



THE INFLUENCE OF PARENTAL GUIDANCE AND LEARNING MOTIVATION ON STUDENT MATHEMATICS LEARNING OUTCOMES BASED ON STUDENT EMOTIONAL INTELLIGENCE

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Abstrak

Kecerdasan emosional siswa merupakan aspek penting dalam pencapaian hasil belajar, khususnya pada mata pelajaran matematika. Penelitian ini bermaksud untuk mengidentifikasi pengaruh pengawasan orang tua dan motivasi belajar terhadap hasil belajar matematika di SMP Wahid Hasyim 8 Waru ditinjau dari kecerdasan emosional tinggi, sedang, dan rendah. Penelitian ini menggunakan metode penelitian kuantitatif dengan melakukan ex-post facto. Dalam pengumpulan data, peneliti menggunakan angket dan dokumentasi. Instrumen angket berisi tiga angket, diantaranya angket bimbingan orang tua, angket motivasi belajar, dan penilaian kecerdasan emosional. Sedangkan dokumentasi digunakan untuk mengumpulkan statistik hasil belajar siswa, selain itu juga berfungsi sebagai sarana komunikasi antara instruktur dan siswa. Hasil pengujian hipotesis dari hasil bimbingan orang tua dan motivasi belajar terhadap hasil belajar siswa ditinjau dari segi kecerdasan emosional tinggi dengan F hitung sebesar 40,661 dan F sig sebesar 0,024, kecerdasan emosional sedang dengan nilai F hitung sebesar 5,288, dan F hitung sebesar 0,010, dan kecerdasan emosional dengan nilai F hitung sebesar 7,073 dan F sig sebesar 0,049. Hubungan antara hasil belajar matematika, pengawasan orang tua, dan motivasi belajar ditinjau dari kecerdasan emosional dapat dikatakan baik dan signifikan.

Kata kunci: Bimbingan orang tua; Hasil belajar; Kecerdasan emosional; Motivasi belajar.

Abstract

The emotional intelligence of students is an essential aspect in achieving learning results, particularly in mathematics. This study intends to identify the impact of parental supervision and learning motivation on mathematics learning outcomes at Wahid Hasyim 8 Waru Middle School in terms of high, medium, and low emotional intelligence. This research utilizes quantitative research methods by doing ex-post facto. In collecting data, the researcher uses surveys and documentation. The questionnaire instrument contains three questionnaires, including a parent guidance questionnaire, a learning motivation questionnaire, and an emotional intelligence assessment. While documentation is used to collect statistics on student learning outcomes, it also serves as a means of communication between instructors and students. The results of hypothesis testing from the results of parental guidance and learning motivation on student learning outcomes are reviewed in terms of high emotional intelligence with an F count of 40,661 and an F sig of 0.024, moderate emotional intelligence with an F value of 5.288, and an F count of



0.010, and emotional intelligence with an F value of 7.073 and an F sig of 0.049. The association between mathematical learning results, parental supervision, and learning motivation in terms of emotional intelligence might be described as good and significant.

Keywords: Parental guidance; Learning outcomes; Emotional intelligence; Motivation to learn.

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INTRODUCTION

Education is fundamental for every human being to develop, educate intellectual capacity, attitude, and behavior with positive values. With good quality education, a person can reach his maximum potential, to be able to help that person in his life in society. (Prayitno, 2021) claims that character education will produce human resources that play a crucial part in the growth of the nation and state, and that the educational process is carried out consciously for educational goals exclusively.

The results of student learning in mathematics courses demonstrate the complexity of these influences. The success of mathematics learning is influenced by parental assistance, learning motivation, and emotional intelligence. They are better able to solve issues critically, logically, creatively, carefully, and comprehensively when they have access to mathematics. Learning outcomes, according to Prayitno and Muttaqien (2018), are changes brought about by the emotional, cognitive, and psychological aspects that influence students' learning.

Parental assistance can help students with arithmetic through several factors. Amin said, "guidance is a constant support effort" (in Ambarwati, 2020). Asfuri (2022) defines parental guidance as the process through which parents support and encourage their kids while they work through challenges and discover their strengths. Education in schools and at home needs to be enhanced. One's goals and desires can be achieved with help. Parents want their children to understand



topics as they help them master math. Parental guidance is crucial to achieving educational objectives.

Interesting learning motivates students to learn, which stimulates their enthusiasm for math and learning. According to Saputra and Poerwanti (2021) motivation derived from the term Motivation is an individual's effort to take action based on feelings and information. Hamalik (in Ambarwati, 2020) says that motivation is a personality transformation characterized by feelings and behaviors to achieve goals. Meanwhile, Suprijono (in Winata et al., 2019) argued that learning motivation encourages students to enhance both their internal and external behavior. Math motivation in this case is defined as an encouragement to children to love learning math. Since math activities are impossible for students who lack motivation. Thus, the learners who study mathematics should be inspired to learn.

Because of the complexities of mathematics, many people feel that a high IQ is required for academic achievement. Imran (2019) Above-average intelligence might indirectly enhance the drive to learn and understand faster than low IQ. Goleman (in Prayitno, 2020), Who would have guessed that emotional intelligence may assist people in motivating themselves, overcoming failure, controlling emotions, delaying satisfaction, and regulating mental conditions?

According to one of the subject teachers at Wahid Hasyim 8 Waru Middle School, some students were silent and did not want to give questions since they did not comprehend the topic of the lesson. Some students attempt to solve practice questions while others wait for answers from peers. Some students do not look happy when they join math class, and some do not bring their textbooks. Subject teachers have a significant impact on the success of the learning process. Muhson said (in Prayitno and Faizah, 2019), that valuable teachers influence learning objectives. Teachers require instructional materials that are easy to understand, diversified, and not tedious in order to stimulate learning in the classroom.

One previous study (Imran, 2019) proves Effective teaching necessitates pupils to be motivated in learning. Meanwhile, Prayitno (2020) believes that



thinking pupils with high emotional intelligence will be excellent during the class, be resistant to persuasion, and be tractable to the learning strategy. According to Faturahman (in Prayitno and Faizah, 2019), the goal of education is to attain achievement by teaching and learning. Therefore, the purpose of this study is to determine the impact of parental advice and learning motivation on mathematics learning outcomes in students with high, medium, and low emotional intelligence.

METHOD

An ex-post facto study was used in this research. This form of research, according to Sarmiati et al. (2019), investigates causal interactions that are not altered. From December 1 to January 22, 2022, this study was administered at SMP Wahid Hasyim 8 Waru. In the academic year 2020/2021, there were 145 eighth-grade students at SMP Wahid Hasyim 8 Waru, however, only 48 were selected at random. The formula for calculating a random sample is as follows:

$$n = \frac{N}{1 + N (d^2)}$$

With,

n : Sample

N : Population

d : The desired level of accuracy

In this study, there are 145 populations and use the desired level of accuracy of 12% so that:

$$n = \frac{N}{1 + N (d^2)} = \frac{145}{1 + 145 (0.12^2)} = \frac{145}{1 + 2.08} = \frac{145}{3.08} = 47.77$$

In this study, a parent advice questionnaire, a learning motivation questionnaire, and an emotional intelligence questionnaire were used, and the



results of the Mathematics Final Semester Examination (UAS) for classes VIII A and VIII D for the 2020/2021 academic year. The researcher used ANOVA to analyze the data, along with the normality and homogeneity tests. Hypothesis testing examines if parental counsel and learning motivation influence mathematics learning results in class VIII SMP Wahid Hasyim 8 Waru FY 2020/2021 based on high, medium, and low emotional intelligence.

Table 1. Question Criteria Answer Questionnaire Parental Guidance, Learning Motivation, and Emotional Intelligence

Category Student Answers	Score For Items	
	Favorable (+)	Unfavorable (-)
STS (Strongly Disagree)	1	4
TS (Disagree)	2	3
S (Agree)	3	2
SS (Strongly Agree)	4	1

RESULT AND DISCUSSION

Before the hypothesis test was conducted, the fundamental assumption test was utilized as a precursor. It was discovered using normality, linearity, multicollinearity, and heteroscedasticity tests that the data had passed the necessary examinations and could be examined utilizing test parametric. Prior to conducting the hypothesis test, a simple assumption test was utilized as a requirement. It was discovered that the data had passed the required tests for normality, linearity, multicollinearity, and heteroscedasticity and could be evaluated using parametric tests. Parental supervision in this case goes beyond simply serving as a good role model for how to act and interact with others in a social context. This result is consistent with both the hypothesis and earlier studies on the subject. Similar findings on student learning achievement in natural science were discovered by Uminingsih (2016). While families, particularly parents, play a role in guiding kids with an emphasis on developing the personality of students as a basis for readiness to receive formal learning by the school, schools play a role in educating and shaping students with an emphasis on formal lessons (Uminingsih,



2016). Guidance had a positive impact on social science learning outcomes for students. Students whose parents devote a lot of effort to supporting and guiding their educational process.

The research variables in the following study are the independent variables of parental supervision and student learning motivation, and the dependent variable is learning outcomes. Documentation of students' Mathematics UAS results provides data on student learning outcomes.

The researcher validated the questionnaire instrument before gathering data. The purpose of this validation is to obtain comments on the lack of a data-gathering questionnaire. After receiving input, the research questionnaire was revised. The professor approved the questionnaire.

The findings of the emotional intelligence questionnaire can be categorized into high, medium, and low categories after gathering questionnaire data and documentation. The computed standard deviation $S = 9.97$ and the mean $X = 111.60$. The next phase is then classified as poor emotional intelligence from a high level of emotional intelligence. The student's emotional intelligence has been classified based on three categories.

$$\begin{aligned} \text{High Category} &= X \geq M + 1SD \\ &= X \geq 111.60 + 9.97 \cdot 9.97 \\ &= X \geq 121.57 \end{aligned}$$

$$\begin{aligned} \text{Medium Category} &= M - 1SD < X < M + 1SD \\ &= 111.6 - 9.97 < X < 121.57 \\ &= 101.63 < X < 121.57 \end{aligned}$$

$$\begin{aligned} \text{Low Category} &= X < M - 1SD \\ &= X < 101.63 \end{aligned}$$

Based on the above data management, the table of the high, medium, and low emotional intelligence categories are as follows:

Table 2. Recapitulation of Emotional Intelligence Categorization

Categories	Total
Emotional Intelligence High	5 students
Medium Emotional Intelligence	36 students



Low Emotional Intelligence 7 students

Following categorization, the questionnaire responses are separated into three tables based on the category. Before that, the conditions for normalcy tests were also completed for homogeneity tests, so that each data result was parental guidance, learning motivation, and emotional intelligence. At a significance threshold of 0.05. Calculated using SPSS version 20 and the significant value of Kolmogorov Smirnov. The data is regularly distributed if the significant value is greater than 0.05. The normalcy test results show a sig value of 0.2 for parental guidance, 0.2 for learning motivation, and 0.081 for learning outcomes. Until the data is regularly distributed, the three significant values are > 0.05 .

After establishing that the sample group in this study is drawn from a normally distributed population, it is determined if the original data is drawn from a homogeneous population or not. Calculated using SPSS version 20 and the significant value of Kolmogorov Smirnov. The data is regularly distributed if the significant value is greater than 0.05. The normality test results provide a sig value of 0.463 for parental guidance, 0.074 for learning motivation, and 0.557 for learning outcomes. Until the data used is homogeneous, the three significant values are more than 0.05.

The data were then examined using *Anova* hypothesis testing. The test is used to determine how well the independent factors utilized can explain the dependent variable. The independent variables in this study are parental guidance and learning motivation, while the dependent variable is mathematics learning results. If the significant value is 0.05, then H_a is accepted at the significance level $= 0.05$.

Table 3. Hypothesis Testing Parental Guidance and Learning Motivation With Student Learning Outcomes Categorized From High Emotional Intelligence

ANOVA^a

Model	Sum of Squares	Mean Square	F	Sig.
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Regression	59,731	29,865	40,661	.024 ^b
Residual	1,469	,735		
Total	61,200			

The computed value for F is 40,661 based on point 4, and the F sig is 0.024. The null hypothesis cannot be accepted because F sig 0.0240.05. It is feasible to examine the effects of students' mathematical education in terms of high emotional intelligence, including the relationship between tutoring and learning motivation.

Table 4. Hypothesis Testing Parental Guidance and Learning Motivation on Student Learning Outcomes Categorized from Medium Emotional Intelligence

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	397,575	2	198,787	5,288	.010 ^b
	Residual	1240,425	33	37,589		
	Total	1638,000	35			

The F sig is 0.010, while the predicted F value is 5.288. The null hypothesis H0 cannot be maintained since F sig 0.010 0.05. The information is displayed in table 4. This observation leads to the conclusion that tutoring and learning motivation have an impact on mathematics education outcomes in terms of moderate emotional intelligence.

Table 5. Hypothesis Testing Parental Guidance and Learning Motivation With Student Learning Outcomes Categorized From Low Emotional Intelligence

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	53,011	2	26,506	7,073	0,049 ^b
	Residual	14,989	4	3,747		
	Total	68,000	6			

From that, the calculated F value is 7.073 and the F sig value is 0.049. If F sig 0.049 < 0.05, then the null hypothesis H0 is rejected. When viewed in terms of



low emotional intelligence, it is possible to comprehend the connection between tutoring and learning motivation that influences the results of mathematics learning.

The results of this study reveal that parental guidance and learning motivation have a favorable and significant impact on mathematical learning outcomes in terms of emotional intelligence. This conclusion was reached after reviewing the gathered research information. The group with the highest emotional intelligence scored an average of 80.4, with the highest score being 87 and the lowest being 77. The average score for the group with moderate emotional intelligence was 84.3, with a range of 100 to 70. People with low emotional intelligence have learning results that range from the highest at 80 to the lowest at 70 on average. Scores vary from 80 to 70. Additionally, this study discovered that students' academic success was positively impacted by emotional intelligence. Students are therefore more likely to demonstrate improved learning ability in social science if they have higher levels of emotional intelligence. The findings of this study are consistent with those of Hadwijaya and Hutasoit's (2017) study, which discovered that emotional intelligence, which includes self-awareness, self-management, motivation, social awareness, and relationship management, partially and simultaneously showed positive influences on learning achievement among middle school students.

The computed F value of learning outcomes with high levels of emotional intelligence, parental support, and motivation to learn is 40,661, and the F sig value is 0.024. F made calculations based on these data for the effects of parental supervision, learning motivation, and learning outcomes in terms of high emotional intelligence. Parental support, learning motivation, and learning outcomes have an estimated F value of 7.073 with an F sig of 0.049 in terms of low emotional intelligence. In the preceding phase, the initial value of 5.288 was compared to this with F sig 0.010.

When compared to other groups where there is a parental direction and incentive to learn mathematics in terms of high or low emotional intelligence, the findings of hypothesis testing show that the group consisting of parental guidance



and motivation are the most influential. Pupils with emotional intelligence pay more attention to their parents when offered advice than students with high or poor emotional intelligence. This is due to the fact that emotionally intelligent students give their parents greater consideration.

CONCLUSION

The following can be concluded from the discussion of the findings of research on parental supervision and learning motivation on pupils' arithmetic learning outcomes based on emotional intelligence. The strong emotional intelligence is present in 5 out of 48 samples. The F value of 40,661 with F sig 0.024, which was less than 0.05 until H0 was rejected and H1 was authorized, was obtained in the ANOVA test of strong emotional intelligence. The emotional intelligence of eighth-grade pupils at SMP Wahid Hasyim 8 Waru is influenced by parental guidance and learning motivation. 36 samples revealed the modest level of emotional intelligence. When H0 was refused and H1 was approved in the ANOVA test for moderate emotional intelligence, $F = 5.288$ and $F \text{ sig} = 0.010$, respectively. The emotional intelligence of eighth-grade pupils at SMP Wahid Hasyim 8 Waru is influenced by parental guidance and learning motivation. The poor emotional intelligence can be seen in 7 out of 48 samples. $F = 7.073$ and $F \text{ sig} = 0.049$ in the ANOVA test for low emotional intelligence indicate that H0 was not accepted while H1 was accepted. The low emotional intelligence of SMP Wahid Hasyim 8 Waru eighth-grade children is affected by parental guidance and learning motivation.

Based on research findings, teachers must be aware of their students' emotional intelligence since it has a favorable impact on learning outcomes for mathematics that may be shown from emotional intelligence. The variables influencing the outcomes of math learning will be the subject of future researchers.

REFERENCES

- Ami, N. H. (2021). Hubungan Antara Kecerdasan Emosional dan Motivasi Belajar dengan Hasil Belajar IPA Siswa SMP Negeri 1 Sungguminasa. *JKPI: Jurnal Kajian Pendidikan IPA*, 1(2), 53-61.



- Chen, L. &. (2017). A study of the effects of digital learning on learning motivation and learning outcome. *Eurasia Journal of Mathematics, Science and Technology Education*, 3553–3564.
- Endriani, A. (2018). Hubungan Perhatian Orang Tua dengan Motivasi Belajar pada Siswa Kelas VIII SMPN 6 Praya Timur Lombok Tengah Tahun Pelajaran 2015/2016. *Realita: Jurnal Bimbingan Dan Konseling*, 1(2).
- Ginting, A. (2008). Esensi Praktis belajar dan pembelajaran. *Humaniora*.
- Hutasoi, H. H. (2017). Effect of emotional intelligence on student learning. 29-39. doi:<http://dx.doi.org/10.24127/gdn.v7i1.663>
- In Andriani, L. R. (2022). Relationship between Self-Efficacy, Emotional Intelligence, and Parental Social Support with Learning Motivation of University Students in Distance Learning during the Covid-19 Pandemic. *Journal An-Nafss: Kajian Penelitian Psikologi*, 154-170.
- Maksum, A. &. (2021). The Contribution of Learning Resources and Parent's Attention to Learning Outcomes. *Journal of Education Research and Evaluation*, 5(1), 9-16.
- Prayitno, S. H., & Muttaqien, S. (2018). Upaya Meningkatkan Hasil Belajar Matematika Siswa Kelas VIII-F SMP Negeri 22 Surabaya Melalui Penerapan Model Pembelajaran Problem Based Learning Tahun Pelajaran 2018-2019. *Jurnal Edukasi*, 4(2), 43-54.
- Purnama, I. M. (2016). Pengaruh kecerdasan emosional dan minat belajar terhadap prestasi. *Jurnal Formatif*, 6(3), 233-245.
- Rochayati, R. &. (2015). Pengaruh komunikasi orang tua dan motivasi belajar siswa terhadap prestasi belajar IPS (siswa kelas VIII SMP Negeri 2 Sakra Barat Kabupaten Lombok Timur NTB). *11*(1), 61-69.
- Saputra, N. P. J., & Poerwanti, J. I. S. (2021). The Relationship Between Parental Guidance and Learning Motivation with Social Studies Learning Outcomes of Elementary School Students. *Journal of Elementary Education*. 36–41.
- Sarmiati, S., Kadir, Anwar, B., & Rahim, U. (2019). The Influence of Learning Motivation and Social Support on Mathematics Learning Outcomes of Class VIII Students of SMP Negeri 2 Kusambi. *Journal of Mathematics Education*. 10(1), 77–88.
- Susanto, A. (2019). The Effect of Parental Guidance and Emotional Intelligence on Learning Achievement in Social Science . *Journal of Family Sciences* , 120-129.



Umi Nurul Hikmah, M. R. (2022). PARENTAL ATTENTION, LEARNING MOTIVATION, EMOTIONAL INTELLIGENCE AND INFLUENCE ON LEARNING OUTCOMES. *REVIEW OF MULTIDISCIPLINARY EDUCATION, CULTURE AND PEDAGOGY*.

Winata, R., Friantini, R. N., Studi, P., Matematika, P., Rani, J. A., Barat, K., & Belajar, P. (2019). The Influence of Learning Motivation on Mathematics Learning Achievement of Class VIII Students of SMPN 1 Kuala Behe. *JIPM (Journal of Scientific Mathematics Education)*, 7(2), 85–92.

