

SIGNIFICANT CONTRIBUTION OF EMOTIONAL INTELLIGENCE TO THE LEARNING ACHIEVEMENT OF ELEMENTARY SCHOOL STUDENTS

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ABSTRACT

This study aims to examine the influence of emotional intelligence on the learning outcomes of elementary school students. The research is motivated by the assumption that low academic achievement is not solely influenced by cognitive abilities but is also related to students' emotional competencies. A quantitative approach with an associative research design was employed. The sample consisted of 240 elementary school students selected through random sampling techniques. Data were collected using closed-ended questionnaires and analyzed using simple linear regression with the assistance of SPSS software. Emotional intelligence has a positive and significant effect on learning outcomes, as evidenced by a regression coefficient of 0.627 with a significance level of < 0.001 . The coefficient of determination (R^2) of 0.321 shows that emotional intelligence accounts for 32.1% of the variance in students' learning outcomes, while the remaining variance is explained by other factors beyond the scope of this study. This study strengthens the perspective that emotional intelligence is a fundamental affective construct that directly contributes to academic achievement at the elementary education level. Educators and policymakers to integrate emotional intelligence development into elementary school learning processes as part of a holistic educational approach aimed at improving students' academic performance and emotional well-being.

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1. INTRODUCTION

Education at the elementary school level has a very important role in forming the foundation of students' academic, social, and emotional abilities. In the context of learning, student learning outcomes are often used as indicators of the success of the educational process. However, learning outcomes are not only influenced by intellectual intelligence, but also by non-cognitive aspects such as emotional intelligence. Emotional intelligence is the ability to recognize, process, and control emotions so that students are able to respond positively (Maitrianti, 2021). The tendency of high emotional turmoil needs to be understood by educators, especially by parents and teachers. Understanding what is most fundamental in a person's life, namely emotions is something that is important for everyone to know, especially by educators. By studying emotions, we as an educator can know the emotions of ourselves and students and be able to develop healthy emotional intelligence that will give birth to a child who will be successful in life in the future (Manizar, 2016).

Phenomena in the field show that many elementary school students have difficulty managing their emotions, which has an impact on learning behaviors such as lack of focus, easy frustration, or conflict with classmates. This condition has the potential to reduce students' motivation and academic achievement (Ahmad & Nurjannah, 2016). Learning motivation is the encouragement that comes from within and outside the student who is able to provide a sense of pleasure and enthusiasm in learning so that students are able to achieve excellent learning achievements. Learning motivation is also related to emotional intelligence. Emotional intelligence is the most important part to trigger high motivation from students to continue to progress and develop so that it can improve student learning outcomes in academic performance (Farhan et al., 2022). It is important to examine the extent to which emotional intelligence affects student learning outcomes, especially at the elementary education stage.

According to (Manizar, 2016) Learning outcomes are the abilities that students have after receiving their learning experience. The learning outcomes of students are determined by the students themselves who want to build their knowledge. According to (Rahman, 2021) Learning outcomes are that if a person has learned, there will be a change in behavior in that person. Another case with (Ikhsan, 2022) stating that learning outcomes are an internal ability that has become a person's personal property and the possibility that the person does something according to his or her ability. In academic circles, it often arises that the success of education is not determined by the student's grades stated on the report card or on the diploma, but the measure of success in the cognitive field can be known through the learning outcomes of a student (Somayana, 2020).

Several previous studies have shown a positive relationship between emotional intelligence and academic achievement. Research by (Parker et al., 2004) found that students with high emotional intelligence tended to have better learning achievement because they were able to manage academic stress and build healthy relationships with teachers and peers. Furthermore, the research conducted by (Karyawati et al., 2022) It shows that elementary school students with good levels of emotional intelligence tend to be more active in the learning process and show higher learning outcomes compared to students with low emotional intelligence.

Based on this background, this study focuses on: Is there a significant influence between emotional intelligence on the learning outcomes of elementary school students?. This study aims to find out and analyze the influence of emotional intelligence on the learning outcomes of elementary school students, as well as contribute to efforts to improve the quality of basic education through the development of students' affective aspects. By understanding the role of emotional intelligence in the learning process, it is hoped that schools can integrate the development of emotional aspects in learning strategies that focus not only on cognitive aspects, but also on the formation of students' character and social-emotional skills from an early age (Purwanto et al., 2020).

Although numerous studies have examined the relationship between emotional intelligence and academic achievement, most existing research focuses on secondary or higher education levels and emphasizes multiple predictor variables simultaneously, such as motivation, learning discipline, and parental support (Osly Usman, 2022). Consequently, the specific contribution of emotional intelligence as an independent factor at the elementary school level has not been sufficiently explored, particularly within the context of Indonesian basic education. Moreover, previous studies tend to rely on descriptive or correlational designs without explicitly quantifying the magnitude of

emotional intelligence’s contribution to learning outcomes. This gap indicates a lack of empirical evidence that clearly explains how strongly emotional intelligence alone influences elementary students’ learning outcomes. Therefore, this study seeks to address this gap by employing a quantitative associative approach to examine the direct and measurable effect of emotional intelligence on the learning outcomes. (Burhamzah et al., 2023) Elementary school students, providing clearer empirical justification for integrating emotional intelligence development into elementary education practices.

2. METHOD

This study uses a quantitative approach with the type of associative research, which is research that aims to determine the relationship and influence between two or more variables (Akbar et al., 2024). The independent variable in this study is emotional intelligence, while the dependent variable is learning outcomes.

The data source used is primary data obtained directly from respondents through the distribution of closed questionnaires. The number of respondents was 240 elementary school students who were selected using *random sampling techniques*. This technique was chosen so that every individual in the population has an equal chance of being selected as a sample, so that the data obtained is more representative.

The data analysis technique used was simple linear regression with the help of IBM SPSS Statistics 29 software. This analysis was chosen to find out how much emotional intelligence affects the learning outcomes of elementary school students in a linear manner.

The emotional intelligence instrument was constructed by referring to the concept of emotional intelligence which includes the ability to recognize one’s own emotions, manage emotions, motivate oneself, recognize others’ emotions (empathy), and build positive social relationships. These indicators reflect core emotional competencies that are considered crucial in supporting students’ learning processes at the elementary level.

Meanwhile, learning outcomes were measured through indicators that represent students’ cognitive learning achievements, including understanding of learning materials, ability to complete learning tasks, and achievement of academic scores. The learning outcomes data were obtained based on students’ academic performance records provided by the school, which were then standardized for analysis purposes. All questionnaire items used a four-point Likert scale, consisting of: (1) Strongly Disagree, (2) Disagree, (3) Agree, and (4) Strongly Agree.

The use of a four-point scale was intended to avoid neutral responses and encourage respondents to provide more definitive answers. Before being distributed to the respondents, the instrument underwent validity and reliability testing. Item validity was examined using the product-moment correlation technique, while reliability was tested using Cronbach’s Alpha coefficient. The results of these tests indicated that all items met the criteria of validity and reliability, so the instrument was deemed appropriate for data collection.

Table 1. Indicators and Number of Instrument Items

Variable	Indicator	Number of Items
Emotional Intelligence	Self-awareness (recognizing one’s own emotions)	5
	Emotion regulation (managing emotions)	5
	Self-motivation	4
	Empathy (recognizing others’ emotions)	3
	Social skills (building positive relationships)	3
Total Emotional Intelligence Items		20 items
Learning Outcomes	Understanding of learning materials	4
	Task completion ability	3

Variable	Indicator	Number of Items
	Academic achievement (learning scores)	3
Total Learning Outcomes Items		10 items
Total Number of Items		30 items

3. RESULTS AND DISCUSSION

The results of the linearity test showed a significance value of < 0.001 with $F = 113.452$, which confirmed that the relationship between emotional intelligence and learning outcomes was linear. A simple linear regression test yields the equation:

$Y=16.407+0.627X$ with Y as learning outcome and X as emotional intelligence. The regression coefficient of 0.627 with a significance of < 0.001 shows a positive and significant influence between emotional intelligence on learning outcomes. This means that every one point increase in emotional intelligence is followed by an increase in learning outcome scores of 0.627 . A value $= 0.321$ indicates that 32.1% of the variation in learning outcomes is explained by emotional intelligence, while the rest is influenced by other factors. R^2

These findings support research by Parker et al. (2004) who found that emotional intelligence plays an important role in academic achievement because students with the ability to manage emotions are better able to cope with learning stress and build positive social relationships. Research by Karyawati et al. (2022) is also in line with the fact that students with high emotional intelligence are more active in learning and obtain higher learning outcomes. Thus, this study reinforces the empirical evidence that affective factors, particularly emotional intelligence, are important determinants in the academic achievement of elementary school students.

Theoretically, this result can be explained through the role of emotional intelligence in influencing students' motivation, focus, and adaptability to learning challenges. Students who are able to recognize and control emotions are calmer in the face of academic difficulties, are able to work together with peers, and have an internal drive to achieve (Nancy Frey, Douglas Fisher, 2019). In contrast, students with low emotional intelligence tend to be easily frustrated, lack concentration, and have difficulty building positive interactions, which ultimately lowers learning outcomes.

The contribution of this research lies in the emphasis on the importance of noncognitive aspects in basic education in Indonesia. If so far learning outcomes have been viewed more from the intellectual side, this finding confirms that the development of emotional intelligence must also be a priority for schools. Learning programs that integrate the strengthening of emotional skills, such as *social-emotional learning*, need to be implemented so that students have better academic readiness and life skills.

Beyond confirming empirical findings from previous studies, the results of this research provide important theoretical implications for the understanding of emotional intelligence within the framework of educational psychology, particularly at the elementary school level. The significant contribution of emotional intelligence to learning outcomes supports the theoretical perspective that academic achievement is a multidimensional construct influenced not only by cognitive abilities but also by affective competencies (Azis, 2021). This finding reinforces emotional intelligence theory, which posits that the ability to recognize, regulate, and utilize emotions effectively plays a crucial role in facilitating learning processes and academic success.

Furthermore, the magnitude of the contribution of emotional intelligence ($R^2 = 0.321$) indicates that emotional intelligence functions as a substantive explanatory factor in students' learning outcomes, rather than merely as a complementary or secondary variable. Theoretically, this suggests that emotional intelligence may operate as an internal regulatory mechanism that influences students' motivation, attention control, persistence, and adaptability when facing academic challenges. Students with higher emotional intelligence are more likely to engage in self-regulated learning behaviors, maintain emotional stability during learning difficulties, and build constructive interactions within the classroom environment.

In the context of elementary education, these findings extend existing theories by emphasizing the developmental importance of emotional intelligence at an early educational stage. Emotional competencies developed during elementary school years may serve as foundational skills that shape students' long-term academic trajectories. Therefore, this study contributes to the theoretical discourse by positioning emotional intelligence not only as a predictor of learning outcomes but also as a core developmental construct that underpins effective learning and academic resilience among young learners.

Table 2. Linearity Test
ANOVA Table

		Number of Squares	Df	Square Average	F	Sig.
Learning Outcomes * Emotional Intelligence	(Combined)	1871.454	20	93.573	6.736	<.001
	Linearity	1576.046	1	1576.046	113.452	<.001
	Deviations from Linearity	295.408	19	15.548	1.119	.333
	In a Group	3042.279	219	13.892		
	Entire	4913.733	239			

The linearity test was carried out to find out if there was a linear relationship between the variables of Emotional Intelligence and Learning Outcomes. The results of the analysis shown in the ANOVA table show that the significance value for the Linearity component is <0.001, with an F value of 113.452. This shows that the relationship between the two variables is very statistically significant, which means that there is a linear relationship between emotional intelligence and learning outcomes. Meanwhile, the significance value of the Deviation from Linearity component was 0.333 ($p > 0.05$), indicating that there was no significant deviation from linearity. That is, the relationship pattern between the two variables follows a straight line consistently and does not show a non-linear pattern. Emotional Intelligence and Learning Outcomes are linear, so further analysis such as linear regression can be used to test the influence between the two.

Table 3. Normality test
Kolmogorov-Smirnov Test One Sample

N		Non-Standard Prediction Values	240
Parameter Normala,b	Mean		37.9666667
	Std. Deviation		2.56794379
The Most Extreme Differences	Absolute		.070
	Positive		.057
	Negative		-.070
Test Statistics			.070
Asymp. Sig. (2-tail 2) ^c			.007
Monte Carlo Sig. (2 tails) ^d	Sig.		.007
	99% Confidence Interval	Lower Limit	.005
		Upper Limit	.010

a. The distribution of the test is Normal.

b. Calculated from data.

c. Correction of Lilliefors Significance.

d. Lilliefors method based on 10000 Monte Carlo samples with 20000000 seeds.

The test results showed that the significance value (Asymp. Sig. 2-tailed) was 0.007. Since this value is less than 0.05, it can be concluded that the data is not statistically normally distributed. However, because the number of samples used in this study is relatively large (more than 30), the violation of this assumption of normality does not have a significant impact on the validity of the regression model. This is in accordance with the principle of the Central Limit Theorem which states

that the distribution of large samples will tend to be close to the normal distribution, so that the regression analysis can still be continued (Habibi, 2023).

Table 4. Hypothesis Coefficients

Pattern	Non-Standard Coefficients		Standard Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	16.407	2.048	8.011	<.001
	Emotional Intelligence	.627	.059	.566	<.001

a. Dependent Variables: Learning Outcomes

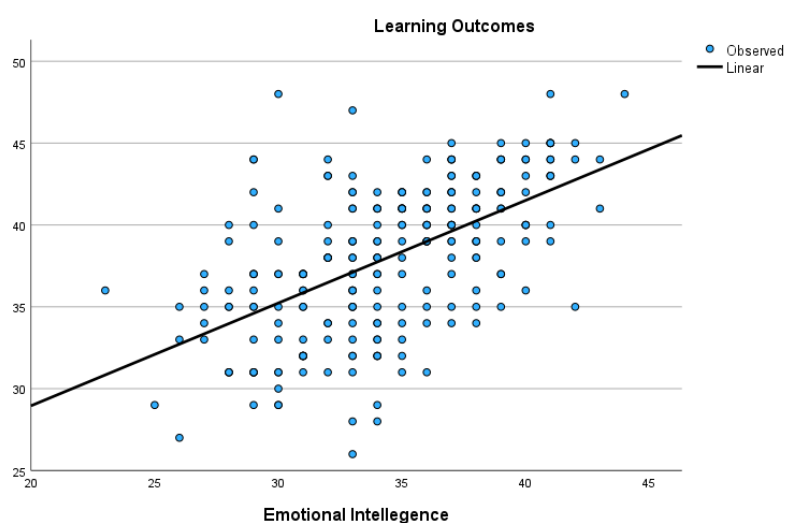
Based on the results of the regression analysis, the regression coefficient value (B) for the Emotional Intelligence variable was 0.627 with a Sig. < value of 0.001. This means that there is a positive and significant influence between emotional intelligence on student learning outcomes. Every 1 unit increase in emotional intelligence will increase student learning outcomes by 0.627 units, if other variables are considered fixed. A Standardized Coefficients (Beta) value of 0.566 shows that the relative contribution of emotional intelligence to learning outcomes is in the category of being quite strong. Meanwhile, a constant value (intercept) of 16.407 indicates that if there is no influence of emotional intelligence (value = 0), then student learning outcomes are estimated to be 16.407. A t-count value of 10.601 for emotional intelligence with a significance of < 0.001 indicates that the influence of this variable on learning outcomes is statistically significant at a confidence level of 95% ($\alpha = 0.05$). Thus, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted, which means that there is a significant influence between emotional intelligence on the learning outcomes of elementary school students.

Table 5. Coefficient of determination

Model Summary				
Pattern	R	R Square	Customized R Box	Std. Estimation Error
1	.566a	.321	.318	3.745

a. Predictor: (Constant), Emotional Intelligence

Based on the results of simple linear regression analysis, the value of the determination coefficient (R Square) was obtained of 0.321. This shows that 32.1% of the variation that occurs in student learning outcomes can be explained by emotional intelligence variables, while the remaining 67.9% is influenced by other factors that are not included in the model, such as learning motivation, parental support, learning environment, and other external factors. The correlation coefficient value (R) of 0.566 indicates that the relationship between emotional intelligence and learning outcomes is in the category of being quite strong and positive, which means that increased emotional intelligence tends to be followed by an increase in student learning outcomes. In addition, the Adjusted R Square value of 0.318 which is not much different from the R Square shows that this regression model is quite stable and does not experience overfitting. The standard error of the estimate value of 3.745 indicates the magnitude of the average deviation between the actual value and the predicted value of the regression model, where the smaller this value, the better the accuracy of the model in making predictions. Thus, it can be concluded that emotional intelligence has a significant contribution in influencing the learning outcomes of elementary school students.



From the graph above, it can be seen that most of the data points tend to follow the direction of the regression line with an increasing pattern. This shows that there is a positive relationship between emotional intelligence and learning outcomes, where an increase in emotional intelligence scores tends to be followed by an increase in student learning outcomes.

3.1. Linear Relationship between Emotional Intelligence and Learning Outcomes

Based on the results of the linearity test, a significance value of < 0.001 with an F value of 113.452 was obtained. This shows that there is a strong linear relationship between emotional intelligence and the learning outcomes of elementary school students. The regression equations resulting from the analysis are as follows:

$$Y = 16.407 + 0.627X$$

Information:

Y = Student learning outcomes

X = Emotional intelligence

This equation indicates that every one-point increase in emotional intelligence will increase a student's learning outcome score by 0.627, assuming the other variables remain constant. This means that emotional intelligence plays an important role in supporting students' academic achievements, so efforts to improve learning outcomes are not enough to rely only on cognitive aspects, but also require strengthening emotional management skills.

3.2. Contribution of Emotional Intelligence to Variation in Learning Outcomes

The results of the determination coefficient analysis showed that the value = 0.321. This means that 32.1% of the variation in student learning outcomes can be explained by emotional intelligence, while the other 67.9% is influenced by other external factors such as learning motivation, family support, teaching quality, and the school environment. R^2

The value of the correlation coefficient (R) of 0.566 also strengthens that there is a positive relationship with a fairly strong strength between the two variables. These findings confirm that emotional intelligence is one of the key factors that need to be considered in learning strategies in elementary schools.

4. CONCLUSION

The results of this study indicate that emotional intelligence has a positive and significant influence on the learning outcomes of elementary school students. The simple linear regression analysis demonstrates that emotional intelligence contributes 32.1% to the variation in students' learning outcomes, while the remaining proportion is influenced by other factors outside the research model. These findings confirm that students' ability to recognize, manage, and express emotions

appropriately plays a crucial role in supporting academic achievement at the elementary education level.

From a practical perspective, this study implies that schools and educators should not focus solely on cognitive development but also prioritize the systematic development of students' emotional intelligence. The integration of social-emotional learning programs, classroom activities that promote emotional regulation, empathy, and cooperation, as well as teacher training in emotional competence, are essential strategies to enhance students' academic performance and overall learning readiness. Educational policymakers are also encouraged to incorporate emotional intelligence development into elementary school curricula as part of holistic education practices.

For future research, it is recommended that subsequent studies include additional variables such as learning motivation, self-regulation, parental support, and learning environment to obtain a more comprehensive understanding of factors influencing learning outcomes. Future studies may also employ mixed-methods or longitudinal designs to explore the dynamic development of emotional intelligence and its long-term impact on academic achievement. Expanding the research context across different regions and educational settings would further strengthen the generalizability of the findings.

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