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The Effect of Wordwall Media on Early Childhood Language Skills at TKIT Al-Kaukaba

Susi Mulyawati, Erna Budiarti
Universitas Panca Sakti Bekasi

ABSTRACT

The purpose of the research is to determine the influence of wordwall media on early childhood language skills in TKIT Al-Kaukaba. This study uses a quantitative approach using a quasi-experimental method using a Nonequivalent control group design. In this study, the population taken was all children of group B TKIT Al-Kaukaba totaling 30 students. The sampling technique in this study is total sampling, while the samples taken are TKIT Al-Kaukaba students with B1 group students of 15 children as the experimental group and B2 group of 15 children as the control class. The instrument in this study is an observation sheet of children's language skills. The data analysis technique using the mean difference test for two paired samples (unpaired sample t-test) was carried out to assess the data using SPSS software. The results of the study showed that there was a difference in the level of children's language proficiency between children who obtained the wordwall method compared to students who did not obtain the wordwall method

Keywords: *Wordwall Media, language skills, early childhood*

Corresponding author
Name: Susi Mulyawati
Email: susimulya78@gmail.com

INTRODUCTION

Early childhood is considered a fundamental period in child development, and the development process during this period is rapid. This period is considered vulnerable because children at this time are very susceptible to environmental stimuli. This period is very important for the development of children's abilities and understanding of the world around them (Nirva & Mesiono, 2016). The golden age is characterized by the beginning of children's sensitivity to the environment and the pursuit of various educational efforts, both intentional and unintentional. It is during this vulnerable period that the child's physical and psychological functions are developing, which causes the child to be ready and have all the necessary skills to achieve the expected daily behavior patterns. Early development is characterized by rapid growth. Understanding child development is basically an effort to observe and understand the changes that have occurred, are occurring, and will continue to occur. (Sri Yulia Sari, Aris Dwi Nugroho, 2019).

The importance of language skills in children's social skills is clear, as children must be able to understand others and communicate to demonstrate their social skills (Wahidah & Latipah, 2021). It is essential to teach children how to speak and communicate with others around them. With sufficient communication skills, a child will be able to follow the curriculum successfully. They will also have good speaking skills (when speaking) and good listening skills (when listening to the teacher's explanation) (Maharani & Budiarti, 2022). The process of language development allows children to learn how to understand and regulate their behavior. When children learn to speak, they inadvertently acquire knowledge of various phonological, syntactic, semantic, and pragmatic systems (Khotijah, 2016).

Based on the range of language development that children aged 4-5 years must master, this research is focused on the ability to understand language. Language skills that 4-5-year-old children must master are divided into: (1) receptive language comprehension; (2) expressive language comprehension; and (3) literacy skills according to the developmental level of their language comprehension abilities (Maharani & Budiarti, 2022).

Children at TKIT Al-Kaukaba, Karawang Regency, especially group B, are still found to have not developed their language well according to the standard level of achievement. Children are notoriously difficult to tell clearly when asked about an activity they did. Sometimes, when children are asked to repeat what the teacher says, they have difficulty doing so. This may be due to their low vocabulary. Because the better the vocabulary, the better the child can string words into sentences.

Language development in early childhood is an important foundation for their future communication, cognitive, and social skills (Budiarti et al., 2022). herefore, the role of technology in early childhood education is becoming increasingly important. Apps such as Wordwall, specifically designed for education, offer a variety of interactive games and activities that can improve vocabulary comprehension, spelling, reading skills, and other language abilities.

However, despite growing claims about the benefits of educational apps, in-depth empirical research on their effects on early childhood language skills is limited. Therefore, this study aims to fill this knowledge gap with a systematic and in-depth approach.

Therefore, to overcome this problem, actions that are appropriate to this situation need to be taken. One solution to overcome these problems is through various activities, such as the use of media for learning and playing. And one of the media used is digital media, namely Wordwall Media, where the Wordwall application is suitable for use in classroom learning activities so that students are more interested and able to understand the material. For example, research (Usman, 2023). he results of this study indicate that the use of wordwall learning media is an interactive medium that is easy to use and can increase student motivation and interest. The difference between the research that the researcher will do and the previous research lies in the object of research, topic, and research focus.

Wordwall is a collection of vocabulary that attaches capital letters to predetermined images, making it easier for students to see words. Researchers believe that the utilization of word walls in educational media can increase student enthusiasm and make it easier to remember vocabulary more concretely. By using Wordwall learning media, the vocabulary created is designed systematically so that students will more easily understand the vocabulary and pronunciation of the language they will learn. (Nenohai et al., 2022).

By collecting data from a group of young children who use the Wordwall app in their learning, this study will evaluate the extent to which using the app affects their language skills. By using careful methods and rigorous research, it is hoped that this study can provide a better understanding of the role of technology apps like Wordwall in improving early childhood language skills (Ilahiyati et al., 2023).

Early Childhood Language Skills

Early childhood language development is highly dependent on the quality of children's interactions with their environment. Through this interaction, language knowledge and skills will be acquired. Children's language development includes four types of development, namely: listening, speaking, reading, and writing (Sri Yulia Sari, Aris Dwi Nugroho, 2019).

Children's language development also develops in various ways as they get older. There are two types of language development in children, namely:

a. Egocentric speech, where the child talks to himself or herself (monologue)
b. Socialized speech occurs when there is contact between the child and their friends or environment. This development is divided into five forms: a) adapting information, exchanging ideas, or looking for common goals; b) criticism, which involves the child's evaluation of the words or actions of others; c) orders; d) questions; and e) answers (Hamalik, 2011).

Learning media is any form of communication tool that can be used to convey information from sources to students in a planned manner so as to create a conducive learning environment where the recipient can carry out the learning process efficiently and effectively (Wahyuni, 2018).

Learning media is a messenger technology that can be used for learning purposes. Learning media is a physical means of delivering subject matter. Learning media is a means of communication in print, view, and hear, including hardware technology (Junaidi, 2019).

Wordwall

Wordwall is an education-based website application that functions as a fun learning medium for students and increases student activity. Wordwall is great for exploring and planning active learning assessments(Rohmat et al., 2023).

In the Wordwall application, there are various game templates, such as quizzes, matching, etc., that can be used to create assessment questions. There are many game results made by other teachers on the Wordwall application page that can be used as a reference to understand the game to be made before making the game. Under the

current new normal, Wordwall can be used for both online and offline learning, realizing offline learning and hybrid learning.

Some of the advantages of Wordwall are that the basic options are free and there are various templates to choose from. In addition, games created by 7 can be sent directly through WhatsApp, Google Classroom, or other means. The software offers many types of games, such as crossword puzzles, quizzes, random cards, etc. Another advantage is that the games that have been created can be printed in PDF form, which will make it easier for students who experience network problems.

Oktariyani (2023) stated that word walls can make it easier for students to understand online course material and are easy to use to understand what students are doing (Oktariyanti et al., 2021). wordwall is an application that can be used as learning media, learning resources, and assessment tools for teachers and students. Wordwall also provides several teacher-made examples to help new users be creative. Halik's learning media can also be explained as a web application to create interesting quiz games. In addition, the wordwall can be used to design and review learning assessments (Farhaniah, 2021).

Based on the points above, it can be concluded that wordwall is an interactive learning media that creates beneficial interactions for students. It can also be explained as a web application for creating engaging quiz games. The great thing about Wordwall is that the basic options are free and there are a variety of templates to choose from. In addition, the games created can be sent directly via WhatsApp, Google Classroom or other methods. The software offers many types of games such as crossword puzzles, quizzes, random cards, etc.

METHODS

The research method used in this research is experimental research, because this research tests the validity of a learning medium. In this case, what was tested was wordwall media. Experimental research is research used to seek the effect of certain treatments on others in controlled conditions (Sugiyono, 2017). Based on the explanation above, the type of research that will be used is quasi-experimental research (quasi-experimental design). The research was conducted at TKIT Al-Kaukaba Telukjambe Timur, Telukjambe Village, Telukjambe East Subdistrict, Karawang Regency.

In order for this study not to deviate from the predetermined objectives, the researchers made a research design with a developed design, namely the nonequivalent control group design, which consists of two research groups, namely the experimental class with wordwall media and the control class with a learning model without using wordwall learning media (using cards). In this study, control classes or experimental classes were selected not randomly but based on predetermined classes; therefore, the design in this study was a nonequivalent (pretest and posttest) control group design.

Tabel 1. Research Design

	Initial Assesment	Treatment	Final Assesment
Experiment	O_1	X	O_2
Control	O_3	-	O_4

Description:
O1 : Initial assessment of experimental class
O2 : Final assessment of experimental class
X : Wordwall media treatment
O3 : Initial assessment of control class
O4 : Final assessment of control class
- : Conventional treatment (cards)

Data collection techniques are strategic steps that aim to obtain research data(Sugiyono, 2015). Data collection tools are tools selected and used by researchers in data collection activities so that these activities are systematic and easy (Suharsimi, 2014). In this study, the techniques that will be used are observation, tests, and questionnaires. In this research, the data collection instrument is an observation sheet.

RESULTS AND DISCUSSION

1. Normality Test

According to Ghozali (2013), the data normality test was carried out using the Kolmogrov-Smirnov test for each variable. Research data is said to spread normally or meet the normality test if the Asymp.Sig (2-tailed) value of the residual variable is above 5% or 0.05; otherwise, if the Asymp.Sig (2-tailed) value of the variable is below 5% or 0.05, then the data is not normally distributed or does not meet the normality test. The results of the normality test carried out in this study are presented in Table 2.

Tabel 2. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		15
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	34.542136
Most Extreme Differences	Absolute	.111
	Positive	. 111
	Negative	.134
Test Statistic		. 111
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

The results of the normality test calculations that have been carried outfor the experimental class obtained an Asymp.Sign value of 0.200. Because the Asymp.Sign value is ≥ 0.05, it can be concluded that the population data is normally distributed.

2. Homogeneity Test

The homogeneity test is used to determine whether the data from the research results in group B have the same variant value or not. It is said to have the same or different variant values (homogeneous) if the significance level is ≥ 0.05, and if the significance level is < 0.05, then the data is concluded not to have the same or different variant values (not homogeneous).

Tabel 3. Homogeneity Test Results

Test of Homogeneity of Variances

Early Childhood Language Skills			
Levene Statistic	df1	df2	Sig.
.452	1	13	.311

Based on the "Test of Homogeneity of Variances" output table above, the significance value (Sig.) of the language ability variable in group B students is 0.311. Because the value of Sig. 0.311 > 0.05, as the basis for decision-making in the homogeneity test above, it can be concluded that the variance of child language ability data in group B students is the same or homogeneous.

3. Hypothesis Test

This Independent Sample T-test test is to make a decision whether the research hypothesis is accepted or rejected, while the hypotheses tested are:

H0 = There is no significant difference in the language skills of children at TKIT Al-Kaukaba between the experimental class and the control class.

Ha = There is a significant difference in the language skills of children in TKIT Al-Kaukaba between the experimental class and the control class.

The test criteria are as follows:

If the probability value (p) is ≥ 0.05, then H0 is accepted.

If the probability value (p) is < 0.05, then H0 is rejected.

Furthermore, the analysis will be carried out on the equal variances line.assumed, it can be seen that the t-test result is 4.263 with df = 15; difference in mean = 12.75; difference in standard error = 2.611; difference in lowest value = 20.00 and highest value = 20.00.lowest value = 20.00 and highest = 11.000.

Tabel 4. Independent Sample T Test Hypothesis Test Results

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Early Childhood Language Skills	Equal variances assumed	.452	.311	4.263	15	.000	12.75	2.611	20.000	11.000
	Equal variances not assumed			4.263	15	.000	12.75	2.611	20.000	11.000

With a significance level of 0.05, which is less than the generally accepted threshold of 0.05 (p < 0.05), the null hypothesis (H0) is rejected and replaced by the alternative hypothesis (Ha). This indicates that there is a difference in the level of children's language skills between students who received the wordwall method compared to students who did not receive the wordwall method.

This study aims to examine the effect of Wordwall learning media on improving children's social and emotional abilities at TKIT Al-Kaukaba. Based on the results of the data analysis that has been carried out, several important findings were found that need to be discussed further.The results of the normality and homogeneity tests showed that the research data met the assumptions for parametric tests. The normality test with Kolmogorov-Smirnov resulted in a significance value of 0.200 (>0.05), which indicates that the data is normally distributed. Meanwhile, the homogeneity test resulted in a significance value of 0.311 (>0.05), indicating homogeneous data variance. The fulfillment

of these assumptions is a strong foundation for conducting hypothesis testing using the independent sample t-test.

The results of hypothesis testing using the independent sample t-test showed a significant difference between children's social and emotional abilities in the experimental group using Wordwall media compared to the control group. This is indicated by a significance value of 0.000 (<0.05), which indicates rejection of the null hypothesis. This finding confirms the effectiveness of Wordwall media in improving children's social-emotional skills.The effectiveness of Wordwall media can be explained by several factors. First, the interactive and visually appealing characteristics of wall media can increase children's interest and involvement in the learning process. This is in line with multimedia learning theory, which states that the use of visual and interactive elements can improve understanding and retention of information (Mayer, 2009). Secondly, the variety of questions and activities in Wordwall allows the stimulation of various aspects of children's socio-emotional abilities, such as emotion recognition, empathy, and social skills. This diversity supports Gardner's (1983) theory of multiple intelligences, which emphasizes the importance of stimulating various aspects of children's intelligence.

CONCLUSION

Based on the results of the research and discussion that have been presented, it can be concluded that wordwall media has a significant effect on the language skills of early childhood at TKIT Al-Kaukaba. The results of hypothesis testing using the independent sample t-test showed a significant difference between children's language skills in the experimental group using Wordwall media compared to the control group. This is indicated by a significance value of 0.000 ($p < 0.05$), which indicates rejection of the null hypothesis. The interactive and visually appealing characteristics of Wordwall media are proven to increase children's interest and engagement in the language learning process, which in turn contributes to the improvement of their language skills.

The influence of Wordwall media cannot be separated from the role of the teacher in implementing it. Although this medium offers various advantages, the teacher's skill in facilitating the use of the medium and integrating it with appropriate learning strategies remains a key factor. This is in line with Mishra & Koehler's (2006) view of the TPACK (Technological Pedagogical Content Knowledge) framework, which emphasizes the importance of integration between technological, pedagogical, and content knowledge in the effective use of learning technology.

Although this study shows positive results, there are some limitations that need to be considered. First, the relatively small sample size may limit the generalizability of the findings. Secondly, this study focuses on the short-term effects of using Wordwall media, so a longitudinal study is needed to assess its long-term impact. Third, this study did not control for other variables that may affect children's social-emotional development, such as family or environmental factors.

Based on the findings and limitations of this study, several recommendations can be made for future research. First, it is necessary to replicate the study with a larger and

more diverse sample to improve the generalizability of the findings. Second, a longitudinal study is needed to assess the long-term impact of using Wordwall media on children's social-emotional development. Third, future research could explore the interaction between Wordwall media use and other variables such as parenting style or classroom climate. Finally, a comparative study between different types of interactive learning media could be conducted to identify the specific characteristics that are most effective in improving children's social and emotional skills.

REFERENCES

Budiarti, E., Farista, D., Palupi, D. I., Wonga Wara, L., Rubiah, S. A., & Harti, U. (2022). Storytelling One Day One Book Terhadap Kemampuan Bahasa Ekspresif Anak Usia 4-5 Tahun. *Jurnal Pendidikan Indonesia*. https://doi.org/10.59141/japendi.v3i12.1405

Farhaniah, S. (2021). Penerapan Media Berbasis Wordwall Untuk Meningkatkan Keaktifan Belajar Siswa Pada Pembelajaran Tematik Di Kelas V Sekolah Dasar Negeri 127 Kota Jambi. In *Skripsi*.

Hamalik, O. (2011). Psikologi Belajar Mengajar. In *Psikologi Belajar Mengajar*.

Ilahiyati, N., Rohmah, Z., & Hamamah, H. (2023). THE IMPLEMENTATION OF WORDWALL GAMES IN VOCABULARY LEARNING. *IJEE (Indonesian Journal of English Education)*. https://doi.org/10.15408/ijee.v10i1.29905

Junaidi, J. (2019). Peran Media Pembelajaran Dalam Proses Belajar Mengajar. *Diklat Review : Jurnal Manajemen Pendidikan Dan Pelatihan*. https://doi.org/10.35446/diklatreview.v3i1.349

Khotijah. (2016). Strategi Pengembangan Bahasa Pada Anak Usia Dini. *Elementary: Jurnal Ilmiah Pendidikan Dasar*.

Maharani, D., & Budiarti, E. (2022). Pengaruh Media Digital & Mutu Perangkat Terhadap Kemampuan Bahasa Pada AUD Melalui Konten Youtube. *JURNAL JENDELA PENDIDIKAN*. https://doi.org/10.57008/jjp.v2i03.240

Nenohai, J. A., Rokhim, D. A., Agustina, N. I., & Munzil, M. (2022). Development of Gamification-Based Wordwall Game Platform on Reaction Rate Materials. *Orbital*. https://doi.org/10.17807/orbital.v14i2.16206

Nirva, D., & Mesiono. (2016). Dasar-Dasar Pendidikan Anak Usia Dini. In *Perdana Publishing*.

Oktariyanti, D., Frima, A., & Febriandi, R. (2021). Pengembangan media pembelajaran online berbasis game edukasi Wordwall tema Indahnya Kebersamaan pada siswa Sekolah Dasar. *Jurnal Basicedu*.

Rohmat, A. N., Supriyono, S., & Purwaningsih, W. I. (2023). Pengembangan Media Pembelajaran Game Edukasi Berbasis Quantum Learning Untuk Meningkatkan Minat Belajar Siswa. *Jurnal MathEducation Nusantara*. https://doi.org/10.54314/jmn.v6i1.292

Sri Yulia Sari, Aris Dwi Nugroho, I. (2019). Tumbuh kembang : Kajian Teori dan Pembelajaran PAUD. *Jurnal PG-PAUD FKIP Universitas Sriwijaya*.

Sugiyono. (2015). Metode Penelitian dan Pengembangan Pendekatan Kualitatif, Kuantitatif, dan R&D. In *Metode Penelitian dan Pengembangan Pendekatan Kualitatif, Kuantitatif, dan R&D*.

Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D.* Alfabeta.

Suharsimi, A. (2014). Dasar-dasar Evaluasi Pendidikan (Edisi II). In *Implementation Science*.

Usman, K. (2023). Penggunaan Media Pembelajaran Wordwall untuk Meningkatkan Minat dan Motivasi Belajar Siswa Kelas 2 SD Negeri 3 Kendari pada Pembelajaran Tematik. *Darul Ilmi: Jurnal Pendidikan Agama Islam.*

Wahidah, A. F. N., & Latipah, E. (2021). Pentingnya Mengetahui Perkembangan Bahasa Anak Usia Dini. *Pendidikan Raudhatul Athfal*.

Wahyuni, I. (2018). Pemilihan Media Pembelajaran. *Jurnal Pendidikan*.