastic contains cancer-causing chemical compounds. Plastic cutlery is clearly not very safe to use for eating equipment in early childhood. The spoon and fork used are already using aluminum material, but it still does not fit the size, especially for children in the Nursery

class. They were seen having difficulty in scooping and bribing food because of the size of spoons and forks that are used by adults.

Figure 4: Melamine and Plastic Cutlery for Eating.

The preparation of a healthy food menu at Ananda Islamic School Kindergarten is carried out by the head of kindergarten and does not involve nutritionists. The Head of Kindergarten plans a lunch menu based on the "four healthy five perfect" guidelines. The menu is a composition of one-meal dishes that are overall harmonious and complementary to one's dining needs. In terms of health, it is often used the term of adequate menu, which means a menu that contains all the classes of food needed by taking the balance of nutritional elements contained in it. Nutrition is a very important factor diet preparation. The food menu that is served must meet the nutritional needs of children in order to support body growth, maintain health and produce energy needed by early childhood. Nutrients needed by the body are classified as energizers, growth promoters, builders and maintainers of body tissues, as well as regulating metabolism and various balances in the body's cells.

To arrange an adequate menu, a person needs to have knowledge about food ingredients and nutrients, balanced nutritional needs as well as knowledge of dishes and its process. Nutritionists are needed to provide input in the preparation of a healthy lunch menu. The preparation of the lunch menu, in addition to using the guidelines "four healthy five perfect" must pay attention to the energy needs of early childhood. For this reason, the role of the nutritionist is very important so that the food menu that is served is in accordance with the standard of healthy eating for early childhood. According to Eliassen (2011), teachers who understand the importance of their role in the development of children's healthy eating behavior can help improve the health of the children they serve for life. They can offer positive and meaningful experiences about food, including growing, preparing, and eating food with children. Apart from the food offered at home, early childhood educators have the opportunity to choose a model and enjoy a variety of foods. Food in the program must be associated with pleasant opportunities and experiences rather than rules and limits. Tasting activities help children learn about food, behavior, and even other cultures.

4.2 *The Impact of Healthy Eating Program*

Teachers or parents who care for children need to be aware that some healthy eating habits strategies have a negative effect on the development of eating behavior. Food practices that involve pressure and restrictions not only affect children's health but also have long-term implications, such as problematic behavior. Apart from the food offered at home, early childhood teachers have the opportunity to model the selection and enjoyment of various foods (Eliassen, 2011). A supportive and caring early childhood environment offers guidance through adult modeling, serves a variety of nutritious food at meals and snacks, and introduces children to new foods in the classroom. These practices encourage the development of children's healthy eating attitudes and behavior and enhance positive long-term health outcomes.

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The program of implementing healthy eating has a positive impact on students. The visible impact is the emotion of pleasure experienced by the child. Children are very susceptible to falling blood sugar levels, which can cause mood swings, irritability, and difficulty concentrating. Holding hunger can cause early childhood emotions erratic. Eating unusual healthy food can cause feelings of pleasure in children. Pleasure is a child's feeling when his wish is fulfilled or being pleasure about something that makes a child happy.

Next is the impact of children becoming fond of eating vegetables. Because the healthy menu provided is mostly vegetables, children who initially do not want to eat vegetables, they like the vegetables at the end. The evidence is taken from the reports received from parents. The students at Ananda Islamic School Kindergarten can also get to know different types of vegetables in their first hands; they can clearly mention the various kinds of vegetables that they often consume. Having a healthy eating program at school can help teachers and parents instill a culture of eating healthy food.

In addition, this healthy eating activity also makes children discipline and responsible. Discipline is an attitude and behavior that is orderly, consistent, and has a certain systematic which is a reflection of a disciplined person. A discipline attitude can be manifested in clear and calm behavior, and all rules can be followed. A discipline attitude can be carried out in daily life by carrying out the tasks and obeying the existing rules or regulations. While responsibility is a behavior that determines how we react to situations every day that require some kind of moral decision. Responsibilities can be instilled and taught from an early age. There are several ways to instill an attitude of responsibility to early childhood, for instance giving trust, apologizing, and giving tolerance.

The children look disciplined starting from waiting in line to wash their hands by lining up. They also appeared to be in an orderly manner, waiting for their turn of getting food that had been prepared. Praying in an orderly manner can also be seen in this program. Even when eating, the children are accustomed to an orderly manner, and not disturb other friends, focus on being responsible to finish the food. If the food taken is not finished, the child will apologize to the educator in class as a form of accountability. Educators will give understanding to children so that next time they take enough food to eat. After eating, the children will immediately bring their cutlery to the table prepared by the educator. Children bring their own equipment that has been used to the place. No dirty eating utensils are left on the classroom table and when food is dropped or spilled, the child is also asked to be responsible for cleaning it aided by the educator in class if there are a lot of them.

Healthy eating programs that have been proven to have a large impact are The Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), each program is estimated to serve three out of ten young children in the United States each month. These programs provide important additional resources for buying food. Research shows that both programs have important positive impacts on children's health and food security. Direct evidence in the SNAP case, and indirect evidence in the WIC case, that this positive impact continues into adulthood (Schanzenbach & Thorn, 2019). Each of these programs is an important investment in the welfare of children today and in the future. Barriers to accessing WIC, SNAP, or other programs that invest in early health tend to endanger health in the short term and both health and human capital in the long run and may have a greater negative impact on more vulnerable populations. Future research and policy reform must address the health problems of children approaching school age.

5 CONCLUSION

Based on the above research results, the conclusion of this research is the application of healthy eating at Ananda Islamic School Kindergarten which is done every Friday every week has been going pretty well as an application of the Ministry of Health Republic of Indonesia Regulation No. 66 of 2014. Menu planning, implementation, supervision, and evaluations had been well implemented. The planning phase starts from planning the budget up to the list of healthy eating

menus for one school year. The planning phase of the menu schedule is prepared directly by the kindergarten head and educators and then disseminated to parents at the beginning of the school year meeting called the Parents Teachers Meeting. At this meeting the school also provides counseling on the provision of healthy and nutritious food as food supplies every Monday-Thursday at school.

Next is the implementation stage, although there is no supervision from the Kindergarten Head in processing food, the cook supervises and cooks it according to the existing rules, that are, washing hands before handling food, washing the food and cooking it with clean water. The class implementation also looks very good. The daily executive assistant provides bowls and other eating utensils in the form of spoons and forks and healthy food that has been cooked to the classes before the "healthy meal" takes place. Educators also make sure all children wash their hands, pray, sit down nicely, eat together and use the provided food equipment, and eat without sound. The educator is also seen giving an explanation of the menu and nutritional content of the food children will eat on that day. Educators also give encouragement or motivation to children who do not want to eat or do not want to finish their food.

The activity of implementing healthy eating is supervised directly by the head of kindergarten, teachers and cooks. They also do not forget to do an assessment as a form of evaluation in the implementation of the next healthy eating such as the menu itself, financing, food preference, and so on. Assessment is written and discussed by the head of kindergarten, educators and cooks. The parents take role to discuss further about this healthy meal program. The advantage of implementing healthy eating at Ananda Islamic School Kindergarten is that the diet is quite varied and can be regarded as healthy and nutritious food. The disadvantage of applying healthy eating at Ananda Islamic School Kindergarten is that there is not yet an adequate kitchen available for cooking this healthy food, so that it is still done by the cook themselves at the Foundation's house which is located not far from the school location.

The issue happens to be the use of melamine and plastic cutlery for eating. The spoon and fork used are already using aluminum material, but it still does not fit the size. The preparation of a healthy food menu at Ananda Islamic School Kindergarten is carried out by the head of kindergarten and does not involve nutritionists. This program of implementing healthy eating has a positive impact on students. The visible impact is the emotion of pleasure experienced by the child. Next is the impact of children becoming fond of eating vegetables. In addition, this healthy eating activity also makes children discipline and responsible.

6 RECOMENDATION

Providing more adequate kitchens so that the implementation of food processing activities can be supervised directly by the head of kindergarten. Replacing children's eating utensils with those that are more suitable and safer for early childhood from the ingredients to their size. Making a new pattern by letting children take their own portion of food in eating activities for children aged 4-6 years as a form of children self-responsibility. Involving nutritionists or doctors or health experts for health and nutrition counseling and for determining healthy eating menus. Make a short counseling about health and nutrition for educators at Ananda Islamic School Kindergarten.

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Early Childhood Disaster Management Media Through Picture Story Books

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ABSTRACT: Indonesia is a country that has a high potential for natural disasters. Picture story book is a form of disaster management learning that can help children from an early age to prepare for a natural disaster. The aims of this study to develop story books as a disaster management learning media, to improve knowledge and skills of children and teacher about the understanding, principles, and actions of rescue when facing the natural disasters, to increase the teacher's learning quality in disaster management. Developmental research approach is used to execute the study. A total of 48 children aged 5-6 years have to carry out pre-test and post-test. Pre-test data shows that children's knowledge about disaster management with an average of 47.92% and its improved at post-test with 76,88%. Five theme of story books involves floods, landslides, earthquakes, tsunamis, lands and forest fires is the product. Dissemination of five story books are proper for children and improve their understanding of disaster management.

Keywords: *Early Childhood Education, Management Disaster, Storybooks*

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1 INTRODUCTION

Indonesia is a country that natural and non-natural disasters always comes. The disaster data presented during 2019 totaled 3,768. The types of disasters such as land and forest fires, drought, tornado, landslides and floods. Meanwhile, if it is compared with the data submitted, it is clear that the trend of disaster events is increasing every year.

The impact of this disaster will be faced by all citizens, especially early childhood. The differences that cause this according to (Hamele, Gist, & Kissoon, 2019) are anatomy, psychosocial vulnerability and mental development causing children to become very weak when disaster strikes. The number of children who are victims of disasters is at 60% -70%. The same thing was also conveyed by (Efthymis et al., 2014) that children are a very fragile group when natural and non-natural disasters occur. Therefore, it can be illustrated that children need special attention from all parties in order to provide information and understanding of disaster management. For examples giving an opportunity to get to know the disasters that often occur around him, how to save themselves and know the recovery measures after a disaster. With this experience, it will help reduce the impact of losses from disaster events.

Children experience various vulnerabilities during and after natural disasters, not limited to threats to physical health, psychological impacts, and disruption to their education (Peek, 2008). As in the aftermath of the 2004 Indian Ocean tsunami, children in Indonesia are more likely to suffer from disease than adults (Guha-Sapir, Van Panhuis, & Lagoutte, 2007) and are less likely than adults to survive disaster (Frankenberg, Gillespie, Preston, Sikoki, & Thomas, 2011). Children are often more affected by disasters than adults (Kousky, 2016). It is estimated that around 175 million children per year are affected by natural disasters caused by climate change (Codreanu, Celenza, & Jacobs, 2014).

Proulx and Aboud (2019) evaluation is one step towards validating a new delivery approach for DRR education for children, given the need for research on the role of preschool in improving DRR education and the capacity of preschool-aged children to reduce environmental risks and respond to disasters. This evaluation found that the DRR-ECD intervention improved the overall quality of preschool, knowledge related to children's DRR, and some but not all areas of early learning. The findings add to the available evidence that preschoolers can effectively participate in DRR activities in their schools and communities in a way that is likely to minimize some disaster risk.

It has been shown that children's participation can have positive results in the rescue, relief and rehabilitation phases. Currently child participation is increasing attention as a component of disaster risk reduction (DRR). Lopez, Hayden, Cologon, and Hadley (2012) discusses children's participation and related literature reviews that illustrate effective DRR outcomes in diverse contexts. A myriad of factors such as gender, age, socioeconomic status, caste, religion, and geographical location play a role in socializing children in certain ways. This paper explores the role of children's participation in DRR plans and practices and identifies directions for developing an evidence base to support this potentially significant relationship. This shows that various innovations in education are expected to be able to foster a culture of safety when disaster strikes. In this case, early childhood should be the priority in disaster management programs. This priority for early childhood in dealing with disasters becomes very important because the stages of growth and development require the existence of learning media that help him to be able to clearly recognize the types of disasters, mitigation measures, how to save themselves and recovery after a disaster. Therefore, preparing for young children to face disasters becomes very important for the survival of a future generation.

In order to introduce disasters and how to deal with them, children need media to receive information and knowledge. Because disaster management is abstract for children to understand. By using of pictorial media, children will be easier to store information in their memories for a long period of time. It is similar to (Meng & Muñoz, 2016) story telling activities that use picture books being a media help children to be prepared in facing disasters and it will be a provision for how to protect themselves in the future. Therefore, the presence of an attractive learning media and in accordance with the child's growth and development needs becomes very important. It is

easier for children to get to know a series of concepts around them. According to (Sumantri, 2015) the successful of using learning media should be easy to understand, clear, interesting and convey the desired message to children. For example, the picture storybook media that deals with aspects of disaster management such as knowing various types of natural disasters, how to save themselves and recovery plans. Through these media, it is easier for teachers to convey information and knowledge about various disaster management actions.

But some kindergartens are lack of knowledge about various disaster management actions (Solfiah, Risma, & Kurnia, 2019). It is supported by teachers' mind who glance that disasters need not be introduced to children, limited information and learning media. Furthermore, teachers are also faced with the scarcity of books relating to disaster management. Even though it is available in bookstores, the price is quite expensive. It is contrary to the statement (Raj & Kasi, 2015) that teachers have an important role in preparing children to face natural and non-natural disasters. Teachers can design learning activities related to disaster management through the use of reading material, such as picture storybooks. As the result, the concept of disaster management is more easily recognized by early childhood.

Picture story book designed to introduce five titles such as floods, landslides, earthquakes, tsunamis and land and forest fires. Some of these disasters often occurs in Indonesia and there are lots of disadvantages especially for children. The plot of the story is designed having special characteristics, interesting images and disaster content; it is expected to support the children to more easily recognize the disaster management actions. In addition, the picture is designed more interesting, so that children are interested in reading the book both the teacher and their parents. Children can read the book with the teacher at school or even with parents at home. Kitagawa (2016) assumed that children get more knowledge about disaster management through reading activities in their free time or even daily activities.

Based on problems in the field and previous studies on disaster management for early childhood. The purpose of this research is to develop story books as a medium for learning disaster management, to improve the knowledge and skills of children and teachers about understanding, principles and rescue actions when facing natural disasters, to improve the quality of teacher learning in Disaster management.

2 THEORITICAL STUDY

Disasters are events that happen to everyone and every time. On this occasion, everyone is expected to have information and knowledge about disaster management actions in order to minimize risks and losses. According to (Undang-Undang No. 24 Tahun 2007 Tentang Penanggulangan Bencana, 2007) disaster is a series of events that affected people's lives that caused by natural factors or due to negligence of mankind. As a result, there are loss of lives, property and prolonged psychological problem. It defines that disaster is an adverse event for all levels of society. If the community is able to increase its resources, the losses from disasters will be reduced. As a component of the community, children need to be prepared to know disaster management.

2.1 *Early Childhood Management Disaster*

The United States estimates that around 1 billion children under the age of 15 live in countries affected by the earthquake (Masuda & Yamauchi, 2017). In addition, more than 175 million children each year face crises caused by climate change. Scientists and authorities have recognized that children depend on adults because of their physical, emotional and cognitive abilities for safety, as well as protection against emergencies and disasters. (Bosschaart, van der Schee, Kuiper, & Schoonenboom, 2016; Tuladhar, Yatabe, Bhandary, & Dahal, 2015). Over the past several decades, disaster education programs have been considered. for children as an innovative approach to disaster risk reduction. Many theories support the usefulness of this program. Education can improve risk perception among children (Faber et al., 2014).

Disasters and emergencies have increased worldwide. Advances in technology and its application in the realm of action are seen as the only effective ways to prevent disasters or reduce their impact. Torani, Majd, Maroufi, Dowlati, and Sheikh's, (2019) research aims to review the importance of education and the influence of various educational methods on disaster risk reduction and preparedness in vulnerable people. Disaster education aims to provide knowledge among individuals and groups to take action to reduce their vulnerability to disasters. Over the past decade, problems that train people to be prepared for disaster and respond well have been widely investigated. Based on the results, disaster education is a functional, operational, and cost-effective tool for risk management. Based on some evidence, it is important for vulnerable people to learn about disasters. There are various methods to educate vulnerable people, but there is no better method than others. People who are trained can better protect themselves and others. In this case, planning and designing a comprehensive education program is needed for people to deal with disasters including early childhood.

The series of disaster management according to (Abulnour, 2013) as shown in the picture below:
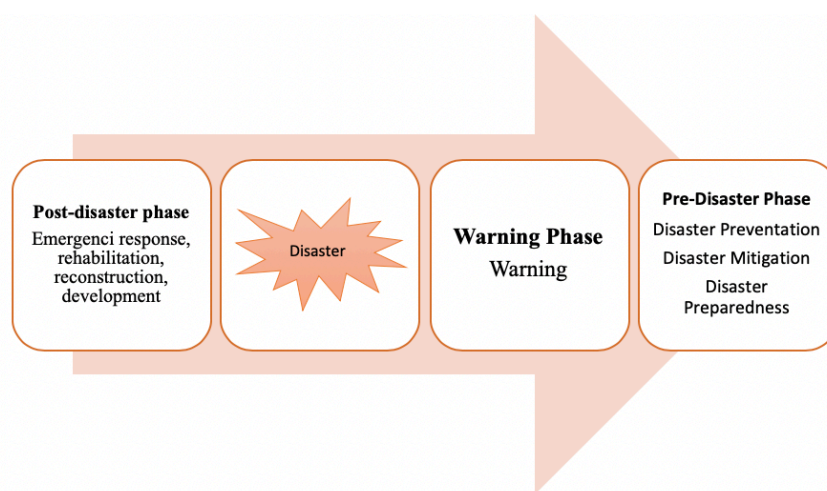

Figure 1. Disaster Management Cycle

Based on Figure 1, disaster management is a business that consists of various aspects and it is a longstanding process. Each aspect has an important role to reduce greater losses for all parties, especially for early childhood. The concept and implementation of disaster management help children to face the possibility of a disaster event. It is similar to education is the most significant way to reduce the impact of disaster events. On the other hand, schools, teachers, curriculum and learning media found in educational institutions contribute positively to the series of disaster management activities. Mutch (2014) emphasized that teachers and schools have a strategic role in preparing and reducing disaster risk. The teacher can introduce several disaster managements actions through integration in curriculum documents and daily learning activities. However, schools should provide various facilities that can foster knowledge such as the availability of picture books in the reading corner in the classroom and so on.

Resilience has become an important concept in the field of emergency and disaster management. Apart from the increasing use of resilience in the academic and public policy arena, the intellectual topography of this subject in the context of emergency and disaster management has not been much studied. Demiroz and Haase (2019) study provides an overview of the intellectual structure of resilience studies. Using bibliometric data collected from 20 emergency and disaster management journals, this article argues that the resdisciplinary nature of resilience research comes from its historical roots.

Environmental education, Education for Sustainable Development (ESD), and disaster prevention education cannot be ignored, because the community cannot be expected to develop. The ESD perspective is a concerted effort in various connected fields needed to achieve sustainable community development. In the field of learning, examples of this field include international understanding, the environment, world heritage, and local cultural assets, and, in recent years, biodiversity and climate change can be added and disaster prevention added to the list. In addition, safety education, including environmental education and disaster prevention education, presents important challenges for the future that must be carefully considered, including challenges from a human resource development perspective regarding teacher development and training (Fujioka & Sakakibara, 2018).

2.2 *Picture Story Book as Implementing Media*

Picture books are a special type of book, which combines verbal and visual communication codes. Picture books are the intermediate stage between comic books, which focus on visual elements, and picture books, which focus on text. In classic picture books the information carried by the text is usually also included in the illustrations (Batič, 2019).

Images in children's books may also have the role of illustrating text to reinforce what is explained by the text, not to expand or develop the text. The picture becomes a visual duplication of words that helps the child get a better understanding of the story. Picture books can also create feelings of presence or a certain atmosphere and arouse emotions, thereby creating context, introducing and building characters who act and react to events, which help the perception of the plot and characters involved. Images can also expose aspects beyond textual content, sometimes aspects that are difficult to describe with words. Sometimes, pictures show the development of stories that are not explicit in the text and therefore the images can fill gaps in the text. Both text and images leave a gap for the reader to fill in with their own knowledge, experience or imagination. Picture books support reading comprehension and sequence comprehension (Haggstrom, 2020).

Early childhood get various opportunities to play and learn through their daily activities, such as playing with toys, watching television shows and reading picture story books (Simcock & Heron-delaney, 2016). Besides being fun, reading picture storybooks can improve children's understanding compared to other media such as videos and others (Lin, 2012). Picture storybooks provide a verbal reading experience and iconic code so that children do not only rely on reading texts but also "read pictures" (Mateo, 2015). It is strongly believed that the decoding interaction process between writing and drawing takes place simultaneously. And it helps children to understand the plots of the story, characters and moral messages easily in picture storybooks. In addition, picture story books have an important role in improving children's cognitive abilities (Ozturk, Sendogdu, Seker, & Tekinsen, 2011). Through listening to stories from picture storybooks or reading pictures does not directly affect language skills, but children are encouraged to imagine.

Experts make the case for reading early story books, highlighting how stories can support emerging literacy skills. Acquisition of children's vocabulary is supported when books contain words that are rarely encountered by children in spoken language. Print knowledge - a multidimensional construction of children's emerging knowledge about the form and function of written language - is also supported through reading story books. Through the interaction of adults and children, children acquire a variety of literacy skills that arise including the organization of books and print, printed meanings, letters, and words, which are the basis for future reading achievement (Justice & Piasta, 2011).

Children are exposed daily to symbolic media, such as print or electronic images. Raynaudo and Peralta (2019) compared children's learning about concepts (camouflage) with two different picture book formats. The results show that children transfer concepts to both types of images. Children give camouflage more justification after reading than before. However, in the post-test, children in book conditions performed better than children in e-book conditions; also, they provide more camouflage justification with prints than with electronic images. Given these results,

they assume that the debate is not only about the use of new technology in the educational environment, but also about how to use it to diversify the learning experiences that traditional media have provided.

Tomé-Fernández, Senís-Fernández, and Ruiz-Martín (2019) research provides qualitative evidence that picture books can be a fun and interesting method to trigger productive discussion and increase student awareness and sensitivity. His research can test the effectiveness of the use of picture books in the classroom, insofar as the combination of text and pictures can offer students more information in the easiest way. Selected picture books open the door to new perspectives on various knowledge such as cultural integration, or disaster management. The selection criteria for picture books can be considered valuable and efficient for finding the right material to be implemented in early childhood learning.

Therefore, the design and implementation of disaster management for children is the main concern and thought in this research. In compiling thinking and implementing disaster management for children, researchers start with the development of instructional media in the form of picture storybooks that can be integrated in the classroom learning activities between teachers and children. The research about the improvement of picture storybooks for disaster management is a solution to find learning innovations at early childhood education level. It also develops a framework of thought and application of the importance of children's knowledge and understanding of disaster management which is a part of curriculum formulation policy at early childhood education level in Indonesia. Furthermore, the improvement of picture storybooks being learning media becomes a forum for innovative thoughts and practices in providing concepts and implementation of disaster management appropriate to children' needs and characteristics.

3 METHODS

This study uses educational design-based research (DBR) (Anderson & Shattuck, 2012). Design-based research is claimed to have the potential to bridge the gap between educational practice and theory, because it aims to develop theories about specific learning domains and the means designed to support that learning. DBR thus produces useful products (e.g., educational material) and accompanies scientific insights on how these products can be used in education (McKenney & Reeves, 2012). It is also said to be suitable for overcoming complex educational problems that must be addressed holistically (Plomp & Nieveen, 2007). Design model product used is a model Sugiyono (2017) consisting of several steps: 1) knowing the problem and / or potential, 2) data collection, 3) product design, 4) design validation, 5) design revision, 6) manufacturing of products, 7) limited field trials, 8) product revisions, 9) major field trials, 10) product revisions, 11) operational trials, 12) product revisions, 13) dissemination / mass production. The research about the improvement of picture story books on disaster management was carried out for children aged 5-6 years (group B) at TK Labor FKIP Riau University, Pekanbaru City, Riau Province.

Product trials in the form of picture storybooks are carried out in two stages, there are individual trials and field trials. Individual trials were conducted by a number of children (12), early childhood education teachers (19), parents (11), and experts (3). And field trials were conducted at the school that consist of 48 children. The results of the effectiveness of the picture story book illustrated by disaster management using quasi experiments then analyzed with t-test statistics.

4 RESULT AND DISCUSSION

The results of this study are illustrated picture story books affecting the knowledge of children aged 5-6 years regarding disaster management in Pekanbaru, Riau Province. Riau Province was chosen because it is prone to floods, landslides and whirlwinds in the rainy season and land and forest fires in the dry season. The book designed consists of five titles such as earthquake, flood, landslide, tsunami and land and forest fires. The reasons use the five titles is based on the history of natural disasters that often occurred in Riau Province and in Indonesia. Therefore, the researcher develops those five story titles that is expected to provide information for young children in their future. Fortunately, children have some information and knowledge on how to implement disaster management. The stages of media research illustrated picture story books consist of:

4.1 First Design

The products of this research and the development are compiled from the results of observations and analysis of needs in the field and conducted literature studies to form design 1 which is the initial draft of a picture story book. In the first figure, the manuscript is still in the form of handwriting from the writing team. Then it was discussed with three experts (BPBD, PAUD and Indonesian) until it produced design 2 that contained a picture story text using the Corel Draw application.
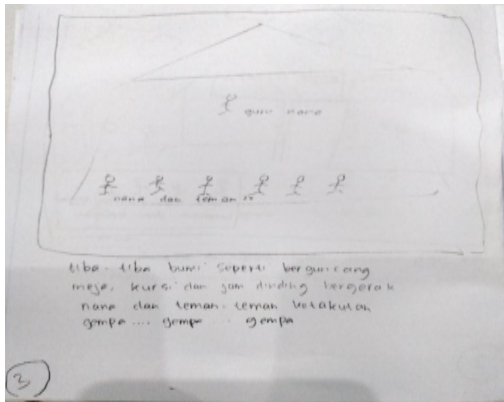

Figure 2. First Design of Picture Story Books Disaster Management

4.2 Second Design

The revision results of small group trials, then revision of the development of second design which is the basis of third design. In the second design 2, the text of the book has been drawn using the Corel Draw application and it has differences with the previous design.
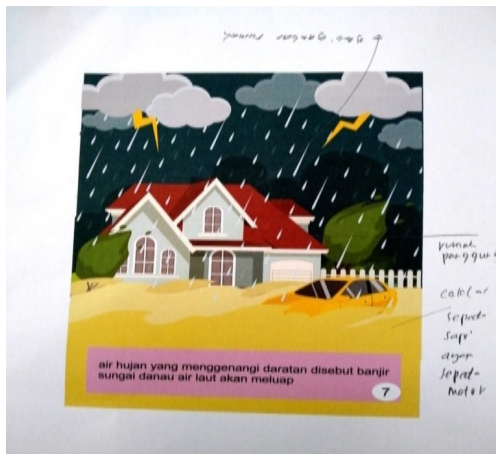

Figure 3. Second Design of Picture Story Books Disaster Management

4.3 Third Design

The development of third design was carried out with a large group trial, after that a revision was made become the final draft for testing the effectiveness of the picture storybook media on disaster management. The revision is in the form of a replacement image of the house. In the second design, the picture of the house is too luxurious and does not reflect the actual condition. According to Indonesian Language experts and Riau Province BPBD, residents who are victims of flooding are people who are in the lower middle class. So, the research team replaced the image of the house to be simpler.

Figure 4. Third Design of Picture Story Books Disaster Management

4.4 *Final Draft*

The results of the improvement of the picture story book media illustrated by disaster management produced a final draft to be passed to the effectiveness test of the media. To this final draft, the research team added images of flood victims who sat on the roof of their homes as a way to save themselves from flooding. It is similar to the advice of experts BPBD Riau Province. In addition, the color of the car was changed to red. It is similar to the advice from Indonesian Language Experts, because in the third design the colors of the car are yellow. As the result, the readers are difficult to distinguish between brown flood water and the color of a yellow car.

Figure 5. Final Design of Picture Story Books Disaster Management

Figure 6. Final Cover Design of Picture Story Books Disaster Management

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A picture storybook consists of five titles and combined into a series of disaster introduction for children aged 4-6 years. The purpose is to make it easier for teachers, parents and children to use this book simultaneously or separately. Therefore, there is not one book title is missing or tucked and the users feel comfortable using the book as a media to introduce various disaster management actions to children.

4.5 *Media Feasibility Test of Picture Story Book Disaster Management*

4.5.1 *The Expert Validity Tests*

This research involved Indonesian language education experts, Early Childhood Education and BPBD of Riau Province.

Table 1. The Percentage of Expert Validity

No.	Experts	Questionnaire	Percentage	Media Feasibility
1	Language	77/80x100%	96,25%	Excellent
2	Early Childhood Education	60/65x100%	92,31%	Excellent
3	BPBD	54/55 x100%	98,18	Excellent

4.5.2 *Empirical Test*

The empirical tests were carried out with a small group trial at Kindergarten of Labor FKIP Riau University, a large group trial was conducted outside of the kindergarten and an effectiveness test of a disaster management picture storybook.

4.5.2.1 The Effectiveness of Disaster Management Picture Book

The purpose of the effectiveness of illustrated story book testing is to know the improvement of knowledge of disaster management for children aged 5-6 years. This research also looked at differences of children's knowledge before and after using of picture story book media. Pre-test and post-test data on the effectiveness test can be seen in the table 2:

Table 2. Results of Pre-test and Post-test Effectiveness Tests

No	Respondents	*Pre-test score*	*Post-test score*	Percentage
1	R1	9	14	23.8%
2	R2	11	19	38.1%
3	R3	10	14	19.0%
4	R4	10	19	42.9%
5	R5	12	17	23.8%
6	R6	8	14	28.6%
7	R7	8	14	28.6%
8	R8	12	18	28.6%
9	R9	9	15	28.6%
10	R10	10	17	33.3%
11	R11	9	15	28.6%
12	R12	11	15	19.0%
13	R13	9	14	23.8%
14	R14	8	14	28.6%
15	R15	10	19	42.9%
16	R16	10	14	19.0%

17	R17	10	16	28.6%
18	R18	8	17	42.9%
19	R19	13	17	19.0%
20	R20	9	15	28.6%
21	R21	10	17	33.3%
22	R22	12	20	38.1%
23	R23	11	17	28.6%
24	R24	10	19	42.9%
25	R25	8	15	33.3%
26	R26	14	21	33.3%
27	R27	8	15	33.3%
28	R28	11	16	23.8%
29	R29	13	21	38.1%
30	R30	7	10	14.3%
31	R31	12	16	19.0%
32	R32	13	17	19.0%
33	R33	14	19	23.8%
34	R34	12	16	19.0%
35	R35	9	14	23.8%
36	R36	9	16	33.3%
37	R37	7	13	28.6%
38	R38	9	16	33.3%
39	R39	10	15	23.8%
40	R40	12	21	42.9%
41	R41	11	17	28.6%
42	R42	11	16	23.8%
43	R43	8	13	23.8%
44	R44	7	12	23.8%
45	R45	7	14	33.3%
46	R46	11	14	14.3%
47	R47	13	21	38.1%
48	R48	8	17	42.9%

If t_{count} = 25.790 with a probability value / sig t = 0,000. Because p <0.05 and t_{count} greater than t table (25.790> 2.011), it can be concluded that H0 is rejected and Ha is accepted. It means that there is a significant difference between before using the media story book illustrated by disaster management (pre-test results) and after using the media (post-test results) for 48 samples (Respondents from TK Labor FKIP Riau University).

Pre-test data show that children's knowledge about disaster management is in the low category with an average of 47.92% for children aged 5-6 years in Pekanbaru City, Riau Province. It is supported by the lack of socialization and disaster education and the lack of availability of learning media to increase knowledge about disaster management. It is similar to the results of research from (Mudavanhu, Chipo Muzenda Manyena & Collins, 2016) which revealed that children have never been involved in training of the emergency situations when disasters occurs both they are at home and at school. It has a negative impact on efforts to reduce risk and losses from natural

disasters. Research conducted by (Delicado, Rowland, Fonseca, & Nunes, 2017) suggests that in Portugal, children are seen as passive participants in order to reduce the risk of natural disasters. It is caused by the frequency of occurrence of natural disasters in the country is rare. In fact, Indonesia is a country prone to natural disasters. All parties should be better prepared to face disasters, especially for early childhood. A picture story book is one way to help that problem, because the children are easy to interact with messages conveyed in an interesting way.

After the post-test was conducted, there was an increase in the knowledge of disaster management with the highest percentage increase of 42.9% with a pre-test score of 47.92% and post-test to 76.88%. This shows that the children were enthusiastic about the picture book media. The child seemed to really enjoy the activity when the teacher read the book during the opening and closing activities of learning in class. Media in this case has a dominant role for students and teachers to improve the quality of the learning process, increase active participation and a variety of student (Manjale & Abel, 2017). On other occasions children can read books in the reading corner in each class with friends or individually. Designed drawings and simple and interesting story lines help children to see the concept of disaster management in a concrete (real) way. In this case this picture book is a media as well as an educational game tool that can be used as a tool and material for playing and is able to make early childhood more easily acquire new understanding concepts(Latif, Zukhairina, Zubaidah, & Afandi, 2013), so they can increase children's knowledge about disaster management with a relatively short period of time and a significant percentage increase. In addition to this, the picture book media can also improve literacy skills. Without realizing it with a pleasant impression the child will absorb a variety of vocabulary that is presented so that the vocabulary increases, so that it can affect the development of children's literacy (Pramitasari, Yetti, & Hapidin, 2018).

Parents as the main educators for their children can introduce disaster management through reading story books at home. The explanation given by the parents can provide good support to build information on how to do mitigation, during the disaster and the recovery period. Disaster management studies for children conducted by (Proulx & Aboud, 2019) determined that early childhood has the potential to participate actively in a series of disaster management activities and it is going to reduce the risk of various losses from disaster events. According to this opinion, it is recommended for teachers, headmaster, disaster experts and the government to accommodate the existence of disaster management education at various levels of education. Relating to the disaster management education curriculum, the teacher will be able to develop various learning plans. One part of the planning is learning media that is adjusted to children' characteristics

A study conducted by (Suryaningsih & Fatmawati, 2017)revealed that picture storybooks can improve children's knowledge and understanding of disaster mitigation actions. The reading material helps children recognize some of the actions that children must do before a disaster occurs. It is similar to (Adiyoyoso, 2018) reading material related to disaster management actions can contribute positively to children's readiness in facing disasters. A similar sentiment was also conveyed by (Halim, Abd Rahman, Zamri, & Mohtar, 2018) that picture storybooks support children's understanding of concepts conveyed through images, colors that attract attention and also fewer verbal texts. The research findings of Pyle & Danniels (2016) state that picture storybooks are useful in communication interactions with children when they play with their friends. It is concluded that picture story books are the ways to communicate about various things contained in the book and the children also get more knowledge. For this reason, all levels of education, such as early childhood education, primary and secondary education should have reading material that is suitable for students' characteristics. Because reading material is to cultivate prevention habits, children as agents of change and experiences in childhood will be embedded in the long term.

Research carried out by (Sawyer et al., 2018) states that the important thing of organizing disaster management for young children is to involve children actively, in this case children are known as a potential component in efforts to reduce disaster risk. The same thing was conveyed that the active involvement of children in disaster risk reduction efforts will get positive results (Tatebe & Mutch, 2015). Furthermore, the methods and approaches used should be appropriate

to the way how children learn by playing activities. Every child's effort in the process of introducing disaster management should be appreciated by parents and teachers. A condition that is no less crucial is to provide an appropriate explanation when children ask questions in order to build their knowledge. The concept that was built by children from an early age about disaster management will be the foundation at the next level of education.

Another finding that is no less important in this research development is to introduce disaster management to children, it requires various media that is suitable for children. For the application and use of the media, picture story books are adjusted to the children' characteristics whether the media can be used in groups or individually.

5 CONCLUSION

The conclusion of this study is that children and early childhood education teachers in Pekanbaru are lack of knowledge about disaster management. The picture storybook became the output of this research can be used as a learning media choice for children, teachers and parents in implementing a series of disaster management activities in the territory of Indonesia. This picture storybook is adapted in the form of local and central government policies by disseminating it to various existing early childhood education institutions. Another benefit of this disaster management picture storybook is prepared with the specialties of early childhood in the form plot of the story, pictures, local wisdom and moral messages.

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Inside-Outside Circle Instructional Strategies with Image Media to Enhance Children Language Skills

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ABSTRACT: Language skills are essential for early childhood, being able to speak clearly and process speech sounds, understand others, express ideas, and interact with others are the building blocks for a child's development. Therefore, this study will examine the effect of the Inside Outside Circle (IOC) instructional strategies with media images on children's language skills. This research is a quasi-experimental design with a posttest only and using a control group. The sample in this study were children in two kindergartens in the village of Banjar Tegal. Data analysis in this study was carried out by quantitative descriptive methods using t-test analysis techniques. The results of this study in kindergarten students in Banjar Tegal Village show that there is an influence of the IOC learning model with picture media on children's language skills ($t_{count} = 6.28 > t_{table} = 2.00$). This shows that language skills achieved by groups of children participating in learning with the IOC model with drawing media are better than groups of children who attend learning without the IOC model. The implication is that further research is expected to develop other aspects of child development through the IOC model.

Keywords: *Children Language skills, Image media, Inside-Outside Circle Instructional Strategies*

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1 INTRODUCTION

Research on language skills in children has not been done much. There has not been much discussion and research on language skills in children or interventions have limitations. Studies (Cabell et al., 2011) for example, linear hierarchical models used in interventions do not show a large effect on children's language skills, similar findings indicate the use of special curricula by teachers that have limited effects on children's language skills (Bierman, Nix, Greenberg, Blair, & Domitrovich, 2008). Regardless of the approach, interest in improving the oral language skills of young children stems from an established relationship between children's early language skills and future academic achievement, especially in reading comprehension. If children's language skills can be improved during the pre-K year, it stands to reason that this might have a positive effect on the children's future academic performance as a result (Johanson & Arthur, 2016).

Similarly, research into children's language skills interventions through joint book reading is considered to have a positive impact on children's language development, with joint reading interventions often carried out in an effort to improve children's language skills, also exploring the potential effects of the duration of the intervention, the child's age, the use of dialogical reading techniques, the person giving the intervention and the way the intervention is given. The results show that, while there is an effect of shared reading on the development of language skills, this effect is smaller than reported in the previous meta-analysis. The results also did not show a significant effect of the differences in the outcome variables. On the basis of these results, the researcher makes a number of recommendations for researchers and educators about the design and implementation of joint reading interventions in the future that might be able to more effectively stimulate the development of children's language skills (Noble et al., 2019).

Practitioners are increasingly being asked to pay attention to the basic evidence of intervention programs, evidence from rigorous trials for the effectiveness of interventions that promote oral language skills in the early years is still very rare. Haley, Hulme, Bowyer-Crane, Snowling, & Fricke's (2017) research evaluates the effectiveness of language skills development intervention programs for children who are identified as having poor oral language skills in preschool classes. This study shows that interventions, of medium duration and intensity, for a small group of preschoolers succeed in building vocabulary knowledge, but do not generalize to areas of language that are not taught. These findings give a warning about the application of language interventions of moderate duration in preschool settings. This finding also highlights the importance of including the control group in intervention studies.

Research has shown that poor language skills in early age can have long-term effects on children (Hoff, 2013; Pace, Alper, Burchinal, Golinkoff, & Hirsh-Pasek, 2019). Children who enter school with good language skills have better opportunities at school, better opportunities to enter higher education and better economic success in adulthood (Blanden, 2006). Conversely, children who have poor language skills at the age of five are more than twice as likely to be unemployed at thirty-four than children who develop language skills at the age of five (Law, Rush, Schoon, & Parsons, 2009).

Parent involvement and close teacher-child relationships offer protection mechanisms to improve language skills among bilingual preschoolers from economically disadvantaged areas. Research has shown that language skills are an integral part of endurance for young children. The findings show that children's relationships with parents and teachers contribute significantly to children's language skills. Higher-quality teacher-child relationships are associated with higher levels of language skills above and above the involvement of qualified parents (Oades-Sese & Li, 2011).

In order to improve and develop language skills in children, the quality of the learning process in kindergarten needs to be improved. This has become a problem for kindergarten institutions in the Banjar Tegal village today. Based on observations and interviews

with a number of kindergarten teachers in Banjar Tegal village found it teachers at kindergarten institutions still carry out many monotonous learning processes. As a result, the child feels bored quickly and is not interested in listening to what his teacher says. This causes children's language development in kindergarten is less optimal. To overcome these problems, learning innovation is needed. The word innovation itself is an idea of a new invention or the result of creative development of an existing idea. In the context of learning, learning innovation means the skills of teachers to try to find, explore, and look for various breakthroughs, approaches, methods, models, and strategies in learning that is done.

One of the learning innovations that teachers can do to improve language skills in children is through the Inside Outside Circle (IOC) learning model. The use of IOC to improve children's language skills is based on several studies which show that IOC is able to improve language skills. Some of these studies include Wahyuni, Mukhaiyar, and Kusni (2013) which in his research stated IOC technique can slightly improve ET-5/1 student's speaking skill at LBPP LIA Pekanbaru in cycle 1. This slight improvement can be perceived by the enhanced score got by the students in speaking test in each indicator except for grammar from cycle 1. Other studies from Kamaliah (2018) also stated similar results that Inside-Outside Circle (IOC) can effectively improve students speaking ability. Based on both studies, the IOC can be applied to improve children's language skills.

There are several studies related to the use of image series, namely research conducted by (Asrifan, 2015; Gutiérrez, Puello, & Galvis, 2015; Krčelić & Matijević, 2015). Research findings have revealed in their research the series of images is beneficial for improving students' writing abilities. As we understand the ability to write it is one of language skills. So, in this study trying to use image media to improve language skills especially for early childhood. By applying the IOC model with the combined by image media, the learning activities will become interesting so that the children's language skills will increase.

Based on the explanation above, the researchers are interested in further researching the effect of the Inside Outside Circle (IOC) learning model on children's language skills in kindergarten Banjar Tegal. In this study, the IOC learning model will be combined with the use of image media. Through the application of the IOC model with image media, it is hoped that it can improve children's language abilities in a more optimal direction.

2 THEORITICAL STUDY

Theoretical studies related to this research are learning IOC, media images, and children's language skills. Through defining these theories, this study seeks to check how the IOC learning model as one of the creative learning models applied and combined with image media to enhance children's language skills.

2.1 *Children Language Skills*

The development of language skills in young children, or how children can communicate with others, is a three-step process. First, children must hear these words repeatedly and become accustomed to these special sounds. Second, they must make connections between words that are familiar and what these words represent. Third, once they can recognize the sound and the people or objects that represent the sound, children can begin to experiment by trying to say the same words (Gilles, 2015).

Language skills is the main point of children's ability to access the curriculum and develop reading skills. Children whose spoken language through the disadvantages of learning languages are at risk of literacy and academic failure (August, Diane Shanahan, 2006). Students with poor oral language skills also tend to respond to reading interventions (Al

Otaiba & Fuchs, 2006). The established relationship between spoken language and educational achievement has resulted in both policy changes in the education system and the development of various programs designed to encourage the development of language skills in preschoolers (Justice & Pence, 2004). Dockrell, Stuart, and King's (2010) current research is contributing to the efficacy of preschool oral language skills interventions by implementing theoretically motivated spoken language interventions from unfavorable circumstances. These interventions are compared with local good practices and contrast interventions where children experience regular small group storytelling (NICHD, 2000).

Practice language skills that stand out early in the school year, children can make great progress in their conceptual development, their vocabulary grows quickly. Children use information to make assumptions about semantic boundaries that might characterize concepts that underlie certain word forms (Clark & Lyons, 2011). Children also do not make simple associations between certain sound patterns and meanings. The identification of children's words becomes increasingly automated, because the meaning of morpheme develops as a result of direct recognition of multi-letter units and all words (Verhoeven & Perfetti, 2011).

Language skills include reading, writing, speaking and listening. Automatic word recognition based on identification and naming, allows children to pay attention to meaning rather than form, which maximizes cognitive capacity to understand texts (Segers, Perfetti, & Verhoeven, 2014). Among the three constituents of lexical representation are orthography, phonology, and semantics (Perfetti, Liu, & Tan, 2005). Orthographic constituents (image media) play an important role in reading as an initial step in visual word recognition. Although strong orthographic representations are universally important for reading, the nature of visual perception differs across written languages (Pelli, Burns, Farell, & Moore-Page, 2006).

2.2 *Image Media*

The relationship between visual images and language is key in the acquisition of verbal and writing skills and in the development of higher order thinking in children. Visual images are felt through the sense of sight, which is associated with the largest number of processing areas in the brain that develops earlier, including those that control high-level cognitive skills (Gogtay et al., 2004). Current research shows that integrating visual images in the teaching-learning process has significant potential to improve learning abilities and achievement. Image-based learning can arouse students' interest, curiosity, attention and motivation, improve memory and memory and gain prior knowledge, develop investigative skills, and promote intellectual abilities and achievements (Clark & Lyons, 2011; Zenkov, Ewaida, Bell, & Lynch, 2012).

Walter, Gil-Glazer, and Eilam (2019) examines the use of photo-based models to improve student language and writing skills. The results show that both the second and fifth grade students in the experimental group significantly improved their language and writing skills compared to the control group. Second grade students increased significantly more than fifth grade students. Suggestions from this study also enable the research team to identify deficiencies that require specific modifications in the language curriculum design.

Teaching methods that combine the stimulation of language skills and visual images produce better results than methods based on the separation of the two elements (Jin & Boling, 2010). The practice of visual literacy skills activities can improve language skills, starting with the simplest level of identification and naming, and leads to complex skills such as classification, inquiry, analysis, deduction, and interpretation (Barbot et al., 2013). The potential of visual literacy, as the ability to interpret and obtain meaning from visual images, to promote a variety of learning and thinking skills among students is increasingly recognized, including the five literacy skills besides reading, writing, speaking and listening (Vitulli, Santoli, & Fresne, 2013).

Efforts to realize the activities of developing children's language skills are supported by media related to the material, the strategies used and the characteristics of the child or student. This media can be in the form of visual, audio- and audio-visual media. Visual media can be developed in various forms. Zulminiati and Hartati (2019) develops flash card media (cards that contain images, text, which reminds children of something connected with images). The findings indicate that there is a significant effectiveness of the use of flash cards in the language development of children at Pre-Kindergarten Hikari Kids Club Padang. Flash cards as media are not only tools, but also as a means of channeling messages. This will be more effective than other media, because it is practical and easily captured by children's memory. Furthermore, by using flash card media, the cognitive, social, emotional, language, and physical motor skills of students or children can be well developed (Dunlosky, Rawson, Marsh, Nathan, & Willingham, 2013).

Media exposure for the development of language skills during infants and early childhood is very important. A shift in the fundamental model of anything will make academic study more relevant and timelier for media makers (Kleeman, 2017). A media cannot provide the dialogical involvement that is needed between those who study how children grow and learn with the media. The changing and ongoing revolutionary times in media making only create interdependence between various aspects of media development. Like Afrida and Mahriza (2019) study reveals a causal relationship between media images and the ability to read children with dyslexia, obtaining language and describing their behavior when image media is applied as a medium in learning to read. A single subject is used as a research design here by observing student behavior when trying to get language using negative images and testing it with oral reading tests. The results showed that the ability of dyslexia was significantly affected by the images.

2.3 *Inside-Outside Circle (IOC) Instructional Learning Strategies*

IOC is a learning model that was introduced by Spencer Kagan in 1990 (Kagan, J., Reznick, J. S., & Snidman, 1987), where in this study students share information at the same time with different pairs in a short and orderly manner (Sumantri, 2015, p. 58). This technique places learners facing each other in two concentric circles, one within the other. It will be more effective if it is done with six or more students, half in each circle. This Inside-Outside Circle technique facilitates verbal interaction between learners, which give them opportunity to practice more with their rolling pairs.

Usually, Inside-Outside Circle is used to smooth the process of practicing dialogue between students, which helps community building at the beginning of term. It is an effective technique for introducing movement and variety into a lesson. Kagan defined procedures in Inside-Outside Circle techniques as people in the outside circle exchange ideas with the person facing them in the inside circle. Then, those in the outside circle rotate to face different person in the inside circle.

Kagan, J., Reznick, J. S., and Snidman (1987) defines cooperative learning as "teaching arrangements that refer to small groups, heterogeneous students working together to achieve shared goals, students working together to learn and take responsibility for peer group learning and their own learning". The Kagan cooperative learning model based on the concept and use of "structure" is an innovative approach to classroom instruction. The main goal is communication about important and personal themes; When students are given various opportunities to practice listening and talking with others, they can develop mastery with communication. Listening, speaking, reading and writing are developmental skills that are naturally mastered sequentially. Children understand more of what is said to them than they can say in reply and can read with more understanding than they can write. Because exposure, practice, and feedback provide experiences that enhance language skills, the structural approach to cooperative learning encourages language acquisition. Structure creates additional and optional student involvement for language acquisition (Davoudi & Mahinpo, 2013).

Furthermore, Hadfield and Hadfield (2002) explained how to do Inside-Outside Circle at first meeting activity. The teacher should divide the class into two groups of equal size. Then, the groups are asked to form two circles, one inside the other. The learners should face each other in pairs. Afterward, the pairs are asked to introduce themselves to each other. Everyone in the outer circle is asked to move a step to the right so that they are facing new partner. Then, everyone in the outer circle is ordered to continue moving around until they have gone all the way around and go back where they started.

The IOC model in learning does not only function for vocabulary and the skills to listen to children but also affects the child's skills to realize receptive and expressive language in dialogue that occurs in a situation. In addition, the superiority of the IOC learning model also lies in activities that allow children to share with different partners briefly and regularly. Through the IOC model children have many opportunities to process information and improve communication skills.

The IOC model can be used for all age levels of students. The purpose of learning with the IOC model is to train children to be more careful and stronger in understanding their subject matter. Children are also trained to think fast and memorize quickly while analyzing and interacting socially. The IOC model is also an appropriate model in creating good relationships between teachers and children because this model can make children feel happy in the game.

To support the use of the IOC model in kindergartens especially in improving language skills, this model can be combined with images media. Images media according to Mayer (2009) is any form of static or dynamic graphics including: photos, graphics, floor plans, illustrations (consisting of two or more images), and also animation or cartoons. Singh (2005) said images media is Any device which by sight and sound increase the individual s' practice, outside that attained through read labeled as an audio-visual aid. Visual aids are those instructional devices which are used in the classroom to encourage learning and make it easier and motivating. The material like models, charts, film strip, projectors, radio, television, maps etc. called instructional aids. From these various opinions we can know that Image media is an intermediary or introduction visual based messages that are presented through images, symbols, points and lines, to give an idea concretely and clearly about a material, an idea, an idea or event.

3 METHODS

This research is descriptive quantitative in the form of posttest only with control group design. The population in this study were all kindergarten students in Banjar Tegal Village. In Banjar Tegal Village there are four kindergarten: (1) Eka Dharma, (2) Kartika VII-3 Singaraja, (3) Rare Bali School, dan (4) Mutiara Singaraja. The sampling technique used in this study is the cluster random sampling technique. The cluster random sampling technique was used to determine two kindergartens that would be sampled in the study. The randomized sample in this study is the class in each kindergarten, because it is not possible to change the existing class. After obtaining two classes as samples, then the sample is randomized again to determine the class that acts as the control class and the class that acts as the experimental class. Based on the results of the draw, obtained Kartika VII-3 Singaraja as a control group and Eka Dharma as an experimental group. Data in the study was collected through observation. Data analysis in the study was carried out by descriptive quantitative method using t-test analysis techniques. Before using t-test analysis, the data obtained need to be tested for normality and homogeneity test.

4 RESULT AND DISCUSSION

The results post-test groups of children in Eka Dharma as an experimental group showed that in language skills the highest score obtained was 120 and the lowest score was 43, with mode 102.3, median 98.64 and mean 95.48. Thus, the mode> median> mean (102.3> 98.64> 95.48). If the results are depicted in the polygon curve shows that the data

distribution in the experimental group is a negative squint, which indicates that most scores tend to be high as shown in Figure 1 below.
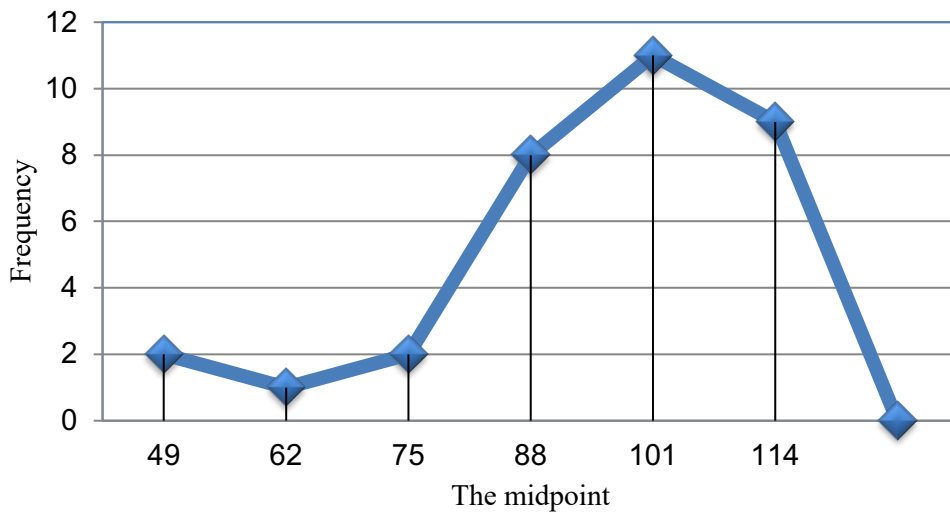

Figure 1 Experiment Group Post-Test Data

While post-test groups of children in Kartika VII-3 Singaraja as a control group showed that in language skills the highest score obtained was 112 and the lowest score was 28, with mode 52.5, median 65.1 and mean 67. Thus, the mode<median<mean. If the results are depicted in the polygon curve shows that the data distribution in the control group is a positive squint, which indicates that most of the scores tend to be low as shown in Figure 2 below.
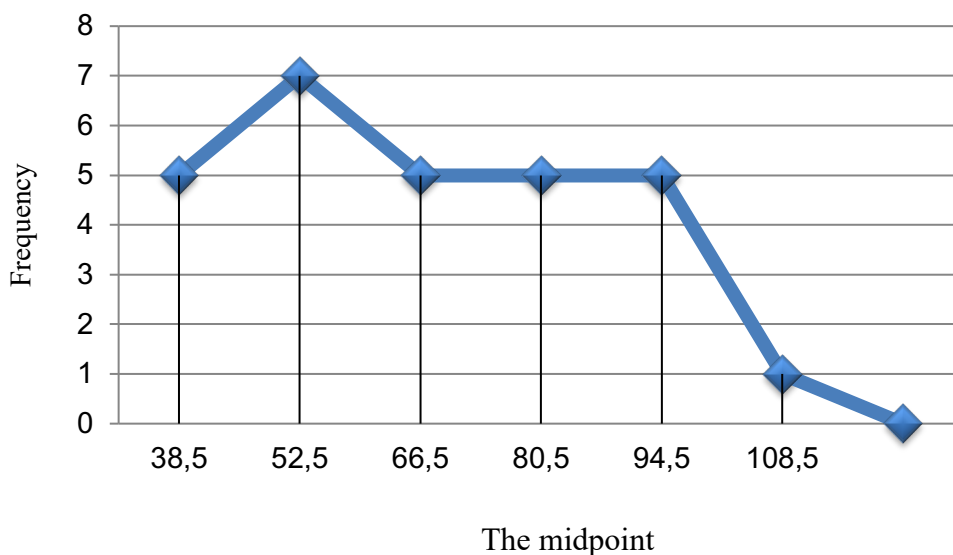

Figure 2 Control Group Post-Test Data

Prerequisite test results, namely normality and homogeneity show that the data are normally distributed and homogeneous. The results of calculations using the Chi-Square formula in the normality test obtained the language skills groups of children who were taught using IOC model assisted with images media normal with $X^2_{count} = 7.46 < \chi^2_{table} = 7.815$

and groups of children who were taught attended learning without the IOC model assisted by images media were also normally distributed with $X^2_{count} = 3.42 < \chi 2_{table} = 7.815$. Likewise with the homogeneity test results using the F test formula, the variance data groups of children who were taught using IOC model assisted with images media with groups of children who were taught without the IOC model assisted by images media were homogeneous, namely $F_{count} = 1.26 < F_{table} = 1$, 87.

Based on the results of data analysis that has been done using the method of observations on two research samples, namely Eka Dharma as an experimental group that is taught with the IOC learning model with image media and Kartika VII-3 Singaraja as a control group that is taught without the IOC model assisted by images media was found that there was a significant difference in language skills between groups of children who took images of media-assisted IOC learning models and groups of children who without taught with images media-assisted IOC models. The results were obtained based on the results of the analysis using the t-test where $t_{count} = 6.28$ was greater than t_{table} with a significance level of 5% = 2.00.

The existence of a significant difference shows that the IOC learning model supported by images media is more powerful than the learning that does not use the image media assisted IOC model on language skills. Therefore, the results of this study indicate that the language skills achieved by groups of children participating in learning with the IOC model assisted by the media images is better than the group of children who did not take learning with the IOC model assisted by the media image. This is because the difference in learning in the IOC learning model is assisted by the image media with those not using the IOC learning model assisted by the image media.

The IOC learning model gives students more opportunities to participate more in learning activities. This model is also designed to help children achieve learning goals that prioritize language activities as the subject of learning. The stages in the process of the IOC model strongly support the child's skills to communicate and develop their language optimally. In the IOC learning model, the learning process is carried out through several learning activities that can improve children's language development in particular in the aspect of receiving language and expressing that language. The IOC learning model provides benefits or advantages for students, including, that is, able to create an atmosphere of active learning and fun, learning material delivered is more attractive to students, the atmosphere of excitement will grow in the learning process, cooperation among fellow students is realized dynamically, the emergence of mutual cooperation dynamics that are evenly distributed across students, students will be easy to get different information and vary at the same time, creating an atmosphere of participants' familiarity students with students.

The application of the IOC learning model in this study was also aided by the use of images media. Learning media are all things that can be used to channel messages from the sender to the recipient so that they can stimulate the thoughts, feelings, concerns, and interests and attention of students in such a way that the learning process occurs (Sadiman, 2002, p. 6). The use of image media will stimulate language development in children in terms of interaction. In general, students state that using images is an advantage for students themselves in improving communicative competence in supporting and conducting two-way interactions between teachers and students (Lavalle & Briesmaster, 2017; C. K. S. Singh et al., 2017). Thus, from what is produced on the picture is more attractive to the eyes of students so that the child's language will develop more optimally.

The opposite condition occurs in the control group that does not use the IOC model assisted with image media. Children's activities in the control class seem very limited and learning is monotonous. The result is children get bored quickly and are not actively involved to interact in learning. This of course can hamper children's language development.

The results obtained in this study are in line with research conducted by Puriniawati, Putra, and Putra (2014) which states that the Inside Outside Circle learning model assisted by images card media is able to improve language development in B2 group children in the second semester at TK Kumara Adi I South Denpasar 2014/2015 academic year. This can be seen from the increase in the average percentage of children's language development in the first cycle of 59.06% with low criteria to 81% with high criteria. A similar study was also conducted by Purnamawanti, Hartati, and Sa'adah (2015) who stated that there was an influence of the type of cooperative learning model inside the outside circle on the skills to communicate with students in the Life Organization material. This is indicated by the value of Z_{count} is 2.28 and the value of Z_{table} is 1.65 which means that the value of Z_{count} is greater than the value of Z_{table}. In addition, in line research conducted by Lavalle and Briesmaster (2017), The findings of the study suggest that the students' communication skills increased as result of integrating picture descriptions in classroom activities, which in turn enhanced the students' overall participation.

5 CONCLUSION

Based on the description above, it can be concluded that there are significant differences in language skills between groups of children who follow the IOC learning model assisted by the media image and groups of children who are not taught with the IOC model assisted by the media image. The results were obtained based on the results of the analysis using the t-test where $t_{count} = 6.28$ was greater than t_{table} with a significance level of 5% = 2.00. The results of the analysis also found that the average score of language skills of children who took the IOC learning model assisted by media images = 20.31 and the average score of the skills of children who did not follow the IOC learning model assisted with media images = 18.92. The existence of a significant difference shows that the language skills achieved by groups of children participating in learning with the IOC model assisted by the media image is better than the group of children who did not follow the learning with the IOC model assisted by the media image.

Suggestions that can be delivered based on research that has been done is that teachers who teach in kindergarten should always be innovative in implementing learning. One form of learning innovation that can be done by teachers in kindergarten to improve language skills in children is through the Inside Outside Circle (IOC) learning model with the help of images media.

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Javanese Traditional Songs for Early Childhood Character Education

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ABSTRACT: Character education in early childhood is not new, and character education is also not just a transfer of knowledge, but something that needs to be built early on through various stimulations. This study aims to develop the character of early childhood through audio-visual media with traditional Javanese songs. Using educational design-based research to develop audio-visual media from traditional songs, this media was tested in the field with an experimental design with a control group. Respondents involved 71 kindergarten students from one experimental class in one control class. The data revealed that character education in children shows the average value of the experimental class is higher than the control group, this means character education in children can be built through traditional songs. Further research can be done to improve the character of early childhood through a variety of media that interests children.

Keywords: *Early Childhood, Character Education, Javanese Traditional Songs Media*

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1 INTRODUCTION

The current phenomenon of cruel acts of violence against children has prompted many people to ask questions about when the character develops. Berkowitz and Bier (2004) states that character is a diverse phenomenon that has its own character component and trajectory of individual development, develops at different rates at each, and has a sequence of development and profile of different character components in different individuals. this causes the component of character tends to develop gradually over a long period of time. Adults must be able to distinguish the characteristics of children, because children develop at different rates. Like when a six-year-old child doesn't show remorse for hurting someone else, or doesn't realize that another person might have a different perspective from him, maybe the child doesn't develop the aspect of character that must be present at that time.

Stimulation through positive values to strengthen the good character that has been formed at this time is often done through habituation instructions (Goodman, 2019). Like, teacher instructions that remind children of responsibility or resilience while at school. But sometimes they miss good opportunities to strengthen the positive attitude of children, such an approach has been recognized as quite useful in character education, but remains criticized for reshaping moral values as a psychological construct that can be measured and instilled without requiring moral involvement (Ecclestone, 2012), through prediction of instilling good character traits in children through modelling adult behavior (Bates, 2016), Carr, (2012) shows the idea of developing the character of children raises a picture of the establishment of schools as a producer or place to foster children's moral development through an environment that has been set. Good character habituation instruction approaches at school encourage children to be selfish and increase positive emotions and are oriented towards moral performance, but ignore more holistic understanding, such as the philosophical of human needs and the moral viewpoints of others (Smeyers, Smith, & Standish, 2010).

Bates (2019) in his research evaluates character education, English language schools, in the teaching of 3 kinds of characters, namely endurance, respect for basic values, and responsibility for personal well-being. However, this approach is considered counterproductive because it relies on teaching about good character traits and ignoring interpersonal relationships in which 'character' develops. The results of the study argue for the fourth alternative of character education, namely empathic relationships with others, recognition precedes awareness. So making character education based on moral actions, such as recognition of others as a prerequisite, and become education that takes into account intersubjective relationships in schools and the broader social context in which characters are formed.

Character education can be done through various approaches. one of them is through music or songs, because musical creativity during childhood is easily exemplified in singing activities. Mang, (2005) discussed the children's performance of the songs they learned and the songs they produced themselves. The results show that by using the songs learned as a reference, a child has a unique sense of ownership that is blessed with rich creative instincts. The early songs that children have, are characterized by character development similar to the type of song being taught.

Traditional songs are able to describe the structure and social values through reference to kinship and family structure, world views, important character values given to marriage and lineage systems, religious systems, and value systems. The song not only provides a pathway to pass down values and social history, but also is a way of knowing and self-reflection and society (Mans, 2002). Hidayati, Handini, and Karnadi (2018) conducts research to see traditional Dendang Saluang songs which are used as a medium for character education for early childhood. The results showed that Dendang Saluang can be used as a medium for character education carried out by parents at home when children are going to sleep and stop crying children. Dendang Saluang traditional song contains moral values that have long lived in society.

Likewise with research conducted by Hariswari and Iswidayanti (2019) that aims to find out the form and value of character education contained in the traditional song Gending Rare from the Bali region. Gending Rare has the potential as a character education medium that can be analyzed in terms of the form and value contained therein. The results of this study found that the

character values contained are religion, honesty, tolerance, discipline, hard work, creative, independent, curiosity, love the motherland, communicative, care about the environment, and responsibility.

Traditional songs are able to develop nationalist characters in early childhood, this is the result of research conducted by Herliyana and Rosmiati (2018) which shows that the strategy in developing nationalist character of young learners using traditional Indonesian songs and dances is done by playing videos on morning oath activities, singing songs and dance national dances in extracurricular activities. The recommendations of this study are so that research on the character development of young students using traditional Indonesian songs and dances done in many ways.

Based on previous research on traditional songs for character development in early childhood, this study ranks as further research to develop traditional songs for early childhood and test their effectiveness in early childhood groups. Development focuses on efforts to develop media in the form of videos of learning traditional songs accompanied by traditional games to facilitate early childhood educators to carry out the process of learning about characters. This research focuses on efforts to develop instructional media in the form of videos that have traditional songs in songs that have learning characters to help early childhood educators carry out the process of learning about these characters.

2 THEORITICAL STUDY

The effectiveness of character education depends on the purpose of character education, namely the development of children's character. The character and its development can be defined in various ways. Atypical actions can be considered as someone's character, or for someone who is said to "have character," it's just that sometimes the character is "good" or "bad." Character is also something that is diverse in the form of a complex set of psychological characteristics that make a person a moral agent. Some psychological aspects of the character that can be identified such as moral actions, moral values, moral personality, moral emotions, moral reasoning, moral identity, and basic characteristics (Berkowitz, 1933).

Characteristic development occurs throughout life, especially in childhood and adolescence (Damon, 1988). The main influence of character building comes from the family (Lickona, Schaps, & Lewis, 2007) but schools can be a place of reinforcement for character development. Therefore it is very important to understand the complex character traits and carry out principles that are effective and have been proven to have a positive impact on moral people development, when families and schools want to influence children's character development optimally.

Sizer and Sizer (1999) emphasize instilling moral problems importance in children. Some literature shows that planned peer moral discourse is an effective way to enhance moral development reasoning capacity. Furthermore Zeidler, Dana L; Keefer (2003) proposed these strategies integration in the field of content, such as to strengthen character education in science academic learning. The research which relies on structured group discussion and mutual respect of moral content issues, shows that the main element in the effective use of moral content in character education is to use the pedagogical process. He also mentioned how teacher character development can create respectful social norms and social skills training becomes an important model for effective experience of moral-peer discourse (Berkowitz & Bier, 2004). Likewise, character development through character education that has been well designed through the media, helps teachers to carry out character education in early childhood in a way that is fun for children.

2.1 *Character Education for Early Childhood*

Character education programs such as the Child Development Project provide significant program results in reducing violence and drug use in children (Battistich, Schaps, Watson, Solomon, & Lewis, 2000). Effective prevention programs such as Life Skills Training (Botvin, Epstein,

Baker, Diaz, & Ifill-Williams, 2013). Other intervention programs show ways to prevent and reduce risk behaviors and enhance the development of positive characters (Greenberg, Kusche, Cook, & Quamma, 1995). These studies provide a clear distinction between prevention of bad behavior and character education, proving that character education is an effective form of primary prevention.

Many characters develop during childhood such as self-control, guilt, and perspective taking. Self-control in a child that begins with adherence, has full capacity to regulate its own impulses internally has affected the child's success in the preschool years, especially between the ages of five and seven. Children are better able to delay gratification, control impulses and aggressive urges, and direct their behavior. The main virtue on which to base other virtues is character in the form of self-control. This makes feelings development of guilt important in understanding character development. Self-critical emotional responses describe the guilt that is in the child (Berkowitz, 1933).

Lickona et al., (2007) distinguishes between constructive guilt (self-criticism that leads to encouragement for improvement) and destructive guilt (decreases self-esteem and self-humiliation). Some evidence that shows children aged two to three years can make some imperfect perspective taking, then develop to understand the perspective of others occurs between four years to twelve years. The moral function depends on being able to balance the interests of different people, so perspective development taking is a fundamental part of critical character. The main components development of character becomes an important target during childhood, because this makes childhood an important point to become a mature social and moral agent.

Berkowitz (1933) summed up some rules of thumb for effective character education based on the research literature to date. First, how to treat children is a major influence on the child's character development. Relationships with adults are important for children's character development, so character education must focus on relationships quality at school. Like, good relationships (nurturing, supportive), authentic (honest, open), attentive (inclusive, assessing student voice), and consistent (predictable, stable). So that quality character education can improve the prosocial relationships and environment of the school community and positive classroom climate. Second, children learn, and are influenced by their observations, so that quality character education is effective through modeling adults treating others in front of children, because children see and imitate. For character education effectively, the adults around children need to take care of actions and apply words in action. Third, character education needs a clear priority and hope, schools become to shape and demand good character. Structures to support children and to meet the expectations of achieving good character. Schools play a role in strengthening what children learn and develop from watching and being treated positively by others. Schools give children the opportunity to practice good character such as, building the perspective-taking, critical thinking, and conflict resolution skills needed to become people of character. The school environment can foster moral thinking development capacity, children get the opportunity to think, debate, and show on moral issues. Creative teachers carry out character education in the curriculum, through proper strategies, methods and learning media that are able to increase children's understanding of moral issues that are embedded in various aspects of learning (Berkowitz & Bier, 2004).

Character education efforts are influenced by the culture in which they are carried out. Lee (2013) explored how Korea's early childhood education system strives to ensure the development of positive characters among children. The focus on character education is set as a counterweight to the materialistic and selfish tendencies that largely determine "academic success" in the world today. Promoting caring, pride in one's cultural heritage, and respecting cultural differences, and fostering cooperation are the goals of today's character education. Kotsonis (2020) traces the educational steps of the Philosopher in Plato's ideal country, to ensure that the decades-old educational regime aims to train them in three types of virtues: (a) Moral Virtues; (b) Nature of Cognitive Abstraction; (c) Cognitive Virtue of Debate. Through the Socratic Method, Plato's educational program does not feed knowledge to students but rather encourages the growth of intellectual virtue through problem solving. The Plato education program is beneficial for contemporary modern character education.

Next in a meta-analysis study conducted by Jeynes (2019) investigating the relationship between character education and student achievement and behavioral outcomes. Additional analysis is carried out to decide whether the effects of character education differ based on the grade level of students, local, race, and so on. A high level of education is related to character education, character education is also associated with a higher level of expression of love, integrity, affection, and self-discipline.

2.2 *Song and Music for Early Childhood Character Education*

Given the right media as a tool for character development for children, Lee (2016) has explored the efficacy of using music activities to improve aspects of the character education of preschoolers in Taiwan's school environment. Educational programs utilize music activities to instill this understanding in children. The results revealed six important themes regarding the benefits of integrating music activities into the curriculum to increase children's interest in character development. Values developed through music activities include, "Caring for Others"; "Assessing Courage"; "Cooperation"; "Respect"; "Responsible"; and "Honesty." Positive changes in social interaction and student behavior are fostered when six core personal character values are incorporated into classroom teaching. Character development through music activities makes children more prepared to proactively address problems in their daily lives.

Then other research discusses daily music practices and their relationship to children's learning and development, on and through music. Research starts from learning music in early childhood as a form of participation and level of intention in learning. The next stage, shows the conception of children who have dominated the discourse of early childhood music education, along with other factors that are known to influence children's musical life, such as spatial, repertoire, and political participation (Ilari, 2018).

Music is present in intensive attendance at an early age. Children are involved and share music with various friends as they go about their daily lives. Children instinctively join friends or are only interested in music, motivated by charming melodies, rhythms and words, or based on motor, social and / or emotional transmission (Marshall, Bouquet, Thomas, & Shipley, 2010). Now that it has been claimed that children's musical experience is based on many of cultural influence, social and personal factors, there is a recognition that early childhood development, in and through music, is not unidirectional or "naturally developing processes" (Fleer & Hedegaard, 2010). By paying attention to the many factors that affect children's daily music life, early childhood educators can develop more holistic and correct media from every student child, because they take part in music with young children.

Music can be described as enough space with the material chosen and carefully positioned, to trigger the act of musical discovery in children (Hanna, 2014). Music repertoire of practices and real songs and music that make up the fabric of children's daily lives may be very different following different educational philosophies. So that children can learn traditions such as attentive community participation (Rogoff et al., 2007) will look very different in preschools oriented by this approach.

A study exploring the ethno-pedagogical values of the Osing tribe revealed the values of biological characters because the Osing 3 tribe was closely related to biological science application, such as, in utilizing plants for traditional ceremonial activities or as medicinal plants. The results of the study mentioned that ethno-pedagogical values were found in the folk songs "Slap" and "Nggolek Ilmu" from Fatrah-Abal. These two songs express the explicit and implicit values of biological characters. This traditional song becomes a community media in instilling the attitudes or values of the characters needed in studying biology at pre-school age. These values will be further developed in learning biology in schools, which are carried out in an integrated way in the affective aspects (Hariyadi, Tamalene, & Hariyono, 2019).

Harahap, Kahar, and Nasution's (2018) research on lullabies which became the oral tradition of parents in ancient times in Indonesia. Include local wisdom in the lyrics of the song, and the negative value of globalization has an impact on local cultural values erosion. The study was

conducted to analyse and find the values of local wisdom contained in lullabies that used in character formation. The findings show that lullabies with North Sumatra ethnic culture are performed to keep local culture. The research developed the packaging of digital lullaby songs disseminated through social media / websites to revive children's tradition songs . Research also identifies the types of local cultural values that used in the current generation of children.

2.3 *Javanese Traditional Songs Media*

Cultural environments shape moral values and provide experiences for children, because cultural traditions contain local wisdom with superior eternal value, which plays a role in developing children's character (Yang et al., 2007). As according to Selasih and Sudarsana,(2018) that education based on local wisdom can be a source of innovation in cognitive, affective, and conative development. Schools with curriculum must be able to facilitate this development. Schools as houses for the formation of national character can preserve cultural values (Derlicki, 2005), one of which is through preservation of traditional nuances that have been modified or developed so that they are suitable with the character of early childhood.

Traditional English parenting poems and songs, also known as the poem Mother Goose, has long played a role in early childhood character education. From the medieval "Baa Black Sheep" to "The Wheels on the Bus" today, the lives of young people have been enriched with many poems and songs handed down from generation to generation. The experience of sharing rhymes and singing helps prepare children to play cooperatively with others, and some material also creatively gives them rules to follow. Language games also contribute to children's emotional development (Mullen, 2017).

Indigenous knowledge systems are culturally specific; they form the basis for people's livelihood. one aspect of indigenous knowledge systems is traditional children's songs and games. Through songs and games children get to know their environment, acquire life skills among others, and build character. Mutema (2008) research investigates the existence and performance of traditional children's songs and games among children. The data states that traditional children's songs and games are no longer as popular as they once were, must be extinct. Educators and other key players are asked to consider creating methods that help advance the knowledge of indigenous peoples.

Games and children's songs in learning provide the main socialization. It is this socialization that allows children to adapt to their natural and social events. Children's games are more than just games. Then it is supported by the statement of Nyota and Mapara (2008) that traditional Shona children's games and playing songs provide an opportunity where children learn by participating in social experiences and exploring their world. Through games and songs, they learn a lot about the role of adults, socially and economically, social skills such as sharing, resolving conflicts, practical skills such as building houses, preparing and maintaining food. But it is unfortunate the arrival of Western knowledge systems, information communication technology and globalization of children no longer have time for traditional games and songs. Formal education has disturbed aspects of practical everyday life from indigenous knowledge and ways of learning. They went on to say that much Indigenous knowledge was lost when people adopted the Western knowledge system as a way to know and learn (Nakashima, Prott, & Bridgewater, 2000).

Sukoyo (2016) has developed Javanese songs with character values as a medium for early childhood learning. The six songs are titled "Elinga", "Pasinaon", Kuwajibanku, Temen, Bumi Asri, and Nuswantara. The Elinga song contains religious characters, the song "Nuswantara" contains the character of the motherland love, the song "Pasinaon" contains the disciplinary character, the song "Bumi Asri" contains environmental care characters, the song "Temen" contains the character of hard work, and the song "Kuwajibanku" contains the character independent. Based on the acceptance test, Javanese language songs with character values as a medium for early childhood learning were declared worth testing in the field.

Therefore, Sukoyo's (2016) research is a reference for this research as a further research to develop traditional children's song media as a tool to help character education. The media designed in this study is audio-visual media, in the form of instructional videos to assist teachers in implementing early childhood character education, with the contents of traditional songs that are full of cultural values contained in them, so that the target indicators for character development are achieved.

3 METHODS

The development of this media product uses research based on educational design (DBR) (Anderson & Shattuck, 2012). Design-based research develops theories about basic learning and tools designed to support product development for learning. Although still relatively new, the DBR method is recognized as producing useful products suitable for addressing complex educational problems that must be addressed holistically. The steps in developing the model adopt the Dick and Carey (2009) model in developing learning products. Field product tests were carried out using an experimental design with a control group of 71 respondents (early childhood). Instrument collection of data on the development of this instructional video consisting of interview and questionnaire.

3.1 Product Development Design Stages

The instructional design of the system according to this approach has several components that will be passed on in the development process and the planning (Dick & Carey, 2009).
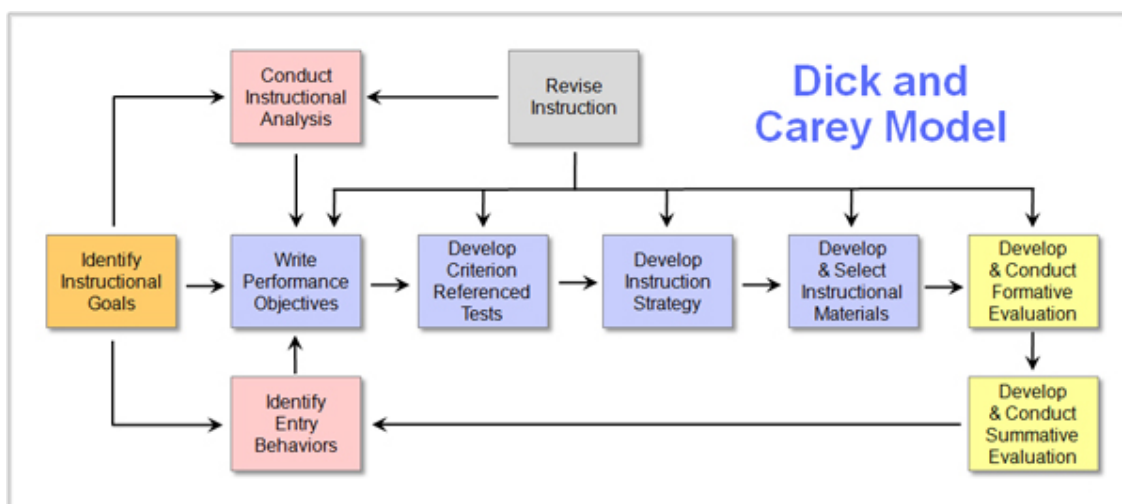

Figure 1. Development Design Stages-Dick And Carey Models

Developing refers to the research and development of design Dick and Carrey says in the book "Educational Research" As described in previous chapters of this development procedure includes steps:

3.1.1 Identity Instructional Goal

The initial phase of this study begins by analyzing the needs of the education community character. Researchers identify the problem and the reasons that the development of audio-visual media in teaching character. The results of the questionnaire that has been distributed to 10 teachers and 10 parents of early childhood mention that that the majority of states that there has been deterioration in character education at this time due to the lack of cultivation of character. A total of 16 respondents mentioning the reasons for the lack of character because there are obstacles in the implementation of learning for early childhood character.

A total of 11 respondents said that the current school still uses a question and answer media in conveying the character of learning. And 18 respondents said that they agreed that if there is a medium to build character in accordance with the current curriculum. To the authors need to develop instructional media such as video traditional songs accompanied by traditional games as a medium of learning the character values in early childhood. 2 remaining respondents agree with a note that learning the characters are not only taught but must be exemplified.

3.1.2 *Conduct Instructional Analysis*

Parenting skills are required for this research tailored to the character values contained in the National Education Minister Regulation number 58 of 2009 within the scope of the development of morality and religion, among others: (1) recognize religious beliefs, (2) getting used to worship, (3) understand the noble behavior (honest, helper, polite, respectful, etc.), and (4) distinguish between good and bad behavior, (5) identifying the rituals and religious holidays, (6) respect the religion of others (Menteri Pendidikan Nasional, 2009).

3.1.3 *Analyze Learners and Contexts*

The analysis is done by identifying the behavior and characteristics of the child by means of observation and interviews. Children's early childhood was taken from the nursery class B. After viewing carefully and heard what info is seen from educators, some characteristic, among others; The early childhood special needs or not, eating and drinking alone, go defecate alone or accompanied by a teacher, the social status of the family, was also asked whether it see video media to teach character or traditional songs or not. All the characteristics above have been fulfilled and the random sample between the control class and experimental class declared balanced. Then they are declared ready to be put to the test individual or small group trial or test large group and field trials.

3.1.4 *Write Performance Objectives*

The purpose of this research in general is to develop a medium to improve or develop a child's character. Specifically, the purpose of this study was to apply a wide range of good character to children, especially as the National Education Minister Regulation number 58 of 2009 on early childhood education standards in the sphere of moral and religious development.

3.1.5 *Develop Assessment Instruments*

Basic of objectives that have been written above, the next step is to develop a grain assessment parallel (criterion reference test) to measure the ability of early childhood as estimated from the goal. The main emphasis is laid on character values correspond Education Minister Regulation number 58 of 2009 (Menteri Pendidikan Nasional, 2009), see on the table, on the scope of morals and religion. Experiments conducted in accordance RKH attached in an annex.

Table 1. Instrument for Early Childhood Character Experiment Through Traditional Song Media

No	Early Childhood Character
1	Recognizing God's creation
2	Speaking and acting honestly
3	Helping friends who are struggling (caring)
4	Speaking politely
5	Behaving politely
6	Say good to friends' good deeds
7	Remind friends not to behave badly
8	Respect friends who are worshiping
9	Cooperative
10	Responsibility
11	Courage

3.1.6 *Develop Instructional Strategy*

No part of this instructional strategy for helping researchers develop strategies for early childhood to achieve each objective is commonly called the learning plan. Learning design used in the development of instructional media is formed in a Daily Activity Plan made as many as four meetings. RKH attached as an annex

3.1.7 *Develop and Select Instructional Materials*

Definition of product development instructional video was made after collecting the results of a questionnaire of educators, early childhood and parents about their needs in teaching character and also the advice of the experts, the author will start making instructional video material. Drafting through several stages of learning multimedia production, including the determination of ideas (general purpose learning), determination of the specific goals of learning, early childhood characteristics analysis, make matter content (content outline), written treatment (synopsis description of the material). In this section required the help of the expert test and test materials to produce the concept, material, descriptions and storyboard is good and right. After the bill is approved by expert testing and material testing, the author enters the product development stage. After the writers get feedback from various parties, then made a storyboard or storyline of the video characters to be created. Storyboard contains the synopsis and screenplay (conversation) of the video to be created.

3.1.8 *Design and Conduct Formative Evaluation of Instruction*

This research tests an audio-visual media in the form of instructional videos to implementation as a medium of learning value in early childhood characters that contains videos of the characters with traditional songs. In the test the feasibility of this video, the five stages of expert validation (media specialists and subject matter experts), individual testing, piloting a small group, large group trials and field trials. Here are the test results of these products:

3.1.8.1 Validation Expert Media

Validation of experts carried out to test the feasibility of the media before the media was used to test group individuals, small groups and large groups. Data obtained from the results of expert validation form of qualitative data in the form Comments and suggestions where the data is in the form of a questionnaire with "appropriate" and not "appropriate". Questionnaire Results of Bachtiar S. Bahri as validator media experts shows that the media early childhood learning for the whole variable no revision so that it can be feasible use of the appeal / the attractiveness, the narrator, motivation, relevance, accuracy and technical quality. Validator shows that video learning these characters can be used directly in the learning character. Before got approval to use the media, the writer must revise product 2 times because there are some things that have not been appropriate, especially in terms of clarity of the purpose of learning the characters on the video media, clarity delivery of content of character, conformity with the development of indicators, the suitability of learning materials with learning needs, compatibility between video with instructional materials. After the author to revise the product then the products approved in large groups.

3.1.8.2 Validation Expert Content

Next is the validation conducted by L. Hendro Wibowo as content expert learning materials AUD. The tests showed that the content of the learning material validator AU have agreed that most of the variables and indicators have met so that it can be said of the media fit for use of the content of the material. Before got approval to use this media writer must revise product 1 times because there are some things that have not been appropriate, especially in terms of clarity about the character aired video. After revising the advice validator then the product is ready to use for testing.

3.2 *Data Analysis*

The data obtained from expert validation of content and material in the form of data quantitative and qualitative data. Quantitative data obtained from the instruments given to the test subjects (media specialists and subject matter experts / contents), while the data of citizens and governments in the form of suggestions for improvement. This type of data obtained from a group of individuals, small groups and large groups are quantitative data which will be calculated using a percentage formula. Analysis of experimental data using the SPSS program.

4 RESULT AND DISCUSSION

The results of this study present the field test data for digital songs research and development on children's traditional media that are predicting to improve good character in children. Previously, expert tests have been conducted on the media, then test the instrument validity used to see the child's character development after experiencing treatment, as well as normality tests on the experimental and control groups. The results seen in the discussion are the results and discussion of the experimental class to see the effect of traditional songs on the child's character development. This study seeks to test the effectiveness of traditional songs on the character of a group of early childhood. The time span of research to look at character development in early childhood takes a long time, therefore, research is conducted to see changes in children's behavior that measured and categorized as good character traits in children.

4.1 *Result*

The calculated data in table 2, shows a better average value in the experimental class. Therefore, to answer the hypothetical question is that the influence of traditional song media on children's learning success in the field of characters is as follows: H0: there is no effect of traditional song media on children's learning success in characters, and H1: there is an influence on traditional song media on children's learning success in character. It is seen that there are significant differences between the Control Class and the Experiment Class. It seems that the results of the experimental class scores were higher, so the conclusions of H1 were accepted and H0 was rejected.

Table 2. Descriptive Statistic

			Statistic	Std. Error
Experiment	Mean		68.5493	1.34939
	95% Confidence Interval for	Lower Bound	65.8580	
	Mean	Upper Bound	71.2406	
	5% Trimmed Mean		68.4664	
	Median		70.0000	
	Variance		129.280	
	Std. Deviation		11.37012	
	Minimum		45.00	
	Maximum		90.00	
	Range		45.00	
	Interquartile Range		15.00	
	Skewness		-.288	.285
	Kurtosis		-.540	.563
Control	Mean		53.3803	1.33734
	95% Confidence Interval for	Lower Bound	50.7130	
	Mean	Upper Bound	56.0475	

5% Trimmed Mean	53.5211	
Median	55.0000	
Variance	126.982	
Std. Deviation	11.26862	
Minimum	30.00	
Maximum	85.00	
Range	55.00	
Interquartile Range	15.00	
Skewness	-.253	.285
Kurtosis	.279	.563

Data in the two histograms show different results from the two classes, the experimental class shows the bar is at number 80 while the control class, which does not get traditional song treatment looks at number 60, this shows the experimental group's test results to build children's character better. Also seen in the mean difference in the experimental and control groups the results are 15,17 points greater than the experimental group than the control group.
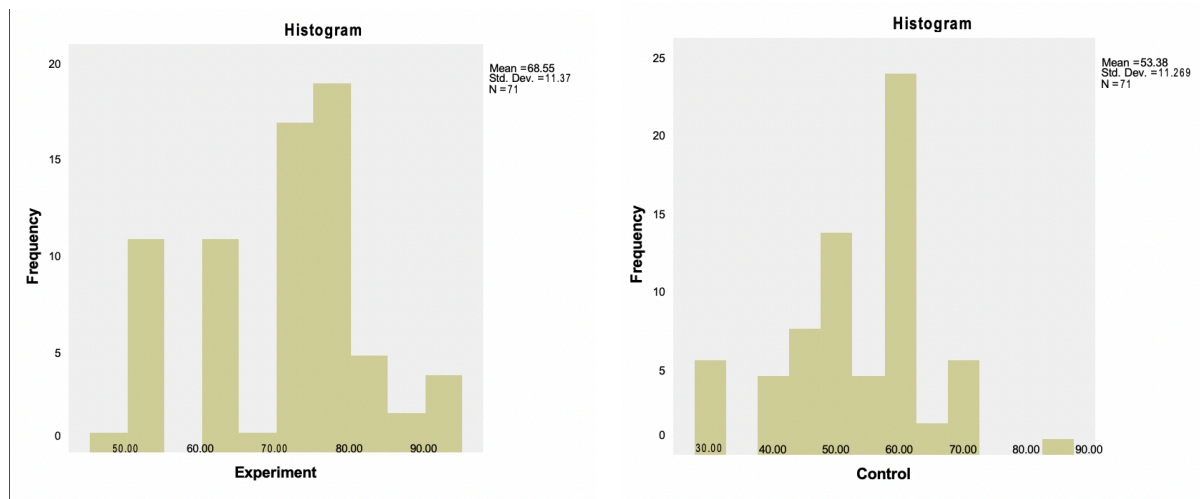

Figure 1. Histogram of Experiment Class and Control Class

4.2 *Discussion*

Teaching children in the arena of moral values and character is one of the oldest educational goals in Indonesian society. Current research has proven that culture is one of the tools to develop the character of a nation. Javanese traditional songs are songs with local wisdom content that can arouse the soul of the listener to follow the teachings. The results of this study have shown that children can understand the meaning of the characters contained in the song that requires them to behave the same as the characters in the song.

At various times throughout the nation's history, schools are seen as institutions of change, and teachers are responsible for the intellectual and moral development of children. The results of field observations show the role of the teacher is not limited to teaching the lyrics of traditional songs, but also to live and apply first in their daily lives, so that children can see the harmony between the teaching of characters given through songs, as well as the teaching of characters from the teacher as a model.

4.2.1 *Instilling Culture of Good Characters through Traditional Songs*

Based on the analysis, character values begin to appear in most children in the experimental class after the teacher gives stimulation of character development through traditional songs and games with visual media. Provide consistent stimulation continuously with the hope of building children's character more quickly, because basically children like attractive visual media. This was also conveyed in Kurniawati, Pranoto, and Hong's (2014) research that Javanese traditional games integrated through learning would be an alternative learning method of learning to develop "good character" in early childhood students. Suggestions in their research on the role of parents and the community are expected involved in socializing character building programs through traditional games. The next hope is to improve learning quality by utilizing environmental resources both material and non-material, in this situation local culture is manifested in traditional Javanese games. Children basically love music and singing activities, this is an indisputable fact. Children learn through fun and interesting things, involve children in the activities of singing traditional songs with good character content to make students know the cultural values and social norms that are needed as guidelines in social life and play a role agree their social level to be, they face later.

This experiment is integrated into the learning process of children. The research indicators are based on assessing "good character" development which refers to national education standards. Observations see through play integrated into observations of learning stimulation, observations of teachers and students in separate places and times, and special notes of everything that happens during the learning process, both inside and outside the classroom. Field analysis in this study shows that if planting characters in children is not easy, this requires the efforts of the teacher able to convey the meaning of the songs that have been designed and displayed through visual media equipment. Teachers also need special time to prepare these activities so that character education can make learning goals in an atmosphere that still attracts early childhood interests.

Early childhood educators and practitioners are in a position to promote, encourage and be an example of playing language with families and children. Centuries of children's songs have been proven to support the overall development of children in meaningful and interesting ways. Forms of language play exist in all cultures, plus they are disseminated orally, making them accessible to all families, regardless of their socioeconomic status or educational level. This will be very useful to help parents and caregivers understand how language play can further strengthen emotional bonds, because it is only on a strong basis of attachment that all children's relationships and learning development are built (Cobb, 2007). Therefore, the traditional Javanese song can be embedded in the hearts of children because it is their native language for children born and living in the area of Javanese.

In Taiwan's educational institutions, character education programs with integrated music activities can be implemented effectively in preschools, especially when using a system of core character values. According to Lee (2016) the comprehensive approach can be applied throughout the school system, including in playgrounds, at recreation centers, and during all extracurricular activities. A complete interdisciplinary approach to character education makes it easy to instill character in children. This research also seeks to teach and impress character values to be awakened in children through frequent repetition.

4.2.2 *Effects of Traditional Songs on Childhood Character Education*

The research findings show the good effects of traditional songs on children's character development which includes, the character recognizes religious beliefs (recognizing God's creation), accustom themselves to worship, understands noble behavior (honest and honest acts, helps difficult friends, speaks politely, behaves polite), distinguish between good and bad behavior (Saying good to the good deeds of friends, reminding friends not to behave badly) identifying rituals and religious holidays (recognizing religious holidays), about other people's religion (respecting friends who are worshiping).

Traditional songs with a different rhythm from the music of millennial children who are digital natives, and mostly with parents who have become digital immigrant residents, have slowly abandoned many traditional customs, such as songs and traditional games. This happens because of changing times, technological advancements that bring foreign cultures into and are familiar in the lives of children of gadget users. At the beginning of music introduction may feel strange to the ears of children, but basically, children like various types of sounds that lead to the joy of playing. Songs whose lyrics use their native language, they can quickly grasp the meaning and enjoy the lyrics even though the lyrics voice requests for good deeds, such as being honest, loving and helping friends, or saying good words and forgiving friends.

The effects of music and songs alone are enough to leave marks on the minds and hearts of children, especially if the music setting, with good visualization, and involving children to sing and move freely, of course, makes children excited to follow the teacher direction. Traditional rhythms are not uncommon for digital native children, making them interesting things that they look forward to at every opportunity (Mullen, 2017). Another interesting finding, the effect of traditional songs that influence a child's character development, doubles its influence, when children get other effects from the results of changes in behavior when he loves friends, helping friends in trouble, children realize good things like that prevents him from the difficulties of friends.

Children's experiences in the social world show how they interact with others outside the home. Traditional songs have a mother tongue that makes it easy for children to do more social interaction. When a baby's brain is formed to imitate behavior (Hendrix, Palmer, Tashis, & Winner, 2013), they quickly learn conventions. Besides mutual attention, it is important for children to follow the rules, due to social and safety reasons. Preschoolers can follow two to three steps direction; the activity also allows children to take an active role in games that also need children to follow the rules.

5 CONCLUSION

Based on the purpose and research findings, it concluded that Javanese traditional songs integrated through learning will be an alternative learning media for developing "good character" in early childhood students. The role of teachers and parents in socializing character education programs through traditional songs makes the effectiveness of traditional song media have a profound effect on early childhood. In addition to achieving the goals of character development contained in the National Education standard, researcher hope that traditional song media development in further research can build the nation's noble national cultural culture.

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Movie Media with Islamic Character Values to shaping "Ahlaqul Karimah" in Early Childhood

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ABSTRACT: Character education in Islam has its own style, as well as the character values contained in various learning media for early childhood. This study is a follow-up study to find the effect of Movie Media with Islamic Character Values (M-ICV) in shaping "Ahlaqul Karimah" in early childhood. Using an experimental method with a control class, which involved 19 respondents of early childhood. Data shows that the $t_{test} < t_{table}$ (0.75 < 2.110), meaning that there is a significant difference in effect between the experimental class and the control class. The results conclude that M-ICV is able to form a child's "Ahlakul Karimah" slowly, because the child likes various movies with content interesting and easy to imitate. The implications of further research on movie content development for children are able to develop other aspects of children's development.

Keywords: Early Childhood, Ahlakul karimah, Islamic Character Values Movie Media

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1 INTRODUCTION

Children must choose the behavior and characteristics of people who are complicated when they enter the social world. Children can rely on intuitive theories of psychology and sociology (Rhodes, 2012) to understand the thoughts and actions of others (Gopnik & Wellman, 2012). To identify causal mechanisms that produce people's behavior and morals, children can use theories that allow them to judge and predict other people's behavior including how others will react and act in response to something. It was mentioned in Chalik and Dunham (2020) research that early childhood views social behavior as a moral obligation towards each other and expects this obligation to shape people's social behavior. Thus, morality notions are embedded in children's social behavior implementation, so that when learning about new moral norms, children immediately expect those obligations uniquely held in social groups.

Moral values development in Islam has its own name, namely the teaching of Ahlaqul Karimah (AK). AK in Islamic Education is the life goal of the followers of Islam, namely these values improvement through planting, modeling and application in social life that instilled since humans are in the womb. Tamuri's (2007) research aims to develop individual potential in a holistic, balanced and integrated way, covering intellectual, spiritual, emotional and physical aspects to create a balanced and harmonious human being with high moral standards. The findings believe that school activities, religious activities, and school regulations in schools make a positive and significant contribution to a child's AK development. It was also found that peers, negative attitudes among some teachers, parents and the local community, media, entertainment centers and job demand had a negative influence on AK students.

Embong, Bioumy, Abdullah, and Nawi's (2017) research discusses values and ethics in Islam about their forms and sources. The research highlights Islamic values and ethics integration in the school curriculum, the role of the teacher, the challenges faced in instilling Islamic values in the school curriculum. His findings recommend that the school system interested in developing ethical and moral skills. Consideration must give to the delivery of a fundamental understanding of ethics and moral values that enables teachers to prove their own behavior rationally in the context of the school and critically look at it.

Islamic education is very important for Muslim children even though it is treated only as one of many subjects in the Integrated Curriculum. The main goal for the subject of moral values development, teachers at school or parents at home must give at least basic knowledge or basic teachings of Islam (fard al-'ain), such as 'worship (worship),' aqidah (belief) and morality q̄ (ethics), as well as the ability to read the Qur'an to students. There are many ways the results of research to educate children's morals, adults can model various virtues and encourage children to imitate their behavior. teachers and parents must issue a series of imperatives and offer consequences for failure to comply. By telling children's stories to grow good behavior and prevent bad behavior. Stories like that often hold to the ideals that children are white papers where the environment implements certain moral values. They are intended to 'outperform the reader, cleanse him of original sin and foster passive obedience' (McGavock, 2007). In Islamic religion, character education has the essence and meaning of the same moral education and "Ahlakul Karimah or ethical Islamic education" (Ramli, 2003). The aim is to shape the personality of children, to be good human beings and good citizens.

In today's fast-paced technology, movies have many roles in learning. Educators can take advantage of the various advantages of film to help children understand moral themes. Another advantage of film media is that it incorporates technical effects, photography, graphic animation, and music into its narrative presentation. Wonderly (2009) explores children's moral abilities and pedagogical excellence in film. The findings show, children are able to think critically about ethical issues, when stimulation is done appropriately; The goals of moral cultivation include developing their capacity

and educating emotions; and with this aim, the genre of children's film is to be an appropriate and effective tool to help children's moral teaching.

Rossiter (1996) examines the effect of science, film and television on the morale and spirituality of children and adolescents who emerge by looking at problems through the lens of 'stories'. Research suggests an approach for students to influence the story in a film on moral and spiritual. The proposed approach concentrates on studying the form and function of movie media, which can tell moral messages based on theories that have a potential personal effect on the audience. This theory itself is a strong part of the educational process because it is proven to encourage students to think critically about the formation cultural elements influence film on attitudes, moral values, and behavior.

Based on several studies on the moral and effectiveness of movies to stimulate moral values, this study aims to test movie products development that contain moral values through experiments in early childhood classes, to see how much influence the effectiveness of movie media in enhancing the understanding and practice of ahlakul karimah of young children early.

2 THEORITICAL STUDY

2.1 *Early Childhood Moral and Character Education*

Lovat's (2016) research proposes that teaching Islamic morality exists as an urgent matter for moral education. This article seeks to find a meaningful role for moral education in dealing with various issues about Islamic morality. The teaching of Islamic morality to restoring tradition, which has proven to be can be done, is as important as the problem of moral education. Ebrahimi and Yusoff's (2017) article suggests that Islamic ethics has been studied as a matter of concern since the Prophet Adam received respect from angels in the form of their prostrations and then descended from al-Jannah (heaven) to earth. Islamic ethics discusses how humanity accommodates divine guidance as good human behavior and personal morality. This comprehensive study uses a qualitative approach and cites various verses of the Koran and parts of the Sunnah of the Prophet to support an analysis that emphasizes ethical principles and values of Islamic humanity. The findings highlight Islamic ethics and principles of life which have a significant effect on civilization as valuable teachings for all aspects of daily life.

Moral education in Malaysia 2013-2025 (Pre-school to Secondary Education) launches Islamic education for Muslim students and Moral Education (ME) for non-Muslims, strengthening students in understanding the values that encourage unity and fostering good relations among students. Both subjects, to help the progress of the nation, complete the school curriculum aimed at making students holistic individuals. Through an analysis of the historical and political dynamics of education, it was revealed that ME in Malaysia had been formed in an Islamic environment and permeated by fundamental Islamic values. ME in multicultural societies must go beyond indoctrination of prescribed values. Several alternative strategies are offered to bridge the ME and Islamic Education in the challenging situation of an Islamic country with a multicultural population (Balakrishnan, 2017).

Moral values in Islam aim to find the activities of human behavior in social life, control their behavior for the benefit of the society and people, bring a good end as a provision in other lives, integrate human traits, behavior, activities for prepare true followers of God, and explain the path of goodness to them. Moral values in Islam appear on, sincerity, patience, charity love, fighting the soul, or the public such as one's own feelings, obligations, and calls for Islam, intended to bring benefits to people and society and protect human benefits (Halstead, 2007). According to Halstead (2007), there is no separate ethical discipline in Islam for most Muslims, what is considered halal (permitted) and harām (forbidden) in Islam are understood in the sense of what Allah determines as true and

good. Moral learning in Islam refers to three main values: Ahlaq, which refers to the duties and responsibilities stipulated in sharia and in Islamic teachings in general; adab, which refers to behavior related to good breeding; and character quality possessed by a good Muslim, after the example of the Prophet Muhammad. Then the study findings mention two main aspects of moral education in Islam: spreading knowledge about what people should and shouldn't do and motivating them to act in accordance with that knowledge. In the end, moral education is about inner change, which is a spiritual problem and occurs through the internalization of universal Islamic values. Therefore, it becomes very important to instill Islamic moral values from an early age, starting from home and school has a role to strengthen moral education at an early childhood.

The relationship between moral and character education in Islam is very important. Internalization of good character is the competence to realize noble character importance into real behavior that actually applies honesty, trustworthiness, responsibility, and so on in daily life. In moral education theory this is called moral action which needs to be facilitated so that it emerges and develops in daily life. In order for moral action to be realized, it is necessary to create a conducive social environment for moral education. Knowledge competence about what and why the need to have noble character and affective competence (appreciation for the urgency of character and noble attitude) must be facilitated by providing social space for students as well as effective learning media to bring both of them. A conducive social environment to collect moral actions is very necessary for moral education (Budiningsih, 2004, p. 7).

The term "character education" is quite commonly found in several verses of the Koran and Hadith, namely: rushd and halah (Shihab, 2001, p. 714;719). "rushd" is a logical combination, moral awareness and sanctity of life. Praiseworthy character is the result of internalization of religious and moral values in a person which is characterized by positive attitudes and behaviors. The term "halah" is interpreted as internalized knowledge. The term "rushd" is important, because without this, character education is meaningless, because real humans have intelligence and a soul. Therefore, character education must succeed in touching these two important dimensions if it is to succeed.

In addition to the above terms, there are three other concepts that become pillars of "character education" in Islam, namely: morals, manners, and modeling. The term morality refers to duties and responsibilities other than Sharia and Islam in general; adab refers to attitudes related to good behavior and refers to the exemplary traits of the character shown by a Muslim who follows the example of the Prophet Muhammad (Sukardi, 2016). The term character is actually similar to the term morality in Islam. Morals (from the word al-khuluq) are embedded in the nature of the soul, which arises actions without being preceded by thought and reflection (Mahmud, 2004, p. 28). Behaviors and actions that arise appear automatically, directly, without thought and contemplation. If the behavior / action is good, it reflects the character / character of a good person, and vice versa appearances / bad behavior that appears, in fact it is a reflection of a bad character. The behavior / actions that arise are sometimes called moral.

Behavior is an example or a result of character in the soul, so what must be well educated is, of course, aspects of character. This is the origin of the term "character education" which in Islam is worth "noble moral education". Source Platform The concept of character education in Islam certainly comes from the main sources of Islam itself, namely the Qur'an and Hadith. There are some verses that talk about the values of the formation of the noble character (moral) of humans through exposure to the stories of earlier people (Sukardi, 2016). Likewise, in the thousands of hadith collections there are also many hadith which describe how excellent character should be built. Efforts to understand Islamic teachings on the formation of the noble character of Islamic teaching sources on further development have led to religious works of Islamic morality (Miskawayh, 1938). Furthermore, what is the important basis of character education in Islam? None other than the main mission of Islam or the main mission of the arrival of the Prophet Muhammad saw namely morality improvement (noble morals). Obviously,

we can see from the words of the Prophet saw which means: "I am sent for perfect moral glory" historical hadith of Ahmad (An-Nawawi, 2000). Character education in Islam is in line with the mission of Islam. Because the mission of Islam is to improve character, it is not surprising that the main principles of the three pillars of Islam (besides Aqeedah and Sharia), the pillars of equal importance and organically linked to the other two pillars are Moral (Islamic Ethics). From the two main sources of Islamic teachings, the concept of morality was formulated. Hundreds of scholarly works have emerged which describe these moral concepts.

Herwina and Ismah's (2018) research attempts to give and socialize thematic teaching models based on Asmaul Husna to improve the values of early childhood religion. The results obtained from the spread of thematic teaching models based on Asmaul Husna are effective in improving the moral values of early childhood religion. This model has been developed to offer a pleasant atmosphere for young children, because using real media in the school environment, the media used are very easy to get so that it does not complicate teachers. The learning model applied motivates teachers to be more creative in choosing themes and integrating in Asmaul Husna. The impact of applying the model will show good behavioral habits by children in accordance with 19 indicators of successful achievement models. Based on studies that have been carried out in improving character education for early childhood, this research tries to develop religious moral values through Islamic character values contained in movie media content to shape the Ahlakul Karimah of early childhood.

2.2 *Ahlakul Karimah*

An outline of the concepts, strategies, aims of the subject of Islamic Education, current moral teaching can be seen as a positive effort to educate children from an early age at school. Children's personality development is considered more serious in the syllabus with a section introduction on Islamic Characteristics and Way of Life, Islamic Moral Codes based on Islamic Ethics. The syllabus in terms of morality is in line with the Islamic concept of morality. They discussed the integrative aspects of morality in Islam, namely morality to God, His Prophet, parents, teachers, society, and the universe, as discussed by Islamic scholars (Al-Qardawi, 1981). Problems found in moral lessons are the lack of educational resources and the latest learning media and insufficient time (once a week or fortnight when interspersed with other topics in Islamic Education), time allocation and activities planned by teachers for students is much reduced (Tamuri, 2007).

According to Hamdani (2014), student morals development or character through a number of subjects in formal educational institutions is less effective because of the character of the cost of redundancy / morality in several subjects as separate subjects. As a result of the terminologies problem the character / morality in curriculum subjects separately and keeps it away from the moral problems of society. The low effectiveness of character education in formal educational institutions is increasingly serious problems of national morality, including the younger generation, as well as the indoctrinate approach. This requires a process of habituation and example which is also not integrated into the school system. The pattern of integration will offer flexible choices when dealing with certain moral problems; can cut the burden of a curriculum that is already solid; and avoid moral teachings and character as mere cognitive knowledge.

The practice of developing moral values in Islamic societies is a complex problem related to habits, family traditions, community leadership, literature, and each judgment, many Muslims find it difficult to talk about morality outside the religious context. Morality in Islam is generally understood as a list of rules, duties and responsibilities whose authority comes directly from the Qur'an and hadith (sayings and traditions of the Prophet Muhammad and his companions) (Halstead, 2007). Rahman (1985, p. 18) points out ethical behavior in Islam 'not stated in propositions, but in terms of divine commands and actions' and the Koran is a 'moral memorial work'. Two main reasons why all Muslims

must accept the Qur'an as an ethical basis: first, they believe it is the word of God, and second, they believe that it has, ultimate truth and answers to all questions of daily life.

Among the virtues taught in the Qur'an are justice, virtue, piety, honesty, integrity, gratitude and holiness. All people are required to comply with ritual and moral and legal obligations set out in the Qur'an (except in cases of particular difficulties). The Prophet Muhammad is considered a perfect moral example, as explained by the Qur'an itself: "You do have a beautiful pattern of behavior in the Apostle" (Sura 33, verse 21) (Departemen Agama RI, 2007). The Prophet Muhammad 'was sent to perfect good character' (Ibn Anas, 1989, p. 382) by practicing and exemplifying all the ethical values of Islam itself. Thus, the notes of his words and actions contained in the hadith have become an important complement to the command of the Koran in providing guidance and moral regulation.

Morality in Islam is contained in several ways; The first is akhlaq, which translates as 'ethics' or 'moral values. Ahlaq has been defined by Ibn Sadr al-Din al-Shirwani (d. 1036 H, 1626/7 AD) as 'traits which contain virtue and how to get it, bad traits and ways of distancing themselves from that reprehensible nature (Walzer & Gibb, 1960). Al-Qardawi (1981, p. 106) classifies morality in six categories, showing the range of moral values expected in Muslim life: morality on self, morality on family, morality on society, morality relating to society, morality relating to society the animal kingdom, Ahlaq relating to the physical environment and ahlaq relating to the Creator. Akhlaq is a plural word, but is sometimes used in the singular (khuluq) to mean character, innate character, or 'mental state which causes it to carry out its action without thought or consideration' (Miskawayh, 1938, p. 30). 'Ilm al-akhlaq (knowledge of moral values) is a major part of Islamic Studies at all levels of education in Islam.

Ahlaq can be categorized into four things, human morality towards him, where everyone is obliged to support themselves in nature, fulfill their rights, in Islam those who let themselves suffer let alone to kill are categorized as sinful and even apostate. Man's morality towards Allah, where he as a creature created only to worship him (worship) so that he does not worship, his morality with God is bad. Man's morality towards fellow human beings, where each other is interdependent, therefore humans and their fellow humans are obliged to help each other / help in virtue, as well as look after each other's soul, honor, and property. Man's morality towards other creatures, whether with jinn, angels, animals, plants, etc., there are limits to regulating the relationship between each other (Al-Qardawi, 1981).

The category of ahlaq in oneself is; Looking at the Future means that once we have finished dealing with the world and with all our responsibilities in it, we should get ready to seek direct knowledge of divine reality (Surah Al-Hasyr (59) verse 18) (Surah Al-Insyiroh (94) verse 7) (Surah Al-Kahfi (18) verse 110) (Surah An-Nahl (16) verse 97); Have a positive thinking (Surah Al-Isra (17) verse 36) (Al-Insyiroh (94) verses 5 and 6) (Surah Al-Baqarah (2) verse 269); Humble and not arrogant (Surah Al-Isra (17) verse 37) (Surah Luqman (31) verse 18) (Surah Al-Hadid (57) verse 23) (Surah Al-a'raf (7) verses 40-42); Maintaining mental health means always realizing that everything that happens is provisions of Allah Swt. (Surah Al-Imran (3) verse 112) (Surah Al-Imran (3) verse 145) (Surah Al-Imran (3) verse 173) (Surah Al-Ro'ad (13) verse 28) (Surah Al-Ma'rij (70) verses 19-24); Maintaining cleanliness (Surah Muddatsir (74) verses 4-5) (Surah Al-Baqarah (2) verse 125) (Surah Al-Imran (3) verse 141) (Surah Al-Lail (92) verse 18) (Surah Thaahaa (20) verse 76) (Surah Al-A-laa (87) verse 14); Loving knowledge and learning spirit (Surah Al-Alaq (96) verses 1-5) (Surah Mujadilah (58) verse 11) (Surah At-Taubah (9) verse 122) (Surah Az-zumar (39) verse 9); have proper shame (Surah Al-Qashash (28) verse 25) (Surah Al-Imran (3) verse 139) (Surah Fushilat (41) verses 30-32); As-Syajaah or Courage (QS. Al-Imran (3) verse 139).

Ahlaqul Karimah on the environment; Praised Attitude Toward Natural Environment (Q.S. Al-Jaatsiyah, 45-12-13) (Q.S. Ar-Ruh, 30:41); Praised Attitude towards Animals

(Animals): Rasulullah SAW said Which Meaning: "Those who are merciful, Allah the Most Merciful will love them. Allah SWT said: Then love the creatures on earth, surely the creatures in the sky (angels) love you. " (Imam Ahmad's History Hadith). Praiseworthy Towards Plants: Meaning: "And Allah has arranged the earth for His creatures. On the earth there are fruits and date palms, which have scalloped petals and skinned seeds and fragrant flowers. Then what favor of your Lord do you lie about? " (Surah Ar-rahman, verses 10-13) (Surah Al-Baqarah, verse 22) (Surah Huud, verse 61) (Surah Ar-Ruh, verse 41).

Theorem about Ahlaqul Karimah, Allah Almighty says: "Be forgiving and ask people to do what is sorry and turn away from fools." (Surah Al-A'raf: verse 199). This verse is concise but concise and has a broad meaning, with its short sentence covering all aspects of akhlaqul karimah. This verse instructs us on three things: The word خُذِ العفو (forgive) instructs us to forgive the guilty person, connect the cord of friendship to the brother who broke it, improve relations with others, forgive those who hurt us and so forth. This sentence contains all forms of forgiveness and patience with others. The word وَأْمُر بِٱلْعُرفِ (have people do what is good (good)) contains instructions to call on things that are considered good in the Shari'a, both in the form of words and deeds. The word وَأَعرِض عَن ٱلْجُهِلِينَ (turn away from fools) contains the command to be patient and turn away from fools and glorify yourself by not arguing with them.

Rasulullah SAW said: "Best of all you are the most noble character" (Hadith History. Bukhari and Muslim). In another hadith he said: "Indeed, the most I love among you and the closest to where he lives with me on the Day of Judgment is the most noble character" (Hadith History. Tirmidhi)

The virtue of noble morality is increasingly evident in his saying which reads: "There is nothing heavier in the scales of a believer on the Day of Resurrection than a noble character" (Hadith History. Tirmidhi). The Word of Allah Azza wa Jalla when praising His Prophet sallallaahu 'alayhi wa sallam:

وَإِنَّكَ لَعَلى خُلُقٍ عَظِيمٍ Verily, you (O Muhammad) are truly virtuous in character (Surah al-Qalam, verse 4). Also, the words of the Prophet Muhammad sallallaahu 'alayhi wa sallam:

وَخَالِقِ النَّاسَ بِخُلُقٍ حَسَنٍ Associate people with noble morals (Hadith History. at-Tirmidzi no. 1987 from Abu Dhar, and he considers this hadith hasan saheeh).

The practice of learning in the classroom in teaching the values of ahlakul karimah involves two tasks of the teacher: first, giving children knowledge of what they should and shouldn't do; second, giving them motivation or wish to behave morally. With regard to the transfer of moral knowledge, knowledge itself ('ilm al-akhlaʾq and' ilm al-adab) will be varied in methods, media and learning strategies but must stay based on the main sources of Islam in the Koran and hadıth had (Halstead, 2007).

2.3 *Islamic Character Values in Movie Media*

Narvaez, Gleason, Mitchell, and Bentley (1999) imply that when educators try to educate children morally through the use of narration or textbooks, the results are less effective. The proper instructional role of narration is not to overwhelm children with moral principles, but to advance the goals identified in the previous section: educating empathy and developing moral reasoning skills. Children's films can fulfil both of these goals.

Many educators can appreciate the beauty and literary value of children, but film is often considered a destructive media. Educators generally want children to read, train their brains, not stare at film screens for two hours. Some films can involve children,

emotionally and cognitively, presenting it with ethical problems that stimulate critical thinking and mature thinking. The film itself has many values, is a useful tool for moral education. To get the best from them, children must approach the film from an educational point of view. Teachers and / or parents must prioritize children for the problems they will face in the film and discussion or guidance must accompany the watching activity. The fact that children's film genre is an effective moral education instrument and moreover, which has several advantages compared to children's text literature (Wonderly, 2009).

The advantage of movie media in character planting is the incorporation of technical effects, photography, graphic animation, and music into its narrative presentation. Narratives are generally more emotionally attractive to children and these creative elements can also serve to increase aesthetic appreciation for various forms of art. Children's film media, designed to involve moral sensitivity and imagination, can be valuable tools for character development, morals, and aesthetic arts education. Movie must be developed so that it has the same ability to educate empathy or to promote moral reasoning. For example, films in which the main characters are pre-teens who face a moral dilemma symbolizing the lives of school-age children are actually preferred to those consisting of non-human entities interacting in strange and chimerical environments. The last type of film is able to capture the audience's imagination and emotions; However, related characters function in realistic situations more likely to get genuine empathy responses and wise reflection. Not that it removes children from the beautiful cinematic fantasy world, but the best films are those that are creative and interesting, but still relevant to life, everyday morality (Wonderly, 2009).

Wonderly (2009) also suggests that morally good and instructive children's films easily conquer their early audience with severe ethical problems. While directors and storytellers need not describe cruel or tragic events graphically, they may intelligently and honestly describe issues such as death, addiction or harassment in ways that respect the intellects of their audience. For the same reason, this view rejects the position that movie characters and children's story books must be entirely good or completely evil to avoid causing confusion. Most would agree that the real world consists of multi-layered individuals whose nature and actions vary ethically. There seems to be no valid reason to protect or educate children by suggesting otherwise.

Research by designing film media to shape the morals of early childhood children trying to compile and design films that are proper to the characteristics and needs of early childhood. Film media with Islamic character values are partly adopted from existing films and some are made with a simple animation system. Film media products with Islamic character values have been examined by media experts and early childhood education experts. This product is continuously being improved through various field tests. Starting from the expert validation test, one to one test and small group test. After going through various stages of product development, researchers intend to test the effectiveness of film media with Islamic character values through product effectiveness testing in small group experimental tests with control class classes.

3 METHODS

This study uses an experimental method with a control class. The Experiment class with nine respondents received treatment of watching movies with Islamic character values in them, the film as a result of product development in earlier studies. While the control class numbered 10 respondents, using textbooks and other media besides films to improve understanding of good character (Ahlakul Karimah). Data analysis using SPSS 20 to see the results of the effectiveness of treatment in the experimental class and the control class through comparison of the results of the t test.

3.1 *Instrument*

The word akhlaq is rooted from the word khalaqa or khalqun which means event, form, creation, appearance, behavior, behavior, which only connotes outwardly. The morality includes the inner (in addition to the outer) because the inner attitude is included in the study of morality, so that someone who is said polite, behaves politely, but he is not noble because he wants to get praise or even in the context of deception. Therefore, morality cannot be identified with, morality, ethics, manners because all of that is limited to only out things, besides only on the relationship between people. In this study the instrument to measure the Ahlakul Karimah of early childhood, is an adjustment indicator of aspects of the child's moral development. Collecting data use instruments, see table 1, which is the research instrument of Ahlakul Karimah in early childhood.

Table 1. Ahlakul Karimah in Early Childhood Moral Education

No	Ahlakul Karimah	Description
1	Child's morals towards him	Looking forward
		Be Positive or Think
		Humble Yourself and Not Arrogant
		Maintaining mental health
		Maintaining Cleanliness
		Loves Science and Enthusiasm for Learning
		Embarrassed at its place
		As-Syajaah or Courage
2	Child morals towards Allah (God)	Happy Worship
		Love to pray
		Patient with certain circumstances
3	Child morals towards fellow human beings	Happy to Help Friends
		Able to work together
		Have Empathy
		Happy to Share with friends
		Like Peace and Peace
		Able to forgive friends mistakes
4	Akhlaq child of other creatures, such as animals, plants, and so forth	Love animals and avoid torturing them
		Loving and able to care for plants and trees

4 RESULT AND DISCUSSION

4.1 *Result*

The results of this study are the joint results of observations made in both early childhood classes, the experimental class and the control class, in testing the effectiveness of forming ahlakul karimah through film learning media with Islamic character values listed in the assessment indicators. Ideally, ahlakul karimah formation is carried out with a longitudinal study, to strengthen film media influence opinion on early childhood learning. Facts on the ground when collecting data, is quite easy because the film media is very popular with early childhood.

4.1.1 *Respondent Profile*

Respondents came from early age students who were divided into two classes. A class of 9 respondents is an experimental class with activities treatments stimulating ahlakul karimah shaping by using movie media for about 8 weeks, while a class with a total of 10 respondents is a control class by stimulating ahlakul karimah shaping by using print media, such as books, and the story method telling or other methods, such as read aloud. Table 2 shows the output view one-sample statistics.

Table 2. Output View One-Sample Statistics with SPSS 20

	N	mean	Std. deviation	Std. error Mean
Experiment Class	9	19.5556	1.66667	.55556
Control Class	10	18.4000	1.95505	.61824

Table 3 shows the results of the SPSS output for data on mean differences, t values, and the significance values of the experimental class and the control class. The SPSS 20 calculation results in table 3 results in the need to find the standard deviation of a control class and experimental class data, so that the researcher can find the average value and find the homogeneity between groups by determining the calculated F value.

Table 3. Output View One-Sample Test with SPSS 20

	Test Value = 9						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Experiment Class	9,000	8	.000	10.55556	9.2744	11.8367
Control Class	5 204	9	.000	9.40000	8.0014	10.7986

Table 4 is made to help the reader in seeing the data needed to calculate the value of F, determine homogeneity and give results to find the value of the t test polled variance, due to the different amount of N in each group.

Table 4. Average and standard deviation of a control class and experimental class

Data	Class	
	Experiment	Control
N (Total students)	9	10
Average	19:55	18:40
The standard deviation (SD)	1.66	1.95
SD squares	2.75	3.80

4.1.2 Homogeneity Test Between Groups

Homogeneity between groups is done by calculating F_{value} with F_{table}. The F_{value} test results show that the variance homogeneity is 1.38. by the numerator dk (Class Experiment) = (9-1) and the denominator df (Class Control) = (10-1). Then the numerator dk and the denominator dk = 8 = 9. With the standard error specified = 5%, then F_{table} = 3.23. From the results above it shows that F_{value} (1:38) <F_{table} (3.23), this shows that both groups are homogeneous.

Since the variance is homogeneous (α 12 = α 22) and the number of samples in the experimental and control groups is not the same (n1 ≠ n2), a polled variance t-test is needed.

$$t = \frac{19.55 - 18.40}{\sqrt{\frac{(9-1)2.75^2 + (10-1)3.80^2}{9 + 10 - 2}}\left(\frac{1}{9} + \frac{1}{10}\right)} = 0{,}75$$

df = n1 + n2 - 2.
Means df = 9 + 10-2 = 17.
Based on these calculations, it turns out t_{value} 0.75 and t_{table} 17 is 2110.

In testing hypotheses using a two-party test to apply the provisions, that when the t_{value}, which is in the area of acceptance (H_1) or is located between the t_{value} and t_{table}, then the results of the study stated that the hypothesis Ho was rejected, and H_1 was accepted. The calculation results are seen in Figure 1 which shows that the t_{value} is smaller than the t_{table} (0.75> 2.110). So, the conclusion is that there is a significant difference in the results of the treatment between the experimental class and the control class which by using audio visual learning media (movie media) can improve children's ability to understand moral values through film media Islamic character values according to ahlakul karimah instrument.
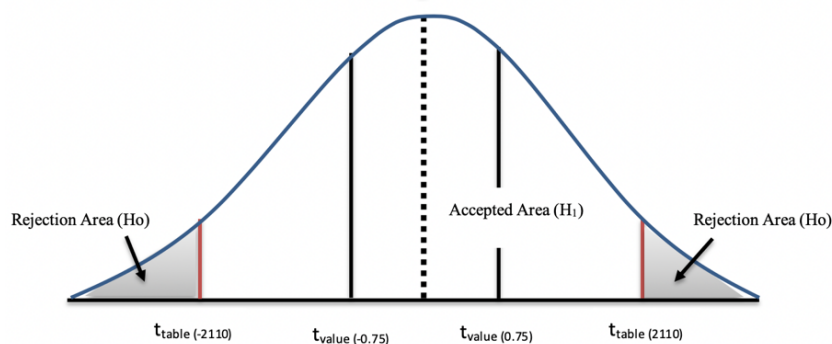

Figure 1. t-test Polled Variance Graphic Results

4.2 Discussion

In this study the focus is on pedagogical strategies used by some teachers in two classes when they offer children in technology-mediated activities. First by presenting the process and context, and then describing and discussing the results of character formation in children after doing some activities that use film media with Islamic character values.

4.2.1 The Activity Process

In the experimental class, one teacher and nine children prepared several movie titles to be watched together, films with content of Islamic character values that had been specifically designed by researchers. Children were allowed to choose the films they liked and the children were divided into teams on every activity watching film media. In the control class, another teacher along with ten other children did the activity of reading books together, with books that contained moral values in Islam.

Table 5. Presentation of Class Activity Process

Class	Activity	Content of Media	Learning Media Type
Experiment	Watching movies	Islamic character values	Movie Media
Control	Read aloud story Story telling	Islamic character values	Text books

During the activity process, the teachers prepare various activities, for example, Narration (for example compiling and discussing narration), Animation (moving scenes), Sound (e.g. recording pieces of sound - to voice and discuss recording), Activities are the most time-consuming activities. Teaching aids and narratives are examples of non-digital activities, without using digital technology that can be used to measure children's understanding after stimulating activities, while animation, sound and products are examples of activities where digital technology is central. Child-centred pedagogy is very important in all activities, which will be described later to provide insight into the context.

4.2.2 *Context: Child-Centred Pedagogy*

Teachers from both classes mention the number of children's participation during pre-treatment, using a plan that refers to the Framework Plan (udir.no/rammeplan, 2017) activities carried out with the same technicality in both classes. The teacher states that they always try to involve as many children as possible in ongoing learning activities. Initially the teacher makes a plan of activities resembling ordinary daily activities for learning activities; but before this activity takes place the teacher listens to the children and incorporates the children's ideas into the process.

The teacher emphasizes the process and participation of children as the two most important factors so that the activities take place are fun for children, because this has been agreed as the key in instilling many things related to knowledge. The important thing that was found was, the statement of the teacher in the experimental class in the activities in the class that is about the results of the behavior after the children watched the film was, some good words in the film in the example of the children when they were working on a joint project, the results of the cooperative attitude assessment results the process of measuring the child's behavior by the teacher. In addition, the meaningful values of the film bring an air of excitement in the classroom atmosphere, it seems that the moral values of the film imprint in the hearts of children. This activity is designed in about eight weeks so that the results of observations show progress that can be measured and give participants enough time to enjoy the process. Children mostly want to take part, but some children choose not to take part on several days; they prefer to play or do other activities and exercise their right to say no (Danby, Susan, & Farrell, 2005).

4.2.3 *Inviting to Dialogue*

Research activities find important parts of the observation process in the stimulation of the formation of ahlakul karimah in children. Researchers witness the activities of teachers who teach with an open mind and are centred on children, encourage children to actively participate and give children the freedom in time and space to actively contribute verbally and non-verbally. This is interpreted as an activity inviting interactive dialogue between children and children, between teachers and children. Content analysis of character values in film media shows that the inviting dialogue is used as a pedagogical strategy by the two teachers in all various activities during the process. These words are used by the characters both in the movie, non-verbal communication, and the tone of their voices all play a role in the analysis. The following examples of empirical material illustrate how to invite teachers to dialogue with children.

As in one film that suggests the value of ahlakul karimah "Daring to be honest", one of the main characters of brave children who live in the village. When working in groups after watching the film, the teacher discovers a situation that requires children's honesty, (in the case of colour ink spilling during the painting activity). The teacher explains the situation to the children and invites them to dialogue about what to do by giving them some solutions. The teacher shows again the image of the brave child in the movie and asks the children if one of them can be the main character. The teacher appreciates the child's ability to solve problems boldly, the teacher invites children to dialogue about ahlakul karimah honesty and courage. The limitation of movie media today is that it still needs the help of people to be the most effective tool in instilling the value of knowledge in children. The results of research data show the role of adults around children remains an important key accompanying the effectiveness of this learning media.

There are many choices for teachers to make during the activities of forming ahlaqul karimah children. Sometimes the teacher invites children to dialogue when they animate by encouraging them to make choices about where to portray a character in daily life. Children often animate the roles they do, they are inspired by the characters in the film, children respond verbally and non-verbally to the teacher's questions, this opens the teacher's opportunity to see how deep the child's understanding of character values Islam

that appears in the media of film learning. When watching a movie takes place, unexpected things happen, such as, when one child clicks on a tablet and starts the film, funny things may arise immediately, maybe the children will start laughing, when the opportunity for the teacher to ask questions, 'I want to know what's happening now'. In this example, the child responds to the teacher's comments non-verbally or with direct verbal. Dialogue like this is important to mark important moments in the film, which can be evaluated to be better developed in terms of content.

The process of observation in forming ahlaqul karimah children, is by listening to children, listening carefully, observing children's body language, asking open questions, asking questions, and asking questions to clarify ideas and understand. In line with the ways of inviting children to dialogue can be under the understanding. The process of evaluating the content of ahlaqul karimah values can develop during the process of interaction between children, to create stories that are more interesting and more meaningful for children, which are mediated by technology together. The teacher states that sometimes teachers do not have answers, help from ideas, responses and desires of children, creating meaning in the results of interaction and discussion between teacher and child, as highlighted by (Letnes, 2019).

With a broad interaction pattern, every child feels valued and respected, sometimes public opinion portrays digital activities as lacking dialogue, with no talks between the teacher and children when children use computers and other digital devices to watch media films content of character values of Islam. Therefore the analysis in this study shows that teachers have an important role in inviting children to have rich dialogues in understanding all the meanings of Islamic character values contained in film learning media.

4.2.4 *Explaining the practical*

During the watching movie activity, when the children comment on something, sometimes the teacher explains to the children what the film character is going to do and why, what is the meaning of something, and answers the children's questions. Analysis of film content by experts in the expert testing process, explains the practice of film learning media can be used as a pedagogical strategy by teachers in instilling the values of Islamic character early on, through various digital technologies. When children are enthusiastic and fascinated by the good and sincere characters of some film characters, the teacher invites children to dialogue and explain their impressions to the characters who make them happy with the character's behavior.

The teacher asks questions about what children do if children are in a complicated situation that they need to choose such as the difficult circumstances faced by the characters in the film. Whether the child can follow the good behavior that the characters do or the children have their own answers, all of which are set forth in the teacher's observation notes. The teacher also asks the children to highlight certain things in the film as an invitation for children to find their own solutions. At other times, children need help to see whether a character is actually displayed in a film image or not or need a reminder that one of the good characters the child sees in the film is still visible in his behavior and words.

When the language in film in Indonesian is different from the mother tongue of children in the area, there are several languages that need to be explained by the teacher, or there are words that do need to be explained in more detail in children to implement behaviours or topics that contain the expected ahlakul karimah . Researchers see this as a valuable opportunity to highlight the differences between languages and explain what they mean. Explaining various understandings of ahlaqul karimah with the direct practice of film characters can be understood as a narrow pattern of interaction, a study shows that very often teachers use explaining in combination with invitations such as small dialogues with children into broad patterns of interaction (Bae, 2012).

The teacher's role in explaining the meaning of Islamic character values contained in the film is very important, because it is proven when there is a moment where the teacher lets the children watch until the film is finished and asks the children's impression about the character's characters and what values are contained in the film , some children sometimes look confused and argue with each other's perceptions. This experience shows that movie content must be continuously improved, and analyzed to produce value content that does not make a child confused when he watches alone without adult guidance. It also shows that the various shows in which show new things for children, require the assistance of adults in interpreting many things that are presented by the film.

Interaction with dialogue is the key to measuring children's understanding of the meaning of Islamic character values in film media. Then followed by various activities that can measure whether the results of the treatment led to the formation of ahlaqul karimah in children. The teacher engages the children in activities, explains and shows the process that must be passed, then lets the child do it himself, as in proximal-guided interactions; the teacher supports children by just being there, as in distal-guided interactions (Plowman & Stephen, 2007). The teachers can interpret their observations about the situation and the children and act in response to the results of the treatment, the teacher can set when needed an explanation.

4.2.5 *Instructing for results*

Instructions in learning in kindergarten are very important, even this can be used as a teacher as a tool to instil other good character. Like adab when watching a movie, it includes ahlakul karimah which needs to be developed early on, so that children can bring good habits as spectators until they grow up. In the instructional learning activities the teacher explains something to the children, tells the child what to do and why. Teachers Sometimes teach children by telling them what to do without explanation, namely by being a good model in the implementation of watching movies.

The general way of giving instructions is watching this example; when the film begins the children are asked to sit quietly and try not to disturb the people sitting on the right and left; children are asked to sit in a good position, so that the focus and concentration of listening to the movie is not disturbed; children are asked to raise their hands when they want to talk to comment on films; children are asked not to interfere with the screening of film activities; children are given the freedom to make an agreement to determine and choose the title of the film to be watched together.

The teacher also explains where to sit and stand and why, but the children still need reminders during the activity to be able to complete this activity. In this activity, Children do what the teacher says to them and seem to receive instructions; they seem to recognize teacher instruction as meaningful and relevant. Instruction is a central part of proximal guided interaction (Plowman & Stephen, 2007).

The teacher takes responsibility and controls the situation. Teaching strategies are an important part of the process. Instruction is not a general term used in child-centered pedagogy, but the use of teacher's instructions is an important key to completing activities with children so that learning objectives are achieved well (Bae, 2012). Findings when the teacher shows, instructs, and organizes activities; and participate in pleasant interactions with children and provide positive feedback and support for the formation of ahlaqul karimah in early childhood classes.

5 CONCLUSION

Findings show significant influence data through t test results. The statistical data from quantitative calculations are in the place that in watching movies with content of Islamic character values shows the point of forming ahlaqul karimah in the experimental class. This shows developing film media importance as a learning medium in instilling character

values at an early age. Utilizing a child's liking for films, film media are expected to develop more appealing to children, it is recommended that children's filmmaking be made and designed so that it can impress the child's soul, to inspire children's daily behavior. The role of teachers and parents in assisting learning media is an important finding in this study that needs attention.

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