Digital Literacy and its Impact on Reading Interest in Prospective Elementary School Teachers

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ABSTRACT

The rapid development of technology in the 21st century requires that every individual is skilled in using digital devices, including in the world of education. The ease of accessing information through digital media should increase students’ interest in reading. This study aims to analyze the effect of digital literacy on students’ reading interest. The research method used is quantitative with survey research methods. The population in this study were all 6th semester students. Sampling in this study used a purposive sampling technique that found 44 students in total. The instrument uses a Likert scale type interval questionnaire. Data analysis techniques, namely descriptive test, normality test, linearity test, and hypothesis testing using a simple linear regression test. The results of this study indicate that digital literacy has a significant influence on students’ reading interest. This means that digital literacy has a strong influence on students’ reading interest. Digital literacy also has a positive influence on reading interest, which means that the better the student’s digital literacy, the better the student’s reading interest. This is indicated by the results of the coefficient table which has a significant value of 0.000 < 0.05. So it can be concluded that there is an influence of digital literacy on students’ reading interest.

1. INTRODUCTION

The rapid development of technology and information in the 21st century has created many societal changes and challenges. The era of Revolution 4.0 has shifted to the era of super-intelligent Society 5.0, first introduced by the State of Japan in 2019 (Fadli, 2021; Hendarsyah, 2019). Every aspect of life has become familiar with using mobile phones, computers, tablets, and other technologies to support ease and accuracy in facilitating every communication, and work is included in education (Reddy et al., 2020; Ririen & Daryanes, 2022). The rapid development of information and communication technology requires every individual to have good literacy skills. However, the literacy skills that must be possessed at this time are not enough only with the ability to read and write classically but must be equipped with other abilities that support life in the 21st century (M. F. dan F. D. A. Akbar, 2017; Yunita Anindya et al., 2019). Along with the rapid development of technology, literacy has expanded meaning. UNESCO (United Nations Educational, Scientific, And Cultural Organization) initially explained literacy as the ability to read and write texts and interpret the contents of reading material. In its development, literacy is defined as one’s awareness and...
Digital literacy is the ability to understand and use information from various sources (A. Akbar et al., 2022; Leaning, 2019; Pangrazio et al., 2020). Digital literacy is the ability to use technology and information from digital devices effectively and efficiently in various contexts such as culture, economics, academics, careers and everyday life. In addition to evaluating information and information sources and realizing the risks associated with the digital world and adapting to the digital era (Churchill, 2020; Hadayani et al., 2020). Digital literacy is an individual’s ability and knowledge to utilize digital devices or digital media, such as smartphones and computers, to organize, understand, evaluate, and analyze information effectively in various formats.

Currently, students are the millennials generation who have become very digital and urban since birth. Individuals of this generation grow and develop with ever-advancing technology. Digital literacy skills are critical to be mastered by students as internet users, both in terms of time management, the ability to find valuable sources, ethics in using social media, the ability to protect personal security, and device security to the ability to use devices (Ririen & Daryanes, 2022; Yunita Anindya et al., 2019). Glister explained that there are four core competitions for digital literacy skills, namely: (1) Internet Searching; (2) Hypertextual Navigation or guided directions; (3) Content Evaluation or evaluation of information content; (4) Knowledge Assembly or compilation of knowledge (Glister, 1997; Elpira, 2018; Aqil et al., 2022).

Based on a survey by the Ministry of Communication and Information regarding Indonesia’s digital literacy skills, it received an average score of 3.47. When viewed more specifically for each sub-index, information and data literacy, communication and collaboration, security, and technological capabilities are still below 4 (good category) (Ririen & Daryanes, 2022). Literacy culture, especially reading interest, has a vital role in life because it is produced through reading and writing activities. Especially in this era of disruption, literacy is the key to increasing Human Resources (HR). A nation with high literacy can exist in global competition, especially in science and technology (Ningsih, 2020; Pakistyaningsih et al., 2019; Eddy, 2023).

Efforts to foster a culture of literacy cannot be separated from the world of education. This is because the development of insight and knowledge of students is obtained through reading and writing activities. By reading, students can get information easily and quickly. Therefore, reading culture should be used as an academic activity in schools and universities (Mansyur, 2020; Aqil et al., 2022). Based on data from the 2020 United Nation Development Program (UNDP) through the Human Development Report (HDR), Indonesia’s Human Development Index (IPM) is ranked 121 out of 198 countries. Far from other Southeast Asian countries, such as Singapore, Malaysia, Thailand, Brunei and Vietnam. Released from the 2018 Program for International Student Assessment (PISA), Indonesia ranks 73rd out of 79 PISA participating countries in the field of reading (Kemendikbud). In 2019 the Program for International Student Assessment (PISA) reported that the majority (60%) of Indonesian students were at level 1 or 2 in reading and only a small group (0.1%) had acquired reading skills at levels 5 and 6 (Afriyanti et al., 2018; Sultan et al., 2020). The low level of literacy in Indonesia is due to the fact that people have a low interest in reading. This is what causes Indonesia to have low competitiveness and human resources (HR).

With the growing development of technology, especially among high school and college students, it has become easier to obtain information than reading materials from various digital devices should be able to increase their interest in reading. However, the facts still show that students’ interest in reading is still relatively low. Students’ interest in reading is closely related to their ability to process information analytically, critically, and reflectively, which is currently known as HOTS (Higher Order Thinking Skill) (Damaianti et al., 2020; Mayevskaya, 2018). The low interest in reading results in students’ critical thinking skills also being low. It is not surprising that the spread of hoaxes in Indonesia is mushrooming. The community’s intensity in accessing social media and the internet is very high, but literacy and critical thinking are weak ((Moore & Hancock, 2022; Spante et al., 2018).

Interest in reading is basically an impulse that can affect behavior and action, followed by feelings of pleasure and accompanied by one’s efforts to read. People who have a high interest in reading will be manifested in their willingness to get reading material and then read it on their own accord (Sumita & Sumini, 2019; Aprilia, 2020). Interest in reading positively and significantly affects students’ language skills. High interest in reading can make students like to read because it trains thinking skills, increases understanding, adds knowledge and insight, supports speaking skills, improves writing skills, and increases vocabulary. This shows that a high interest in reading will improve a person’s ability to write or speak. There are five aspects of reading interest that are interconnected with one another and cannot be separated, including (1) Motivation; (2) Happy Feelings; (3) Will; (4) Attention; (5) Awareness (Aqil Siroj et al., 2022; Lestari et al., 2017).
Reading skills as an academic activity in the tertiary environment play a vital role because they are a means for students to recognize, understand, and apply the knowledge gained on campus. In addition, reading supports other language skills, such as speaking and writing. Therefore, reading skills should be mastered by students. Several previous studies revealed that digital literacy significantly increases students’ interest in reading (Simbolon, 2022). The results of other studies also reveal that digital literacy has a strong influence on increasing students’ interest in reading (Aqil et al., 2022). The results of other studies also reveal that digital literacy positively improves adolescent reading comprehension skills (Namaziandost et al., 2019). Based on some of the results of these studies, it can be said that digital literacy is very good at increasing students’ interest in reading. It’s just that in previous studies there was no research that specifically discussed the impact of digital literacy on reading interest of prospective elementary school teachers. So this research focuses on this research with the aim of analyzing the effect of digital literacy on students’ reading interest.

2. METHOD

This research is a quantitative research which is included in the type of survey research. Quantitative research is a research approach that involves the collection and analysis of numerical data to understand and explain various phenomena (Creswell & Creswell, 2018). Survey research is a type of quantitative research method that involves the collection of data from a sample of individuals through the use of surveys or questionnaires (Bolanakis, 2019; Setia, 2016). Within the context of survey research, several types of quantitative research can be included. The population in this study were all 6th semester students of the Yogyakarta State University Elementary School Teacher Education study program. Sampling in this study using purposive sampling technique. The sample involved in this research was Elementary School Teacher Education students, class 6 B semester 6, Yogyakarta State University, totaling 44 students. The research instrument used in this study was a Likert scale type interval questionnaire in the form of a digital literacy questionnaire and a reading interest questionnaire given using the Google form. The data obtained in this study were then analyzed using a simple linear regression test using SPSS version 25 for windows. Before testing the hypothesis, there are several conditions that must be met and need to be proven, including: the data to be analyzed must be normally distributed, the data to be analyzed must be linear. The normality test used SPSS version 25 for windows, with the Shapiro-Wilk analysis technique at a significance of 0.05. While the linearity test with the ANOVA technique with the help of SPSS version 25 for windows.

3. RESULT AND DISCUSSION

Result

Descriptive Statistical Test

Data from descriptive statistical analysis regarding the effect of digital literacy on reading interest in Elementary School Teacher Education students at Yogyakarta State University can be seen in Table 1.

Table 1. Results of Descriptive Statistical Analysis

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Means</th>
<th>std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Literacy</td>
<td>44</td>
<td>45.00</td>
<td>68.00</td>
<td>58.0455</td>
<td>4.96478</td>
</tr>
<tr>
<td>Reading Interest</td>
<td>44</td>
<td>48.00</td>
<td>70.00</td>
<td>57.8636</td>
<td>4.56269</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 1, it is known that the amount of research data (N) is 44 respondents. The digital literacy variable (X) has a minimum value of 45 and a maximum of 68. It is known that the average value of the digital literacy variable is 58.04, with a standard deviation value of 4.964. At the same time, the reading interest variable (Y) has a minimum value of 48 and a maximum value of 70. The average value of the reading interest variable is 57.86, and the standard deviation value is 4.562.

Prerequisite Analysis Test

Testing the prerequisites for research analysis is carried out by normality and linearity tests. The normality test was carried out to determine the effect of digital literacy on the reading interest of Elementary School Teacher Education students with normal distribution or vice versa. Data normality test results can be seen in Table 2.
Table 2. Normality Test Results

<table>
<thead>
<tr>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics</td>
<td>df</td>
</tr>
<tr>
<td>Reading Interest</td>
<td>0.126</td>
</tr>
<tr>
<td>Digital Literacy</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Based on Table 2. The results of the Shapiro-Wilk test showed that the significance value of the digital literacy variable (X) has a significance value of 0.889 > α=0.05 and the reading interest variable (Y) has a significance value of 0.372>α=0.05, so it can be concluded customarily distributed data. After getting the results of the normality test, the analysis then proceeds to the linearity test. The results of the linearity test can be seen in Table 3.

Table 3. Linearity Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>MeanSquare</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Interest*</td>
<td>Between Groups</td>
<td>Linearity Deviation from Linearity (Combined)</td>
<td>653.598</td>
<td>18</td>
<td>36.311</td>
</tr>
<tr>
<td>Digital Literacy</td>
<td>Within Groups</td>
<td>Total</td>
<td>241.583</td>
<td>25</td>
<td>9.663</td>
</tr>
<tr>
<td></td>
<td></td>
<td>895.182</td>
<td>43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 3 above, a significant value of 0.819 > α = 0.05 is obtained, which means that there is a significant linear relationship between the digital literacy variable (X) and reading interest variable (Y).

Hypothesis Testing

The following analysis tests the research hypothesis through a simple linear regression test with the help of the Windows SPSS Version 25 application. The results of a simple linear regression test can be seen in Table 4.

Table 4. Simple Linear Regression Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>MeanSquare</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>546.779</td>
<td>1</td>
<td>546.779</td>
<td>65.914</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>348.403</td>
<td>42</td>
<td>8.295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>895.182</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 4 it can be seen that the significant value is 0.000 < α = 0.05, so that it can be seen that the alternative hypothesis (Hₐ) is accepted while the null hypothesis (H₀) is rejected. So it can be concluded that there is a significant influence between digital literacy and reading interest in Elementary School Teacher Education students at Yogyakarta State University. The results of the coefficient of determination is show in Table 5.

Table 5. The results of the Coefficient of Determination (Adjusted R²)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>std. An error in the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.782</td>
<td>0.611</td>
<td>0.602</td>
<td>2.880</td>
</tr>
</tbody>
</table>

Based on Table 5, it is known that the correlation coefficient (R) is 0.782; this shows the degree of relationship between the digital literacy variable (X) and reading Interest (Y) of 78.2%. This means that digital literacy strongly influences students’ reading interests. While the value of the coefficient of determination (Adjusted R²) is 0.602, digital literacy variables realize 60.2 % of reading interest. Meanwhile, 28.8 % is explained by other variables not included in this study. Coefficient results is show in Table 6.

Table 6. Coefficient Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>16.173</td>
<td>5.153</td>
<td>3.138</td>
</tr>
</tbody>
</table>
Based on Table 6, it is known that the digital literacy variable has a significant value of 0.00, so digital literacy has a positive effect on students’ reading interest with a significant 0.00 < α = 0.05. This means that the better students' digital literacy, the better interest in reading students will have.

Discussion

This research was conducted to determine the effect of digital literacy on students’ reading interests. The data obtained by the researcher used a questionnaire regarding digital literacy and students' interest in reading which was then given to respondents, namely elementary school teacher education students in class 6D, Yogyakarta State University. The process of filling out the questionnaire was carried out by students using the Google Form application. The results of the study show that digital literacy is very influential in increasing students' interest in reading. This is because the ease of accessing information through digital devices makes it easier for students to be able to easily obtain information and learning resources anytime and anywhere, for example through websites, e-books, e-journals, and digital libraries (Wulandari & Sholeh, 2021; Sukarno & Widdah, 2020). In this era of disruption, of course, digital literacy also has a positive influence on reading interest, which means that digital literacy has a strong influence on students’ reading interest. Students who have a high interest in reading will have a broader perspective, be more productive and knowledgeable (Wulandari & Sholeh, 2021).

The existence of digital literacy can help the learning process, students can distinguish the right learning resources, and various reading materials quickly. Interest in reading is needed to strengthen the mastery of science and technology which continues to develop (Senen et al., 2021; Widiastini, 2021). Students who have a high interest in reading will have a broader perspective, be more productive and creative. Based on the research results related to the effect of digital literacy on students' reading interest, the regression equation shows \( Y = 16.173 + 0.718X \). A constant of 16.173 states that if there is no good digital literacy, student reading interest is 16.173. The regression coefficient of 0.718 indicates that adding one digital literacy value will increase student reading interest by 0.718 or 71.8%. Conversely, if digital literacy decreases by one value, student reading interest will also decrease by 0.718.

The correlation coefficient shows an R-value of 0.782, which means that the correlation is strong and the large percentage of the influence of digital literacy (X) on student reading interest (Y) is called the coefficient of determination (R²) shows a value of 0.602, which means that the variable quality of student reading interest is influenced by digital literacy variable of 60.2%. At the same time, other variables outside the research variables influence 28.8%. The results of testing the hypothesis described in this study's simple linear regression test show that the significant value is 0.00 < α = 0.05. so that it can be seen that the alternative hypothesis (Hₐ) is accepted while the null hypothesis (H₀) is rejected. So it can be concluded that there is a significant influence between digital literacy and the reading interest of elementary school teacher education students at Yogyakarta State University.

The results obtained in this study align with previous research results, which revealed that digital literacy significantly increases students’ interest in reading (Simbolon, 2022). The results of other studies also reveal that digital literacy has a strong influence on increasing students' interest in reading (Aqil et al., 2022). The results of other studies also reveal that digital literacy positively improves adolescent reading comprehension skills (Setyawati et al., 2021). Based on some of the results of these studies, it can be said that digital literacy is very good at increasing students’ interest in reading.

4. CONCLUSION

Based on the results of data analysis, it can be seen that the significance value is superior to the level of significance. So it can be concluded that there is a positive influence of digital literacy on students' reading interest. The results of this study indicate that digital literacy has a significant influence on students' reading interest. This means that digital literacy has a strong influence on students' reading interest. Digital literacy also has a positive influence on reading interest, which means that the better the student's digital literacy, the better the student's reading interest. This is indicated by the results of the coefficient table which has a significant value. So it can be concluded that there is an influence of digital literacy on students' reading interest.

5. REFERENCES


