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The Influence of Interactive Learning Media on Mathematics Learning Interest in Students of UPTD SMPN 7 Sinjai

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Abstract

This study aims to find out whether interactive learning media affects students' interest in learning mathematics subjects at UPTD SMP Negeri 7 Sinjai. The type of research used in the study is Ex Post Facto with a quantitative approach. The population in this study is all grade VIII students at UPTD SMPN 7 Sinjai which totals 128 students and the sample in this study is 56 students. The data collection technique is through questionnaires and documentation. The data analysis technique in this study uses descriptive statistics and inferential statistics. The results of the study based on hypothesis testing with simple linear regression and t-test obtained a coefficient value with a significance value of 0.00001 < 0.05 and a t-value of 4.655 and a t-table value of 1.672 so that the tcount value of $>_{t\ table}$ or 4.655 > 1.672, with an R Square value of 28.6%. So H0 was rejected and Ha was accepted, so this proves that there is an influence of interactive learning media on students' interest in learning mathematics subjects at UPTD SMPN 7 Sinjai.
Keywords: Mathematics, Interactive Learning Media, Learning Interest

1. Introduction

Mathematics is one of the main subjects studied at various educational levels, from elementary to secondary school, to enhance students' thinking abilities (Mila & Rizki, 2015).. Herman Hudojo states that mathematics learning involves discussing concepts or structures and finding relationships between these concepts or structures (Septiana et al., 2021). Based on this explanation, mathematics learning is conducted systematically, maximizing the active role of students. Students not only gain an understanding of these concepts but also develop skills and creativity to apply mathematics in everyday life.

Several factors contribute to students' reluctance to study mathematics, including unsupportive learning situations and a lack of understanding of fundamental material. Therefore, it is crucial to improve understanding of basic mathematical concepts before progressing to more complex concepts (Suci, 2020). When students find it difficult to grasp the material, they may become bored and disengaged from the lessons. Thus, it is necessary to enhance students' interest in learning.

Students often lack interest in learning mathematics due to various factors related to teaching methods and the learning media used. One major cause is the insufficient use of varied and engaging learning media, such as Canva. Previous research has shown that monotonous and conventional media can lead students to feel bored and disengaged in the learning process (Zuschaiya, 2024). Interactive learning media that align with contemporary developments, like Canva, can help increase students' interest by presenting material visually and attractively.

Another factor influencing students' interest in mathematics is their negative perception of the subject, where many view mathematics as difficult and tedious (Ayu et al., 2021). By using media such as Canva, teachers can create more engaging materials, making it easier for students to understand mathematical concepts. Varied learning media that are relevant to current developments can enhance

students' interest in learning. However, teachers play a crucial role as mediators in the teaching-learning process; thus, utilizing other tools or media is also vital for making learning more interactive and successful in achieving desired outcomes.

Effective packaging of learning media can foster student interest in the teaching-learning process (Nur, 2018). Learning media plays an essential role in educational activities. Choosing appropriate learning media can develop an interest in studying. Learning media serve as aids that can influence the atmosphere, situation, and conditions prepared and shaped by teachers or educators (Lemi, 2019).This type of media is designed to stimulate student interest so they can focus on the learning process and encourage active participation in discovering and building their understanding (Rizki, 2015)

This leads to more active engagement in the learning process, which can also be applied by using Canva to create engaging and interactive material (Hansa Cordelia Tabina et al., 2024). Other studies indicate that using interactive multimedia for education, including animations, can spark student interest. Media like Canva can be utilized to create visually appealing content that is easy to understand, thus supporting better learning outcomes (Pratama et al., n.d.). Similar findings were noted in previous research regarding the development of Android-based interactive learning media that effectively increased student interest. Although not directly mentioning Canva, the design principles used on this platform are highly relevant for creating valid and practical educational media (N.N.D. Kristanti et al., 2024). A good teacher will always strive to ignite student interest and ensure they have a strong desire for the provided lessons to achieve optimal learning outcomes (Nur, 2018). Interest in learning is a determining factor for achieving educational goals because high student interest facilitates guidance from teachers (Roida, 2015).

Interest refers to a strong tendency or enthusiasm for something (Aulia et al., 2023). Students with a keen interest in studying tend to focus and engage seriously in their preferred activities (Rahma & Agung, 2022). Therefore, student achievement is influenced by their level of interest in studying. The level of student interest in mathematics remains low due to the perception that mathematics involves difficult calculations that are hard to comprehend. Some students view mathematics as an uninteresting subject; some even fear facing it due to its perceived difficulty. This fear stems from challenges in understanding the material, ultimately affecting their motivation to learn mathematics (Muhammad et al., 2022).

Student interest in studying is a necessary aspect of lessons as it is a key reason for success in teaching-learning activities. If students lack sufficient interest in studying, teaching-learning activities cannot proceed effectively. Interest serves as an essential foundation for achieving success in education. When students have an interest, they will be motivated throughout the teaching-learning process from start to finish, resulting in optimal learning outcomes (Maharani, 2019).

Learning media play a role in educational activities across several aspects such as providing instructional materials that can influence motivation, attention, and student interest. Media also help simplify difficult material so that learning becomes more engaging ("joyful learning"). The information conveyed will be clearer; thus, educational media can be used to present challenging concepts to students (Firsta et al., 2022). Consequently, media are an integral part of educational activities that cannot be overlooked; therefore, teachers need to be imaginative and creative when determining which types of media and resources will be utilized.

Based on observational results at UPTD SMPN 7 Sinjai regarding student interest in mathematics lessons being low—indicating boredom during study sessions—this was evidenced by their lack of enthusiasm during lessons, inattentiveness during instruction periods, chatting during lessons, and minimal participation during class activities. Interviews with one teacher and math students revealed that the platform used for teaching math was Canva. Canva is a graphic design application used for creating presentations, posters, documents, etc. Utilizing Canva can make learning activities less monotonous while being enjoyable and creative.

Additionally, its interactive features can create a more dynamic and enjoyable learning experience for students. Therefore, researchers are interested in investigating interactive educational media's impact on student interest. Based on the background description above, researchers are keen to examine how interactive educational media influences students' interest in mathematics subjects at UPTD SMPN 7 Sinjai.

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2. Method

The type of research used in this study is Ex Post Facto. Ex Post Facto research aims to determine the effect of interactive learning media on students' interest in learning mathematics at UPTD SMP Negeri 7 Sinjai. The issues to be measured in this study are "interactive learning media and learning interest," where the independent variable (X) is interactive learning media, and the dependent variable (Y) is learning interest. The research design is as follows:

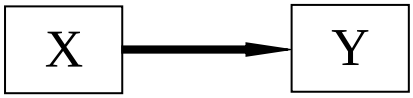

Figure 1 Research Design

Information:
X : Interactive Learning Media
Y : Minat Belajar

This study aims to determine the effect of interactive learning media on students' interest in learning mathematics at UPTD SMP Negeri 7 Sinjai. The total population in this study consists of all eighth-grade students, which includes 5 classes with a total of 128 students. The sampling technique used in this research is probability sampling with simple random sampling. The sample size is determined using Slovin's formula, resulting in a sample of 56 students. The data collection methods in this study are as follows: 1) The researcher distributes questionnaires to students, 2) Students fill out the distributed questionnaires, and 3) The completed questionnaires are collected from the students. The data obtained from the research are then analyzed using descriptive statistics and inferential statistics, analyzed with the aid of SPSS version 25.

3. Results and Discussion

This research was conducted at UPTD SMPN 7 Sinjai on May 8, 2024 - May 28, 2024, with a total of 56 respondents. This study was conducted with the aim of determining the influence of interactive learning media on students' learning interest in grade VIII mathematics subjects. The data used in this study is data from the results of filling out the questionnaire.

3.1 Descriptive Analysis

Descriptive analysis is conducted to describe or analyze the statistical research results. In this study, descriptive analysis is used to provide an overview of the variables of interactive learning media (X) and learning interest (Y), including the mean, maximum value, minimum value, standard deviation, and variance. Based on the results of the descriptive test in SPSS version 25, the mean value is 75.13, the maximum value is 96, the minimum value is 55, the standard deviation is 7.599, and the variance is 57.748. The results of the descriptive statistical test for learning interest (Y) indicate that the mean value obtained by the researcher is 77.73, with a maximum value of 94, a minimum value of 60, a standard deviation of 7.600, and a variance of 57.763.

3.2 Inferential Analysis

3.2.1 Normality test

The data normality test in this study was carried out to measure whether the data obtained had a normal distribution so that it could be used in statistical analysis (Irmayanti, 2021). The technique used in the calculation of the data in the study was the Kolmogorov-Smirnov normality test because the sample size was larger than 50. In this test, the data is declared to be distributed normally if the significance value is greater than (Pandriani et al., 2023). The following are the results of the Kolmogorov-Smirnov normality test using the SPSS version 25 program. The results of the normality test for variable X show a significant value of 0.063, which is greater than 0.05. Therefore, it can be concluded that the variable of interactive learning media (X) is normally distributed. The results of the normality test for variable Y indicate that the significance value is 0.200, which is also greater than 0.05. Thus, it can be concluded that the variable of learning interest (Y) is normally distributed.

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3.2.2 Linearity Test

The Linearity Test is a test to determine whether two variables have a significant linear relationship or not between variable X and variable Y, as the data is considered good if it exhibits a linear relationship. This linearity test uses SPSS version 25 through the Test for Linearity with a significance level of 0.05. The relationship between the two variables is considered linear if the significance value (Deviation from Linearity) is greater than 0.05 (Siti, 2023). The results of the linearity test show that the significance value for deviation from linearity is 0.741. Therefore, it can be concluded that 0.741 is greater than 0.05, indicating a significant linear relationship between the variable of interactive learning media (X) and learning interest (Y).

3.2.3 Such Hypotheses

In this study, hypothesis testing was carried out using simple linear regression analysis to analyze the influence of interactive learning media on students' learning interests. The following are the results of the hypothesis test:

3.2.3.1. Tes T (Coeficin)

The results of the significance test using the t-test, which is to find out whether the X variable (Interactive Learning Media) has an effect on the Y variable (Learning Interest). With the following research hypothesis:

H_0: There was no significant influence of the interactive learning media variable (X) on learning interest (Y).

H_a: There is a significant influence of the interactive learning media variable (X) on learning interest (Y).

With the following conditions:

- If the sig value < 0.05 and $t_{is\ calculated}$ >t the table, H0 is rejected and Ha is accepted, meaning that there is a significant influence of the interactive learning media variable (X) on learning interest (Y).
- If the value of sig > 0.05 and $t_{is\ calculated}$ <t table, then H0 is accepted and Ha is rejected, meaning that there is no significant influence of the interactive learning media variable (X) on learning interest (Y).

The results *of the output coefficient* above, it can be seen that the significant value is 0.00001 < 0.05 and the calculated t-value is 4.655. In the t distribution table, the value of the t table was found to be 1.672, it can be concluded that the t count < the value $_{of\ the\ t\ table}$ (4.655 > 1.672). Because the value of sig. < 0.05 and $t_{are\ calculated} > t_{table}$ so that in this case H0 is rejected and Ha is accepted, which means that there is a significant influence of the interactive learning media variable (X) on learning interest (Y).

3.2.3.2. Determination Test (R Square)

This test aims to measure the extent to which the interactive learning media variable (X) affects learning interest (Y). The R Square value test result is 0.286 (28.6%). This shows that by using the determination test it can be seen that the interactive learning media variable (independent) has an influence on learning interest (dependent) of 28.6%, while 71.4% is influenced by other factors. The results of the Simple Linear Regression test above, the basis for decision making is, the significance value is 0.00001 <0.05 and the t count value is 4.655> table 1672 t, then H0 is rejected and Ha is accepted, so it can be concluded that there is an influence between interactive learning media on students' interest in learning mathematics at UPTD SMPN 7 Sinjai. In this study, the main objective is to determine the effect of interactive learning media on students' interest in learning mathematics at UPTD SMP Negeri 7 Sinjai.

This study focuses on how the use of interactive learning media can increase student interest, which is often considered low in mathematics. The argument behind this study is based on the need to overcome the classic problem in mathematics education, namely the lack of student interest in materials that are considered difficult and boring. The novelty of this study lies in the use of innovative and

applicable interactive learning media in the context of mathematics education. This study shows that the use of such media not only increases students' interest in learning but also provides strong empirical data through statistical analysis. The results of the R Square test of 28.6% indicate that interactive learning media contribute significantly to increasing interest in learning, although there are still 71.4% other factors that influence this interest. This opens up space for further research on other factors that can contribute to students' interest in learning. The limitations of this study include several aspects that need to be considered for further research, namely exploring other variables that may affect students' interest in learning, such as teacher teaching methods, learning environments, or students' psychological factors. Research in various schools with different characteristics can provide broader insights and combine interactive learning media with other learning methods (eg, collaborative learning) to see if the synergy between these methods can further increase interest in learning.

4. Conclusion

Based on the results of the study at UPTD SMP Negeri 7 Sinjai, it can be concluded that interactive learning media has a significant positive effect on students' interest in learning mathematics. This study uses a simple linear regression analysis method with hypothesis testing through the t-test. The results of the analysis show that the significance value is 0.00001 <0.05, and the t-count is 4.655> t-table which is 1.672. Thus, the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted, indicating a significant effect of interactive learning media (X) on students' interest in learning (Y). The R Square value obtained is 28.6%, indicating that 28.6% of the variation in students' interest in learning can be explained by the use of interactive learning media. This finding emphasizes the importance of integrating interesting and interactive learning media in the learning process to increase students' interest and motivation in mathematics subjects.

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Bibliography

Aulia, A., Muhammad, Q. H., Anggil, V. K., M.Imran, H., Neni, M., Erfha, N., Retno, F. N., Nurlina, N., Fitri, M., & Ade, I. F. (2023). *Minat Bermain dan Perkembangan Anak* (Y. Ari & W. N. R. Apt., Eds.). PT Global Eksekutif Teknologi.

Ayu, S., Ardianti, S. D., & Wanabuliandari, S. (2021). Analisis faktor penyebab kesulitan belajar matematika. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, *10*(3), 1611–1622.

Firsta, B. S., Mirayanti, M., & Feronika, I. (2022). *Implementasi Multimedia CD Interaktif Untuk Meningkatkan Aktivitas dan Hasil Belajar Tema 6 Kelas II SDN Merjosari 04 Kota Malang*. *15*, 39–48.

Hansa Cordelia Tabina, M., Isna Mubarok, A., Marinda Sari, I., Aura Nabela, Y., Fakhriyah, F., & Fajrie, N. (2024). Analisis Media Pembelajaran Interaktif Dalam Minat Belajar Siswa Kelas 5 SD 03 Tergo. *Jurnal Cendekia Ilmiah*, *3*(5).

Irmayanti, I., Nurjannah, N., & Syarifuddin, S. (2021). *Basic Statistics*. CV Pena Persada.

Lemi, I. (2019). *Pemanfaatan Media Pembelajaran Dalam Proses Belajar Untuk Meningkatkan Kemampuan Berfikir Kognitif Siswa*. *2*(1).

Maharani, A. (2019). *Pengaruh Penggunaan Media Interaktif Animasi Terhadap Minat Belajar Matematika Pada Peserta Didik Kelas SD Negeri*. Universitas Lampung.

Mila, C. P., & Rizki, A. (2015). *Pengimplementasian Media Pembelajaran Berbasis Multimedia Interaktif Pada Mata Pelajaran Matematika Di Sekolah Dasar*. *5*, 131–149.

Muhammad, A., Lintang, R. S., & Nur, K. (2022). *Pengaruh Model Pembelajaran Problem Based Learning dan Media Pembelajaran Matematika Interaktif Terhadap Minat Belajar Siswa*. *4*(Sandika IV).

N.N.D. Kristanti, N. Dantes, & Sariyasa. (2024). Pengembangan Media Pembelajaran Interaktif Berbasis Android Bermuatan Materi Bentang Alam Pada Mata Pelajaran Ipas Dalam Meningkatkan Minat Belajar Siswa. *Pendasi Jurnal Pendidikan Dasar Indonesia*, *8*(1), 168–180. https://doi.org/10.23887/jurnal_pendas.v8i1.3251

Nur, A. P. (2018). *Pengaruh Media Pembelajaran Interaktif Terhadap Hasil Belajar Bahasa Indonesia Di SMP Negeri 1 Bungoro Kecamatan Bungoro Kabupaten Pangkep*. Universitas Muhammadiyah Makassar.

Pandriani, P., Vina, N. V. H., Abdul, W., Sisca, V., Sri, S., Endang, K. N., Bagus, D. H. S., Vini, R., Muhammad, I. H., Syamsidar, G., Trisna, Y., Anisa, R., Firdhani, F., & Siti, M. (2023). *Statistika Dasar*. Widina Media Utama.

Pratama, M. P., Hasanah, F. N., Pgsd, P., Psikologi, F., Pendidikan, I., Sidoarjo, U., Pendidikan, P., & Informasi, T. (n.d.). *Eduproxima: Jurnal Ilmiah Pendidikan IPA PENGARUH MEDIA Pembelajaran Interaktif Terhadap Minat Belajar Siswa Mata Pelajaran Ipa SD*. http://jurnal.stkippgritulungagung.ac.id/index.php/eduproximaEDUPROXIMA6