




## The Influence of Parental Attention on the Mathematics Learning Outcomes of Class IV Elementary School Students

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ARTICLE INFO	ABSTRACT
<p><b>Artikel History:</b> Received : 18 Mey 2025 Revised : 14 June 2025 Published: 29 July 2025</p> <p><b>Keywords:</b> Mathematics Learning Outcomes Parental Attention Elementary Schools</p>	<p>The main problem in this study was the low mathematics learning outcomes of the fourth grade elementary school students. The purpose of this study was to determine the effect of parental attention on the mathematics learning outcomes of the fourth grade elementary school students. This research used quantitative research with ex-post facto method. The population in this study was 218 students and the research sample was 73 students at SD Negeri Gugus Pattimura Tanjung Bintang. This study used a probability sampling technique, namely proportional random sampling. Data collection technique used was a questionnaire. Data analysis used a simple linear regression formula. The results showed that there was a significant influence of parents attention on mathematics learning outcomes with <math>F_{count} \geq F_{table}</math> (<math>19.194 \geq 3.976</math>). This means that the higher the attention given by parents to students, the higher the learning outcomes will be. Vice versa, if the attention given is low, the learning outcomes of students will also be low.</p>
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## INTRODUCTION

A conducive and harmonious home environment can have a positive and beneficial influence on children, enabling them to concentrate on their studies and helping them achieve maximum and satisfactory learning outcomes. There are several factors that determine children's learning outcomes. According to Slameto (2015), there are two main factors that influence learning outcomes, namely internal factors (originating from within the self, including physical, psychological, and fatigue) and external factors (originating from outside the self, including family, school, and community). Meanwhile, (Dalyono, 2015) revealed that parents who are indifferent and do not pay attention to their children's learning progress will cause their children to have learning difficulties. This statement is reinforced by previous research conducted by (Andini, 2018), which shows that parental attention influences 75.3% of learning outcomes, while the rest is influenced by other factors. From the experts' opinions and the results of this research, it can be seen that one of the factors that influence children's learning success is parental attention.

Parental attention, according to Kartono (2014), is the concentration of psychic energy or, more or less, the awareness that accompanies an activity carried out by parents in relation to their child's education. The attention that parents give to their children can motivate students in their activities, including motivating children to study. (Slameto, 2015) also emphasizes the forms of parental attention to children's learning activities, namely providing learning guidance, supervising children's learning, giving rewards and punishments, fulfilling learning needs, creating a calm and peaceful learning atmosphere, and paying attention to children's health.

Parental involvement in children's learning activities at home has been shown to have a positive relationship with preschoolers' academic achievement. This is in line with Durand's (2011) opinion, which states that parental involvement in learning activities at home has been shown to have a positive relationship with preschoolers' academic achievement. Research shows that enrichment activities, such as telling stories, teaching letters and numbers, problem solving activities, singing songs, and playing games have been shown to improve children's literacy skills.

The attention given by parents can foster children's motivation to learn. Through the continuous attention given by parents to their children, it will indirectly foster motivation and encouragement in children to learn so that they are more active and enthusiastic in learning. The more parents play a role in supervising and paying attention to their children's learning activities, the more it will increase their children's motivation to learn, so that they can be enthusiastic in the learning process and achieve satisfactory learning outcomes.

Learning outcomes can be defined as the results obtained by students after undergoing the learning process. According to (Jihad and Haris, 2012), learning outcomes are achievements that tend to be permanent in the form of behavioral changes in the cognitive, affective, and psychomotor domains from the learning process carried out within a certain period of time. Therefore, it can be concluded that learning outcomes are the results obtained by students after undergoing a learning process and experiencing behavioral changes that encompass cognitive, affective, and psychomotor domains within a certain period of time and are measured using appropriate evaluation tools.

The learning process for children certainly experiences several obstacles or difficulties in certain subjects, especially in mathematics, which some children find intimidating and difficult, making it hard for them to understand the material and solve math problems. This is in line with the opinion of Abdurrahman (2012), who states that of all the subjects taught in school, mathematics is considered the most difficult by students, both those who do not have learning difficulties and especially those who do. To improve students' mathematics learning outcomes, it is necessary to rely not only on the role of educators at school but also on other important factors, one of which is the

role of parents. The attention given by parents to their children will directly influence their learning outcomes at school, especially in mathematics.

Parental attention greatly influences student learning outcomes at school. This is reinforced by relevant research conducted by Sihombing, et al. (2020), which shows that there is a strong influence between parental attention and student learning outcomes in grade IV at SD Negeri 097350 Parbutaran Simalungun. Another study conducted by Asri and Bahri (2022) showed that there is a significant influence of parental attention on student learning outcomes at SDI Utsman Bin Affan. The similarity between this study and the relevant studies is related to parental attention and learning outcomes, while the difference between the relevant studies and this study is in the implementation or time and place of the study.

## METHOD

The data analyzed in this study includes quantitative research. The type of research in this study is ex-post facto research. (Sugiyono, 2017) states that ex-post facto research is research to investigate events that have occurred and then trace back to find out the factors that could have caused these events to occur. The population in this study consisted of all fourth-grade students at SD Negeri Gugus Pattimura, Tanjung Bintang District, South Lampung Regency, for the 2022/2023 academic year, with a total of 218 students. The calculation to determine the sample size used probability sampling. The probability sampling technique used in this study was proportional random sampling. The use of the proportionate random sampling technique for sampling from the population is random and proportional (Riduwan, 2019). The sample in this study consisted of 73 students in the fourth grade of SD Negeri Gugus Pattimura, Tanjung Bintang District. The data collection techniques in this study were questionnaires and document studies. The questionnaire showed students how much influence parental attention had on learning with a total of 36 statements, while document studies were used to collect information related to mathematics learning outcome data. The analyzed data was found to be normal and linear, so it was continued with testing the research hypothesis using a simple linear regression test. To see how much influence parental attention to learning activities has on mathematics learning outcomes, it can be calculated using a simple linear regression formula according to (Muncarno, 2017), namely:

$$Y = a + bX$$

Next, prove whether the hypothesis is accepted or rejected by using a simple regression significance test with the formula proposed by (Muncarno, 2017), namely:

$$F_{hitung} = \frac{RJK_{Reg(b|a)}}{RJK_{Res}}$$

## RESULT AND DISCUSSION

The research results are presented in the form of graphs, tables, or descriptive. Analysis and interpretation of these results is needed before discussion. The discussion should include merit journal aspects (what/how?, why?, and what else Based on research conducted in the fourth grade of Gugus Pattimura Tanjung Bintang Public Elementary School, which had 73 students, data was obtained on the level of parental attention as well as documents in the form of fourth-grade mathematics learning outcomes. The data on the parental attention variable can be seen in the following table and figure.

**Table 1.** Distribution of Parent Attention Categories

No.	Score interval	Category	Frequency	Percentage (%)
1	$X < 100$	Low	16	21,92
2	$100 \leq X \leq 148$	Medium	47	64,38
3	$X \geq 148$	High	10	13,7
Total			73	100

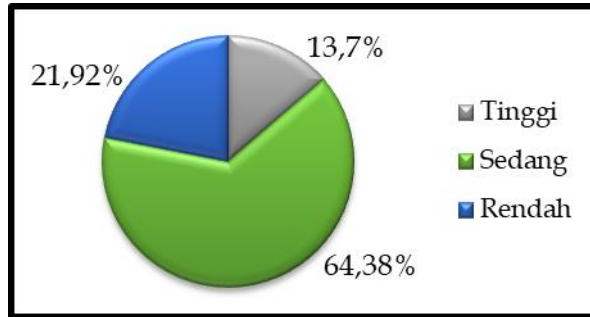


Figure 1: Parent Attention Pie Chart

Based on Figure 1, it can be concluded that out of 73 samples, there were 16 students with low parental attention, representing 21.92%. There were 47 students with moderate parental attention, representing 64.38% of the total, and 10 students with high parental attention, representing 13.7% of the total. Data on the learning outcome variable can be seen in the following table and figure.

**Table 2.** Distribution of Learning Outcomes Categories

No.	Score interval	Category	Frequency	Percentage (%)
1	$X \geq 50$	Low	14	19,18
2	$50 \leq X \leq 78$	Medium	47	64,38
3	$X < 78$	High	12	16,44
Total			73	100

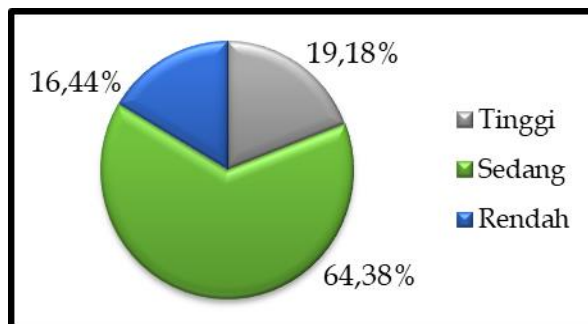


Figure 2: Pie chart of learning outcomes

Based on Figure 2, it can be seen that of the 73 student samples, 14 students had high learning outcomes, with a percentage of 19.18%. There were 47 students with medium learning outcomes, with a percentage of 64.38%, and 12 students with low learning outcomes, with a percentage of 16.44%.

Before conducting a simple regression test, the instrument needs to be tested with prerequisites, namely by conducting a normality test and a linearity test. The normality test is conducted to determine whether the data is normally distributed or not, and the linearity test is conducted to determine whether the data has a linear pattern or not. The normality test uses the chi-square test by comparing the calculated  $\chi^2$  with the table  $\chi^2$  for a significance level of  $\alpha = 0.05$  with DOI article: <https://doi.org/10.23960/joaeu.v3i2.1173>

the decision rule that if the calculated  $\chi^2 \leq \text{table } \chi^2$ , then the data is normally distributed, and if the calculated  $\chi^2 \geq \text{table } \chi^2$ , then the data is not normally distributed. The results of the normality test are shown in the table below.

**Table 3.** Results of Normality Test

Variable	$X^2_{\text{count}}$	$X^2_{\text{table}}$	Decision	Description
Parental attention (x)	18,925	19,675	$X^2_{\text{count}} \leq \chi^2_{\text{table}}$	Normally distributed
Learning outcomes (y)	11,159	12,592	$X^2_{\text{count}} \leq \chi^2_{\text{table}}$	Normally distributed

Based on the calculations and results of the normality test analysis that has been carried out, it is known that the research data is normally distributed. Thus, the next step is to conduct a linearity test. The linearity test is done by comparing  $F_{\text{count}}$  with  $F_{\text{table}}$  with the decision  $F_{\text{count}} \leq F_{\text{table}}$ , which means that the data is linear, and if  $F_{\text{count}} \geq F_{\text{table}}$ , it means that the data is non-linear. Based on the linearity test calculations for the variables of parental attention and learning outcomes, the result is  $F_{\text{count}} = 0.985 \leq F_{\text{table}} = 1.823$ , which means that the data is linear.

Thus, further hypothesis testing can be carried out, namely regression testing and F testing with the criteria  $F_{\text{count}} \geq F_{\text{table}}$ , so it can be concluded that  $H_a$  is accepted and  $H_o$  is rejected. After conducting the F test of the variable of parental attention in learning on learning outcomes, it was obtained that  $F_{\text{count}} \geq F_{\text{table}}$  ( $19.194 \geq 3.976$ ), so  $H_a$  was accepted and  $H_o$  was rejected. Thus, the results show that there is a significant effect between the attention given by parents and their children's learning outcomes.

Based on the data from the research that has been conducted, it can be seen that parental attention in learning has an influence on students' mathematics learning outcomes. In line with what is meant by (Slameto, 2015), the way parents guide their children will affect their children's learning activities, so that the success of children's learning is also influenced by parents. This is in line with the opinion of (Dalyono, 2015), who states that parents who are indifferent and do not pay attention to their children's learning progress will cause their children to experience learning difficulties. For example, parents who do not pay attention to their children's learning activities, do not supervise or pay attention to their learning needs, do not provide learning tools and resources for their children, do not pay attention to whether their children have studied or not, do not care about their children's learning progress, and so on, can cause their children to fail or not succeed. Not providing children with learning tools and resources, not paying attention to whether children have studied or not, not caring about their learning progress, and the difficulties children experience in learning activities can result in children failing or not succeeding in their learning activities. The results of this study are relevant to the research by Sihombing (2020), which shows a strong influence between parental attention and the learning outcomes of fourth-grade elementary school students.

Good learning outcomes are influenced by many factors, one of which is parental attention to learning. Good parental attention will certainly have an impact on learning outcomes. This is in line with the hypothesis that parental attention (X) has a significant influence on learning outcomes (Y). Thus, there is an influence of parental attention on the mathematics learning outcomes of fourth-grade elementary school students. Marked by a regression coefficient of 0.461, this regression is positive with a fairly strong criterion. Furthermore, the contribution of the parental attention variable (X) to the learning outcome variable (Y) is 21.28%, while 78.72% is influenced by other factors outside the scope of this study.

## CONCLUSION

Based on the research data and discussion presented above, it can be concluded that parental guidance in the form of parental attention has an effect on the mathematics learning outcomes of fourth-grade students at Gugus Pattimura Public Elementary School in Tanjung Bintang District. Thus, the higher the level of assistance in the form of parental attention, the greater the learning outcomes will be. Parental attention can be provided by giving learning guidance, supervising children, giving rewards and punishments, fulfilling children's needs, creating a calm and peaceful learning atmosphere, and paying attention to children's health (Slameto, 2015).

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