

Analysis of Students' Concept Understanding Ability in View of Mathematical Anxiety in the Implementation of Learning in Class VII of SMP Negeri 1 Mazo

Agnes Rosdiana Telaumbanua¹ Amin Otoni Harefa² Yulisman Zega³

Mathematics Education Study Program, Faculty of Teacher Training and Education,

Universitas Nias, Gunungsitoli City, Nort Sumatera Province, Indonesia^{1,2,3}

Email: agnesrosdiana@gmail.com¹

Abstract

This research is motivated by the lack of students' ability in understanding concepts so that it has an impact on students in learning mathematics. Because the ability to understand concepts is the basis of understanding principles and theories with the aim of making it easier for students to understand concepts in subsequent material in studying mathematics. One of the factors of the lack of students' ability to understand concepts is math anxiety which has a large influence on student learning processes, both at school and on the student's environment. This study aims to find out how students' conceptual understanding abilities are viewed from mathematics anxiety in the implementation of learning in class VII SMP Negeri 1 Mazo. This type of research is descriptive research with a qualitative approach. This research was conducted at Mazo 1 Public Middle School with a total of 35 research informants. Data collection techniques through written tests, student math anxiety questionnaires, interviews and documentation. Based on the results of the study, it shows that there are students who have the ability to understand mathematical concepts with high anxiety, moderate and low anxiety. Students with high anxiety still cannot solve the test questions in a structured way due to a lack of focus and feeling a little anxious. students who are anxious are students who are good at completing test questions coherently, it's just that there are some that are not done. Students who are low on anxiety, students are able to solve test questions that are given in a structured way because students are calm and don't feel anxious when facing math problems, it's just that they can't finish up to the final result, so that this can have an impact on student learning. So in this case the ability to understand concepts with math anxiety is that the higher the level of students' math anxiety, the lower the students' ability to understand mathematical concepts. Conversely, the lower the students' math anxiety level, the higher the students' understanding of mathematical concepts.

Keywords: Concept Understanding, Mathematical Anxiety



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INTRODUCTION

Education is strongly influenced by the quality of learning in schools and has a very important role for student development. According to law No. 20 of 2003 article 1 which states that: Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength self-control, personality, intelligence, noble character, as well as the skills needed by himself, the community, the nation and the State. Thus, the education of students is expected in every learning process to be able to develop any knowledge obtained by being active in the learning process. This is stated in the Law of the Republic of Indonesia Number 20 of 2003 article 3 which states that: National education functions to develop abilities and form dignified national character and civilization in the context of educating the nation's life, aiming at developing the potential of students to become human beings of faith and fear God Almighty, have a noble character, be healthy, knowledgeable, capable, creative, independent, and be a democratic and responsible citizen.

Law Number 20 of 2003 (13-15) concerning the National Education System states that curriculum is a set of plans and arrangements regarding objectives, content, and learning materials as well as the methods used as guidelines for organizing learning activities to achieve certain educational goals. Based on this understanding, there are two dimensions of the curriculum, the first is planning and setting regarding objectives, content, and learning materials, while the second is the method used for learning activities. The 2013 curriculum is one of the changes in the learning paradigm from conventional learning to learning that activates students by practicing creative thinking skills as well as quality and character.

The 2013 curriculum is a curriculum created by the government to replace the old curriculum, namely the Education Unit Level Curriculum (KTSP) or the 2006 curriculum to advance education in Indonesia. The aim of the 2013 curriculum is for students to be more independent and more active in teaching and learning activities. As education develops in Indonesia, there are more and more significant changes to date, in Indonesia it still adheres to the 2013 curriculum as the basis for educating the nation, one of which is in mathematics lessons where students are required to be active in learning.

Mathematics as a field of science that has a close relationship in real life. So that mathematics is studied by students starting from elementary, junior high, high school, to tertiary education which is proof that mathematics is an exact science that forms the basis of other sciences, So that mathematics is interrelated with other sciences. According to Cahani, et al (2021: 120) states that: Mathematics is a very important subject for students, because students will have a logical mindset by studying mathematics, so that it will be of benefit for solving problems in everyday life .

Based on Permendiknas No. 22 of 2006 one of the objectives of learning mathematics is for students to have the ability to understand mathematical concepts, explain the interrelationships between concepts or algorithms, in a flexible, accurate, efficient, and precise way to solve problems. Thus understanding the concept is an important part of learning mathematics, in line with one of the goals of education. Mathematics is one of the main subjects that is studied at every level of education in schools, from elementary, junior high to high school. This is because mathematics plays an important role in life, especially in solving everyday problems. Mathematics is often considered a difficult and frightening subject for students, causing students to feel lazy to study, unhappy and feel that they are a heavy burden for students. So, this is what encourages low students' ability to understand mathematical concepts.

Based on the results of observations of researchers conducted in class VII SMP Negeri 1 Mazo obtained interview data with mathematics teachers as follows, symptoms were found that indicated a low understanding of mathematical concepts, that is, when most students were asked about the concept of previous learning material through examples, students often could not answer, most students could not work on questions that were different from the examples given, there were students who had not been able to complete the exercises given, there were students who did not understand, there were still students who were unable to apply concepts, and they still lacked their ability and activity to explain or communicate the results they get. In addition, the results of the interview The mathematics teacher also said that there were many factors that influenced this, one of which was the lack of enthusiasm of students in the learning process because mathematics material had many formulas and was difficult.

According to Susanto (Alawia, et al. 2021: 199) reveals that mathematical anxiety is one of the dominating factors in learning. Anxiety has a great influence on student learning, both at school and in everyday life. Many of the students are not confident with the abilities they

already have. When a teacher asks to do a board problem, some look down, some look scratching their heads, some want to raise their hands but are embarrassed, and some are eager to raise their hands, even though the answer is not quite right. In addition, there were also students who looked afraid and did not want to mingle with their classmates. Students who experience anxiety about mathematics cannot be said to be normal, because the ability experienced by students in adapting to mathematics can cause students to have difficulties and even have a phobia of mathematics which ultimately results in low learning outcomes and student achievement. Students who are less able to understand problems or issues will easily experience anxiety. There are students who can easily understand when receiving an explanation, but there are also students who find it difficult to understand what is explained. If students who find it difficult to understand feel anxious, students will not hesitate to try harder to understand.

Anxiety about something related to mathematics is often termed math anxiety. "Mathematics anxiety is a situation where a learner will feel uncomfortable, afraid and anxious when in a situation related to mathematics" According to Nazariah, et al. (2018: 99) states that: Anxiety is a term that describes a psychological disorder which can have characteristics in the form of fear, concern for the future, prolonged worry, and nervousness. The importance of understanding the concept is not in line with the quality of the ability to understand the actual concept. The fact shows that the mathematics achievement of Indonesian students is still relatively low. TIMSS (Trends in International Mathematics and Science Study) as an international study in mathematics and science conducted to find out and science in participating countries reported that in 2015, the average grade 8 mathematics achievement score of Indonesian students was ranked 45 out of 50 participating countries. This is in line with the opinion (Cahani, 2019) which states that when the teacher gives practice questions, some students are unable to solve the problem and just wait for their friends to finish working on it. The low ability of students' understanding of concepts is also shown by students who are only able to do the same questions as the examples given by the teacher. according to (Diana et al, 2020) states that: Understanding concepts is the basis of understanding principles and theories, so to understand principles and theories students must first understand the concepts that make up these principles and theories, because that is a very fatal thing if students do not understand mathematical concepts.

From the description of the background, the researcher can formulate the problem as follows: How is the ability of students' understanding of concepts in terms of mathematical anxiety in the implementation of learning in class VII SMP Negeri 1 Mazo? Based on the research focus above, the main objective of this research is to find out how students' conceptual understanding abilities are viewed from mathematical anxiety in learning implementation in class VII SMP Negeri 1 Mazo.

RESEARCH METHODS

Based on the objectives of this study, the research approach is a qualitative approach with a descriptive research type. Qualitative research according to Sugiyono (2020: 9) is as follows: Qualitative research methods are research methods based on the philosophy of postpositivism, used to research the conditions of natural objects, (as opposed to experiments) where the researcher is a key instrument, data collection technique carried out in a triangulation (combined) manner, data analysis is inductive/qualitative in nature, and the results of qualitative research emphasize meaning rather than generalization. According to Sugiyono (2020: 35) "descriptive research is a formulation of a problem relating to the question of the existence of an independent variable, either only on one variable or more (stand-alone variable). So in this study the researcher did not make comparisons of these

variables to other samples, and looked for the relationship between these variables and other variables.

The location of this research was carried out at Mazo 1 Public Middle School, which is located on the village road of Tetegawa'ai, Mazo District, South Nias Regency, North Sumatra Province. The reasons for prospective researchers choosing to conduct research at Mazo 1 Public Middle School as a research location are: Researchers conducting research at Mazo 1 Public Middle School believe that the school is feasible for research which of course will collaborate with researchers to answer the problems to be studied. At the school location, no one has ever conducted previous research on the analysis of students' conceptual understanding abilities in terms of math anxiety in learning mathematics.

The data source was obtained from the subject in the form of 35 students of class VII SMP Negeri 1 Mazo. The data obtained was in the form of written data when given tests and questionnaires, as well as verbal during interviews with research subjects related to students' ability to understand mathematical concepts. And for the supporting data source is the class VII mathematics teacher at SMP Negeri 1 Mazo. "The research instrument is a tool used to measure observed natural and social phenomena" (Sugioyono, 2017: 102). The instruments used in this study were documentation, interviews, written tests, and questionnaires.

1. Documentation. Documentation is a researcher's notes or reports used to obtain data on a phenomenon that occurs, which can be in the form of notes, small notes, and pictures obtained at the research site.
2. Interview. Interviews are needed in this research, as a data collection technique if you want to do a preliminary study to find problems that must be studied, and also if the researcher wants to know things from respondents that are more in-depth and the number of respondents is small. Interviews are questions and answers between two or more people that are carried out directly or in conversation with a specific purpose. The conversation was conducted by two parties, namely the interviewer (interviewer) who asked questions and the interviewee (interviewee) who provided answers to the question. Research using unstructured interviews.

RESEARCH RESULTS AND DISCUSSION

The subjects of this study consisted of 35 class VII students who would be categorized into 3 anxiety categories, namely high anxiety, moderate anxiety, and low anxiety by using an anxiety questionnaire. Then distributed essay questions related to the ability to understand students' mathematical concepts. The stages before this research was carried out, the researcher tested the test instrument first to find out whether the instrument used in the study was valid or not. The subjects of the research trial were class VII students of SMP Negeri 1 Gomo, totaling 34 students. This study used a qualitative research method with a descriptive approach. In analyzing the data, the research uses test instruments, anxiety questionnaires, interviews, and documentation. The researcher gave a question test to obtain data in the form of the results of the subject's answers to determine students' anxiety in completing tests of ability to understand mathematical concepts.

Data is done by bringing up a collection of data that has been organized and categorized which allows conclusions to be drawn. The data presented are in the form of test results for students' ability to understand mathematical concepts, results of student anxiety questionnaires, results of interviews, and results of data analysis. Before giving the test the researcher conducted interviews. Interviews were conducted to determine the level of students' conceptual understanding ability, and to find out how far the achievement of the material in learning mathematics. After studying quadrilaterals and triangles in class VII. The questions given by the researcher were in the form of questions that included indicators of

students' conceptual understanding abilities. With indicators restating a concept, using mathematical concepts, comparing mathematical concepts, making conclusions in solving mathematical problems in quadrilaterals and triangles. The questions were made by the researchers themselves and have been validated by the validator. Then a question test was carried out from the quadrilateral and triangular material in which the material had been studied before. The aim is to find out how the results of students' conceptual understanding abilities after going through the learning process. And after the tests carried out by students are examined, an assessment of the value is carried out. After that the researcher interviewed mathematics teachers and students. Then test the validity of the data by extending the research to fulfill the data and information collected must contain accurate truth values. As material for the fulfillment of data from this study, it is accompanied by taking documentation during the activities carried out.

Discussion

Test Logical Validation

Before the test is designated as a research instrument, it must first be logically validated by the mathematics teacher/lecturer to find out whether the test is feasible to use. From the results of validation by the validator, the student's concept understanding ability test was declared valid or suitable for use as a research instrument contained in the appendix.

Research Instrument Trial Results

After being tested for logical validity, the researchers carried out a test instrument test at SMP Negeri 1 Gomo for the 2021/2022 academic year. Testing of this test instrument is used to test the validity of the test, the reliability of the test, the difficulty level of the test, and the differentiability of the test. The results of the instrument trials are contained in the appendix.

Test Validity Test

Test the validity of the items using correlation. The question is said to be valid if the correlation value $r_{\text{count}} \geq r_{\text{table}}$, with a significant level of 5%. Based on the trial data of the concept understanding ability test, the calculation of the validity test of item number 1 was obtained 0.629. Then confirmed in r_{table} for $N = 35$ at a significant level of 5% ($\alpha = 0.05$) obtained $r_{\text{table}} = 0.329$. Because $r_{xy} \geq r_{\text{table}}$, test item number 1 is declared valid. Based on the calculations carried out by the researcher, all test items item 1 to item 5 are declared valid so that they can be used as research instruments. It's listed in the attachment.

Test Reliability Test

To test the reliability of the test is done by using the alpha formula. With the reliability test obtained $r = 0.7721$ and $r_{\text{table}} = 0.329$. Because $r \geq r_{\text{table}}$, the overall test is declared reliable. Included in the attachment. Thus, measurements made using tests as research instruments provide consistent (fixed) results so that they can be trusted and can be used anytime and anywhere.

Test Difficulty Level Test

To find out whether the difficulty level on the test grid corresponds to the actual conditions at school, a difficulty level calculation is carried out based on the results of the instrument trial. From calculating the difficulty level of item number 1 to item number 5, it can be concluded that the difficulty level of each test item corresponds to the level of difficulty on the test grid. Included in the attachment.

Discriminating Power Test Test

To find out whether each test item can distinguish students from the upper group and students from the lower group, a discriminatory power calculation is carried out based on the results of the instrument trial. From the calculation of the item discriminating power, the data is contained in the appendix. This is in line with the opinion of Lestari (2017: 220), saying that the discriminating power interval can only be used as a research instrument if it is categorized as very good, good, and sufficient.

Questionnaire Logical Validation

The process of considering the content validation of the student anxiety diagnostic questionnaire instrument was carried out using logical validation carried out by the validator, namely lecturers in the mathematics education study program, mathematics teachers at Hiliduho 1 Public Middle School and mathematics teachers at Mandrehe 1 Public Middle School. the conclusion of the results of the questionnaire validation, namely the diagnostic questionnaire of students' learning mathematics anxiety, is feasible to use with revisions according to the suggestions of the validator.

Research Data Analysis

Data analysis techniques are the process of systematically searching for and compiling data obtained from the results of tests, questionnaires, interviews and documentation by organizing data into categories, describing, selecting important data and making conclusions to facilitate data processing. In conducting this research, the researcher gave test questions to students to obtain data in the form of the subject's answers in solving math problems and the difficulties experienced by students. The questions given by the researcher were in the form of non-routine questions which included indicators of ability to understand concepts. After that the researcher distributed questionnaires to students to fill in according to their perceptions. In addition to giving tests and distributing questionnaires, the researcher also conducted interviews with 6 students by looking at the interview guidelines and the results of the subject's answers. Apart from that, the researcher documented the activities in the research process using electronic media prepared by the researcher. In this study, researchers obtained some data from the subject, namely the results of test answers, questionnaires, interviews and documentation. The data will be analyzed to find out, examine and describe the results of the analysis of students' conceptual understanding abilities in terms of math anxiety in the learning process in class VII SMP Negeri 1 Mazo.

Interview Data Analysis

Interviews were conducted on June 14-June 16 2022, with many informants, namely interviews with subject teachers and students. The researcher only conducted interviews in class VII, which was a sample of 35 students. To make it easier for researchers to summarize the results of interviews with teachers and each respondent. The following describes the results of interviews conducted by researchers at SMP Negeri 1mazo.

Results of Interviews with Teachers

Q: In your opinion, what are the forms of student anxiety that are experienced when working on practice questions in the form of understanding concepts?

Gr : Students often experience problems or anxiety in learning mathematics, such as fear, cold sweat, nervousness, especially when students are asked to do practice questions on the blackboard that are different from the examples explained by the teacher.

Q: Do students experience anxiety such as anxiety, daydreaming and despair when the teacher asks students to give opinions with questions given by the teacher?

Gr : Often there are students who are anxious or feel afraid, some even pretend not to hear, some want to put their hands up to answer. When a teacher gives students the opportunity to give their own opinion with questions that have been given by the teacher.

Q : Do students experience feelings of hopelessness or lack of confidence during the mathematics learning process?

Gr : when in the process of learning mathematics sometimes there are students who feel anxious, restless, sleepy, some even don't like learning mathematics because it is related to calculation numbers and formulas that are complicated to memorize and there are students who also come just sit down without understanding what is being learned.

Results of Interviews with Students

1. Based on the results of interviews conducted by researchers in class VII, with the question "Is mathematics very fun?" It is known that there are 15 students who like mathematics, because mathematics is fun and often mathematics is found in everyday life so that students are enthusiastic about learning mathematics and 20 students who do not like mathematics, because according to students mathematics is a subject. which is very difficult to understand and understand, sometimes students feel dizzy, anxious and nervous when there are practice questions that are different from the examples explained by the teacher. This is also supported by the results of an interview from one of the students who was interviewed by a student with the initials LWL by answering that he is very happy and enthusiastic about learning mathematics, because mathematics is one of the most enjoyable subjects and the material is also challenging to understand and understand so that I am enthusiastic in learning mathematics to get good grades. The student with the initials EWL also answered that sometimes I am lazy to study mathematics because it deals with numbers and I still don't fully understand the subject matter, so when the teacher teaches I don't pay attention and don't do the practice questions that have been given by the teacher, so learning mathematics is not fun.
2. The results of interviews conducted by researchers in class VII, with the question "Do you feel dizzy if you have a lot of calculations in practice questions to do?" It is known that there are 16 students who do not feel dizzy when there are many calculations in solving math problems, because these students are able and able to do the practice questions that have been given by the teacher and there are 19 students who feel dizzy a lot if there are many calculations, because these students are unable and cannot can work on the practice questions that have been given because the examples of questions given are different from the examples that have been explained by the teacher. This was also supported by the results of an interview from one of the students who had been interviewed with the initials FLT with the answer. I don't find a solution, I will study again and ask other students or the subject teacher. And students with the initials MRL also answered that sometimes I feel dizzy, when there are assignments that are being done because I have not mastered the material that has been studied, especially if the practice questions are different from the examples that have been presented by the teacher.
3. Then the results of the next interview that was conducted by the researcher, with the question "Are you afraid every time the teacher asks you to do a problem on the blackboard?" From these questions it can be seen that there were 13 students who felt no fear, because the student felt that he was able and able to do the practice questions when the teacher told him to do it on the blackboard. And there were 22 students who felt afraid,

because these students were unable or unable to do the questions when the teacher ordered them to do it in front of them. In accordance with the results of an interview with one of the students who was interviewed with the initials AML answered that when the teacher asked me to complete blackboard practice questions, I would do it to my own ability and be brave even though I felt nervous, nervous and anxious because I was afraid. With my answer, I don't know if something is wrong, but I still believe in myself that I can definitely do it and be able to solve it. And the student with the initials MRL answered that sometimes I feel scared, nervous, and anxious when the teacher asks me to do practice questions, because I can't complete the practice questions.

4. The results of the next interview that was conducted by the researcher, with the question "Are you difficult to memorize mathematical formulas?" According to the results of interviews conducted by researchers, it can be seen that there were 17 students who found it easy to memorize mathematical formulas, and there were 18 students who found it difficult to memorize mathematical formulas. In accordance with the results of an interview from a student who found it not difficult to memorize mathematical formulas with the initials ZFL stated that sometimes I did not find it difficult to memorize mathematical formulas because the formulas were not memorized but understood and I had to study frequently to recall the material that had been learned or discussed formula. And students who find it difficult to memorize math formulas with the initials AL state that actually memorizing math formulas is difficult, because I can't memorize math formulas and it's not just one but different formulas for each material studied, so I get confused memorizing math formulas.
5. Based on the results of interviews conducted by researchers in class VII, with the question "Is the way the teacher explains it easy to understand?" From the results of interviews that have been obtained by researchers it can be seen that there are 13 students who can understand the subject teacher's explanation and 22 students who feel unable to understand the teacher's explanation. This is supported by the results of an interview from one of the students who were interviewed with the initials AL stating that when the teacher explains the material is understandable, because he explains in great detail and often gives students the opportunity to ask questions if something is still not understood. On the other hand, the results of interviews with ML principles stated that because I did not like mathematics, when the teacher taught class I did not pay attention to it so I could not understand what was explained.

The results of data analysis on the first indicator, namely on the cognitive aspect, obtained the lowest percentage of 49.3.7% and the highest of 65.7%, but the overall average value of the first indicator was 58.1% with moderate criteria. This is also in line with the results of tests and interviews with LWL and EWL students, it was found that there were students who were able to understand and understand the material that had been studied and there were also students who still did not understand and understand, students who were able to understand the material, as seen from the results of the test answers he did where he was able to complete the test questions that had been given, even though there were still deficiencies in their completion, compared to students who could not understand the material that had been studied at all, it can be seen from the answer paper that he could not complete the test questions he only pensive, sleepy, and just sat quietly looking at the answer paper and could only copy the answers from his friends.

So in the results of this research data, it can be found that there are still some students who still do not understand the material that has been studied and there are also those who feel anxious, lack confidence and have difficulty concentrating in learning mathematics, this is

because students still cannot understand or understand the material they have learned, because learning mathematics is related to numbers, calculations and formulas, especially in working on test questions that are different from the examples of problems that have been done. The results of data analysis on the first indicator, namely the affective aspect, obtained the lowest percentage of 53% and the highest 70.7%, but the overall average value of the second indicator was 61% with moderate criteria. Based on the results of the data that has been obtained, it shows that most students still feel anxious, nervous, unhappy and restless. This can be seen from the results of tests and interviews with students, where there are students who do not like learning mathematics and there are also those who enjoy learning mathematics.

For example, the results of interviews with FLT students state that they enjoy learning mathematics so that in the learning process they are always enthusiastic about learning. If there is something they don't understand, they will ask their subject teacher again because according to them learning mathematics is very fun. When there are assignments or tests given by the teacher sometimes he feels dizzy but he tries according to his abilities. And it can also be seen from the results of the answer paper in solving the test questions that have been given. While the results of interviews with FOL students stated that they felt lazy to study mathematics because mathematics was related to numbers and calculations, for him learning mathematics was not fun. And when he was told to do the blackboard exercise he felt anxious, nervous and nervous because he couldn't do it. In accordance with the results of the answer paper that has been done.

So it can be concluded that there are students who like learning mathematics and there are also those who do not like learning mathematics. The researcher found students who did not like learning mathematics and thought that mathematics was a very difficult subject to understand. The results of data analysis on the third indicator, namely on the physiological aspect, obtained the lowest percentage of 43.6% and the highest 75%, but the overall average value of the third indicator was 60.3% with moderate criteria. In the results of the research data that has been obtained, some students feel what causes the anxiety experienced in learning mathematics or recognizes things that make these students anxious in learning, where this anxiety will have an impact on the learning process and student knowledge. In the results of tests and interviews that have been asked of these students, there are students who feel their heart pounding, sweating cold and trembling. That the anxiety or constraints experienced by students in mathematics such as being tense when working on math problems, they feel shaky, cold sweating, it happens because these students are unable to complete the questions that have been given. It can also be seen in the results of the answer paper that some only worked on a portion of the questions that had been given and there were also those who answered only half of each question and did not complete it until the final result.

Research Data Validity

The validity of the data in this study is the credibility test, namely:

1. Extension of research. Extension of the observations made by researchers is to conduct observations and interviews. After checking again the data has not changed, it means the data is correct, then the data is credible.
2. Increase persistence. The researcher re-checked the results of tests, questionnaires, interviews and documentation to see if something was wrong or not. Moreover, double-checking the results of the tests, questionnaires and interviews.

3. Triangulation. Triangulation is done by checking data from various sources with various sources, methods and time. In this case, the researcher asked the teachers and students regarding the habits of the learning process.
4. Using reference materials. This study is equipped with photographs and results of observations and interviews so that they can be trusted.
5. Member checks. The data found has been agreed upon by the data provider.

Conclusion Drawing (Withdrawal of Conclusions/Verification)

Based on the results of data reduction and data presentation, it can be concluded that what students of SMP Negeri 1 Mazo class VII experienced. there are students who have the ability to understand mathematical concepts with high anxiety, moderate and low anxiety. Students with high anxiety still cannot solve the test questions in a structured way due to a lack of focus and feeling a little anxious. students who are anxious are students who are good at completing test questions coherently, it's just that there are some that are not done. Students who are low on anxiety, students are able to solve test questions that are given in a structured way because students are calm and don't feel anxious when facing math problems, it's just that they can't finish up to the final result, so that this can have an impact on student learning.

CONCLUSION

Based on the results of the research that has been carried out, the following conclusions are obtained: Students with high anxiety in understanding mathematical concepts, namely students focusing on the core of existing mathematical problems by finding out the questions on the problem, without students writing back what information is known from previous problems. And students are still less structured in working on these problems so that there is a lack of focus on students themselves in solving mathematical problems which then makes students less precise in the final results. Students with moderate anxiety in understanding mathematical concepts, namely students are structured in solving mathematical problems in the early stages, namely by rewriting the information that has been obtained, then students find out what is being questioned. Students with low anxiety in understanding mathematical concepts, namely students are structured in completing the initial stages of mathematical problems, namely by writing back information that has been previously obtained on the problem, then asking what is being sought in the problem.

Based on the research results obtained, there are several suggestions that researchers can convey in this study, namely as follows: To math teachers; Based on the results of the study, it was found that students have math anxiety on the ability to understand mathematical concepts. In the learning process, a teacher should use tools that make the material closer to making sense and easy for students to understand. The teacher must encourage students to ask questions if there are still things that are not clear. clear or there is still material that students cannot understand, so that students can gradually reduce the feeling of math anxiety that exists in each student. To students; Students are expected to frequently train themselves in solving math problems so that in the future students will become accustomed to solving difficult math problems. So that students do not think that mathematics is very difficult to learn, and so that students no longer experience anxiety when learning mathematics takes place in this case the ability to understand mathematical concepts. To researchers; This research is still limited by time so that it is possible not to provide results that are too detailed on the problems found in the research process, therefore this research would be better reflected for improvement. This research should be further developed to a wider level and the results obtained will be more accurate. This research is expected in further research to

further develop what has been obtained in this study so that the results obtained are more detailed and accurate. By doing the same research but in different materials or different levels of education.

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