

Students' Learning Interest Analysis of Mathematics Learning in the New Normal Era

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Abstract. This research is a type of descriptive qualitative research. The purpose of this study was to analyze and describe the learning interests of third grade students at Al Azhari Global School Cikampek for the 2021/2022 academic year in Karawang district. The results of this study indicate that the average percentage of students' overall interest in learning mathematics is 78.75%. So it can be concluded that most students have an interest in learning mathematics. The questionnaire instrument in this study consisted of four indicators consisting of feelings of pleasure, attention, interest and involvement of students in learning mathematics. Each indicator in the instrument consists of 4-8 items in the category of positive and negative statements in accordance with predetermined indicators. The indicator that obtained the greatest results was the student's interest with the results of 87.98%. In the second order there is an indicator of feeling happy with the results of 82.55%. Furthermore, in the third order shows the acquisition of a score of 75.87 with an indicator of attention to mathematics learning. The lowest gain shows a result of 68.60% on the indicator of student involvement. The results of this study can be used as an illustration of the interest that students have in learning mathematics. Especially in the post-pandemic transition situation, namely in the learning of the new normal era.

Keywords: interest in learning, learning mathematics, online learning, low grade, new normal era.

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INTRODUCTION ~ The current pandemic has affected various aspects of life. One of the aspects affected is the education aspect. Various policy adjustments are trying to be applied at various levels of education. The learning process, which is applied directly or face-to-face, becomes something that cannot be applied as usual. Learning in schools is shifted to an online system or online with various techniques and applications. This process requires various abilities in the use of technology, adjustments to the learning system as well as self-preparation from the side of teachers and students as well as school institutions. However, not all schools are able to implement the policy in a ready and adequate manner. So that, It is feared that the quality of learning carried out will be less than optimal.

The readiness of the online learning system needs to be reviewed from various things such as teacher readiness, learning media, effective learning systems and learning outcomes assessment systems. Various data show that online learning has caused various impacts.

Yurianto (Alkhaira & Lena, 2021) describe that The number of COVID-19 cases in Indonesia has reached more than 81,668. The government responded to the Covid-19 pandemic problem by imposing a large-scale social restriction (PSBB) policy as a form of handling COVID-19 by issuing Government Regulation (PP) Number 21 of 2020 and Presidential Decree (Keppres) Number 11 of 2020.

These restrictions have a significant effect on students' interest and desire to learn.

As the results of research conducted at SDN 4 Sirang Setambang in the fourth grade Mathematics subject some time ago on April 4 2018, that there are some fourth grade students who have problems in learning interest. This can be seen from the learning outcomes in the form of students' daily test scores, seen from the activities in the classroom when learning takes place based on the observations of students not paying attention to the teacher's explanation during the learning process, as well as the lack of attention and interest in student learning during the learning and learning process. (Dores, Huda, & Rustina, 2019).

The results of other studies show that what the fifth grade students did at the Sei. Rotan elementary school in Pariaman City on June 19, 2019 there were various reasons that the researchers got from the results of student observations and interviews including: 1) students are lazy to do school assignments because the assignments are given online very many and collected once a week for all subjects, 2) some students have difficulty understanding the lessons explained by the teacher via whatsapp, 3) some students are bored because they study alone and are supervised by their parents, 4) students complain because the network is often interrupted while studying, 5) students are not enthusiastic about learning

After going through a pandemic period with full restrictions on the learning process. The government then implements a learning system that adapts to the new normal situation. The implementation of the learning process carried out at that time was an integrated learning process, namely between the online system and the face-to-face system.

Even though schools have been allowed to carry out learning activities. However, these activities are still carried out with various restrictions.

There are various aspects of learning that can support the implementation of a good learning process. In addition to the aspect of the ability to think, another aspect that is no less important is the character of students in participating in the learning process. Various student characters that appear during the learning process such as patience, independence, desires and interests and others. In this case, the focus of attention in this study is on the desires and interests of students. Especially students' interest in learning mathematics. Mathematics learning, both in high and low grades, which are still integrated in thematic, need to pay attention to the interest in learning that each student has. Because, student learning interest is a factor that is quite major and important for a student to have.

Interest and desire to learn is very important in the smooth learning process carried out. Interest in learning is an impulse that moves a person to carry out learning activities where he can freely choose what he will do without any pressure from others. Interest will settle and increase in a person to get encouragement from the environment in the form of experience (Heryyanti, Tanzeh, & Masrokan, 2021). Interest in learning is very important for students to have in the learning process. Hurlock (Friantini, 2019) said that 1) interest affects the form and intensity of ideals, for example people who are interested in mathematics will aspire to become mathematicians, who are great, or become people who are experts in

mathematics, 2) interest can serve as a strong motivator, students those who are interested in mathematics will be encouraged to do activities related to mathematics, 3) achievement is always influenced by the type and intensity of a person's interest, students who are interested in mathematics will try to get good grades in mathematics, 4) interest creates satisfaction, students tend to repeat activities related to their interests.

One of the subjects that need to be focused on is mathematics. Mathematics as one of the main subjects and included in group A as a core subject, is one of the subjects that has been considered a difficult and scary subject. Mathematics learning needs to be accompanied by a high student interest in learning to be carried out. However, as described above. The transition of the learning process from the pandemic period to the new normal era is feared to affect student interest in learning, one of which is mathematics. There are concerns about the decreasing interest in students' learning in mathematics. This is not without reason, because by having a high interest in learning, It is hoped that students will be able to learn and practice mathematics well. In the end, it will be easier for students to be trained to think critically, creatively, carefully and logically which makes students perform well in mathematics (Sirait, 2016).

The importance of a teacher to determine students' interest in learning mathematics to be carried out, so it is hoped that the objectives of learning mathematics can be achieved. Interest in learning is very influential on student learning outcomes in certain subjects.

The indicators of interest in learning according to Lestari and Yudhanegara (2017) including 1) the feeling of pleasure, 2) the interest in learning, 3) the attention when learning, 4) the involvement in learning. The indicators at the next stage are outlined in the form of questions in positive and negative forms. So, based on the description above, the researcher will analyze students' interest in learning mathematics in the new normal era. This research was conducted in a private elementary school in Karawang regency. The research subjects were third grade elementary school students who were in two classes with a total of 43 students.

METHOD

The type of research conducted in this research is descriptive qualitative research. Descriptive qualitative research is one type of qualitative research. Calculation of the results of this study in the next step will be described in accordance with the criteria of interpretation or interpretation of the existing scale. While the sampling technique used is saturated sampling. The sampling technique of saturated sampling is a sampling technique when all members of the population are used as samples (Sugiyono, 2015). The subjects in this study were third grade students of SDI Al Azhari Global School Cikampek. At the school there are two class groups consisting of grades III A and III B with 21 students and 22 students respectively. So the total is 43 students. The selection of low grades in this study is an attempt to detect student interest in learning as early as possible. It is intended that teachers or all education parties are able to prepare maximum efforts in increasing

students' interest in learning mathematics. The data collection method used in this study was a non-test method in the form of a questionnaire. According to Sugiyono (2015: 199) explained that the questionnaire or questionnaire is a questionnaire technique used consisting of 24 questions that contain four indicators of interest in learning. The four indicators are, there is a feeling of pleasure in learning mathematics, an interest in learning, a concentration of attention and thoughts on learning mathematics and the last is the involvement of students in the learning process of mathematics. The next step is that the indicators are set out in the form of 4-8 items of positive and negative statements that students must answer in the yes or no category.

Data analysis was carried out by determining the percentage of answers or respondents or students for each of the questions in the questionnaire.

$$P_1 = x 100\% \frac{\sum f_i P_i}{n}$$

Information:

Table 1. Interpretation Criteria Percentage of Questionnaire Answers

Criteria	Interpretation
P = 0%	Nobody
0 % < P < 25 %	Fraction
25% < P < 50%	Almost half
P = 50%	half
50 % < P < 75 %	Most of the
75% < P < 100%	Almost entirely
P = 100%	all

(Lestari & Yudhanegara, 2017)

RESULTS

The results of data processing from research conducted on students' interest in learning mathematics in the new normal era are

$P\bar{i}$ = average percentage of student answers for item i-statement

f_i = frequency of student answer choices for i-th statement item

P_i = percentage of student answer choices for i-th statement item

n = number of students

Furthermore, the percentage gain was analyzed descriptively. Determination of the percentage of student answers for each question item in the lift, the following formula is used:

$$P = x 100\% \frac{f}{n}$$

Information:

P = Percentage of Answers

f = Answer Frequency

n = Number of Respondents

described in two categories of descriptions, namely based on the overall data in general and based on the gender categories of male students and female students. The

description of the percentage results is described below:

1. Based on all data

In general, the results of data processing consisting of 24 questions with 43 respondents obtained an average percentage of answers of 78.75% with interpretations included in the almost entirely category. These results illustrate that almost all students have an interest in learning mathematics. These results show that online learning during the pandemic does not reduce students' interest in learning mathematics. On the other hand, students feel happy, interested, pay attention and try to involve themselves in the process of learning mathematics. This can happen because the conditions or methods used by all parties involved in the learning

process are very mature and ready. So that students do not find it very difficult to receive learning materials.

These results are certainly a good thing for the mathematics learning process that will be carried out at the next level. As we all know that student interest in a learning process is very important. Moreover, if the interest in learning can be raised as early as possible and maintained as much as possible. So that students in all conditions still have a strong desire to understand each lesson. Although in general the results of the percentage gains show pretty good results with almost all interpretations. In fact, there is one category that shows a poor score. The percentage results have an interpretation that most students have an interest in learning mathematics.

Table 2. Presentation results of students' learning interest

No	Indicator	Average	Interpretation
1.	There is a feeling of pleasure towards mathematics	82.55%	Almost all
2.	There is an interest in learning mathematics	87.98 %	Almost All
3.	There is a concentration of attention and thoughts on learning mathematics	75,87%	Almost All
4.	There is an effort to be involved in learning mathematics	68.60 %	Most of the

Based on these results, the indicator that obtained the greatest results was the interest that students had with the results of 87.98% it showed that almost all students were interested in learning mathematics. In the second place with the indicator of feeling happy, the result is 82.55% which shows that almost all students feel happy when learning mathematics. Furthermore, in the third

order produces a score of 75.87% with an indicator of attention which means that almost all students have an interest in learning mathematics. The lowest gain shows a result of 68.60% on the indicator of student involvement which means that almost all students show involvement in learning mathematics.

The conclusion that can be drawn from the various percentage results of these indicators is that almost all students have an interest in learning mathematics.

2. By gender

The results of the acquisition of the questionnaire will then be described based on the gender of the research subjects. Overall research subjects were 43 people with a composition of 20 men and 23 women. From the calculation results, it can be seen that the percentage of male students' interest in learning indicators is lower than that of female students. For the four indicators tested, female students obtained the highest score on the indicator of the concentration of attention and thoughts on learning mathematics with a score of 90.58% while the results of the acquisition of male students were 75%. However, both have the same interpretation, namely that almost all male and female students focus their attention and thoughts on learning mathematics. Furthermore, in the second

order, the results of the calculation of female students with a score of 88.40% on the indicator of feeling happy about learning mathematics indicate that almost all female students are happy with learning mathematics. While the score obtained by male students was 76.67%, lower than the score obtained by female students but had the same interpretation meaning that almost all male students were happy with learning mathematics.

In third place with the acquisition of a percentage of 78.26% shows the results that almost all female students have a sense of interest in learning mathematics while for male students the percentage is 75% with the same interpretation. The last and the lowest percentage obtained by female students is in the category of student involvement in learning mathematics. The percentage gain of female students is 70.65% with the interpretation that most of the students show involvement in learning mathematics while for male students, the percentage gain lies at 66.25%.

Table 3. Presentation results of female students' interest in learning

No	Indicator	Average	Interpretation
1.	There is a feeling of pleasure towards mathematics	88.40 %	Almost all
2.	There is an interest in learning mathematics	78.26%	Almost All
3.	There is a concentration of attention and thoughts on learning mathematics	90.58%	Almost All
4.	There is an effort to be involved in learning mathematics	70.65%	Most of the

Although, overall the results of the percentage and interpretation of the indicators of interest in learning show the data that almost all students have an

interest in learning mathematics. However, the percentage gain between male students and female students has a fairly clear difference.

The percentage gain in male students shows the highest gain on the indicator of feeling happy about learning mathematics with a score of 76.67%. Although they have different percentage gains, the interpretations of the two groups of subjects are the same, that is, almost all students have a happy feeling when learning mathematics. In second place with a score of 75% is on the indicator of student interest in learning mathematics. The interpretation of these results shows that almost all male students have an interest in learning mathematics.

The last indicator, namely the involvement of students in learning mathematics, shows the acquisition of a percentage of 66.25% with the meaning that most of the male students show involvement in learning mathematics. Based on the description, it can be seen clearly the difference in the percentage results between male students and female students. These differences can be identified based on the scores and interpretation results on each indicator of interest in learning.

Table 4. Presentation results of male students' interest in learning

No	Indicator	Average	Interpretation
1.	There is a feeling of pleasure towards mathematics	76.67%	Almost All
2.	There is an interest in learning mathematics	75%	Almost All
3.	There is a concentration of attention and thoughts on learning mathematics	75%	Almost All
4.	There is an effort to be involved in learning mathematics	66.25%	Most of the

Based on the two tables, it can be seen that in general the percentage gain results are in high numbers with the interpretation that almost all students have an interest in learning mathematics

as contained in each indicator. However, if it is analyzed more clearly, it can be concluded that the learning interest of female students is higher than that of male students.

Table 5. Comparison of results presentation of indicators of interest in learning boys and female students

No	Indicator	Average Percentage	
		Woman	Male
1.	There is a feeling of pleasure towards mathematics	88.40 %	76.67%
2.	There is an interest in learning mathematics	78.26%	75%

3. There is a concentration of attention and thoughts on learning mathematics	90.58%	75%
4. There is an effort to be involved in learning mathematics	70.65%	66.25%

The comparison of the percentage results between male and female students as a whole obtained a fairly large average with the interpretation that almost all students had an interest in learning. However, the percentage results obtained in each category show quite different words. In the category of female students, the percentage results obtained are in the category of focusing on learning mathematics. This is in accordance with the characteristics of female students who are more capable of being mature in the mathematics learning process. Female students are easier to be directed and instilled about the importance of having an interest in learning in learning. The character of these female students can be seen in the results of the acquisition of the percentage of other indicators such as an interest in feeling happy and an interest in learning mathematics. Both indicators show a fairly high result with almost all interpretations. While in the third indicator, namely regarding involvement, female students obtained scores that were quite different from the results in the previous indicator indicators, which were in the interpretation that most of the female students had an interest in learning mathematics.

DISCUSSION

The results obtained from the percentage of students' interest in learning which show results are quite high with almost all interpretations, need to be appreciated. Because previously some data showed that student interest in

learning before the pandemic period showed quite low results. In a sense, many students do not have an interest in learning mathematics. This is certainly a challenge and can even become an obstacle in the smooth learning process and the achievement of learning objectives. Students' interest in learning is increasingly felt to be worrying during the implementation of online learning systems in elementary schools. Thus, during the new normal learning period, students need to make various adaptations and adjustments quickly and precisely to the learning process.

The application of the online learning process can be an opportunity or an obstacle. This depends on the readiness of all parties in order to implement a maximum learning system both online and face-to-face. The learning process carried out in the new normal era is a learning system that is applied in an integrated manner or known as blended learning. The system applies a combination of online and face-to-face learning.

At the time of implementing the integrated learning process in the new normal era, students have actually been conditioned to be able to experience learning by using various available media. This is in order to maintain the rhythm of the development of students who increasingly show their skillful abilities in technology. As for the touch of face-to-face learning which is then applied, it is sought to be able to balance the

technological abilities possessed by students. With careful planning regarding this matter, both online and face-to-face situations, students remain in the same condition. One of them is having a stable interest in learning.

As the results of the research shown in this study, almost all students have an interest in learning mathematics in the new normal era. This is not something that is impossible to achieve. On the other hand, it is a condition that can be maximized. These efforts can be carried out with careful, consistent and maximum planning. So that students' interest in learning can arise from an early age and be maintained until students move on to the next level. Therefore, interest in learning is quite the main thing to be the main provision in carrying out the learning process. Especially in learning mathematics.

CONCLUSION

Based on the results of the research described above, the results of this study indicate that the average percentage of the overall answers to students' interest in learning mathematics is 78.75%. So it can be concluded that almost all students have an interest in learning mathematics. The questionnaire instrument in this study consisted of four indicators consisting of feelings of pleasure, attention, interest and involvement of students in learning mathematics. Each indicator in the instrument consists of 4-8 items in the category of positive and negative statements in accordance with predetermined indicators. The indicator that obtained the greatest results was the interest that students had with the results of 87.98%. In the second order there is an indicator of feeling happy with the results

of 82.55%. Furthermore, in the third order shows the acquisition of a score of 75.87 with an indicator of attention to mathematics learning. The lowest gain shows a result of 68.60% on the indicator of student involvement. The results of this study can be used as an illustration of the interest that students have in learning mathematics. Especially in the post-pandemic transition situation, namely in the learning of the new normal era. The results of this study can be used as an illustration of the interest that students have in learning mathematics. Especially in the post-pandemic transition situation, namely in the learning of the new normal era. The results of this study can be used as an illustration of the interest that students have in learning mathematics. Especially in the post-pandemic transition situation, namely in the learning of the new normal era.

In accordance with this, it can be concluded that students' interest in learning mathematics in the new normal era obtained a fairly high percentage result with the interpretation that almost all students have an interest in learning mathematics. This means that the transition of the online learning system to face-to-face is not an obstacle to continue to increase student interest in learning mathematics. Including the learning process carried out in the new normal era that is applied in an integrated manner. Teachers can take advantage of the online learning system carried out during the pandemic to make the learning process interesting, exciting and able to increase student interest in learning.

In addition, the results in this study showed that both male and female students obtained the same results, which were high enough to have an interest in

learning mathematics. The difference that can be seen lies in the percentage gain of each indicator. This is because the characters of male and female students are quite different.

The characters possessed by students, both male and female, will indirectly have differences from one another. This is a situation that arises naturally based on the character of both male and female students. Students' interest in learning should not look at gender, but in order to get clearer and in-depth data. So it is necessary to categorize research subjects based on gender. The benefits that can be obtained from this will not only occur in the present but also in the future.

REFERENCE

- Alkhaira, S., & Lena, MS (2021). A SURVEY OF STUDENT'S INTEREST AND LEARNING OUTCOMES IN FOLLOWING LEARNING DURING THE NEW NORMAL COVID-19 IN CLASS V OF ELEMENTARY SCHOOL. *Projection*, 50-60.
- Dores, OJ, Huda, FA, & Rustina, R. (2019). ANALYSIS OF INTEREST IN LEARNING MATHEMATICS OF CLASS IV STATE ELEMENTARY SCHOOL 4 SIRANG SETAMBANG FOR THE 2018/2019 ACADEMIC YEAR. *JPIMat*, 38-48.
- Friantini, RN (2019). ANALYSIS OF LEARNING INTEREST IN MATHEMATICS LEARNING. *Indonesian Journal of Mathematics Education*, 6-11.
- Heryyanti, DA, Tanzeh, A., & Masrokan, P. (2021). The Influence of Style, Interests, Habits and Learning Environment on Student Achievement. *Educational Journal of Educational Sciences*, 3935-3945.
- Lestari, KE, & Yudhanegara, MR (2017). *Mathematics Education Research*. Bandung: PT Refika Aditama.
- Sirait, OD (2016). THE INFLUENCE OF LEARNING INTEREST ON MATHEMATICS LEARNING ACHIEVEMENT. *Informative journal*, 35-43.
- Sugiyono. (2015). *Educational Research Methods*. Bandung: Alfabeta.