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THE EFFECT OF EMOTIONAL INTELLIGENCE ON MATHEMATICS LEARNING OUTCOMES AMONG HIGH SCHOOL STUDENTS AT ASSA'ADAH

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Abstract

Students' logical, critical, and systematic thinking skills are developed and honed through mathematics. However, in reality, mathematics learning outcomes remain relatively low. In addition to intellectual factors, other factors, such as emotional factors, may also be involved. Emotional intelligence is believed to influence students' ability to manage their emotions, enhance their motivation to learn, and foster positive interactions during the learning process. The purpose of this study is to determine the correlation between students' emotional intelligence and their mathematics learning outcomes at Assa'adah High School. With an ex post facto design, this study is a quantitative association study. In this study, 113 students from Assa'adah High School in Bungah, Gresik, were selected using purposive sampling as the research sample. A Likert-scale questionnaire on emotional intelligence and documentation from the End-of-Semester Summative Assessment (PSAS) in mathematics were used to collect data in this study. The analysis was conducted through several stages, namely the normality test, linearity test, simple linear regression test, and coefficient of determination test. According to the analysis, there is a statistically significant positive correlation between emotional intelligence and learning outcomes, with a significance level of 0.000 < 0.05. Approximately 13.2% of mathematics learning outcomes are attributed to emotional intelligence, while the remaining 86.8% are attributed to additional variables not accounted for in this study.

1. INTRODUCTION

Mathematics is a discipline that makes a significant contribution to various aspects of life and is often used as a benchmark for the success of education management in Indonesia (Saniyyah & Winiati, 2020). Mathematics learning is not only about numerical operations but is also closely linked to deductive reasoning, requiring students to reason

and analyze systematically (Khafidhoh & Mahmudah, 2022). Beyond its focus on numbers, mathematics is expected to cultivate logical thinking, critical reasoning, and analytical skills grounded in deductive proof, rather than personal experience. Furthermore, mathematics is also expected to make a tangible contribution to fostering a rational mindset that can be applied in every decision-making process in daily life. Therefore, mathematics must be taught to students as early as possible to ensure that learning objectives are achieved to the fullest extent. Indirectly, this will also train their minds to think critically, creatively, and independently.

Although mathematics is considered very important, many students still struggle to apply it in daily life through word problems. In addition, during learning activities, it is common to find students who have difficulty understanding concepts, lack confidence when working on problems, and sometimes appear uncomfortable during the learning process. This statement is supported by Kirana & Nur (2022) In their observations, they also noted that many students still struggle to understand the mathematical concepts taught by teachers, and most of them rely solely on memorizing formulas; consequently, when presented with different problems, they find them difficult. Therefore, if this situation is left unaddressed and dismissed, it will eventually lead to low mathematics learning outcomes for the students themselves. In this context, research conducted by Buyung et al. (2022) concluded that several factors can contribute to poor mathematics learning outcomes, such as a lack of motivation, difficulty concentrating, a lack of conceptual understanding, and a lack of student discipline. Therefore, fostering motivation, concentration, and discipline in learning is expected to lead to good academic results and cultivate a love of learning without students feeling forced to study, especially when it comes to mathematics, which is often perceived as difficult and boring.

Learning is an activity that an individual engages in, consciously intending to gain experience from what they have learned as a result of their interaction with the surrounding environment (Syah & Pertiwi, 2024). Meanwhile, learning outcomes are defined as indicators of student success after undergoing a specific learning process, reflecting mastery of cognitive, affective, and psychomotor aspects (Mustakim et al., 2020; Rahman, 2021). In response to this, according to Mahmudi et al. (2022) The cognitive aspect hones thinking skills, the affective aspect shapes attitudes and values, while the psychomotor aspect trains practical skills. Overall, these three aspects complement one another and also form the foundation of student learning success after they undergo a learning process based on Bloom's Taxonomy. Bloom's Taxonomy is a framework to assist educators in designing curricula, formulating learning objectives, and assessing students' levels of understanding (Lactona & Cahyono, 2024). Therefore, through learning outcomes, teachers can assess the extent of the knowledge and success achieved by their students after undergoing the learning process. In addition, these outcomes can serve as a benchmark for teachers in determining appropriate teaching methods, as well as a basis for teacher evaluation. If student learning outcomes decline, attention and improvement are necessary. High learning outcomes indicate that the learning process has been successful and is proceeding well, whereas low learning outcomes require further analysis to identify the factors influencing them. Broadly speaking, there are two main groups of factors contributing to optimal learning outcomes: internal factors and external factors (Nabillah & Abadi, 2019). Internal factors include motivation, talent, attitude, interest, and intelligence, both intellectual and emotional intelligence. Meanwhile, external factors relate to the surrounding environment, such as the family environment, school, learning setting, climate, culture, and the level of difficulty of the material presented by the teacher during the learning process (Maulida, 2023).

In response to this, in recent years, attention to non-cognitive factors such as emotional intelligence (EQ) has become just as important as intellectual intelligence (IQ). Quoted from Damayanti et al. (2023); Saputra et al. (2024), Goleman states in his book that the factors determining a person's success consist of 20% intellectual intelligence and the remaining 80% from other factors, one of which is emotional intelligence. The term "emotional intelligence" was first used by Peter Salovey and John Mayer in 1990, but it gained wider recognition after Daniel Goleman published his book titled "Emotional Intelligence: Why It Can Matter More Than IQ" in 1995, as cited in (Hermawan et al., 2025). Damayanti et al. (2023) argue that a person's success depends on intellectual intelligence and the capacity to regulate one's emotions. In line with this, Fauziah et al. (2025) also note that the components of emotional intelligence include the ability to regulate one's emotions, motivate oneself, show empathy toward others, and build healthy interpersonal relationships with others. Based on

this statement, it can be concluded once again that not all success is based solely on intellectual intelligence, but is also grounded in the processing of one's own emotions, a concept often referred to as emotional intelligence. Emotional intelligence itself encompasses several elements, such as self-control (understanding and managing emotions), self-motivation, empathy toward others, and building good relationships with others. Therefore, attention to non-cognitive factors such as emotional intelligence is also expected to support success in the learning process so that learning can proceed smoothly and students can be more enthusiastic about learning.

In the context of learning, students with balanced emotional states are more likely to exhibit self-control, perseverance, and maintain their enthusiasm even when they face difficulties in learning mathematics. On the other hand, students who are unable to regulate their emotions often struggle to manage their own emotions, leading them to become easily discouraged, give up quickly, and lose focus during the learning process (Sudiartini, 2024). An unstable emotional state has a direct impact on learning outcomes. This aligns with the view of Murtafiah & Firdaus, (2022), who state that students who are able to achieve good learning outcomes typically possess high self-confidence and a stable emotional state. Conversely, students who have not yet achieved their learning outcomes typically lack self-confidence and have unstable emotional states. This is because emotional intelligence is, in fact, a factor inherent in the student themselves and plays a significant role in learning outcomes (Saputra et al., 2024). This reinforces the assertion that attention and efforts to maintain a student's emotional stability are essential during the learning process, particularly to enhance students' interest in mathematics so they can achieve optimal results.

The relationship between emotional intelligence and academic achievement has been frequently observed in previous studies involving various samples and variables, such as the study conducted by Erika et al. (2021), which showed that intellectual, emotional, and spiritual intelligence are interrelated in terms of academic achievement. However, among these three aspects, emotional intelligence has the most significant influence on academic achievement. Additionally, a study conducted at SMPN 1 Geger by Dayanti et al. (2024) found a strong and positive relationship between emotional intelligence and mathematics learning outcomes. Furthermore, in her research, Fitriani (2022) found that students' emotional intelligence influences their mathematics learning outcomes at various levels. However, most of these studies are frequently conducted at the junior high school level or on subjects other than mathematics in high school. Additionally, differences in school conditions, learning environments, and student backgrounds may lead to variations in research findings. This finding is supported by Setiadi (2018) study. To further support this, other researchers are encouraged to conduct similar investigations, but they should use larger sample sizes or broader research areas. Therefore, additional research is needed on the impact of emotional intelligence on students' mathematics learning outcomes in various high school contexts. Therefore, the researcher selected the study site to examine the effect of emotional intelligence on mathematics achievement at Assa'adah Bungah High School in Gresik.

Based on the researcher's experience during the learning activities, it was observed that some students still exhibited anxiety when faced with math problems requiring precision and a deep understanding. In many learning processes, this situation is very common, particularly in mathematics, which is often considered challenging for students because it requires a high level of reasoning skills and conceptual understanding. Additionally, during the learning activities, there were some students who were not yet fully engaged in the learning process. This may be due to students not yet being able to manage their emotions effectively. While emotional regulation varies from person to person, it remains a crucial factor that deserves attention in supporting students' success in learning mathematics. However, all of this remains a preliminary hypothesis, and this hypothesis still requires evidence through more systematic and measurable empirical research to be substantiated. Therefore, this study aims to determine whether there is a correlation between students' emotional intelligence and their mathematics learning outcomes, based on the claims mentioned above. This study is expected to make a theoretical contribution to expanding research on non-cognitive aspects of mathematics learning and to serve as a foundation for teachers to design lessons that take into account students' emotional development in addition to cognitive aspects.

2. METHOD

This study employs a quantitative associative approach with an ex post facto design. The quantitative approach was chosen because this study uses numerical data that is analyzed to investigate a specific population or sample.

Reinforcing this statement, according to Sugiyono (2013) Quantitative research is an approach based on the philosophy of positivism and is used to study a specific population or sample, where data collection is conducted using research instruments, then analyzed quantitatively or statistically with the aim of testing predetermined hypotheses. Meanwhile, the type of research in this study is associative. Associative research was chosen because it aims to determine the influence or relationship between the two variables, namely emotional intelligence and mathematics learning outcomes. In line with the views of Pravitasari & Khoiriawati (2022) Associative research is a type of research used to determine whether or not a relationship exists between two or more variables. Meanwhile, the research design selected for this study is the ex post facto design. Widyastuti & Purwanto (2024) explain what an ex post facto design is. This design was chosen to identify and assess the impact of various variables after implementation without directly interfering with the learning process. Therefore, in this study, the researchers collected data on students' emotional intelligence and learning outcomes after they had completed the learning process, which was then analyzed using simple correlation or linear regression to determine the influence. Furthermore, the population in this study included all students enrolled at Assa'adah Bungah Gresik High School for the 2025/2026 academic year, totaling 827 students. However, from this large population, a sample of 113 students was selected via purposive sampling from all students in classes XI.1, XI.4, XI.5, and XI.6 based on the recommendations of the mathematics teachers for those classes. The purposive sampling technique was chosen for this study because the sample was selected based on specific criteria and considerations (Sugiyono, 2013).

In this study, emotional intelligence is the independent variable, while mathematics achievement is the dependent variable. Data collection in this study was conducted using a Likert-scale questionnaire on emotional intelligence and documentation of students' End-of-Semester Summative Assessments (PSAS) in mathematics. The emotional intelligence Likert scale questionnaire used in this study was adapted from Ainun (2022) thesis titled "The Effect of Emotional Intelligence on Student Learning Outcomes in Grade VI at Prannapa Jae State Madrasah Ibtidaiyah, Barumun Tengah Subdistrict, Padang Lawas Regency." The questionnaire used in this study consists of written questions on pre-printed sheets distributed to respondents. It is structured as a Likert-scale questionnaire with four response options: strongly agree (SS), agree (S), disagree (TS), and strongly disagree (STS). To answer each question in the questionnaire, respondents were to select the answer that best reflected their situation and mark it with a check mark. The questionnaire contained 20 questions, including both positive and negative items. Meanwhile, student learning outcomes were derived from the documentation of the End-of-Semester Summative Assessment (PSAS) in mathematics. The researcher obtained these end-of-semester summative assessment (PSAS) results from the relevant mathematics teacher at Assa'adah High School. Data collection in this study was conducted using research tools, and the data were then statistically analyzed to test the hypothesis (Sugiyono, 2013). The analysis in this study was conducted in several stages, namely preliminary tests consisting of normality and linearity tests, hypothesis testing using simple linear regression analysis, and a test of the coefficient of determination (R^2).

3. RESULTS AND DISCUSSION

Research result

Using an emotional intelligence questionnaire and documentation from the End-of-Semester Summative Assessment (PSAS) as research instruments, the researcher successfully obtained findings regarding the influence of emotional intelligence on the mathematics learning outcomes of Assa'adah High School students. This data was collected from 113 respondents, who were students at Assa'adah High School, selected as the sample for this study. Before the data was analyzed using SPSS, the raw data from the questionnaire results and the documentation of students' mathematics scores were first totaled to obtain the individual scores for each respondent. During the calculation of questionnaire scores, the researcher did not perform manual calculations one by one but instead utilized Microsoft Excel software to assist in summing the individual scores for each respondent, as this was deemed far more effective and minimized calculation errors.

In the next step of this study, the researchers examined a number of testing stages, including both preliminary tests and hypothesis tests. Preliminary tests are a crucial stage in quantitative research and serve as the foundation for determining whether the data is suitable for analysis using parametric statistics. Supporting

this statement, according to Ulum et al. (2024), the importance of conducting prerequisite tests before hypothesis testing is to ensure the validity and reliability of statistical analysis results before applying other statistical methods, so that the required data can be proven to meet the assumptions to be tested. In this context, the prerequisite tests to be conducted include: the normality test to evaluate data distribution, and the linearity test to evaluate the relationship between variables. Meanwhile, a hypothesis is generally a tentative answer to a research problem, the truth of which remains a provisional assumption and must be proven through data, research, or observation (Nur et al., 2025). Thus, hypothesis testing is a stage in testing the truth of a hypothesis or tentative assumption regarding a population based on sample data. In this case, the hypothesis test to be conducted is a simple linear regression test. The simple linear regression test was chosen because it is used to measure the extent to which changes in the independent variable influence the dependent variable. Additionally, the coefficient of determination (R^2) test was also conducted in this study to calculate the magnitude of the impact. All analyses in this study were conducted using SPSS software to assist the researcher in determining and verifying the results of each test. The following is a detailed explanation of each test discussed earlier.

Normality Test

The first step is to conduct a normality test. The data on emotional intelligence and academic performance are examined using a normality test to determine whether they are normally distributed. The decision criteria for this test are as follows: H_0 is accepted if the Sig. value is > 0.05, indicating that the data is normally distributed, while H_0 is rejected if the Sig. value is < 0.05, indicating that the data is not normally distributed. Table 1 below shows the results of the normality test, which can be seen in the "Asymp. Sig. (2-tailed)" column.

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		113
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	17.17346804
Most Extreme Differences	Absolute	.082
	Positive	.082
	Negative	-.052
Test Statistic		.082
Asymp. Sig. (2-tailed)		.059[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

The researcher used the One-Sample Kolmogorov-Smirnov Test because the sample size in this study was 113 respondents, with n ≥ 50. The Kolmogorov-Smirnov test was conducted to assess normality and determine whether the data were normally distributed. The significance level of the test results met the criteria for accepting H_0 because the significance level of the test results was 0.059, which is greater than 0.05. This indicates that the data are normally distributed, allowing for statistical testing in the next stage.

Linearity Test

Once the data has been confirmed to be normally distributed, the next step is the linearity test. The linearity test is conducted to determine whether the data exhibits a linear relationship between the independent variable (emotional intelligence) and the dependent variable (learning outcomes). The decision-making process in this linearity test is the same as in the previous test, by examining the significance value in the "Deviation from linearity" section: the data is considered to have a linear relationship if the Sig. value is > 0.05, meaning H_0 is accepted, whereas the data is considered not to have a linear relationship if the Sig. value is < 0.05, and H_0 is rejected. This must be understood because linear regression will only produce acceptable results if the relationship between the independent and dependent variables is linear. Table 2 below presents the results of the linearity test.

Table 2. Linearity Test Results

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
HASIL_PSAS_Y*	Between Groups	(Combined)	13040.379	22	592.744	2.134	.007
		Linearity	5012.311	1	5012.311	18.042	.000

	Deviation from Linearity	8028.067	21	382.289	1.376	.152
	Within Groups	25003.869	90	277.821		
	Total	38044.248	112			

Based on the results of the linearity test, which produced an ANOVA analysis table, the Sig. The value for the deviation from linearity in the relationship between emotional intelligence and learning outcomes was 0.152. The significance value of 0.152 is greater than 0.05; therefore, based on the decision criteria in the linearity test, this result leads to the conclusion that there is a significant linear relationship between emotional intelligence and students' mathematics learning outcomes.

Hypothesis Testing

After the prerequisite tests, namely, the normality and linearity tests, were met, the next step was hypothesis testing. The purpose of this hypothesis testing was to examine how students' mathematics learning outcomes at Assa'adah High School were influenced by their emotional intelligence. In this case, the researcher tested the hypothesis using one of the inferential statistical analyses, namely, simple linear regression analysis. This test helps the researcher conclude the presence or absence of the influence of emotional intelligence on mathematics learning outcomes. The proposed hypothesis is as follows:

H_0 : There is no effect of emotional intelligence on mathematics learning outcomes.

H_1 : Emotional intelligence has an impact on mathematics learning outcomes.

Decision-making in hypothesis testing is based on the significance level; specifically, if the significance level (sig.) is < 0.05, then H_0 is rejected and H_1 is accepted. Conversely, if the significance level (sig.) is > 0.05, then H_0 is accepted and H_1 is rejected. Table 3 below shows the results of the simple linear regression test mentioned earlier.

Table 3. Results of the Simple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-41.205	20.218		-2.038	.044
	SKOR_ANGKET_X	1.273	.310	.363	4.104	.000

a. Dependent Variable: HASIL_PSAS_Y

Based on the results of the simple linear regression analysis shown in Table 3, the coefficient table provides the following information: the regression constant (a) is -41.205, and the regression coefficient (b) is 1.273. This means that the regression can be written as follows:

$$Y = a + bX$$

$$Y = -41.205 + 1.273X$$

In the equation above, the coefficient b is the regression coefficient that indicates the average change in variable Y for every one-unit increase in variable X. If b is positive, there is an increase; if b is negative, there is a decrease. The results of the analysis obtained from the regression equation show that the regression coefficient is positive (+). Based on this, it can be concluded that students' mathematics achievement is positively influenced by emotional intelligence. This indicates that a one-unit increase in emotional intelligence results in a 1.273-unit increase in students' mathematics achievement.

Furthermore, based on decision-making criteria, the presence or absence of a relationship between the two variables can be determined by the significance level; that is, if the significance level is less than 0.05, it can be concluded that there is a relationship, and vice versa. Based on the results of the analysis above, the significance level is 0.000, meaning that the regression model formed is statistically significant. Since the significance level of 0.000 is less than 0.05, it can be concluded that students' mathematics learning outcomes are also significantly influenced by their emotional intelligence.

Test of the Coefficient of Determination (R^2)

After the results of the prerequisite tests and hypothesis tests, which are requirements for this study, have been met, the final step of this study is for the researcher to test the coefficient of determination (R^2). This test is conducted to measure the extent of the influence of the independent variable (X), emotional intelligence, on the dependent variable (Y), mathematics learning outcomes. Table 4 below shows the results of the coefficient of determination (R^2) test, which can be found in the R-squared section.

Table 4. Results of the Coefficient of Determination Test (R^2)

Model Summary

Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.363[a]	.132	.124	17.25065

a. Predictors: (Constant), SKOR_ANGKET_X
b. Dependent Variable: HASIL_PSAS_Y

The R-squared value in the results is 0.132, indicating the extent to which emotional intelligence influences the success of Assa'adah High School students in learning mathematics. Thus, the coefficient of determination of 0.132 implies that emotional intelligence contributes 13.2% to students' mathematics learning outcomes, while other factors outside the study variables account for the remaining 86.8%.

Discussion

Further discussion based on the results of the data analysis presented in the previous section indicates that there is a significant relationship between emotional intelligence and mathematics achievement among students at Assa'adah High School. This was demonstrated through a comprehensive series of statistical analyses conducted using SPSS software. The results of the simple linear regression test revealed a positive correlation with a significance level of 0.000. This means that H_0 is rejected and H_1 is accepted, as evidenced by the significance value (Sig.) of 0.000 > 0.05, which indicates that emotional intelligence affects the mathematics learning outcomes of Assa'adah High School students. These results support the idea that emotional intelligence is crucial for student learning, particularly in subjects like mathematics that require concentration, perseverance, and logical thinking skills. In line with the view of Sari & Reffiane (2024), who state that precision, concentration, and patience in finding solutions to problems require a high level of emotional intelligence. Therefore, students with good emotional intelligence are more likely to be able to control anxiety, fear, and stress when faced with math problems, allowing them to think more clearly and focus on solving the problems. Meanwhile, theoretically, according to Daniel Goleman, emotional intelligence encompasses five main aspects: the ability to understand one's own emotions, emotional regulation, self-motivation, understanding others' emotions, and building healthy social relationships, as cited in (Damayanti et al., 2023). The following is an explanation of these various aspects of emotional intelligence according to Fauziah et al. (2025), including:

1. Self-awareness is a key foundation of emotional intelligence that enables a person to recognize and understand their own feelings. For example, when making a decision, a person may realize that they are feeling angry, sad, happy, etc., allowing them to make the right decision and avoid being overwhelmed by their emotions.
2. Emotional management refers to a person's ability to control negative emotions and maintain a positive attitude when facing challenges. Someone who can control their emotions will remain calm and not get easily upset, and will be able to think clearly before taking action.
3. Motivation is an internal drive within a person to achieve goals, face challenges with enthusiasm, and maintain high levels of perseverance and optimism. Someone who is highly ambitious and motivated typically does not give up easily and will keep trying.
4. Empathy is an inner calling that makes a person more attuned to the feelings and needs of others. People who possess empathy are not only sensitive to others' feelings but are also able to respond in a way that demonstrates understanding and compassion.
5. Social skills are a person's ability to communicate effectively, work in a team,

and manage conflicts healthily. Someone with good social skills will be able to create a harmonious atmosphere, whether in the workplace, at school, or in the community.

Thus, by fulfilling the five key aspects of emotional intelligence as defined by Daniel Goleman, it is hoped that individuals or students will be able to respond and act much more effectively when facing a problem, including, in this context, their challenges with learning mathematics. Furthermore, this will also indirectly impact their learning outcomes, as evidenced by the findings of this study, which have demonstrated that emotional intelligence influences students' mathematics learning outcomes.

Furthermore, after confirming the influence of emotional intelligence on students' mathematics achievement, the regression equation obtained in this study is Y = -41.205 + 1.273 X. The results of this regression analysis show that the coefficient b is positive, indicating that a one-unit increase in emotional intelligence will increase students' mathematics achievement by 1.273 units. These findings are also consistent with previous studies conducted by Jannah et al. (2016); Ventini et al. (2018), which revealed a positive relationship between emotional intelligence and academic achievement. Therefore, the findings showing a positive relationship between emotional intelligence and learning outcomes imply that emotionally prepared students tend to be more mentally resilient during the learning process, are less likely to give up when facing difficulties, and possess greater internal motivation to learn and understand the material. This finding is further supported by Maharani et al. (2025); Wahdah & Malasari (2022) Students who can manage negative emotions, such as anxiety and frustration, tend to be calmer during the learning process, particularly in mathematics, which is often considered challenging. Conversely, students who are unable to manage negative emotions tend to be more temperamental and restless and lack focus during the learning process, making it difficult for them to absorb the material. Thus, emotional intelligence serves as a supporting factor that can help students optimize their cognitive abilities. Furthermore, this reinforces the view that learning success depends not only on cognitive abilities but is also influenced by students' affective and emotional aspects.

Furthermore, the extent of the influence of emotional intelligence on the mathematics learning outcomes of Assa'adah High School students can be observed through the coefficient of determination (R^2) of 0.132. This value indicates that emotional intelligence contributes approximately 13.2% to students' mathematics learning outcomes. Although this contribution is relatively small, emotional intelligence still demonstrates that it is one of the variables influencing student learning outcomes. Meanwhile, 86.8% of the remaining variation is influenced by other factors outside the variables under study, such as intellectual intelligence, teaching methods, learning motivation, family environment, socioeconomic conditions, and students' interests and attitudes toward mathematics.

The implications of these research findings suggest that teachers, as educators, should not only focus on delivering content and developing students' cognitive abilities but should also pay special attention to emotional aspects during the learning process. According to Faudillah et al. (2024) Creating a solid foundation for students' emotional development will make them feel safe and valued, thereby making them better able to manage their emotions effectively. In addition to using various appropriate teaching methods to facilitate student learning, fostering positive interactions between individuals, such as interactions between teachers and students, will also indirectly foster a sense of comfort and enjoyment during the learning process. Another perspective is offered by Sari & Reffiane (2024)Learning difficulties arise in students who feel uncomfortable and stressed because they are constantly afraid of failing or are overwhelmed by intense emotions, which prevents them from learning to their full potential. Therefore, teachers should be able to understand students' emotions and foster a sense of mutual comfort first, so that the learning content presented can be easily accepted by students without internal resistance. In addition, attention to the development of students' emotional intelligence is also a strategic effort to improve the quality of learning and students' mathematics learning outcomes to achieve more optimal results. Supporting this statement, efforts that can be made by teachers as educators to improve students' emotional intelligence, according to Wisda et al. (2022), include:

1. Prepare learning materials appropriate to the subject matter to be taught, present

them as engagingly as possible, and take into account students' learning styles,
2. Providing students with free time to ask questions or discuss the material they have learned,
3. Providing students with the opportunity outside of class hours to consult on course material they have not yet understood and to have it explained step by step in a way that is easy for them to remember,
4. Adopting engaging teaching methods that take into account students' learning styles to create a pleasant and comfortable learning environment,
5. Providing recognition in the form of praise for their academic success and awards for their achievements, to foster their motivation to learn,
6. Setting a concrete example of positive behavior, such as discipline, politeness, and friendliness, for students,
7. Be fair and firm with every student who disrupts the learning process, without making any distinctions.

Based on this statement, it can be concluded that efforts teachers can make, such as creating engaging lessons, providing opportunities for questions and discussion, offering praise, and demonstrating a positive and fair attitude, are expected to help students feel valued, comfortable, and motivated to be more enthusiastic about learning. Furthermore, a teacher's sense of care as an educator toward students' individual needs by adopting a teaching approach that considers students' learning styles is expected to foster a strong emotional bond between teacher and student. Building such positive relationships will also support students' development in managing emotions, boosting self-confidence, fostering empathy, and cultivating discipline and a sense of responsibility. Thus, the findings presented by Wisda et al. (2022) indicate that enhancing students' emotional intelligence can be achieved through a learning process that fosters mutual respect, openness, and a focus on students' needs. Therefore, teachers, as educators, are expected to continuously develop their pedagogical and social competencies so that they are not only able to create a learning environment focused solely on academic achievement, but can also optimally support students' emotional development, thereby enabling students to achieve the best possible learning outcomes.

4. CONCLUSION

Based on the data analysis and hypothesis testing regarding the relationship between emotional intelligence and students' mathematics achievement at Assa'adah High School, the following conclusions can be drawn.

1. The results of the analysis indicate that the mathematics achievement of students at Assa'adah High School is significantly influenced by emotional intelligence. This is evidenced by the results of a simple linear regression test, which showed a significance level of $0.000 < 0.05$; the regression equation identified in this study is $Y = -41.205 + 1.273X$. The results of this regression analysis show that the coefficient b is positive and indicate that every one-unit increase in emotional intelligence will increase students' mathematics learning outcomes by 1.273 units.
2. The coefficient of determination (R^2) test was used to measure the extent of the influence of emotional intelligence on mathematics learning outcomes, and the results of this study yielded a value of 0.132. This implies that 13.2% of the mathematics learning outcomes of Assa'adah High School students are influenced by emotional intelligence, while the remaining 86.8% is influenced by other factors outside the variables examined in this study.

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