

Analysis of Math Learning Difficulties In Students MTsN 1 Pandeglang In The Covid-19 Pandemic

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Abstract

This study is a descriptive qualified study conducted on class VII students at MTsN 1 Pandeglang who are conducting online learning with the aim of knowing the factors that cause math learning difficulties in students. Data collection techniques use questionnaire sheets, interviews, and documentation. The sample in this study was 30 students of class VII. Results from research show that students have difficulty learning mathematics. The results of the analysis found five factors that affect student learning difficulties, namely teacher influence 36.67%, family to children's learning 48.89%, student interest when learning mathematics 34.4%, student concentration when learning mathematics 43.4%, students' confidence when studying mathematics 45.56%. So in conclusion, the cause of the problem of learning mathematics based online in class VII in MTsN 1 Pandeglang is external factors and internal factors. External factors include inattention from parents and inappropriate teacher methods when teaching and learning. Internal factors include lack of interest in learning, weak concentration of students, and lack of self-confidence.

Keywords: Learning Difficulties; Mathematics; School.

INTRODUCTION

The existence of COVID-19 causes some sectors of life to decline in the economic sector, pariwisata, and especially in the education sector. From the decision of the Minister of Education of Indonesia's rebublik that all learning activities either in school or higher education are carried out in their respective homes through online or offline. Based on circular letter no.4 of 2020 for the implementation of education policy in the emergency period of the spread of coronavirus disease (COVID-19). Considering teaching and learning activities will initially be done from home through distance education (PPJ). In distance learning (PPJ) can be done in two approaches, namely distance learning in network (online) and distance learning outside the network (offline).

The purpose of distance learning (PJJ) is to ensure that students' right to access educational services in the case of a Covid-19 emergency is implemented, to protect the citizens of educational institutions from the negative effects of Covid-19, and to prevent Covid-19. Thus, distance learning can suppress the spread of Covid-19 in the educational environment. However, there are obstacles in the implementation of distance learning facilities and infrastructure (PJJ). This is reinforced by mentioning distance learning will not be implemented if students do not have computers, mobile phones, internet quotas and adequate internet networks.(Kukuh Dwi Utomo, A.Y. Soegeng , Iin Purnamasari, 2021; Simanjuntak et al., 2020)

Learning math is a compulsory subject, and students from elementary to middle school to high school are required to study it. However, many students think that learning mathematics is difficult because there are too many formulas and math problems that are difficult to work with. Students have different levels of interest in mathematics, which causes their math performance to be unsatisfactory in school. Students also find math difficult because they have to memorize so many formulas that students feel scared and lazy in themselves. Learning difficulties experienced by students are caused by two factors, internal and external. Internal factors include student talent, student interests, student motivation, and student intelligence. External factors are the family environment, teachers and school facilities (Haqiqi, 2018; Mustikasari et al., 2021)

In the process of learning mathematics based online students experience various difficulties. One of the obstacles of online learning is internet network service, because students are not used to online learning. Internet networks that are not as stable can affect the learning process of students and can inhibit the presenter of material by teachers in the learning process. Learning barriers are conditions that make students unable to learn well because there are disorders experienced by students in the learning process. Teachers are also required to prepare relevant learning methods in online learning. Because students describe learners online is very boring and ineffective. In fact, most teachers only explain the material without being interspersed with entertainment in learning activities. The lack of mathematical learning tools and materials and entertainment elements will have an impact on the mathematical learning process in the midst of the Covid19 pandemic (Janah, 2020; Loviga Denny Pratama, Wahyu Lestari, 2020; Yoppy Wahyu Purnomo, Jihan Luthfi Salsabila, Ainun Nafisah, Rizki Dwi Rahmawati & Mawaddah, 2021)

The purpose of this study was to find out the causes of difficulties in online-based math learners in class VII MTsN 1 pandeglang. The difficulty that many students experience is signal difficulties and lack of understanding in the use of online applications. So the author conducted a study to find out the causes of math learning difficulties in online learning.

METHOD

The method used is a descriptive method using a qualitative approach. Researchers have a role as a direct research instrument and collect data from research results that have been done. The research was conducted in the even semester of the 2020/2021 school year at mtsn 1 pandeglang. The subjects used in this study were 5 students of class VII MTsN 1 Pandeglang. The data collection techniques in this study use questionnaires, interviews, and documentation. The analytical technique used is to describe the results of questionnaires and interviews conducted by students.

RESULT AND DISCUSSION

Result

In this study, the spread of questionnaires using Google Form that has been through the likert scale. Angket is divided into 30 students while the interview is conducted to 5 students. The results of the study showed that an average of 67.52% of the total number of students had difficulties. It can be concluded that out of 30 students on average have difficulty when carrying out online learning. Here is a summary of the results of external and internal factor research of students of class VII MTsN 1 Pandeglang who have difficulty learning mathematics online in various aspects, as seen in the table below

Discussion

Of the nine indicators of factors causing difficulty learning mathematics in online learning, there are five factors that are most dominant, namely: 1) the influence of family on children's learning 48.89%, 2) teachers 36.57%, 3) student interest when learning mathematics 34.4%, 4) student concentration when learning mathematics 43.3%, 5) student confidence when studying mathematics 45.56%.

After collecting data through questionnaires and interviews that have been described above, it can be done to analyze the factors that cause students' learning difficulties in learning mathematics online. From the results of questionnaires and interviews there are several factors that make it difficult for students to learn online. The first factor is the 'Family Support Factor', the second factor is the 'Guru Factor', the third factor is the 'Learning Interest Factor'. The fourth factor is 'Learning Concentration Factor' and lastly 'Confidence Factor'.

Family support factor

This factor was found to be 3 items of questions with a presntase of 3 students (13%) said parents who did not meet the student's learning needs, 16 students (53%) said parents' lack of attention to the child's learning, and 25 students (86%) said parents did not scold if their children did not learn. The results of the analysis test obtained the percentage of family influence by 48.89%. The results of the above analysis showed that family support has an impact on students' learning difficulties in online math learning, so this statement tests the first hypothesis: "There is an influence of family support on students' learning difficulties in online-based math learning".

Family support is very influential on the learning of students. The family support factor in question is the lack of parental support for their children caused because parents are busy with their work. Most of the parents' jobs of students in pandeglang are civil servants and traders. Where they have to work from morning to evening. As a result, parents are unable to accompany and encourage their children to learn. There are even some parents who don't mean online learning. And most students do not tell what difficulties they experience at the time of online learning. Online learning is very different from face-to-face learners in person. Where in online learning students must do learning activities from their respective homes so that the atmosphere is very different from learning in the classroom.

A child has external and internal motivations that can only be achieved when there is support. Such support can be in the form of attention, advice or material given by the master. The social role of parents can also determine a child's achievement in learning. Parental social support has a major impact on students' academic performance by transmitting intrinsic motivation for learning. The more often parents accompany their children in online learning activities the better the student's achievements. (Fajri, 2020; Mauliddya & Rustam, 2019)

Teacher Factor

This factor is determined based on 6 question items with a percentage of 8 students (27%) saying guru explaining math material is not nets, 17 students (57%) say teachers are too quick in explaining math materials, 8 students (40%) say not interesting material described by teachers, 10 students (33%) say the questions given by teachers are difficult to work with, 10 students (33%) say teacher communication with students is not good, 13 students (43%) said teachers rarely motivate their students before learning begins. The results of the analysis test obtained the results of the percentage of teacher's success in explaining the material by 36.6%. The results of the above analysis showed that there is a teacher influence on students' learning difficulties in online math learning, so this statement tests the second hypothesis that reads "There is a teacher influence on student learning difficulties in online-based learners".

Teachers have an important role in teaching and learning activities, and teachers have the ability to educate, teach, guide and train. These skills are integrative skills that cannot be separated. Teachers are formal educators who are trusted by the community with an educational background and appointment as educators. So in the teaching process teachers must use good methods in teaching and learning

activities so that students are enthusiastic and interested in the teaching and learning process. This will have a big impact on students' learning outcomes. (Imam Suwardi Wibowo & Farnisa, 2018)

Due to improper teaching methods in online-based math learning, many students experience a decrease in interest in learning. Teachers who only use one learning application in explaining the material make students become confused to understand the material and even make learning boring. This is bred by the lack of understanding of teachers in the school towards technology and not ready schools to carry out online-based learning.

Many students have difficulty in understanding the mathematical materials provided by teachers. Because the teacher only provides materials and training questions without any explanation first. In online learning, teachers are increasingly giving assignments to students. As a result students are increasingly struggling in math lessons and even making students less interested in math lessons.

Learning Interest Factor

This factor was determined based on 3 question items with a percentage of 5 students (17%) saying they did not pay attention to the teacher's explanation of the math material because they did not understand, 11 students (37%) said they did not make a summary of the math material described by the teacher, 15 students (50%) said they did not enjoy learning mathematics online. The results of the analysis test obtained the percentage of the influence of student learning interests by 34.4%. The results of the above analysis show that learning interests have an impact on students' learning difficulties in online math learning, so this statement tests the third hypothesis, namely "There is an influence of learning interest on student learning difficulties in online-based mathematics learners".

In the online learning process today many students are less asked to follow math learning due to not understanding students in using learning applications or constrained by networking. In addition, many students are not serious in following the teaching and learning process. Due to lack of supervision from teachers and parents, students often do not focus when the teacher is explaining the math material. This can cause students to experience difficulties and easily despair when working on math problems.

Interest in learning is a positive attitude that exists in students, and this attitude must be suppressed as much as possible so that students feel comfortable, calm and pleasant while studying. This is so that students have a high interest among students to participate in teaching and learning activities. But the atmosphere of online learning is very different from the atmosphere of learning in the classroom. The presence of teachers and friends can add to students' learning interest. In addition to teachers and friends, the presence of family is also very important to increase students' learning interest. Families should also provide motivation so that students have a high interest in getting good learning results. Because learning motivation has a positive relationship with student learning outcomes. Menciptakan sebuah lingkungan yang nyaman dan bersahabat dengan suasana belajar, akan menambahkan minat belajar. Maka dapat disimpulkan bahwa kurangnya minat siswa dalam kegiatan belajar daring diakibatkan oleh kurangnya perhatian dan motivasi yang diberikan kepada siswa sehingga berdampak pada nilai matematikanya. (Korompot et al., 2020; SIRAIT, 2016; Yuliany, 2019)

Learning difficulty factor

This factor was determined based on 3 question items with a percentage of 16 students (53%) saying they did not clearly hear the material submitted by the teacher, 10 students (33%) said it was difficult to concentrate while math learning took place, 13 students (43%) said often leaving hours of math

lessons making it difficult for students to learn the material. The results of the analysis test obtained the percentage of learning concentration of 43.3%. The results of the above analysis showed that learning concentration affects students' learning difficulties in online math learning, so this statement tests the fourth hypothesis, namely "There is an influence of learning concentration on student learning difficulties in online-based mathematics learners".

The home environment determines the outcome and success of learning. If the home environment is noisy, cluttered, or inaccessible over the internet, it will not provide comfort for students to participate in learning. The average student complains about the state of the *rumanya* where the location right next to the highway can cause noise from the sound of vehicles pacing. And there are some students whose homes are not affordable internet access so students need to go to an affordable place of the internet.

In addition to the atmosphere of the available facilities can also provide *kenyamana* to students. Even complete facilities can also encourage students to follow online learning activities. Learning facilities at home have a positive influence on the motivation of students. The more complete the supporting facilities the greater the interest and concentration of students during learning. (Susanti & Wahyudin, 2017)

Confidence Factor

This factor was determined based on 3 question items with a percentage of 21 students (70%) saying I was less active in online-based math learning, 15 students (50%) said I didn't like discussing with friends to understand math lessons, 5 students (17%) said I didn't compete healthily for high grades. The results of the analysis test obtained a percentage of confidence of 45.56%. The results of the analysis showed that there is an influence of confidence in students' learning difficulties in online math learning, so this statement tests the fifth hypothesis, namely "There is an influence of confidence in student learning difficulties in online-based math learners".

Students will feel inferior and lazy when the teacher uses the right methods. For example, teachers who often generalize their students' skills in the classroom affect students who have difficulty understanding the material. Where if there is material that has not been understood the student is embarrassed to ask for any reason. This will lead to low student learning outcomes.

Self-confidence is a person's mental attitude in order to be able to judge themselves and around, which can make students become confident in their ability to do things. Self-confidence means being able to accept or appreciate yourself and one's own efforts to accept or appreciate a problem and be ready to try new things. Therefore, teachers must be able to give students confidence in teaching and learning activities so that they can be more active and enthusiastic in learning. (Anggreni, 2017)

CONCLUSIONS AND SUGGESTIONS

Based on the analysis of data, it can be concluded that the factors that cause learning difficulties in mathematics students in MTsN 1 Pandeglang lesson year 2020/2021 based on the findings of these factors consist of Family Support Factor, Teacher Factor, Learning Interest Factor. Learning Concentration Factor and Confidence Factor. Online-based math learning difficulties are disorders that occur in students that result in difficulty in receiving and analyzing the material described by the teacher. Inefficient and effective teaching and learning activities make students get bad results. So the teacher must know the background and difficulties of each student in order to be able to design the right online-based mathematics learning. Teachers should give more attention and guidance to students who have difficulty in learning math based online. The role of parents is very important so that students are more enthusiastic in following online-based math learning.

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