



## Analysis of students' interest in learning mathematics

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### Abstract

This study aims to analyze students' interest in learning mathematics at SMP IT Al-Qur'an Al-Fadlilah, a pesantren-based formal school where students are required to manage their time between academic and religious activities. The research employed a descriptive qualitative approach, collecting data through questionnaires, interviews, and observations of three 8th-grade students. The analysis focused on five indicators of learning interest: enjoyment of learning, focus and attention, willingness to learn, self-motivation to actively participate, and efforts to realize learning goals. The findings reveal that the highest level of fulfillment was found in the indicator of enjoyment in learning, while the lowest was in the effort to realize learning goals, with a 0% fulfillment rate. The primary obstacles identified were time limitations and a lack of facilities within the pesantren environment, which hindered students' ability to engage in independent learning. The study suggests the need for learning strategies that stimulate students' active and independent engagement, as well as collaboration among teachers, the school, and the pesantren to create a more supportive learning environment.

**Keywords:** learning interest; mathematic education; students' interest

### Abstrak

Penelitian ini bertujuan untuk menganalisis minat siswa dalam pembelajaran matematika di SMP IT Al-Qur'an Al-Fadlilah, salah satu institusi pendidikan formal yang berbasis pesantren dan menuntut siswa untuk menyeimbangkan antara aktivitas akademik dan keagamaan. Studi ini menggunakan pendekatan deskriptif kualitatif dengan metode pengumpulan data melalui angket, wawancara, serta observasi terhadap tiga siswa kelas VIII. Analisis difokuskan pada lima indikator minat belajar, yaitu: rasa senang dalam belajar, tingkat konsentrasi dan perhatian, kemauan untuk belajar, motivasi internal dalam berpartisipasi aktif, serta usaha untuk meraih tujuan pembelajaran. Hasil penelitian menunjukkan bahwa indikator dengan capaian tertinggi adalah rasa senang dalam belajar, sementara indikator dengan capaian terendah adalah usaha mencapai tujuan belajar, dengan tingkat ketercapaian sebesar 0%. Faktor penghambat utama yang ditemukan meliputi keterbatasan waktu dan fasilitas yang tersedia di lingkungan pesantren, yang membatasi kemampuan siswa dalam belajar secara mandiri. Berdasarkan hasil ini, penelitian merekomendasikan perlunya pengembangan strategi pembelajaran yang dapat mendorong



partisipasi aktif dan kemandirian siswa, serta pentingnya kolaborasi antara guru, pihak sekolah, dan pesantren dalam menciptakan lingkungan belajar yang lebih kondusif.

**Kata Kunci:** minat belajar; pembelajaran matematika; minat siswa

## Introduction

Mathematics is one of the main keys in science, because almost all components in aspects of life, both directly and indirectly, will always be related to mathematics. Mathematics is a necessity for all of us, because mathematics is a subject that is always related to everyday life (Sahena, et al., 2023). Mathematics is a constant part of life; you are always learning, especially now that everyone gets new information all the time. So, it is only natural that the title of the king of science is mathematics itself. However, the problem that has not been resolved for a long time is related to the thinking of society from children to adults, especially students, students who think that mathematics is a difficult subject and there are many formulas that must be memorized. As according to Asri, et al. (2021) stated that mathematics is currently one of the subjects that is less liked by students, even though with learning mathematics, their way of thinking will expand, from thinking logically, realistically, critically, rationally, honestly, and efficiently, the purpose of studying mathematics is to improve students' ability to reason critically, reach conclusions, and solve problems.

However, there are quite a few students who think that mathematics is difficult and tend not to like mathematics lessons because they do not fully understand the benefits of learning mathematics itself (Schoenfeld, 2022; Putri, 2023). We can first target this regarding students' interest in learning mathematics, because with this we can find out whether the idea that mathematics is a difficult lesson comes from themselves or from other parties. The importance of mastering mathematics can be seen in Law of the Republic of Indonesia No. 20 of 2003 concerning the National Education System Article 37 which emphasizes that mathematics is one of the compulsory subjects for students at elementary and secondary education levels. In essence, mathematics lessons cover three aspects, namely product, process, and attitude aspects. The product aspect includes the concepts and principles in mathematics lessons. The process aspect includes the methods or methods used to acquire knowledge, while the attitude aspect is a scientific attitude which is a variety of beliefs, opinions, and values that must be maintained by people who study it.

The results of the researcher's observations at SMP IT Al-Quran Al-Fadlilah found that students tend to depend on teachers and their enthusiasm for learning mathematics is lacking, so it is clear that interest in learning mathematics is very low, this is because some students think that school learning is only done at school (Yates et al., 2021). This is in line with the results of observations (Ndraha et al., 2022) stating that in one of the schools



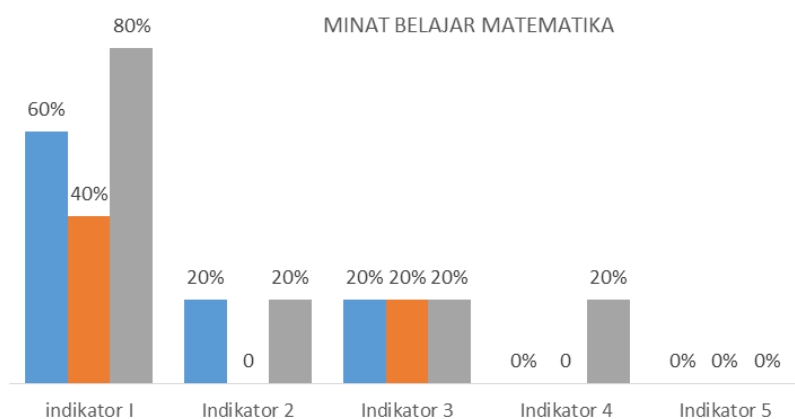
where the researcher was an intern, students were found to be non-independent and predominantly dependent on teachers, lack of interest in learning, resulting in low student learning outcomes. Apart from that, the factor that causes students to think that mathematics is a difficult subject is interest in learning, this was stated by Darma Ziliwu et al., (2024) based on the results of their observations, it was found that one of the causes of low mathematics learning outcomes is students' interest in learning mathematics.

## Method

This study uses a qualitative approach with a descriptive method (Pangadongan, Purwati, & Wyrasti, 2022), which aims to describe students' interest in learning mathematics. The study was conducted on Thursday, June 6, 2024, at SMP IT Al-Qur'an Al-Fadlilah. The subjects in this study were all grade VIII students at the school, with a random sampling technique that resulted in three students as samples. The instrument used was a questionnaire or non-test questionnaire compiled based on indicators of interest in learning mathematics. The data collection technique was carried out by distributing closed questionnaires to students, which were then continued with open interviews to obtain more in-depth data. The data analysis technique in this study used a data reduction process, namely by simplifying and summarizing the data obtained from the questionnaire and interviews in order to obtain relevant and meaningful information according to the focus of the research.

## Result

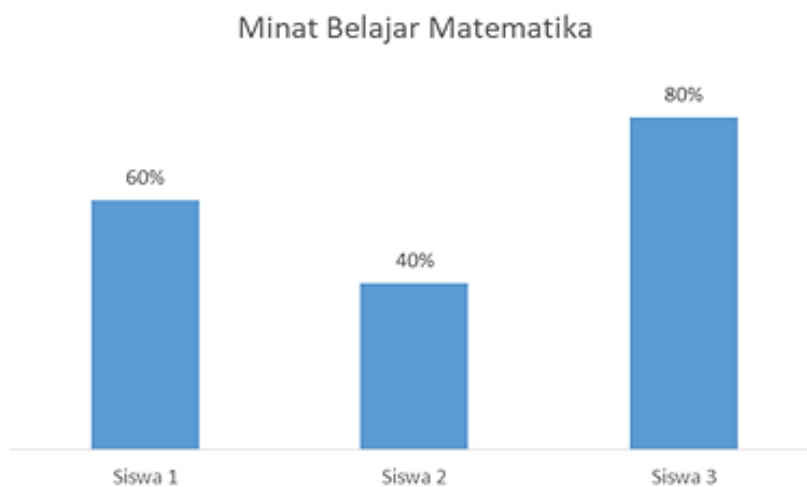
Based on the results of the questionnaire that was given to three students in class VIII of SMP IT Al-Qur'an Al-Fadlilah, data was obtained regarding the level of interest in learning mathematics which is displayed in the following diagram (Figure 1).



**Figure 1.** Level of interest in learning mathematics based on indicators



Based on Figure 1 the results of the analysis of learning interest indicators show that Indicator 1 obtained the highest score compared to other indicators, with a percentage of 60%, 40%, and 80% of each student. This indicates that the first indicator—which may be related to initial attention or interest in the lesson—is quite dominant in influencing students' learning interest. Meanwhile, Indicator 2 and Indicator 3 show lower and more even values, at 20% and 0% respectively (for Indicator 2), and 20% consistently from the three students in Indicator 3. Indicator 4 was only responded positively by one student, and Indicator 5 did not get any score at all, which means that no students showed interest in this aspect.



**Figure 2.** Level of interest in learning mathematics based on students

Meanwhile, if viewed from the individual results shown in Figure 2, it is obtained that Student 3 has the highest interest in learning mathematics with a percentage of 80%. Student 1 is in second place with an interest of 60%, while Student 2 shows the lowest interest with only 40%. This difference indicates that there are variations in the level of interest in learning between individuals which may be influenced by internal factors (such as personal motivation, perception of the subject) and external factors (such as teaching methods, learning environment, and parental support).

## Discussion

The results of the data analysis related to interest in learning mathematics obtained one indicator with the lowest percentage, namely the indicator of efforts made to realize the desire to learn. This is in line with research by Friantini, et al. (2019) and Yu (2023), there is one indicator with a low category of 48%, namely the indicator of the willingness to learn. Then the results of the study by Aulia, et al. (2023) obtained one indicator with the lowest category, namely 61%, which is the indicator of actively discussing with friends in learning



mathematics. The results of the study by Imami, et al. (2021) there is one indicator with the lowest scale of 69% on the indicator of having a disciplined attitude during mathematics learning.

## Conclusion

In this case, it was concluded that the indicator of the feeling of pleasure towards learning obtained a scale of 60%, in other words, almost all students met the indicator, for the indicator of the concentration of attention and thoughts towards learning amounted to 40% with almost all students meeting the indicator, then for the indicator of the concentration of attention and thoughts towards learning, a percentage of 20% was obtained with students almost not meeting the indicator, likewise for the indicator of the willingness to learn obtained the same scale as the previous indicator of 20%, then the last indicator of the efforts made to realize the desire to learn became one of the lowest indicators with a percentage of 0% which can be interpreted that there are no students who meet the indicator.

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## Conflict of Interest

There is no conflict of interest regarding the publication of this manuscript. The entire writing process was carried out independently, without any influence or interest from any party that could affect the results of the study. Furthermore, the author is fully responsible for the honesty presented in this manuscript. Ethical issues, plagiarism, manipulation, falsification and/or engineering of data, duplication and/or redundancy of publication or submission, are entirely the responsibility of the author.

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