



## The Effect of Online Learning on Learning Interest and Digital Literacy of Students in terms of Gender (Gender-Based Comparative Causal Study of Students' Learning Interest and Digital Literacy in Distance Learning Due to the Covid-19 Primary School Pandemic)

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**Abstract:** The implementation of online learning in elementary schools since the spread of the COVID-19 virus in Indonesia, so the background of this study is to determine the effect of learning interest in online learning on students' digital literacy in terms of individual competence based on gender. The method used is causal-comparative. The instrument in the form of a questionnaire regarding interest in learning and digital literacy in terms of individual competence based on gender. Data was collected using google form. The study population was students at SDN Sukamukti 02, with a random sampling of 300 students, consisting of 175 girls and 125 boys. The research findings obtained are (1) there is a significant difference between the learning interest of male and female students with sig. 0.007; (2) there is no significant difference in the digital literacy skills of male and female students with sig. 0.091. So, the conclusion is that online learning that is carried out shows that there are differences in the learning interests of male and female students. However, the digital literacy skills of both male and female students during online learning did not show a significant difference. So, it can be said that the digital literacy skills of students are equal.

**Keywords:** Online Based Learning, Interest, Digital Literation,

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### INTRODUCTION

The COVID 19 pandemic that has occurred for six months has resulted in all community activities. One of them is in the field of education, namely by closing schools, colleges, and universities as a way to avoid the spread of the COVID-19 virus. The education sector is one of the many areas affected by the spread of the COVID-19 virus, this has led to the Minister of Education and Culture of the Republic of Indonesia on March 24, 2020, to issue Official Circular Number 4 of 2020 concerning Implementation of Education Policies in an Emergency for the Spread of COVID.

The circular contains the implementation of learning that can be carried out at home, through distance learning, or online. Distance learning is a solution in the scope of education so that students can still carry out learning without having to come to school to break the chain of the spread of COVID-19

itself. Studying at home is certainly a new experience for students, teachers, and parents because so far, student learning activities and processes are always carried out at school. Seeing the importance of implementing the learning process amid this pandemic, distance, or online learning is the best solution so that students continue to have meaningful learning experiences. Online learning existed long before this pandemic occurred, but its implementation was not comprehensive. Therefore, online learning is a new challenge, especially for teachers. Therefore, the teacher must prepare various forms of learning activities that can be carried out online.

Online learning does not only transfer material contained in textbooks to digital media, it sends assignments and reading material to students through online-based learning applications. Good online learning requires complete planning, from activities to evaluation. Online learning during the



pandemic has made teachers learn to innovate and look for appropriate online-based learning applications that can be accessed by students and parents through their digital media, such as cellphones and laptops. Several digital media that provide online learning facilities such as google classroom, google meet, Edmodo, zoom, WhatsApp group, etc. Through this online learning, students have the flexibility to study time, so that they can study wherever and whenever (Dewi, 2020). Indirectly, students are given learning experiences that lead to the use of technology and information currently developing in the learning process. However, over time online learning has gone on to get complaints that lead to the unpreparedness of parents to become guides during distance learning (online). The achievement of online learning depends on the collaboration between teachers, parents, and students. So online learning is now a new challenge in the sphere of education.

The factor of student learning success is an interest in learning. Interest is a strong factor for successful learning (Gable, 1986; Singer, 1987). Therefore, learning must be able to encourage student interest in what is desired. Besides, interest in learning is an active tendency and is always related to awareness, attention, willingness, and pleasure to learning Winkel, 2004; Safari, 2005; Slameto, 2010,). Therefore, student interest in learning can be interpreted as a condition of students who can foster a sense of liking and arouse self-enthusiasm to carry out an activity that can be measured through liking, being interested, having attention, and involvement in the learning process.

These challenges include maintaining students' interest in learning and practicing their digital literacy skills. Student interest in learning during online learning has an impact to some extent on the learning process and outcomes, because students may feel more enthusiastic about learning because they have time flexibility, but students can also feel bored and do not like online learning. Through online learning teachers can direct, encourage and train

students to have good digital literacy skills, considering that online learning introduces more or less the use or use of digital technology in student learning activities that were not previously discovered or experienced. Therefore, the purpose of this study is to obtain information about the effect of online learning on students' interest in learning and digital literacy in terms of individual competence based on gender in the distance learning program at SDN Sukamukti 02 during the COVID-19 pandemic emergency.

Advances in technology and information indirectly change a person's habits, maybe even change learning patterns that may have been going on for a very long time. However, of course, this cannot be used as an excuse for not participating in supporting the advancement of existing technology and information. Therefore, to support the development of technology and information, the world of education directs the learning process carried out in the classroom by using more or less digital media, be it smartphones or computers, this aims to train students' digital literacy skills. Digital literacy as awareness, attitude, and individual ability to use digital tools and facilities to identify, access, manage, integrate, evaluate, Internet users are not only required to be proficient in technical competencies using the internet only. However, they are also required to be able to think critically about the various content displayed by the internet, so that they can use the internet effectively for their interests. Besides, internet users are also required to be able to build social relationships and participate in society through the internet. Therefore, it is necessary to learn that always leads to digital literacy training, especially among elementary school students.

One of the components contained in digital literacy is communication and collaboration. Within these components, there are individual competencies (Setyaningsih, et al, 2019). Ansert in Morten Soby's (2008) research defines individual competence as the skills, knowledge, and attitudes needed



by a person to use digital media in mastering social knowledge and learning.

Commission and Unit (in Setyaningsih, et al, 2019) also stated that in this individual competence component there are several other supporting components, namely use skills which are the ability of students to access and operate digital media, critical understanding in the form of the ability to analyze and evaluate media content. digital, and communicative, namely the ability to communicate and participate in students through digital media.

Based on the background and research objectives that have been stated, the formulation of the problem in this study is how the effect of online learning on students' interest in learning and digital literacy in terms of individual competence based on gender. Based on the formulation of the problem, the hypothesis in this study is; 1). There are significant differences in learning interest between male and female students in online learning that has been carried out. 2). There is a difference in digital literacy in terms of the significant individual competence effect between male and female students after participating in online learning.

## METHOD

Comparative causal research is a research activity to examine causal relationships that are manipulated or treated by researchers. (Sukmadinata, 2010: 55). In this case, it is looking for the effects of online learning on 2 main variables, namely an interest in learning, and digital literacy in terms of individual competence aspects of students based on gender during the COVID-19 pandemic. The population of this study was students of SDN Sukamukti 02, Katapang District, Bandung Regency. The sample selected in this study was determined randomly, totaling 300 students, consisting of 175 female students and 125 male students. This research instrument uses a questionnaire distributed via googles form. The data analysis technique used to determine whether there are differences in

learning interest and digital literacy between male and female students is to test the normality of the score data on learning interest and digital literacy in both groups, by conducting the Lilliefors test (Kolmogorov-Smirnov) with a significance level. 0.05. Furthermore, the homogeneity test was carried out to see the variance of the data in the two groups, the test used was the Levene test with a significance level of 0.05. If the data obtained is normally distributed and has a homogeneous variation, then to test the hypothesis, a two-party (2-tailed) independent sample t-test is carried out, using SPSS version 22 to see differences in learning interest and digital literacy between male and female students. If the data obtained is not normally distributed and the variance is not homogeneous, the test will be carried out using the non-parametric test, namely the Mann Whitney test.

## RESULTS AND DISCUSSION

The first test carried out in processing data from research results regarding learning interest and digital literacy based on gender is the Lilliefors normality test (Kolmogorov-Smirnov) with the help of SPSS version 22 software to determine whether the data is normally distributed. The normality test is one of the prerequisites for further hypothesis testing.

Based on the Lilliefors (Kolmogorov-Smirnov) normality test on learning interest in female students, the sig value is 0.00 less than 0.05, so the research data is not normally distributed. While male students obtained a sig value of 0.02 which is smaller than 0.05, the research data is not normally distributed. The results of the Lilliefors (Kolmogorov-Smirnov) normality test on digital literacy in female and male students obtained a sig value of 0.20 greater than 0.05, so the research data was normally distributed. Furthermore, the homogeneity test is carried out to determine that the two groups of sample data come from populations that have the same variance (homogeneous).



The results of the Levene homogeneity test on students' learning interest scores based on gender obtained a sig value of 0.273 which is greater than 0.05, so the sample data comes from a population that has the same variance (homogeneous). Likewise, the results of the Levene homogeneity test on students' digital literacy scores based on gender obtained a sig value of 0.078 which is greater than 0.05, so the sample data comes from a population that has the same variance (homogeneous).

Based on the prerequisite test for the normality of research data, it was found that the data on student learning interest-based on gender was not normally distributed, while the digital literacy data for students based on gender were normally distributed. The prerequisite test for the homogeneity of the research data showed that all sample data came from a population that had the same variance (homogeneous). Therefore, the hypothesis test for students' interest in learning based on gender was carried out with a non-parametric test, namely the Mann-Whitney test at a significance level of 0.05, while the hypothesis testing for digital literacy of students based on gender was carried out using the Independent Samples t-Test at a significance level of 0, 05.

The results of the Mann-Whitney test on student interest in learning based on gender obtained a sig value of 0.007 smaller than 0.05 so that  $H_0$  was rejected and  $H_1$  was accepted, meaning that there was a significant difference in learning interest between male and female students. This difference can be seen through the results of the interest in learning score which shows that the average value of student interest in learning is 3.38 while the male was 3.25. Based on these data, it can be said that female students have a higher interest in learning than boys.

The results of the Independent Samples t-Test on student digital literacy based on gender obtained a sig value of 0.091, greater than 0.05 so that  $H_0$  was accepted and  $H_1$  was rejected, meaning that there was no significant difference in digital literacy

between male and female students. Based on the results of this hypothesis test, it can be said that there is no significant difference between male and female digital literacy students.

## CONCLUSION

Based on several research findings on online learning due to the COVID-19 Pandemic in Indonesia, it shows that there are differences in learning interest between male and female students where women have a higher interest in learning than boys. Besides, other findings indicate that students' digital literacy during online learning does not show a significant difference between boys and girls. So, it can be said that the digital literacy skills of male and female students are equal.

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