



# THE INFLUENCE OF THE BANK KIDS WEBSITE-BASED GAME MEDIA ON THE FINANCIAL LITERACY SKILLS OF CHILDREN AGED 5-6 YEARS

Stephany Wahyu Pramudya<sup>1</sup>, I Wayan Sutama<sup>2</sup>, Rosyi Damayani Twinsari Maningtyas<sup>3</sup>,  
Yudithia Dian Putra<sup>4</sup>

State University of Malang, Jl. Semarang No. 5 Malang, East Java, Indonesia

\*Author of correspondence, Email: [wayan.sutama.fip@um.ac.id](mailto:wayan.sutama.fip@um.ac.id)

## Abstract

Financial literacy learning in early childhood is very important to form the basis of healthy financial behavior in the future. However, in reality, financial literacy skills in students are still relatively low, this is due to the lack of implementation of activities on financial literacy. Therefore, researchers offer a solution in the form of using website-based Bank Kids games to improve financial literacy skills in children aged 5-6 years. The Bank Kids interactive game media is one platform that can be used to improve financial literacy understanding in children aged 5-6 years. Bank Kids media presents a banking simulation game with a concept that is in accordance with early childhood financial literacy. This study uses a quantitative research method with a quasi-experimental design before-after one group pretest-posttest design. This study involved 15 students at the Children Center Brawijaya Smart School in Malang City. The results of the Wilcoxon calculation after being given treatment showed  $0.001 < 0.05$ , so  $H_0$  was rejected and  $H_a$  was accepted. Based on these results, it can be concluded that the website-based Bank Kids game media has a significant influence on the financial literacy skills of children aged 5-6 years.

**Keywords:** Bank Kids, Financial Literacy, Early Childhood

## 1. Introduction

Financial literacy is one of the knowledge and skills related to the management and utilization of finances to improve future well-being (Sovia & Syafwandi, 2023). Financial literacy education for young children is very important to establish a foundation for healthy financial behavior in the future. Young children are in their golden age, making it very effective to introduce basic financial concepts such as saving and distinguishing between needs and wants. Introducing financial literacy to children helps them develop good financial habits, a sense of responsibility and independence, prevent future consumerist behavior, and cultivate discipline and long-term planning (Syahid, 2023).

The results of the Financial Services Authority (OJK) survey in 2022 show that Indonesia has a relatively low level of financial literacy, which is 49.68% (Ismail et al., 2023). Research results show that not all early childhood education institutions provide financial literacy education to young children (Novedi & Susilaningih, 2022). The financial literacy skills of students are still relatively low, which is due to the lack of implementation of activities related to financial literacy education (Yuniza et al., 2022). A similar problem also occurs in three institutions located in the city of Malang, where children aged 5-6 years have not yet reached the expected standard of financial literacy skills. Some children still have difficulty recognizing the value of currency and calculating currency value.

The ability of financial literacy in children aged 5-6 years includes knowing the functions and types of money, understanding various types of goods and services obtained with money, being able to store valuable items, comparing the prices of goods they want to buy, calculating the value of currency, understanding how to earn money, understanding the difference between needs and wants, the concept of saving, understanding the consequences of decisions made, sharing, and paying attention to banking practices (Pradani et al., 2023). Children aged 5-6 years should start to understand the value of money, the difference between needs and wants, and the importance of saving. Financial literacy knowledge in children should be adjusted to their cognitive development stages and understanding. Children cannot yet comprehend complex financial concepts, but they can be introduced to basic understandings such as what money is, how to earn money, and how to manage finances wisely.

The impact that can arise from the lack of financial literacy education in early childhood on future behavior includes, 1) improper financial management, 2) lack of desire to save, 3) experiencing FoMO or panic buying/selling when knowing about discounts at an event (Syahid, 2023). The lack of understanding of financial management in children has a significant impact on their finances in adulthood (Oktaviani et al., 2022). Additionally, the lack of understanding of financial literacy also makes children tend to use money to fulfill their desires without considering the long-term implications. The lack of understanding about saving in early childhood has negative impacts on children, namely the inability to have financial reserves during difficult times, the loss of opportunities for wealth growth, and difficulties in achieving financial goals (Saragih, 2020).

The Bank Kids interactive game media is one of the platforms that can be utilized to enhance financial literacy understanding in children aged 5-6 years. The Bank Kids media presents a banking simulation game with a concept that aligns with the financial literacy of children aged 5-6 years. The Bank Kids game features include naming currency values, matching images with currency values, adding currency values, and categorizing types of currency. This game can help children understand the concept of saving, the difference between needs and wants, as well as banking practices in a simpler and more enjoyable way (Elyta & Mutia, 2020). The Bank Kids game is suitable for the characteristics of early childhood, making it useful in enhancing children's financial literacy understanding.

Through this research, it is hoped to become an effective solution in improving financial literacy in early childhood. The novelty in this research lies in the fact that no one has yet tested whether the Bank Kids game media affects the financial literacy skills of children aged 5-6 years. This research not only aims to improve financial literacy skills but can also provide new insights into the use of digital game media in education. With the presence of digital game media, it is hoped that it can help make the learning method more engaging and interactive.

## **2. Method**

### **2.1. Type of Research**

The method used in this research is a quantitative method with a quasiexperimental design, specifically a before-after one group pretest-posttest design. This study involves the population of group B1 at the Children Centre Brawijaya Smart School in Malang City. The sampling technique used is the saturated sampling technique. This study uses a one-group pretest-posttest research design, where the experimental group is given a pretest before the treatment and then a posttest after the treatment. In this study, the researcher used an

independent variable, which is the Bank Kids game media based on a website, and a dependent variable, which is the financial literacy ability of children aged 5-6 years.

**2.1.1. Time and Place of the Research**

The research was conducted at the children Centre Brawijaya Smart School in Malang City. The Children Centre Brawijaya Smart Svchool is located at Jalan Veteran No. 7, Ketawanggede, Kec. Lowokwaru, Malang City, East Java. The research was conducted during the 2024-2025 academic year, specifically in the even semester from January to May.

**2.1.1.1. Research Subject**

The research subjects used in this study are the B1 group at the Children Centre Brawijaya Smart School in Malang City, consisting of 15 children. This study uses a one-group pretest-posttest research design.

$O_1 \rightarrow X \rightarrow O_2$
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Explanation:

O1 = Pretest score (Before treatment)

O2 = Posttest score (After treatment)

X = Treatment given

**2.1.1.2. Instruments and Techniques for Data Collection**

The data collection techniques used are observation and documentation. Observation is conducted to collect data by directly observing the level of financial literacy knowledge in children aged 5-6 years. Observations will be carried out during the pretest and posttest activities. Next, documentation involves taking pictures or gathering data related to the research.

The instrument used in this study is an observation sheet. The instrument in this study consists of questions to measure the impact of the Bank Kids game on improving the financial literacy skills of children aged 5-6 years.

**2.1.1.3. Data Analysis Techniques**

The data analysis technique used in this research is first descriptive analysis, which involves explaining or providing information about a data set. The data analysis in this study employs non-parametric statistics. The non-parametric statistics and hypothesis test used in this research is the Wilcoxon test.

**3. Results and Discussion**

**3.1 Result**

**Table 1. Pre-test and post-test results of financial literacy ability**

	Sample Size	Min	Max	Mean
Pre-test Results	15	8	12	10,40
Posttest results	15	15	16	15,73

Based on Table 1, the results of the descriptive analysis test above show that the average score on the pretest before treatment was 10.40, while the average score on the posttest after treatment was 15.73. The minimum score during the pretest was 8 and the maximum score was 12, whereas in the posttest the minimum score was 15 and the maximum score was 16. From these results, it can be concluded that there was a significant improvement between the pretest results before the treatment and the posttest results after the treatment.

**Table 2. Wilcoxon test data analysis**

	N	Mean	Sum of Ranks
Positive	15	8	120
Negative	0	0	0

Based on the Wilcoxon test, it shows that the negative difference between the pretest and posttest is 0, both in terms of N, average value, and sum rank, while the positive difference shows 15 positive data (N). Therefore, based on the results, it can be concluded that there is no decrease or reduction in the posttest scores. All the children showed improvement after the treatment was given. The average improvement was 8, while the total number of positive rankings was 120.

**Table 3. Hypothesis Test Results**

**Test Statistics Posttest - Pretest**

Z	-3,426 <sup>b</sup>
Asymp. Sig. (2-tailed)	,001

- a. Wilcoxon Signed Ranks Test
- b. Based on negative ranks.

Based on Table 3, it is known that the hypothesis results at the posttest after treatment became  $0.001 < 0.05$ , so  $H_0$  is rejected and  $H_a$  is accepted, which means there is an effect of using the Bank Kids game based on the website on the financial literacy ability of children aged 5-6 years.

### 3.2 Discussion

The influence of using the Bank Kids website-based game media to improve financial literacy in children aged 5-6 years conducted at the Children Centre Brawijaya Smart School is proven through descriptive analysis tests and hypothesis analysis tests. In this study, the same sample was used, consisting of 15 students. Data collection was conducted using observation and documentation. Observation was carried out during the pretest and posttest activities by recording the collected data. Meanwhile, in the documentation, the researcher took photos of the activities from the pretest to the posttest.

Based on the pretest results before the treatment, several students were found to still have difficulties in understanding financial literacy, which includes naming currency denominations, matching pictures of money with denominations, calculating the value of money, and categorizing types of money. Subsequently, the posttest results after the treatment showed an increase in children's knowledge about financial literacy.

The Bank Kids web-based game can be used to improve financial literacy in children aged 5-6 years. During the pretest, children tend to have difficulty understanding financial literacy. Financial literacy has quite a complex topic, making it often difficult for children to understand (Apriliani, 2023). Therefore, a medium is needed that can facilitate children's understanding of financial literacy. Play media is one of the solutions that can be used to introduce financial literacy to children. Digital game media is very suitable for the characteristics of early childhood, which is learning while playing (Humaida & Suyadi, 2021). This can be seen after the treatment, where the posttest results showed an improvement in financial literacy skills in children aged 5-6 years.

Based on the observation results during the posttest, it shows that the children did not have difficulty answering questions while playing. This is evident from the fact that initially, the

child often asked the teacher for help in solving problems, but after the intervention, the child became less frequent in asking how to solve or understand the problems. The Bank Kids game media is equipped with interactive features that help children understand financial literacy more easily. Interactive features in digital games can help children engage actively during the learning process or while playing (Indartiwi et al., 2020). Web-based game media can provide an interactive and engaging experience for children (Zakiyah & Chotijah, 2023).

#### 4. Conclusion

Based on the presentation of research results and discussion, it shows that there is an increase in financial literacy skills among children aged 5-6 years after the treatment was given. This can be proven through the average posttest score which increased to 15.73, thus it can be concluded that there is an influence of the Bank Kids website-based game media on the financial literacy skills of children aged 5-6 years. Based on the hypothesis testing results, there is a significant difference in financial literacy skills before and after the treatment, using the Bank Kids media, where  $T_{hitung} < T_{tabel}$ , thus  $H_a$  is accepted and  $H_o$  is rejected.

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