

Analysis Of Factors Causing Low Interest In Learning Mathematics After The Covid-19 Pandemic

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Abstract

This research aims to determine the factors causing students' low interest in learning mathematics after Covid-19. This research method uses a qualitative descriptive approach based on the philosophy of postpositivism. The population of this study were all students in class V/A of SD Negeri Kedung Jaya 01 Kab. Bekasi with 23 students obtained using purposive sampling. The data analyzed in this research is the result of observation, questionnaires, interviews and documentation. The results of this study indicate that there are 11 out of 23 students who have low interest in learning mathematics. (2) external factors, namely parental assistance when students study at home, the environment and social friends, facilities and infrastructure. The results of questionnaires, interviews, observations, and documentation show that the transition to learning during the Covid-19 period made students lazy to study, mastery of basic mathematical concepts that did not make students difficult to learn mathematics, lack of parental assistance, lack of learning facilities and infrastructure at home. Based on the results of this study, it can be concluded that the factors that cause students' low interest in learning mathematics have their own level for students at the elementary school level.

Keywords: Interest in Learning Mathematics, Post Covid-19

1 INTRODUCTION

Education is an effort carried out in an organized and planned manner to develop the potential and skills embedded in students as well as the formation of student character. School is a gathering place between teachers and students to obtain education which aims to build character and develop the students' talents, interests, abilities and potential. To develop this, good learning planning is needed that is appropriate to students' abilities. In preparing for learning, careful and planned preparation is needed in order to achieve effective and efficient learning. Therefore, every educator must have the ability to develop learning resources according to students' potential, talents, abilities and interests.

The teaching and learning process is essentially a communication process, where the teacher acts as the messenger and the students as recipients of the message. The message sent by the teacher is in the form of lesson content/material which is expressed in communication symbols, both verbal (words and writing) and non-verbal. In the world of education, mathematics is often the most frightening subject, this is usually because mathematics is a subject related to calculations, numbers/symbols that are difficult for them to understand. Sometimes there are some students who think that mathematics can only be mastered by genius students and is only of interest to high achieving students, but basically mathematics aims to help train students' thinking patterns so they are able to solve problems, both problems in mathematics and problems in life.

Based on Piaget's theory, elementary school age cognitive development is in the concrete operational stage. At the concrete operational stage, students generally still experience difficulties in understanding abstract mathematics. At this age students are only

able to think systematically related to concrete objects and events. Therefore, in the learning process, a comfortable and pleasant atmosphere must be created and attract the attention of students. Interesting learning will get the attention of students, giving rise to a greater sense of desire or interest to continue learning and paying attention in order to obtain maximum results. By having a high interest in learning, students will be able to learn and practice mathematics well, so that it will be easier for students to be trained to think critically, creatively, carefully and logically which will enable students to achieve well in mathematics lessons.

Based on the results of observations made by researchers in November 2022 at SDN Kedung Jaya 01 on class V students, at that time the teacher was explaining length units, it was seen that there was a lack of attention and involvement of students towards the teacher during mathematics learning activities. The atmosphere in the class, students are more engrossed in themselves, such as daydreaming, scribbling on the table without looking at the teacher's lesson, it can be seen that only 5 out of 23 students are active and enthusiastic in these learning activities. Based on the results of interviews conducted with the class V teacher, it was revealed that the impact since post-Covid 19, teachers have really felt the drastic decline in students' interest in learning. Students prefer to be lazy, do not do assignments, and tend to easily forget the lessons given.

The class V teacher also stated that the learning input for class V students was quite severe. The teacher said that it was very difficult for class V students in 2022/2023 to absorb and accept the learning provided. Not only that, fifth grade students don't even know low multiplication like multiplication 3 and 4, the multiplication concept should have been understood by students when they were still in lower grades. This is due to the lack of student interest in learning mathematics so that there is no interest in students reviewing and learning mathematics. Interest in learning can be influenced by several factors, namely, 1). Internal factors: a). Enjoyment of subjects, b). Students' sense of interest in the subject, c). Students' high sense of desire for the subject. 2). External factors: a). Family, parental assistance when students study at home, b). Community environment and social friends, c). The facilities and infrastructure available in the school environment and at home really support students' interest in learning (Tanjung, 2021).

Interest is a self-motivation to like something or an activity without being influenced by anyone. In learning activities, the importance of students' interest in learning is to support successful learning achievement. Without interest, learning mathematics given to students will be in vain and students will feel that learning mathematics is not important. If students do not instill interest in mathematics from within, then learning mathematics will continue to be very scary learning. Interest in learning can also affect student learning outcomes, this is evidenced by (Hanaan Rofiqoh, 2020) in his research entitled "The Relationship between Learning Interest and Mathematics Learning Outcomes of Grade V Students at SDN Sekecamatan Kutoarjo Academic Year 2019/2020", the results of the study concluded that there is positive and significant relationship between interest in learning and learning outcomes in mathematics, meaning that the higher the interest in learning, the higher the learning outcomes of students in mathematics. Vice versa, the lower the interest in learning, the lower the student's mathematics learning outcomes.

Based on the explanation above, the researchers are interested in analyzing the factors causing the low interest in learning mathematics post-covid-19 in fifth grade students in the even semester of the 2022/2023 academic year at SDN Kedung Jaya 01 Kab. Bekasi so that this problem can be handled as soon as possible by teachers or educators

There are several factors that influence a person's interest in learning. The indicator of interest in learning according to Lestari and Mokhammad (2017), is 1). Feelings of pleasure, 2). Interest in learning, 3) Showing attention when learning, 4) involvement in learning. Furthermore, according to Hendriana (2019), indicators of interest in learning include: (1) liking or enjoyment in learning; (2) students' interest in learning; (3) student involvement in learning; (4) diligent in studying and doing mathematics assignments; (5) diligent and disciplined in studying and having a study schedule.

Based on the description above, it can be concluded that the indicators of interest in learning mathematics in this study consisted of 2 factors, namely (1) internal factors; enjoyment of learning mathematics, students' interest in mathematics, and students' high desire for mathematics, (2) external factors; family, parental assistance when students study at home, the environment and peers, as well as facilities and infrastructure owned to support students' interest in learning mathematics

2 RESEARCH METHODS

This research method is a qualitative research method with a descriptive approach and tends to use analysis. Process and meaning (Subject Perspective) are highlighted in qualitative research. The theoretical basis is used as a guide so that the focus of research is in accordance with field facts. Sugiyono (2019) states that the qualitative research method is a research method that is based on the philosophy of postpositivism, used to examine the natural conditions of objects. It can be said that qualitative descriptive research is research that describes or describes an independent variable by investigating a situation, condition or other matters which are poured into the form of a research report.

The subjects in this study were students of class V/A SD Negeri Kedung Jaya 01 Kab. Bekasi Academic Year 2022/2023. There are 23 students in class V/A consisting of 11 male students and 12 female students. For data collection researchers used observation, questionnaires, interviews and documentation. Observations were made while the learning took place, questionnaires were used to find out students' interest in learning mathematics, then conducted interviews with teachers and students who had low learning interest, each activity of the researcher carried out documentation as evidence of research activities.

The data obtained was then analyzed using the Miles and Huberman models, namely data reduction, data display and data verification. At the data reduction stage, the researcher sorted the completeness of all data collected from observations, questionnaires and interviews. After that, the data is classified based on the research focus. In verifying the data, the researcher interprets the findings with existing theories and relevant previous research. The data was validated using the triangulation technique as suggested by Sugiyono (2019).

3 RESULT AND DISCUSSION

Analysis of the factors causing the low interest in learning mathematics post-covid-19 at SDN Kedung Jaya 01 Kab. Bekasi refers to what students experience. Data was collected based on observation, questionnaires and interviews. The questionnaire was distributed to one class totaling 23 students and then the results of the student respondents were recalculated to get students who had a low interest in learning mathematics, with the criteria 0-50 = Low, 51-75 = Medium, and 76-100 = High. It was found that based on the results of distributing questionnaires, 11 out of 23 students had a low interest in learning. Since the post-covid pandemic students have enjoyed studying at school because during the covid pandemic students were forced to study at home, where students were required to study independently without direct interaction with the teacher, this made students feel difficult in learning, especially in mathematics. With the habit of studying at home during the Covid 19 pandemic, it made students even more lazy to do homework and questions given by the teacher, not a few students also felt unhappy and did not care about the math explanations given by the teacher. In addition, students also become passive and find it difficult to ask the teacher. Adjusting online to face-to-face learning makes students have to readjust the learning provided, because of that many students still seem lazy when learning takes place. The following is a recapitulation of the results of the questionnaire distribution respondents who have a low interest in learning:

Table 1.1 Recapitulation of Low Student Interest Scores

No	Student Initials	Description	Grades
1.	A. M	Subyek 1	47
2.	N. S. D	Subyek 2	44
3.	R. S. W.	Subyek 3	42
4.	S. Al-K	Subyek 4	45
5.	M. F. Al-F	Subyek 5	41
6.	R. N. F	Subyek 6	49
7.	A. R	Subyek 7	49
8.	H. T. O	Subyek 8	49
9.	M. F	Subyek 9	48
10.	E. N	Subyek 10	49
11.	W. J	Subyek 11	44

Table 1 shows the results of the recapitulation scores from the student interest in learning questionnaire which was distributed to 23 students, but was filtered again to get 11 students who had low interest in learning. If you look, the average student interest score is below 50, which means that based on the criteria, students have low interest in learning. If depicted through a graph, the following is an illustration of the value of each student

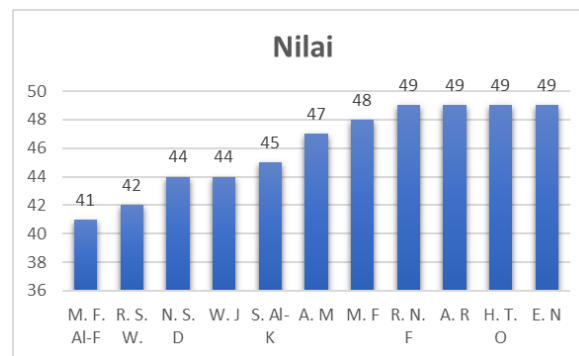


Figure 1: Depiction of Student Learning Interest Values

Then followed by interviews of teachers and students who have low interest, after that conduct class observations. The following presents a grid of interview guidelines and the instruments used

Table 2: Teacher and student interview grid

Participants	Aspect	Indicator
Teacher and student	Causes of Low Interest in Learning Mathematics	1. Enjoyment of Mathematics Subjects
		2. Students' sense of interest in mathematics subjects
		3. Students' high sense of desire for mathematics subjects
		4. Parental Assistance When Students Study
		5. Community Environment and Social Friends
		6. Facilities and Infrastructure

From the development of indicators, there are 20 questions given to the teacher and 30 questions to students. The teacher and student interviews were carried out directly and face to face

3.1 Discussion

After knowing the facts in the research findings, the further action of this research is to analyze the collected data using detailed qualitative descriptive methods. In the learning process during the post-Covid-19 period, of course, it requires readjustment, this certainly creates online learning habits that make students lazy to study so that it can affect students' learning interest. Based on the research findings, there are two factors that influence students' interest in learning mathematics, namely internal factors and external factors.

3.1.1 *Causes of Low Interest in Learning Mathematics*

Internal factors are factors that come from within students which can influence students' interest in learning. It includes a feeling of pleasure in learning mathematics, a sense of interest in learning mathematics and a sense of desire to learn mathematics. Several factors also have similarities with the research presented by Alda Baringbing, et al in her research entitled "Factor Analysis of Students' Low Interest in Learning in Mathematics Class VI Elementary School", based on the results of her research explaining the low interest is influenced by students not interested in learning mathematics, parents does not help students in learning, media and learning tools are never used in class, parents never accompany students in learning mathematics and students do not know how to develop self-interest.

Based on the results of observations and interviews with teachers and students of class V-A at Kedung Jaya 01 Public Elementary School, Bekasi Regency, the following details the internal factors:

First: The habit of studying online makes students find it difficult to learn mathematics. With normal learning returning after Covid-19, students feel happy because they get maximum learning. Even so, mathematics is not a subject that students enjoy or is not a subject that students look forward to every day. The absence of pleasure in mathematics makes students lazy to review mathematics lessons. Students really enjoy learning mathematics directly at school because students feel they understand more quickly than when learning online.

Second: Students' lack of interest in learning mathematics is also a factor affecting student interest in learning, this is due to a lack of knowledge of basic mathematical concepts such as multiplication when studying online during Covid-19 which resulted in students not being interested in mathematics. This is the impact and difficulties experienced by teachers and students when learning mathematics after Covid-19. The lack of knowledge of the basic concepts of mathematics makes it difficult for the teacher, so the teacher has to review and repeat the multiplication lesson, which the basic concept should have been mastered by students since they were in the lower grades.

Third: The student's desire to learn mathematics also greatly influences student learning interest. This was stated by the class V-A teacher who said that students still like not doing homework, besides that there are still many students who are reluctant to study mathematics. The low desire to learn mathematics forces teachers to move slowly in teaching mathematics so that learning mathematics takes a long time and makes mathematics learning less developed. The lack of desire to learn mathematics is influenced by a lack of mastery of basic mathematical concepts and makes students feel afraid of making mistakes when answering questions from the teacher. The habit of studying online during Covid-19 also made students lazy to study.

External factors are factors that come from outside the student's self which can influence students' interest in learning mathematics. This includes family or parental assistance when students are studying at home, the community environment and associates, as well as facilities and infrastructure. Based on observations and interviews with teachers and students of class V-A at SD Negeri Kedung Jaya 01 Kab. Bekasi, the following are details of external factors, namely:

First: Lack of parental attention makes students lazy to study. Facilitation and support from family or parents are factors that can influence students' interest in learning. This is

supported by (Widiasworo, 2017) which states that parental attention greatly influences student learning interest. Based on the results of interviews with students, it was stated that the students' parents, especially their mothers, did not work or were only housewives, even so, parents' concern for their children's learning at home was minimal, this was stated by the students' acknowledgment that parents never accompanied or taught their children there is homework or assignments given by the teacher. Besides that, students also admit that every time they have homework they always do it themselves without being accompanied by their parents, it's not even rare that students prefer not to do homework or do it at school by copying the answers from their friends.

Second: The environment and social friends can also influence students' interest in learning. Based on the results of interviews with class V-A students at SD Negeri Kedung Jaya 01, they stated that they preferred studying in groups. Students also admit that sometimes they understand more easily when taught by their friends rather than when explained by the teacher. Therefore, the class V-A teacher applies peer tutoring, where students may teach their friends if their friends do not understand or are behind in lessons. The class environment is quiet, there are no embedded learning works, motivational posters for learning are also factors for students' low interest in learning mathematics.

Third: Facilities and infrastructure also greatly influence students' interest in learning mathematics. Provision of facilities and infrastructure at SD Negeri Kedung Jaya 01 Kab. Bekasi is still considered inadequate. The learning innovation provided by teachers is also very minimal, this was stated by the V/A class teacher who said that students' mathematics learning activities were only based on textbooks. In fact, in this modern era, teachers should provide new innovations such as the use of technology in the form of focus, short mathematics learning videos, and other learning resources so that they can foster students' interest in learning mathematics. However, this was not done due to the lack of provision of facilities and infrastructure owned by SD Negeri Kedung Jaya 01 Kab. Bekasi.

So it can be concluded that the cause of students' low interest in learning mathematics at SD Negeri Kedung Jaya 01 is a lack of understanding and mastery of the basic concepts of multiplication in lower grades, students are not interested in studying mathematics, the transition from online learning to face-to-face learning which is still carried away makes students lazy to learn. active, minimal parental involvement and assistance, less motivating classroom environmental conditions, and lack of provision of facilities to support interest in learning mathematics

3.1.2 Efforts Made by Teachers to Overcome Low Interest in Learning Mathematics

Based on the results of observations and interviews conducted by researchers in accordance with research findings, teachers try to carry out learning to make it easier for students to memorize the basic concepts of multiplication, the application is carried out routinely, namely through the Jarimamatics method and implementing memorizing multiplication before entering class. In between lessons, the teacher also gives enthusiastic pats to motivate students to learn. Apart from that, to add to the pleasant atmosphere, the teacher gives rewards to students if the students answer well the questions asked by the teacher. This is in accordance with what was conveyed by Alfina Hidayatul in her research entitled "The Role of Teachers in Fostering Students' Interest in Learning in Class V Mathematics Subjects at Madrasah Ibtidayah Imam Suhadi Ponggok Blitar" which explains that teachers act as motivators by providing encouragement, as well as being role models. good to students, teachers as facilitators by providing comfortable classroom facilities that are made as attractive as possible, and using varied learning models so as to build students' interest in learning mathematics. This ability is closely related to the teacher's ability to create favorable conditions, please students and create healthy learning discipline. As Jamaral stated, quoted from research (Fatmawati. R, 2018), teachers are expected to have high creative power in learning, because teachers cannot carry out their role if they do not master any of the teaching methods that have been formulated and put forward by psychologists and education experts. Therefore, the key to success in using the method depends on the teacher, how the teacher applies and controls it in learning which

is then packaged in the application carried out by the teacher as well as variations in learning that can attract students' interest in learning mathematics. This opinion is supported by (Alperi and Handayani, 2015) who argue that with current technological developments, teaching materials can be made more interesting, interactive and environmentally friendly. Educators should show creativity by carrying out new innovations and bringing out ideas that are presented in the learning process. However, apart from that, the efforts made by teachers in the learning process do not provide a variety of learning innovations. In this modern era, teachers should provide learning innovations by showing short lessons/videos of mathematics learning through Infocus to increase students' interest in learning mathematics. However, this cannot be done due to the lack of learning support facilities provided by SDN Kedung Jaya 01 Kab. Bekasi.

4 CONCLUSION

Based on the results of the research "Analysis of Factors Causing Low Interest in Learning Mathematics Post-Covid-19 in Class V Students at SD Negeri Kedung Jaya 01 Kab. Bekasi", then the following conclusions can be drawn:

- a. Causes of Low Interest in Learning Mathematics Post Covid-19 SD Negeri Kedung Jaya 01 Kab. Bekasi.

The lack of understanding of basic mathematical concepts taught during online learning during the Covid-19 pandemic makes it difficult for students to learn mathematics after Covid-19. Getting used to studying online during the Covid-19 pandemic has made students lazy to study and need to readjust after Covid-19. Apart from that, the lack of learning innovation provided by teachers makes students feel uninterested in learning mathematics, the quiet classroom environment with student works and motivational learning posters makes students less enthusiastic and motivated to learn, besides the lack of parental assistance when students study. at home makes students not motivated to learn. As well as the facilities provided by SDN Kedung Jaya 01 Kab. Bekasi is still considered inadequate to support students' interest in learning mathematics so that the learning innovations used are still limited

- b. Efforts Made by Teachers to Overcome Students' Low Interest in Learning Mathematics.

In overcoming students' low interest in learning mathematics, the teacher makes every effort as best he can so that students return to active learning and learning objectives can be achieved optimally, namely by routinely memorizing the basic concepts of multiplication before entering class, using the math method in between lessons, providing a comfortable atmosphere. not gripping and provide rewards to students if students can answer questions raised by the teacher so that students feel happy and enthusiastic

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