

## **THE EFFECT OF SELF-CONFIDENCE AND INDEPENDENCE OF LEARNING ON STUDENTS' MATHEMATICS LEARNING OUTCOMES**

**Nerru Pranuta Murnaka<sup>1\*</sup>, Selvi Kiat<sup>2</sup>, Bobbi Rahman<sup>3</sup>, Elizabeth Wahyu Margareth Indira<sup>4</sup>, Siminto Siminto<sup>5</sup>**

<sup>1,2,3</sup>Departement of Mathematics Education, STKIP Surya, Banten Province, Indonesia.

<sup>4</sup>Department of Psychology, Universitas Katolik Soegijapranata, Central Java Province, Indonesia.

<sup>5</sup>Department of Management, IAIN Palangkaraya, Palangkaraya, Central Kalimantan Province, Indonesia.

\*Correspondence: [nerru.pranuta@stkipsurya.ac.id](mailto:nerru.pranuta@stkipsurya.ac.id)

### **ABSTRACT**

Self-confidence and learning independence are internal factors that influence student learning outcomes. Because both of them demand students in total to be able to take responsibility for students related to the learning process. This study aims to investigate whether there is a significant effect of self-confidence and learning independence on students' mathematics learning outcomes. This research is a quantitative research with a correlational design type. The population in this study were all students of class VII MTs Negeri 5 Tangerang with a sample of 132 students and the sample technique used was simple random. The instruments used in this study were questionnaires and math learning outcomes test questions. Questionnaires are used to measure self-confidence and student learning independence. While the test is used to measure students' mathematics learning outcomes. Based on the results of the self-confidence regression test on student learning outcomes, the sig. 0.026 < 0.05, meaning that there is a significant influence between self-confidence and student learning outcomes. Then for the results of the independent learning regression test on student learning outcomes, the sig value was obtained. 0.672 > 0.05, which means that there is no significant effect of independent learning on student learning outcomes. While the results of the regression test of self-confidence and learning independence on student learning outcomes, the sig. 0.084, which means that there is no significant effect of self-confidence and learning independence on students' mathematics learning outcomes.

**Keywords:** Self Confidence, Independent Learning, Learning Outcomes, Surveys

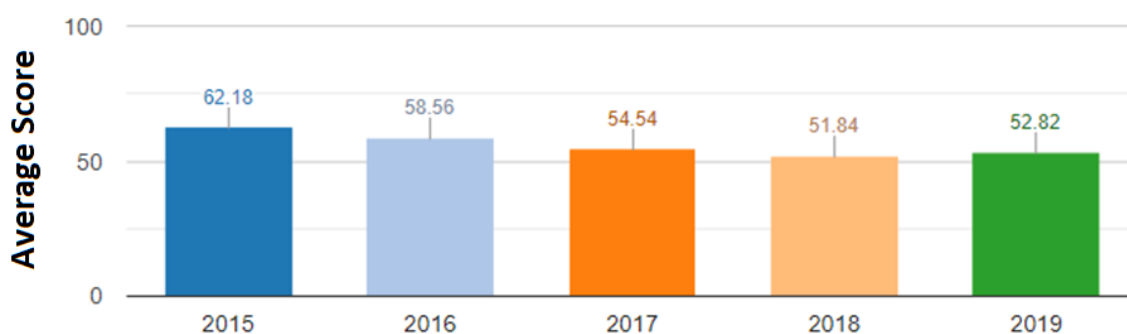
**How to Cite:** Murnaka, N. P., Kiat, S., Rahman, B., Indira, E. W. M., & Siminto, S. (2023). The Effect of Self-Confidence and Independence of Learning on Students' Mathematics Learning Outcomes. *Mathline: Jurnal Matematika dan Pendidikan Matematika*, 8(2), 389-404. <http://doi.org/10.31943/mathline.v8i2.392>

### **PRELIMINARY**

Education is an essential thing in our life. The importance of education because it aims to educate and develop abilities in a person. This means that every human being has the right to education. As stated in the 1945 constitution (UUD), Article 31 paragraph (1)

of the 1945 constitution states that "Every citizen has the right to education." Education in schools cannot be separated from learning, and the success of learning can be seen from the learning outcomes. In line with that, (Pramudya & Maharani, 2020) argues that learning outcomes are essential for teachers and students because they are a reference for their success in learning. Apart from that, according to Maisyarah et al. (2021), learning outcomes are very important in supporting success in learning, which depends on learning management. That means that through learning outcomes, we can know success or failure during the learning process.

In addition, mathematics learning outcomes are indicators that determine the quality of mathematics education. Student learning outcomes, especially mathematics, are still far from the target of success; in other words, they are not optimal. This can be seen from the results of international studies. The learning outcomes of Indonesian students are still not very high. The results of the National Middle School Mathematics National Examination scores (figure 1) show that the average SMP National Examination score is still below 65. In that sense, from the results of a preliminary study conducted by researchers at MTs Negeri 5 Tangerang, it was found that the learning outcomes of many students are still below the KKM, which is 70. The average value of the daily mathematics test for class VII MTs Negeri 5 Tangerang is 36.38.



Source : <https://hasilun.pusmendik.kemdikbud.go.id>

**Figure 1. Results of The 2015-2019 Middle School Mathematics National Examination Average Scores**

From the results of the diagram above, it can be seen that the average results of the Mathematics National Examination scores of students in Indonesia are still below 65. This shows the low quality of education in Indonesia. The results of the Trend International Mathematics and Science Study (TIMSS) compare the quality of education in Indonesia compared to other countries. The results of the TIMSS study can be seen in the following table.

**Table 1. TIMMS Indonesia Results from 2003 - 2019**

| <b>Year</b> | <b>Ranking</b> | <b>Participant</b> | <b>Average Score Indonesia</b> | <b>Average Score International</b> |
|-------------|----------------|--------------------|--------------------------------|------------------------------------|
| 2003        | 35             | 46 Countries       | 411                            | 467                                |
| 2007        | 36             | 49 Countries       | 397                            | 500                                |
| 2011        | 38             | 42 Countries       | 386                            | 500                                |
| 2015        | 44             | 49 Countries       | 397                            | 500                                |

Source : Alperu et al., 2022; Asri et al., 2016

Whereas in 2019, based on the results of the TIMSS study, Indonesia did not participate in the study (Murnaka et al., 2021) With the TIMSS criteria, the achievement of the survey participants was divided into four levels: low (low 400), medium (475), high (550), and advanced (625) from the data above so that Indonesia's position is at a low level. The 2011 TIMSS results put Indonesia in a low position where Indonesia's ranking is even below Palestine (a country that has been in a state of war).

Many factors, including self-confidence, influence the low student learning outcomes in mathematics. In line with the opinion of Dimiyati & Mudjiono (2013), self-confidence is one of the factors that are strong enough to influence learning outcomes. According to Hakim (2015), self-confidence is a person's belief in all aspects a person has, which makes him feel capable of achieving goals in his life. Meanwhile, according to Tambunan (Murnaka et al., 2020), self-confidence is a person's belief in his strengths and makes him feel capable of achieving goals in his life. However, not all students have good self-confidence.

Based on the results of observations by Setyowati & Widana (2018) conducted at SMA Negeri 1 Sukawati, there were indications of a need for more confidence seen in the students. They were restless and indecisive when completing tests and math assignments. These things affect the achievement of students' mathematics learning outcomes. It was found that there were students' mathematics learning outcomes that were still below the school's Minimum Completeness Criteria (KKM) standard, which was set at 78, so they were declared not to have achieved completeness. In addition, the results of testing the hypothesis stated that there was a direct effect of self-confidence on learning outcomes in mathematics with a path coefficient of 0.300 through a questionnaire that students had completed. This shows that high self-confidence is needed to obtain good learning outcomes. The importance of self-confidence as maximum support for learning outcomes

has been proven by several previous studies, such as Murtiningsih's research (2017) which shows a relationship between self-confidence and student mathematics learning outcomes at State Junior High Schools in Surabaya. In addition, Septiani & Purwanto (2017) also stated that there is a significant relationship between self-confidence and student learning outcomes. Class VIII SMP Negeri 2 Kota Solok with a percentage of 88.36%.

The internal factor that also affects learning outcomes is learning independence. In line with Assagaf's research (2016) states that internal factors also influence learning outcomes, one of which is learning independence. Therefore student independence in learning is an essential factor that must be considered to achieve good learning outcomes. Based on the research results by Susilo et al., (2021), another factor that is seen as the cause of the less-than-optimal learning outcomes in mathematics for students in class VII SMP Balikpapan is low student learning independence.

Sukmadinata (2007) and Sugiarti et al., (2021) state that independent learning is a form of individual readiness to learn on their initiative, with or without the help of other parties. One indication of the causes of low student learning independence is the learning process which is still teacher-centered. In addition, there is also research from Ningsih et al., (2021), which states that one of the internal factors influencing the learning outcomes of class VIII students of SMP Negeri Mataram is learning independence, which is due to problems in the learning process. When learning is taking place, there are still students who tend to be lazy in working on practice questions, copying, and relying on friends' answers rather than finding solutions on their own. The interaction that occurs in class is a one-way interaction. Learning independence is the readiness of each person to learn on their own initiative, without coercion, and done with or without the help of others. This is in line with the opinion of Anastasya et al., (2015) and Gita et al., (2015), which state that independent learning is a learning process within students to achieve specific goals that require students to be active by not depending on others.

Therefore learning independence is an essential factor for students to support their learning outcomes. The importance of independent learning as a support for learning outcomes has been proven by previous research, such as research conducted by Dewi et al., (2020), which states that independent learning is something that plays an essential role in learning, especially in learning mathematics. This is because independent learning is the ability of students to carry out learning activities with their encouragement and without coercion. Self-confidence and learning independence influence students' mathematics learning outcomes, in line with the results of Pratiwi & Laksmiwati's research (2016),

---

which states that independent learning can be achieved when students have self-confidence. In addition, self-confidence makes an important contribution to the formation of self-learning independence in students.

Collecting data as information related to the effect of self-confidence and student learning independence on learning outcomes needs to be done by the teacher. In accordance with the opinion of the Ministry of Education and Culture (Kemendikbud, 2013) which states that assessment activities are activities to obtain, analyze, and interpret data about student learning processes and outcomes that are carried out systematically and continuously so that they become meaningful information in decision making and help teachers in improving their teaching abilities. Based on the problems above, the aims of this study are 1) to determine the effect of self-confidence on learning outcomes, 2) To determine the effect of independent learning on learning outcomes, 3) To determine the effect of self-confidence and learning independence on learning outcomes.

## **METHODS**

The method used in this study is a quantitative method with a correlational design. The use of the correlational method is to find out whether there is an influence between two or more variables to be studied. The population in this study were students of class VII MTs Negeri 5 Tangerang, consisting of 7 classes with a total of 200 students. The number of samples taken was based on the Krejcie and morgan tables with sig. 5%. The sampling technique used was simple random sampling with a total sample of 132 students. In this study, there are two variables, namely, the independent variable and the dependent variable. The independent variables in this study are self-confidence and learning independence, while the dependent variable is the results of learning mathematics.

The research instruments used in this study were: 1) a test of learning outcomes in the form of a description type, the purpose of which is to obtain research data that can measure student learning outcomes; 2) The non-test instrument (questionnaire) is in the form of a self-confidence and learning independence questionnaire, the aim is to determine the amount of self-confidence and learning independence. The indicators of learning outcomes are knowledge aspects (C1), understanding aspects (C2), and application aspects (C3).

The hands of self-confidence to be measured in this study are the following indicators: 1) belief in one's abilities; 2) optimism; 3) objectivity; 4) responsibility; 5) rationality; and 6) reality. The hands of student learning independence to be measured in

---

this study are : 1) learning discipline; 2) learning initiative; 3) study routines; and 4) learning creativity. Data collection techniques in this study used tests and non-tests. The test given to students aims to measure students' mathematics learning outcomes. The test given to students aims to measure students' learning outcomes in mathematics, while non-test techniques are used to measure students' self-confidence and independence in learning. Data analysis used in this study are 1) the Normality Test; 2) Multicollinearity Test; 3) Heteroscedasticity Test; 4) Linearity Test; and 5) the Regression Coefficient Significance Test.

## RESULT AND DISCUSSION

### 1. Research Results

This research was conducted to investigate whether there is an effect of self-confidence and learning independence on learning outcomes. This research was carried out at MTs Negeri 5 Tangerang, Banten, with a population of all class VII students for the 2021/2022 academic year. The sample used in this study was 132 students from all class VII students of MTs Negeri 5 Tangerang who were selected using a simple random sampling technique. The data used in this study are data on self-confidence and independence learning obtained through distributing questionnaires to 132 students, while data on mathematics learning outcomes were obtained from tests on comparative material.

#### Descriptive Research Data

The following is data on the results of a self-confidence questionnaire, data on student self-confidence obtained from distributing a questionnaire totaling 132 students in class VII MTs Negeri 5 Tangerang.

**Table 2. Descriptive Statistical Results of Confidence**  
**Maximum Minimum Means (X)**

|                     | Maximum   | Minimum | Means (X) |
|---------------------|-----------|---------|-----------|
| Score               | 185,39    | 134,96  | 153,84    |
| Percentage of Value | 92,70%    | 69,57%  | 79,30     |
| Category            | Very Good | Good    | Good      |

Based on the table above, it can be seen that there are students who get the highest percentage of confidence in the very good category of 92.70%, and there are also students who have the lowest percentage of confidence in the good category of 69.57%. So it can be concluded that the level of self-confidence of MTs Negeri 5 Tangerang students is in the good and very good categories.

Data on student learning independence was obtained from distributing a questionnaire totaling 132 students in class VII MTs Negeri 5 Tangerang. The following is a descriptive statistic for learning independence variable data.

**Table 2. Descriptive Statistical Results for Learning Independence**

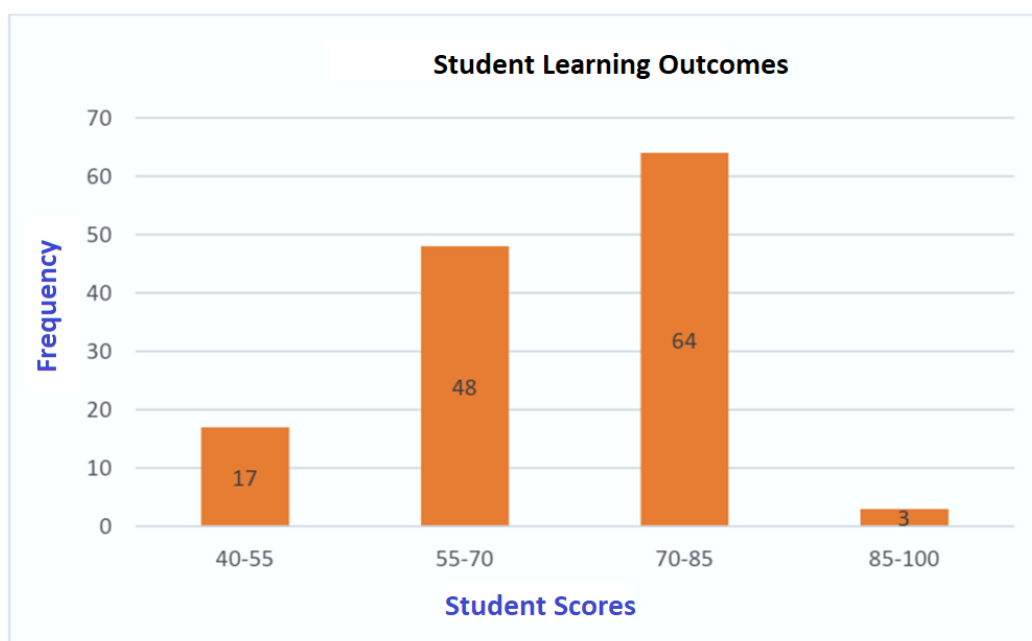
|                     | Maximum   | Minimum | Means (X) |
|---------------------|-----------|---------|-----------|
| Score               | 145,29    | 105,77  | 125,79    |
| Percentage of Value | 96,96%    | 70,58%  | 83,95%    |
| Category            | Very Good | Good    | Very Good |

Based on the table above, it can be seen that there are students who get the highest percentage of learning independence with a very good category of 96.96%, and there are also students who have the lowest percentage of self-confidence with a good category of 70.58%. So got it was concluded that the level of self-reliance of students at MTs Negeri 5 Tangerang was in the good and very good categories. The following is the result of the descriptive statistical analysis of the learning outcomes variable data.

**Table 3. Frequency Distribution of Mathematics Learning Outcomes**

| Maximum Value | Minimum Value | Means ( $\bar{X}$ ) | Median ( $Q_2$ ) | Mode ( $M_o$ ) | Variance ( $S^2$ ) | Standard Deviation ( $s$ ) |
|---------------|---------------|---------------------|------------------|----------------|--------------------|----------------------------|
| 89,29         | 46,46         | 69,23               | 71,43            | 67,86          | 89,50              | 9,46                       |

Based on the table above, it is known that the average student learning outcomes in comparative material are still below the KKM. None of the students scored above 90.



**Figure 2. Descriptive Statistical Results of Students' Mathematics Learning Outcomes**

Based on the graph above, it can be seen that more students at MTs Negeri 5 Tangerang passed the KKM and almost 50% of students did not pass the comparative material learning outcomes test.

### Testing Requirements Analysis

In this study, prerequisite tests were carried out, namely the normality test and multicollinearity test. After the prerequisite test is met, it is continued by testing the hypothesis, namely multiple linear regression analysis. The first step taken in statistical data processing is the normality test.

#### a. Normality test

The normality test or classic assumption test aims to find out whether in the regression model, the dependent & independent variables both have a normal or close to normal distribution (Ghozali & Fuad, 2005). In principle, the normality of the data can be determined by looking at the distribution of the data (points) on the diagonal axis on the graph or the histogram of the residuals. The statistical test used in this study to test the normality of the residuals is the non-parametric Kolmogorov-Smirnov (K-S) statistical test.

**Table 4. Multiple Regression Normality Test Results**

| Residual of | Significance | Decision  | Conclusion            |
|-------------|--------------|-----------|-----------------------|
| Value       | 0,328        | Accept Ho | Normal<br>Distributed |

Information:

$H_0$  : Data is normally distributed

$H_1$  : The data is not normally distributed

Based on table 4, from the summary of the normality test results above, it shows that the residual value obtained is more than alpha with a significance level of 5%. So the assumption of normality is met. After carrying out the prerequisite normality test and it is known that the data is normally distributed, then proceed with the multicollinearity test which shows that there is no multicollinearity between the independent variables.

#### b. Multicollinearity Test

The multicollinearity test in this study was conducted to test whether the multiple regression analysis found a correlation between the independent variables. The criteria for multicollinearity testing are if the Tol value  $\leq 0.1$  or the VIF value  $\geq 10$ , accept  $H_0$  or it is said that there is collinearity or multicollinearity.



**Table 5. Multicollinearity Test Results**

| Variable                  | Tolerance | VIP   | Decision  | Conclusion           |
|---------------------------|-----------|-------|-----------|----------------------|
| Confidence (X1)           | 0,955     | 1.047 | Reject Ho | No Multicollinearity |
| Independent Learning (X2) |           |       |           | Occurs               |

Information:

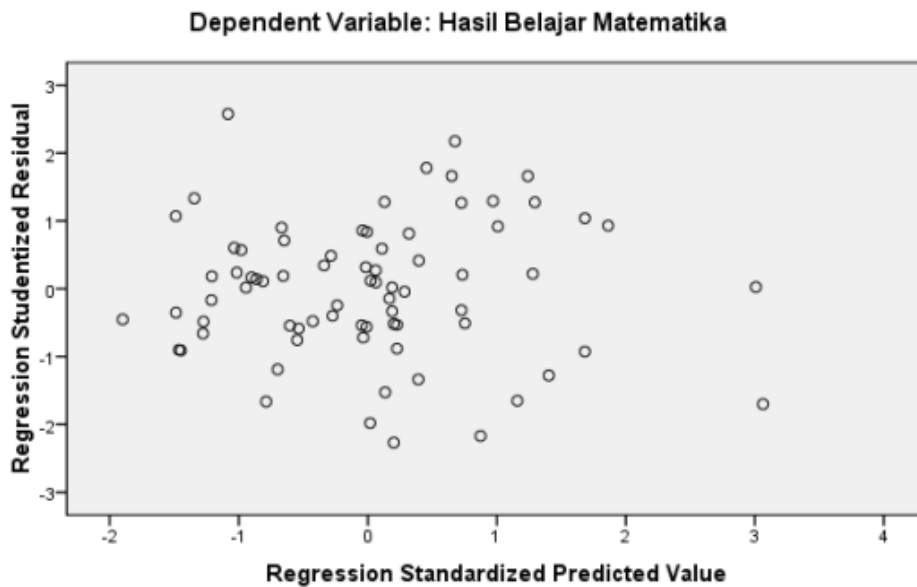
$H_0$  : Multicollinearity occurs

$H_1$  : There is no multicollinearity

Based on Table 5 above, the value of *tolerance* = 0.955 is greater than 0.1, and the value of *VIF* = 1.047 is less than 10, so it can be concluded that there is no multicollinearity. This means that no correlation was found between the independent variables. If all the prerequisite tests have been carried out, and all data meet the prerequisite test, so it can be concluded that hypothesis testing can be done.

c. Heteroscedasticity Test

To find out if the regression model has an inequality of variance in the residuals, it is necessary heteroscedasticity test was carried out.



**Figure 3. Heteroscedasticity Analysis**

Figure 3 above, explains that there is no heteroscedasticity problem in regression. Because the dots seem to spread out to form an indeterminate pattern below and above zeros in the y-axis.

d. Hypothesis test

This hypothesis testing contains research variables that will be tested for the hypothesis. There are three hypotheses tested, namely the effect of self-confidence (X1) on learning outcomes (Y), the effect of independence (X2) learning on learning outcomes (Y), and the effect of self-confidence (X1) and independent learning (X2) on learning outcomes ( Y) which will be described as follows:

1) The Effect of Confidence on Learning Outcomes

Concluding this hypothesis is that self-confidence has a significant effect on student learning outcomes, then  $H_0$  is rejected. The formulation of hypothesis I and the table of the results of the regression test are as follows:

$H_0$ : There is no significant effect of self-confidence on students' mathematics learning outcomes

$H_1$ : There is a significant effect of self-confidence on students' mathematics learning outcomes

**Table 6. Confidence Regression Test Results and Learning Outcomes**

|            | Significance | Decision    | Conclusion                       |
|------------|--------------|-------------|----------------------------------|
| Confidence | 0,026        | Rejected Ho | There is a Significant Influence |

Based on table 6, from the analysis above, shows the statistical price for the coefficient of variable X1, namely  $0.026 < 0.05$ , or  $H_0$ , is rejected, which means that there is a significant influence of self-confidence on learning outcomes in mathematics.

2) The Effect of Learning Independence on Learning Outcomes

This hypothesis concludes that independent learning has no significant effect on students' mathematics learning outcomes, so  $H_0$  is accepted. The formulation of hypothesis II and the table of the regression test results are as follows.

$H_0$ : There is no significant effect of Independence learning on students' mathematics learning outcomes

$H_1$ : There is a significant influence of Independence learning on students' mathematics learning outcomes

**Table 7. Learning Independence Regression Test Results and Learning Outcomes**

| Independent | Significance | Decision  | Conclusion                     |
|-------------|--------------|-----------|--------------------------------|
| Learning    | 0,672        | Accept Ho | There is no significant effect |

Based on Table 7 from the analysis results above, the statistical value for the coefficient of variable X2 is  $0.672 > 0.05$ , or  $H_0$  is accepted, meaning that learning independence has no significant effect on mathematics learning outcomes.

3) The Effect of Self-Confidence and Learning Independence on Learning Outcomes

The formulation of hypothesis III and the table of the results of the regression test are as follows.

$H_0$ : There is no significant effect of self-confidence and learning independence on learning outcomes

$H_1$ : There is a significant influence on self-confidence and independence learning towards learning outcomes

**Table 8. Multiple Regression Significant Test Results Independence Self-confidence and Learning**

| Independence Self-confidence and Learning | Significance | Decisions | Conclusion                     |
|---|--------------|-----------|--------------------------------|
| Independence Against Learning Outcomes    | 0,084        | Accept Ho | There is no significant effect |

Based on Table 8 from the results of the multiple regression significant test above, the statistical values for the coefficients of variables X1 and X2 on Y are  $0.084 > 0.05$ , or in this case,  $H_0$  is accepted. This means that there is no significant effect of self-confidence and learning independence on learning outcomes.

**2. Discussion**

Based on the results of research on the effect of self-confidence and learning independence that has been carried out at MTs Negeri 5 Tangerang in class VII students with a sample of 132 students. On the variable self-confidence in learning outcomes, the sig value is obtained.  $0.026 < 0.05$ , which means  $H_0$  is rejected. That is, there is a significant effect of self-confidence on learning outcomes. Confidence is a belief that must be instilled in students so that they feel capable of achieving the desired goals in their lives.

This is in accordance with the opinion of Murnaka et al., (2020) and Gita et al., (2018), which state that self-confidence is a person's belief in all aspects of a person, and this belief makes him feel capable of being able to achieve goals in his life.

Self-confidence is very important for students because students can learn to be more responsible for their abilities and be able to solve the problems they face independently. This is in accordance with the opinion expressed by Yulianto et al., (2020), which states that having self-confidence is, of course, very important for students because it will allow students to be able to believe in their abilities, not easily give up in facing every problem so that students can do all the tasks given independently and with maximum results. The results of the research show that self-confidence has a significant effect on learning outcomes in accordance with the research conducted by Setyowati & Widana, (2018) at SMA Negeri 1 Sukawati in the class of all class X students, who explains that self-confidence affects students' mathematics learning outcomes. Setyowati & Widana, (2018) stated that high student self-confidence is needed to improve learning outcomes.

The sig. value is obtained in the independent learning variable on learning outcomes.  $0.672 > 0.05$ , which means that  $H_0$  is accepted. That is, independent learning has no significant effect on learning outcomes. The absence of the influence of independent learning on learning outcomes is influenced by one of which is that there is no socialization about the importance of learning, the importance of character education, and the lack of competitiveness in students. This is in accordance with the opinion of Ranti et al., (2017), which states that there is no significant effect of independent learning on mathematics learning outcomes because it is influenced by psychology or the character of most of the students in the environment is still minimal, awareness about the importance of learning, and lack of competitive level in students.

The absence of independent learning influence on learning outcomes is also influenced by more dominant internal factors such as student readiness before receiving lessons. Students should prepare this readiness more seriously so that the desired goals can be achieved during the learning process. This is in accordance with the opinion of Angraini & Aminuyati (2018), which state that the success of student learning is influenced by the readiness or availability of students to respond to learning. Better student readiness in learning allows students to obtain good learning outcomes. The results of this study are in accordance with research conducted by Santoso & Utomo (2020) at Class X Muhammadiyah High School, which also states that there is no effect of independent learning on learning outcomes. This is because the psychology/character of most of the

---

students in the environment still needs to be made more aware of the importance of learning and the level of competitiveness in students. So that there is no independent learning in students toward the learning outcomes they get. Then, self-confidence and learning independence towards learning outcomes obtained sig.  $0.084 > 0.05$ . meaning that there is no significant influence of self-confidence and independence of learning together on student learning outcomes.

Another opinion put forward by Helma & Edizon (2017) states that independence and self-confidence are not the main factors that affect learning outcomes. Gita et al., (2015) state that learning motivation and student interest are the most important internal factors that influence learning outcomes. In addition, Sawawa et al., (2018) suggested that the most dominant factors influencing learning outcomes were interest factors, with a percentage of 33.7%, and motivation, with 53% and 13.3%, were other factors. This means that self-confidence and independence in learning together are not the main factors that influence learning outcomes, but other factors are the main factors.

## CONCLUSION

Based on the results of research data and discussion of research results, it can be concluded that : 1) There is a significant effect of confidence on the results learn math students; 2) Independent learning has no significant effect on students' mathematics learning outcomes; 3) There is no effect of self-confidence and learning independence on students' mathematics learning outcomes. Teachers should not only pay attention to methods, models, or learning media but also pay attention to the psychological factors of students participating in learning activities. These psychological factors are self-confidence, independence of learning on students, anxiety, self-regulation, and etc. which also contribute to student learning outcomes.

## REFERENCES

- Alperu, A., Murnaka, N. P., M, I. B., & H, A. W. (2022). Pengaruh Self Efficacy dan Motivasi Belajar Terhadap Hasil Belajar Siswa Kelas VII SMP Negeri 3 Gantung. *Konferensi Nasional Matematika (KNM XX) "Peranan Ilmu Matematika dalam Menjawab Tantangan Bangsa yang Semakin Kompleks dan Dinamis di Era Revolusi Industri 4.0,"* 573–584. <https://doi.org/https://doi.org/10.30598/PattimuraSci.2021.KNMXX.573-584>
- Anastasya, D., Dewi, S., & Murnaka, N. (2015). Pengaruh Games Memorize Card Terhadap Hasil Belajar Siswa Pada Operasi Hitung Bilangan. *Kreano, Jurnal Matematika*, 6(2), 164–169. <http://dx.doi.org/10.15294/kreano.v6i2.5010>
- Angraini, W. D., & Aminuyati, A. (2018). Analisis Faktor-Faktor Yang Mempengaruhi
-

- Hasil Belajar Mata Pelajaran Ekonomi Kelas XI IIS SMA. *Jurnal Pendidikan dan Pembelajaran Khatulistiwa (JPPK)*, 8(8), 1-11. <https://jurnal.untan.ac.id/index.php/jpdpb/article/view/16253/14142>
- Asri, D. C., Mentari, A., & Murnaka, N. P. (2016). Analysis Student's Interest towards Geometry Learning with Origami. *Asian Mathematical Conference 2016*. <https://doi.org/10.13140/RG.2.2.23045.60646>
- Assagaf, G. (2016). Pengaruh Kemandirian Belajar dan Regulasi Diri terhadap Hasil Belajar Matematika Melalui Motivasi Berprestasi pada Siswa Kelas X SMA Negeri di kota Ambon. *Matematika Dan Pembelajaran*, 4(1), 23-32. <https://doi.org/http://dx.doi.org/10.33477/mp.v4i1.306>
- Dewi, N., Asifa, S. N., & Zanthi, L. S. (2020). Pengaruh Kemandirian Belajar terhadap Hasil Belajar Matematika. *PYTHAGORAS: Journal of the Mathematics Education Study Program*, 9(1), 48-54. <https://doi.org/10.33373/pythagoras.v9i1.2293>
- Dimiyati, & Mudjiono. (2013). *Belajar dan Pembelajaran*. PT. Rineka Cipta.
- Ghozali, I., & Fuad. (2005). *Structural Equation Modeling. Teori, Konsep dan Aplikasi*. Universitas Diponegoro.
- Gita, A., Murnaka, N. P., & Sukmawati, K. I. (2018). Penerapan Model Pembelajaran Conceptual Understanding Procedures (CUPS) sebagai Upaya Mengatasi Miskonsepsi Matematis Siswa. *Journal of Medives*, 2(1), 65-76. <https://doi.org/10.31331/medives.v2i1.521>
- Gita, A., Yuniarti, N., & Murnaka, N. P. (2015). The Implementation of Matematika Gasing on Multiplication Concept Toward Interest, Study Motivation, and Student Learning Outcome. *Proceeding of IICMA 2015*, 234-242.
- Hakim, T. (2015). *Mengatasi Rasa Tidak Percaya Diri*. CV. Puspa Swara.
- Helma, H., & Edizon, E. (2017). Faktor-Faktor yang Mempengaruhi Hasil Belajar Matematika Siswa untuk Penerapan Bahan Ajar Kontekstual Mengintegrasikan Pengetahuan Terkait dan Realistik. *Jurnal Eksakta Pendidikan (JEP)*, 1(1), 86-100. <https://doi.org/10.24036/jep/vol1-iss1/39>
- Hidayatullathifah, H., & Sujadi, A. A. (2017). Peningkatkan Minat dan Prestasi Belajar Matematika melalui Pembelajaran Make a Match Siswa Kelas VII F SMP 1 Banguntapan. *UNION: Jurnal Ilmiah Pendidikan Matematika*, 5(3), 229-236. <https://doi.org/https://doi.org/10.30738/.v5i3.1253>
- Kemendikbud. (2013). *Permendikbud Nomor 81A Tahun 2013 Tentang Implementasi Kurikulum*. Kementerian Pendidikan dan Kebudayaan.
- Maisyarah, M., Afriyanti, D., & Manurung, A. A. (2021). Penerapan Model Pace untuk Meningkatkan Hasil Belajar Matematika Siswa pada SMP Nurul Hasanah. *Jurnal Penelitian, Pendidikan Dan Pengajaran (JPPP)*, 2(1), 81-95. <https://jurnal.umsu.ac.id/index.php/JPPG/article/view/7078/5840>
- Murnaka, N. P., Suwarno, & Haryanti. (2020b). Pengaruh Dukungan Orang Tua dan Kepercayaan Diri Siswa Terhadap Hasil Belajar Matematika Melalui Mediasi Motivasi Belajar Siswa. *Prosiding Seminar Nasional Matematika dan Pembelajarannya*, 2(1), 414-420. [https://www.academia.edu/49008098/Pengaruh\\_Dukungan\\_Orang\\_Tua\\_Dan\\_Kepercayaan\\_Diri\\_Siswa\\_Terdapat\\_Hasil\\_Belajar\\_Matematika\\_Melalui\\_Mediasi\\_Motivasi\\_Belajar\\_Siswa](https://www.academia.edu/49008098/Pengaruh_Dukungan_Orang_Tua_Dan_Kepercayaan_Diri_Siswa_Terdapat_Hasil_Belajar_Matematika_Melalui_Mediasi_Motivasi_Belajar_Siswa)
- Murnaka, N., Rusdarti, Rustono, & Sudana, I. (2021). Determinants of Teacher Performance. *NVEO-Natural Volatiles & Essential Oils Journal*, 8(5), 12249-12260. <https://www.nveo.org/index.php/journal/article/view/3539/3037>
- Murtiningsih. (2017). Pengaruh Motivasi Belajar, Sarana Belajar, dan Percaya Diri terhadap Hasil Belajar IPS Siswa Penerima BSM (Bantuan Siswa Miskin) SMP

- Negeri di Surabaya. *Jurnal Ekonomi Dan Kewirausahaan*, 5(2), 178–191.  
<https://doi.org/https://doi.org/10.26740/jepk.v5n2.p178-191>
- Ningsih, M. F., Sarjana, K., Azmi, S., & Baidowi, B. (2021). Pengaruh Kemandirian Belajar Terhadap Hasil Belajar Matematika Siswa Kelas VIII SMP. *Griya Journal Of Mathematics Education and Application*, 1(1), 11–18.  
<https://doi.org/https://doi.org/10.29303/griya.v1i1.9>
- Pramudya, N., & Maharani, E. T. W. (2020). Refleksi Peserta Didik Guna Mengetahui Tolak Ukur Pemahaman Pada Pembelajaran Kimia Via Daring di SMA X Kota Semarang. *Prosiding Seminar Nasional Unimus “Inovasi Riset Dan Pengabdian Masyarakat Guna Menunjang Pencapaian Sustainable Development Goals (SDGs)”*, 147–157. <https://prosiding.unimus.ac.id/index.php/semnas/article/view/661>
- Pratiwi, I. D., & Laksmiwati, H. (2016). Kepercayaan Diri dan Kemandirian Belajar Pada Siswa SMA Negeri “X.” *Jurnal Psikologi Teori Dan Terapan*, 7(1), 43–49.  
<https://doi.org/10.26740/jptt.v7n1.p43-49>
- Ranti, M. G., Budiarti, I., & Trisna, B. N. (2017). Pengaruh Kemandirian Belajar (Self Regulated Learning) Terhadap Hasil Belajar Mahasiswa Pada Mata Kuliah Struktur Aljabar. *Jurnal Pendidikan Matematika*, 3(1), 75–83.  
<https://doi.org/https://doi.org/10.33654/math.v3i1.57>
- Santoso, T., & Utomo, D. P. (2020). Pengaruh Kecerdasan Matematis-Logis dan Kemandirian Belajar Terhadap Hasil Belajar Matematika. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 9(2), 306–315.  
<https://doi.org/10.24127/ajpm.v9i2.2722>
- Sawawa, D., Solehudin, A., & Sabri, S. (2018). Pengaruh Faktor Internal dan Eksternal Siswa Terhadap Hasil Belajar pada Mata Pelajaran Mekanika Teknik dan Elemen Mesin. *Journal of Mechanical Engineering Education*, 5(1), 21–35.  
<https://doi.org/10.17509/jmee.v5i1.12615>
- Septiani, D. R., & Purwanto, S. E. (2017). Hubungan Percaya Diri Siswa terhadap Hasil Belajar Matematika Siswa Kelas VIII SMP Negeri 2 Kota Solok. *JKPM (Jurnal Kajian Pendidikan Matematika)*, 2(1), 32–43.  
<https://doi.org/http://dx.doi.org/10.30998/jkpm.v6i1.7526>
- Setyowati, D., & Widana, I. W. (2018). Pengaruh Minat, Kepercayaan Diri, dan Kreativitas Belajar Terhadap Hasil Belajar Matematika. *Emasains: Jurnal Edukasi Matematika Dan Sains*, 5(1), 66–72.  
<https://ojs.mahadewa.ac.id/index.php/emasains/article/view/21>
- Sugiarti, R., Murkana, N. P., Erlangga, E., Adicita, R., & Pinandita, S. (2021). Learning Model Of Municipal Students. *Cypriot Journal of Educational Sciences*, 16(4), 1765–1775. <https://doi.org/https://doi.org/10.18844/cjes.v16i4.6039>
- Sukmadinata, N. S. (2007). *Landasan Psikologi Proses Pendidikan*. PT. Remaja Rosdakarya.
- Susilo, G., Wali, A. B., & Pertiwi, S. (2021). Pengaruh Kemandirian Belajar Terhadap Hasil Belajar Matematika Siswa SMP di Balikpapan. *Riemann Research of Mathematics and Mathematics Education*, 3(1), 21–34.  
<https://doi.org/10.38114/riemann.v3i1.128>
- Yulianto, A., Nopitasari, D., Qolbi, I. P., & Aprilia, R. (2020). Pengaruh Model Role Playing Terhadap Kepercayaan Diri Siswa Pada Pembelajaran Matematika SMP. *Jurnal Studi Guru dan Pembelajaran*, 3(1), 97–102.  
<https://doi.org/10.30605/jsgp.3.1.2020.173>
-

