

**HABITS OF MIND AFFECT ON MATHEMATICAL COMPREHENSION
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Email: renenorman75@gmail.com**Abstract**

This research was conducted in Sekolah Alam Indonesia Elementary School. The purpose of this study was to determine the effect of Habits Of Mind on mathematical ability. The research method used was a survey method. The number of samples that the researchers took was 40 students from a total population of 150 students, which were taken using the proportional random sampling technique. The instrument used is a written test instrument with 10 items. The result of this research is that there is a significant influence between habits of mind on mathematical understanding ability. This is evident from the calculation of the normality test, the mathematical understanding ability of the value of $L_o < L_{table}$ ($0.1549 < 0.173$) then H_0 accepted. It is concluded that the mathematical understanding ability data come from a normally distributed population, as well as in classes taught with the ability mathematical understanding $L_o < L_{table}$ ($0.1549 < 0.173$) then H_0 accepted. It is concluded that the data on the mathematical comprehension ability of the population is normally distributed.

Keywords: Habits of Mind, Mathematical Comprehension Ability, Learning

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INTRODUCTION

Mathematics learning has a goal as implied in the Education Unit Level Curriculum (*KTSP*): learning that equips students with knowledge, understanding, and several abilities to develop science and technology (Menanti & Rahman, 2018). To achieve these goals, the learning of mathematics in elementary schools must emphasize the ability to understand mathematics, including products and processes. Moreover, have curiosity). Learning mathematics must involve students actively interacting in learning.

The process of learning mathematics in elementary schools at this time, in general, has not had an impact on the ability to understand mathematics. This can be done by developing students' mathematical comprehension abilities in

learning mathematics through fostering process skills. Students' intellectual, social, and physical skills are processed to obtain better knowledge. Moreover, centralizing bodily interaction as the source of (mathematical) information provides an innovative design approach for instructional technology (Alberto, Shvarts, Drijvers, & Bakker, 2021). Conceptualization is a component of mathematical comprehension (Wibowo & Yuzianah, 2019).

In the classroom learning process, students are required to play an active role in learning, especially through practicing math problems that require understanding. Students are more enthusiastic about working on questions. At the same time, the teacher becomes a facilitator of learning activities whose role is to direct students to find the concepts being studied.

One factor that affects the ability to understand mathematically is the habit of mind. Moreover, comprehension of the right selection and application of learning habits can result in more effective and efficient mastery of new information, enabling pupils to work more effectively and adapting to changes more readily (Urh & Jereb, 2014).

Habits of mind are defined as patterns of intelligent behavior that enable productive action. Habits of mind are a group of skills, attitudes, and values that allow people to bring up their performance or behavioral intelligence based on the stimulus provided to guide students in dealing with or solving existing issues (Marita & Amanati, 2017). In addition, this mathematical habits of mind strategy refers to a method for cultivating mathematical reasoning (Habibi, Lasia, Oktafia, & Ilham, 2020). Habits of Mind have an effect on students' mathematics reasoning ability (Sugandi, Bernard, & Linda, 2021). However, there is no association between the mathematics creative thinking skills of students and their level of mental habit (Yulianto, 2021).

Based on those phenomenon habits, then in the mathematics teaching and learning process, it is necessary to prepare for learning so that students can understand mathematically. Thus the author is interested in researching the influence of Habits of mind on the ability of mathematical comprehension.

METHOD

The type of research used in this study is a survey. A survey is a research conducted on a group of objects at a certain time to assess the condition or implementation of a program (Arikunto, 2010). The research results are used to develop a plan to improve the program (Sanjaya, 2016). The variables measured in this study were students' understanding of mathematical concepts as the independent variable, namely Habits of

Mind (variable X), and students' mathematical comprehension ability as the dependent variable (variable Y).

The target population in this study were all fifth-grade students of Sekolah Alam Indonesia Elementary School for the academic year 2020/2020, totaling 150 students. The sampling technique in this research is random sampling, with the following steps:

- 1) Collecting data on the total population.
- 2) Using a shuffling technique, the names of all fifth graders were put in a closed place and then shuffled; the names (40 students) that came out were used as research samples.
- 3) Collecting data on the sample members and then given the research instrument.

The data collection techniques used in this study were as follows:

- 1) Students' habits of mind were taken using a questionnaire in the form of a statement with 30 questions.
- 2) The students' Mathematical Comprehension Ability was taken from a written test containing 10 questions.

RESULTS AND DISCUSSION

A. Results

There are three kinds of mathematical comprehension: translation, interpretation, and extrapolation. Translational understanding is used to convey information in other languages and forms (Susanto, 2012). It involves giving the meaning of a variety of information. Discussion through statistical results shows that the ability of mathematical understanding shows the calculation results of the average value of 89.4. At the same time, the habits of mind are 76.8, which illustrates that the ability of mathematical understanding is good on the habits of mind.

For the calculation of the normality test, on the ability of mathematical understanding, the value of $L_0 < L_{table}$ ($0.1549 < 0.173$) then H_0 accepted, and it is concluded that the mathematical

understanding ability data comes from a normally distributed population and in classes taught with mathematical understanding ability $L_o < L_{table}$ ($0.1549 < 0.173$) then H_0 is accepted, and it is concluded that the data on the mathematical understanding ability of the population is normally distributed

Meanwhile, in the calculation of the homogeneity test on the mathematical understanding ability, it is obtained that $F_{count} < F_{table}$ or $1.11 < 1.98$ then H_0 accepted, and it can be concluded that the data has the same variance or Homogeneous, which means ability and habits of mind have the same ability. The value of $t_{count} > t_{table}$ or $5.34 > 2.02$ is obtained based on hypothesis testing. This proves that H_0 is accepted, which means there is a significant influence between the ability of mathematical comprehension and habits of mind.

B. Discussion

Based on the information described above, it can be concluded that the ability of mathematical comprehension has a significant influence in helping to improve students' habits of mind. This is in line with other previous studies related to the influence of mathematical understanding ability on mathematics learning outcomes, including research conducted (Kusharyanti, 2009). There is an increase in mathematical understanding ability with habits of mind of students in class XI Nurul Iman Jakarta Vocational School, as well as research conducted by Sebastian, (2022), the results showed that there was an increase in student learning outcomes in class XI of Public Senior High School 2 Bekasi. Moreover, there is an increase in the mathematical comprehension ability of students in class X Public Senior High School 3 Dompu (Wardawati, 2012).

Research has been conducted on the ability to understand mathematics in

elementary schools, with the results showing a significant increase in the acquisition of higher student scores when they already can understand mathematics in solving math problems than if students do not yet have an understanding of mathematics.

During the teaching and learning process, students seem to understand the material presented faster because students can already understand mathematically based on each student's characteristics and ways of learning. Each student has a different way of learning, and the way to respond to the learning material is also different. Some are easier and faster to understand, some are slower, and some are very slow to receive the subject matter. However, when all of them already have good mathematical comprehension skills, almost all students have no difficulty accepting the lessons.

CONCLUSION

Based on the results of research and discussion, there is a significant influence between habits of mind on mathematical comprehension abilities. This is evident from the calculation of the normality test, the mathematical understanding ability of the value of $L_o < L_{table}$ ($0.1549 < 0.173$) then H_0 accepted. It is concluded that mathematical comprehension ability data come from a normally distributed population, as well as in classes taught with the ability mathematical understanding $L_o < L_{table}$ ($0.1549 < 0.173$) then H_0 accepted. It is concluded that the data on the mathematical comprehension ability of the population is normally distributed.

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on this hypothesis testing, the value of $t_{\text{count}} > t_{\text{table}}$ or $5.34 > 2.02$ is obtained. This proves that H_0 is accepted, which means that there is a positive influence between habits of mind and mathematical comprehension ability

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