THE INFLUENCE OF PHONICS AND GAMES INTEGRATIVE LEARNING ON KINDERGARTEN CHILDREN'S READING READINESS

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ABSTRACT

Learning to read may begin at a young age, but it needs to be safe, fun, and enjoyable. Before children enter the reading stage, it is important to pay attention and prepare children to have reading readiness. Learning strategies that can be used in helping early reading readiness in kindergarten include using phonics and games. Children who are already in the reading readiness stage will show behaviors such as being able to recognize the alphabet, voice the sounds of the alphabet, imitate letter shapes, have a decent vocabulary, and understand words and stories. This study aims to see the effect of phonics and game integrative learning on the reading readiness of kindergarten children. The participants in this study were 36 students in Kindergarten X. The participants were divided into two groups, the Experimental Group (KE) and the Control Group (KK). The test tool given to the participants is the Reading Readiness Assessment test kit which has been adapted and tested in Indonesia. Data analysis used the Independent Sample T-Test with a sig. value. (2-tailed) of 0.000 < 0.05, this indicates a significant difference between the experimental group and the control group. So it can be concluded that phonics and game integrative learning has been shown to improve the reading readiness of kindergarten children.

Keyword: phonics method, games, reading readiness, kindergarten

1. PREFACE

Kindergarten (TK) is one of the formal education pathways from Early Childhood Education (PAUD) which is divided into two study groups, namely Group A for students aged 4-5 years and Group B for students aged 5-6 years. PAUD has a goal of helping the development of various aspects of child development, including the development of religious and moral values, social-emotional development, physical motor development, cognitive development, language development, and artistic development.

One aspect that plays a very important role in the process of child development is language. Language is a code used in communication that consists of a set of symbols and rules which will continue to develop well during the school period which can be seen in reading and writing skills. Before children enter the early reading stage, every child needs to have reading readiness. Readiness to read is a condition where children already have general maturity related to the abilities, knowledge, and skills learned to allow children to learn to read through the instructions given.

To help early reading readiness in children can be obtained through the phonics method approach. Phonics is a reading teaching method that focuses on the relationship between sounds (phonemes) and letters (graphemes) in the alphabetic writing system. The phonics approach is an effective reading teaching approach for children in kindergarten through 6th grade as well as for all children who have difficulty learning to read. Phonics consists of analytic phonics and synthetic phonics. Analytical phonics is a method of teaching letters after learning to read has begun. Analytical phonics has a late start in recognizing letter
sounds and their combinations, or in some cases none at all. Synthetic phonics is a process of teaching letter sounds and combining sounds that starts early in school so that new letter sounds can be learned very quickly. Analytical phonics does not teach children to combine sounds to make words, and therefore is not an effective tool for teaching early reading. Synthetic phonics has an overall positive effect on teaching children to read words which includes teaching about phonemes of letters, how to convert letters into phonemes, and integrating the results into words. This synthetic phonics can be used as the main approach to learning to read and write words and it is suggested that teachers can provide an environment with pre-reading activities by teaching phonics before children are 5 years old.

In addition to the phonic method, the game-based learning method is a viable alternative. The application of academic learning provided by the teacher by maintaining a pedagogy that is appropriate for children's development such as play-based learning will provide an interesting and appropriate learning experience for children. Playing is a way of learning that may be most suitable for children's development because in addition to developing social competence, other abilities such as language and cognitive abilities will also develop.

Reading skills can be taught from the age of zero to five in many ways that are safe, fun, and enjoyable. Indonesian children need to be trained to have the habit of reading books from an early age, as conveyed by Nadiem Makarim, Indonesia's Minister of Education and Culture. The pros and cons of reading and writing activities for early childhood often become polemics. Responding to this, R. Ella Yulaelawati R., M.A., Ph.D., as the director of PAUD development explained that what early childhood needs is early literacy. This is regulated in Permendikbud Number 137 article 10 of 2014 concerning the National Standard of PAUD which reads, "Literacy, includes understanding the relationship between the shape and sound of letters, imitating the shape of letters, and understanding words and stories".

Early language and literacy skills in children are the most important foundation in helping reading success in later life. Early literacy such as fluency in recognizing the alphabet and fluency in voicing the sounds of the alphabet are skills that support reading skills in kindergarten children.

**Background**

The initial study that the researchers conducted in Kindergarten X related to early literacy such as the introduction of the alphabet, understanding the relationship between the shape and sound of letters carried out on the children of group A, i.e. children aged 4-5 years consisting of 36 children, found that on average, children struggle to identify letters and sounds well. This explains that children possess poor early literacy.

In this study, researchers will test the application of the phonic method which will be integrated with the game method. It is called: Search Find Read Write and Read Back (CaTeBaTuBali). The game CaTeBaTuBali is adapted from the game hide and seek. Hide and seek is a game that can provide fun in the whole process, where the objective is to hide. In the game CaTeBaTuBali, researchers will hide alphabet cards as well as written and picture cards in hidden places. Then, the researcher will ask participants to
search and find it. Furthermore, participants will be asked by researchers to follow a series of activities instructed by researchers.

This study will examine the application of phonics and game integrative learning methods that have never been studied scientifically. The advantage of the method studied is that it integrates two methods, namely the phonic method and the game method. The method that will be tested on Group A Kindergarten children at Kindergarten X Tangerang is expected to be a new innovation that can help children to more easily and quickly develop readiness to read in a safer, more exciting and fun way.

**Reading Readiness**

Reading is a process of recognizing letters and sounds of letters taught in kindergarten for easier reading. Readiness to read can also be interpreted as a process that prepares children to have real reading skills. Readiness to read is a set of special skills that children possess which is a series of literacy developments such as understanding stories, and recognizing printed letters and numbers when children enter school.

**Reading Readiness Skill**

Phonological awareness, orthography, and visual-analytic skills are readiness skills that are included in the requirements for successful learning to read. Phonological awareness is the ability to identify and manipulate certain sounds in spoken words which are then associated with alphabetic symbols. Orthographic processing is a skill in recognizing print/letter patterns that develops along with reading experience. Fluency in reading is strongly influenced by visual abilities in interpreting and distinguishing between words that are visually similar, so visual skills are needed to help decipher various forms such as letters, characters, and words (as in reading) and interpret musical notation such as in reading music.

Language skills are the most important skills for children to have in obtaining reading readiness, which consist of receptive language skill and expressive language skill. Receptive language skill is the ability to listen and follow directions, while expressive language skill is the ability to speak fluently and clearly, be able to express oneself using language, communicate needs and ideas, understand symbolic language, know people's names, know the names of places and objects and be able to pronounce words for the concept of adjectives and prepositions.

**Factors Affecting Reading Readiness**

Reading readiness is influenced by a group of interrelated factors such as physical, mental, and socio-emotional readiness. Physical readiness requires that the child has a functioning speech organ, able to hear and see well. Mental readiness relates to children's intellectual abilities for word recognition, sound pronunciation, and accurate word pronunciation including oral skills, auditory and visual discrimination, speaking in complete sentences, and reading rhymes and short poems. Socio-emotional readiness shows when the child is emotionally stable and psychologically balanced to accommodate reading tasks and demonstrates interest and desire to read as well as a satisfactory demonstration of the nature of socialization.

Socio-economic background was also found to have a strong influence on children's reading readiness. Children from lower socioeconomic background show reading
difficulties at school because they have little or no support at home. Meanwhile, children from the middle and upper classes did not show much difficulty when reading at school because they were practically and materially supported at home. Gender is also mentioned as a factor that can affect children's reading ability. Girls have better literacy achievements than boys, such as letter recognition, phonemic awareness, word reading, and spelling accuracy.

**Phonics Method**
The phonics method is the systematic teaching of letter sounds and letter groups, including teaching how to combine letters, read, and write words. The phonics approach is an initial approach to teaching reading by involving the learning of letter names and letter sounds, that is very effective for developing phoneme awareness, and does not need to be preceded by a phoneme awareness training program to get better results.

**Games**
Play is essential for healthy body and brain development which allows children to engage with the world around them and by using their imaginations they will find flexible ways to use objects and solve problems. Symbolic play is a game that plays a very important role in the development of abstract thinking.

**Hide and Seek**
Game hide and seek is intended as a game to provide fun in the whole process, where people hide for fun, as children often do. In this game, the subject is directed to hide following a scenario then a potential seeker will try to find them.

### 2. RESEARCH METHOD
Participant sampling uses the purposive sampling technique which gathered 36 children from Kindergarten X, Tangerang who are at A level and between 4-5 years old. This research will be carried out intensively within 2 months including an intervention program that is carried out 2 times a week for 8 sessions. The method of data collection is done through a one-on-one test (measurement of each child one by one). The researcher will ask and read the test questions that the child needs to solve right away. The more test questions that can be done, the higher the child's reading readiness score.

**Measurement**
The measurement of reading readiness in this study uses a measuring instrument adapted from the Reading Readiness Assessment – Learning Disabilities Association of Alberta and has been tested in Indonesia. The reading readiness test is divided into four subtests, which consist of expressive vocabulary (15 items), letter identification (24 items), letter sound identification (24 items), and detecting syllable endings (10 items) for a total of 73 items. Measurements will be carried out before and after the intervention. Each item of the reading readiness test is true/false so that participants will get a score of 1 if they answer correctly and a score of 0 if the participant answers incorrectly.

**Research Design**
This study uses a quasi-experimental method with a group design. In the group design, a comparison of scores between KE and KK will be carried out so that researchers can draw
conclusions about the relationship between the independent variable and the dependent variable.

**Research procedure**
The research was conducted in several stages of preparation, namely: (1) Researchers read literature and various reference sources or theories regarding reading readiness, phonics methods, and games. (2) Develop or adapt a reading readiness test. (3) Develop an intervention module for integrative learning of phonics and games. (4) Prepare research reports.

**Data Processing and Analysis Techniques**
The hypothesis was tested using the paired sample t-test which is also called the paired sample test. Paired t-test was conducted on two groups of data, namely; pre-test and post-test data in the experimental group and pre-test and post-test data in the control group to test whether the two paired samples have differences in the mean. In addition, an independent sample t-test was also conducted to test whether there was a difference in the mean scores of the two groups of unpaired data. The test was conducted on experimental post-test data with control post-test data.

3. **RESULT AND DISCUSSION**
**Paired sample t-test**
Paired sample t test result can be seen in the table below:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Mean Error</th>
<th>Sig (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair</td>
<td>Pre_Experiment</td>
<td>18</td>
<td>31.22</td>
<td>8.31</td>
<td>1.96</td>
</tr>
<tr>
<td></td>
<td>Post_Experiment</td>
<td>18</td>
<td>56.94</td>
<td>11.81</td>
<td>2.78</td>
</tr>
<tr>
<td>Pair</td>
<td>Pre_Control</td>
<td>18</td>
<td>30.89</td>
<td>8.67</td>
<td>2.04</td>
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<tr>
<td></td>
<td>Post_Control</td>
<td>18</td>
<td>40.22</td>
<td>12.78</td>
<td>3.01</td>
</tr>
</tbody>
</table>

Based on the table above, pair 1 shows the value of sig. (2-tailed) of 0.000 < 0.05. It can be concluded that there is a difference between the average pre-test and post-test results from KE. Furthermore, the output pair 2 shows the value of sig. (2-tailed) of 0.000 < 0.05, which signifies a difference between the average pre-test and post-test results from the KK. The mean value of the KE pretest is 31.22 and the posttest average value of KE is 56.94. This shows that KE experienced a significant improvement on reading readiness after receiving the phonics and games integrative learning intervention.

**Independent Sample T-Test**

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The result of independent sample t-test calculation can be seen in the table below.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post_Experiment</td>
<td>18</td>
<td>56.94</td>
<td>11.815</td>
<td>0.000</td>
</tr>
<tr>
<td>Post_Control</td>
<td>18</td>
<td>40.22</td>
<td>12.781</td>
<td></td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen that the mean of KE is 56.94 while the mean of KK is 40.22. Thus, there is a difference in the average learning outcomes of participants in KE and KK. The value of sig. (2-tailed) of 0.000 < 0.05 indicates a significant difference between the average learning outcomes in KE and KK. Thus, it can be concluded that the integrative learning of phonics and games is proven to affect the reading readiness of kindergarten students.

**Overview of Program Implementation**

**Intervention 1**
Providing phonics and game integrative learning interventions with the theme: Recognizing vowels and their sounds (a, e, i, o, u). The purpose of the intervention 1: (1) Participants can name and recognize vowels (a, e, i, o, u), (2) Participants can voice vowel sounds (a, e, i, o, u), (3) Participants can identify the names of objects that begin with vowels on flashcards, (4) Participants can participate in the game CaTeBaTuBali.

In this session, participants will be asked to look for and find letters according to the researcher's instructions. Furthermore, participants will follow a series of instructions such as reading the letter cards found, writing the letters then reading the letters written again.

**Intervention 2**
Providing phonics and game integrative learning interventions with the theme: Recognizing vowels and their sounds (b, c, d, f, g). The purpose of the intervention 1: (1) Participants can name and recognize vowels (b, c, d, f, g), (2) Participants can voice vowel sounds (b, c, d, f, g), (3) Participants can identify the names of objects that begin with vowels on flashcards, (4) Participants can participate in the game CaTeBaTuBali.

In this session, participants will be asked to look for and find letters according to the researcher's instructions. Furthermore, participants will follow a series of instructions such as reading the letter cards found, writing the letters then reading the letters written again.

**Intervention 3**
Providing phonics and game integrative learning interventions with the theme: Recognizing vowels and their sounds (h, j, k, l, m). The purpose of the intervention 1: (1) Participants can name and recognize vowels (h, j, k, l, m) (2) Participants can voice vowel sounds (h, j, k, l, m), (3) Participants can identify the names of objects that begin with vowels on flashcards, (4) Participants can participate in the game CaTeBaTuBali.

In this session, participants will be asked to look for and find letters according to the researcher's instructions. Furthermore, participants will follow a series of instructions such
as reading the letter cards found, writing the letters then reading the letters written again. (n, p, r, s, t)

**Intervention 4**
Providing phonics and game integrative learning interventions with the theme: Recognizing vowels and their sounds (n, p, r, s, t). The purpose of the intervention 1: (1) Participants can name and recognize vowels (n, p, r, s, t), (2) Participants can voice vowel sounds (n, p, r, s, t), (3) Participants can identify the names of objects that begin with vowels on flashcards, (4) Participants can participate in the game CaTeBaTuBali.

In this session, participants will be asked to look for and find letters according to the researcher's instructions. Furthermore, participants will follow a series of instructions such as reading the letter cards found, writing the letters then reading the letters written again.

**Intervention 5**
Providing phonics and game integrative learning interventions with the theme: Recognizing vowels and their sounds (v, w, y, z). The purpose of the intervention 1: (1) Participants can name and recognize vowels (v, w, y, z), (2) Participants can voice vowel sounds (v, w, y, z), (3) Participants can identify the names of objects that begin with vowels on flashcards, (4) Participants can participate in the game CaTeBaTuBali.

In this session, participants will be asked to look for and find letters according to the researcher's instructions. Furthermore, participants will follow a series of instructions such as reading the letter cards found, writing the letters then reading the letters written again. (n, p, r, s, t)

**Intervention 6**
Providing phonics and game integrative learning interventions with the theme "Knowing capital letters and recognizing the letters in their own names". The purpose of implementing the intervention 6: (1) Participants are able to recognize uppercase letters from A to Z, (2) Participants are able to identify the letters in their own names, (3) Participants are able to compose their own names through the CaTeBaTuBaLi game.

In this session participants will be asked to look for and find the uppercase letters of the first letters of their respective names. Furthermore, participants will be asked to search and find the letters of their names in complete and then write their names in the book. Next, the researcher will ask participants to re-read what has been written.

**Intervention 7**
Providing phonics and game integrative learning interventions with the theme "Identifying the sound of the last syllable (part 1)". The objectives of the intervention 7 are: (1) Participants are able to identify the sound of the last syllable, (2) Participants are able to identify the last syllable on the flashcard, and (3) Participants are able to participate in the CaTeBaTuBaLi game.

In this session, participants will be asked to look for and find syllable endings according to the researcher's instructions. Next, the researcher asked the participants to write it down, then the researcher asked the participants to re-read what had been written.

**Intervention 8**
Provision of phonics and game integrative learning interventions with the theme "Identifying the sound of the last syllable (part 2)." The objectives of the intervention 8: (1) Participants were able to identify the sound of the last syllable, (2) Participants were able to identify the last syllable on the flashcard, and (3) Participants were able to participate in the CaTeBaTuBaLi game.

The intervention of identifying the last syllable sound was done twice to help participants better identify the last syllable sound. In this session, participants will be asked to look for and find syllable endings according to the researcher's instructions. Next, the researcher asked the participants to write it down, then the researcher asked the participants to re-read what had been written.

4. CONCLUSION AND RECOMMENDATIONS

The result of data analysis shows the value of sig. (2-tailed) of 0.000 < 0.05, so it can be concluded that phonics and games integrative learning improve the reading readiness of kindergarten students so that students are ready to proceed to the next stage of reading.

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