

The Relationship Between Numeracy Literacy and Self-Efficacy with Students' Science Learning Outcomes in Grade VII

Bela Yurita*, Dios Sarkity, Elfa Oprasmani

Biology Education Departement, Faculty of Teacher Training and Education, Universitas Maritim Raja Ali Haji, Tanjungpinang, Indonesia

*Corresponding Author: belayurita02@gmail.com

Article History

Received : March 06th, 2025

Revised : April 27th, 2025

Accepted : May 10th, 2025

Abstract: Numeracy literacy is one of the essential competencies students need to develop to face future challenges. This research investigates the relationship between numeracy literacy and academic achievement, self-efficacy and academic achievement, as well as the combined influence of numeracy literacy and self-efficacy on eighth-grade students' learning outcomes. Using a quantitative correlational design, the study involved 198 students from a total population of 414 at SMPN 4 Tanjungpinang, selected via stratified random sampling. Data analysis employed Pearson's product-moment correlation for both simple and multiple correlation tests. The research tools included a numeracy literacy test, a self-efficacy questionnaire, and science performance documentation. The results showed a moderate positive link between numeracy literacy and academic performance ($r = 0.482$). A very strong correlation was found between self-efficacy and performance ($r = 0.915$). Moreover, the combined relationship between numeracy literacy and self-efficacy in relation to learning outcomes was also very strong ($r = 0.957$). These results highlight the need to enhance numeracy skills in schools by applying effective teaching strategies.

Keywords: Numeracy Literacy, Self-Efficacy, Student Learning Outcomes

INTRODUCTION

One of the important things that can determine the success of a nation is education. Education encounters numerous challenges as a result of the rapid technological advancements, particularly in the 21st century, one of which is improving students' ability to have global skills. Global skills according to Hamidah et al., (2020) involve skills of life; information and communication technology (ICT); learning; and various literacy. Education in Indonesia is beginning to realize the literacy skills importance, as shown by the National Assessment (AN) implementation, which started in 2021 and is a system of evaluation to assess the education quality in all schools and madrasahs in Indonesia, with a focus on skills of numeracy literacy as one of the aspects measured in the AN (Mellyzar et al., 2022). Based on 2018 PISA data, Indonesia is in the lowest ranking, namely 74th with a reading ability score of 371, mathematics 379, and science 396 in 71st place. The Indonesian government continues to strive to ensure that education in Indonesia continues to improve by reforming various aspects of

education, one of which is updating the curriculum, in the form of independent curriculum. This curriculum emphasizes developing interests and talents of students and emphasizes skills of numeracy literacy (Kalsum & Sulastri, 2023).

According to Ekowati et al., (2019), numeracy literacy refers to the skill of analyzing and comprehending statements related to various activities that involve symbols commonly encountered in daily life and then expressing these statements through both spoken and written form. Based on the Education and Culture Ministry, numeracy literacy refers to the skill to identify and understand different fundamental symbols of mathematics and numbers to address issues faced in everyday life. It involves analyzing information in diverse ways and using the insights gained from this analysis to make informed decisions. This numeracy skill emphasizes students' capability to use and understand mathematics in diverse situations, including employing mathematical reasoning, concepts, facts, techniques, and tools to describe, clarify, and forecast real-world events (Puspaningtyas & Ulfa, 2020).

Salvia et al., (2022) identified several factors that influence students' numeracy literacy skills, one of which is that students still have difficulty using their abilities in everyday life. The same thing was also found at SMPN 4. According to interviews conducted by researchers with teachers, the same issues were identified, including students still having difficulty understanding when they find terms or language that are difficult and rarely used in everyday life. A study by Aminah et al., (2018) demonstrates that students who can model a situation using writing, physical objects, diagrams, images, symbols, and graphs still exhibit relatively low proficiency. Based on the results of the interview, a similar thing also happened at SMPN 4 Tanjungpinang. The teacher explained that students cannot still solve various problems using numbers, and symbols and using interpretation results to predict and draw conclusions. This is further supported by observations made on several students. Most students still feel insufficient when it comes to solving problems that involve symbols and numbers in real-life situations. Additionally, they are generally less capable of analyzing different forms of information, as well as handling prediction and problem-solving tasks. The material that is also usually presented with numbers, tables, symbols and diagrams is the material on the structure and function of the body of living things. This was also conveyed by the interviewed teacher that the material includes numeracy literacy as well as the structure and function of the body of living organisms has a low level of numeracy literacy and is quite difficult for students to understand.

Students' numeracy literacy is strongly connected to their self-efficacy. Self-efficacy is essential in determining students' capacity to actively participate in learning activities (Toharudin et al., 2019). One way to identify students with high self-efficacy is by observing how they manage, execute, and resolve problems related to their learning tasks, displaying confidence in their ability to complete them successfully (Bandura, 2013). If students feel unsure of their abilities, it causes them to give up easily in the learning process (Salsabilah & Kurniasih, 2022). Regarding the problem of self-efficacy, this was also found at SMPN 4 Tanjungpinang through interviews with teachers and distributing questionnaires to students. When the teacher asks students to give a presentation in

front of the class, most students did not believe that they were able to make the presentation, only a few students were able to make presentations and ask questions in discussions. It is also known that students often think that they cannot learn science and often students give up even though the learning process has not started. According to the results of the questionnaire conducted with several students, they still have varying self-efficacy. Students also still feel less confident with the tasks they are working on.

Based on interviews with teachers, problems related to numeracy literacy revealed that students exhibit a wide range of learning outcomes. Learning outcomes are the receipt of information during the process of learning, where the learning outcomes achievement is influenced by internal and external factors. Learning outcomes are an important part of learning because they are the criteria for success in the process of learning (Kurniawan et al., 2017). Because there were problems that were suspected of being related to numeracy literacy and self-efficacy, the researcher wanted to conduct a comprehensive analysis to examine how the relationship between numeracy literacy and self-efficacy impacts the learning outcomes of students.

METHODS

This research applies a descriptive correlational method with a quantitative approach. The participants were students from SMP N 4 Tanjungpinang, chosen through stratified random sampling as suggested by Sugiyono, (2019). Specific details regarding the sample distribution can be found in Table 1.

Table 1. Sample of Research

Class of VIII	Total of Studens
1	23
2	22
3	23
4	22
5	21
6	21
7	21
8	23
9	22
Total	198

The data collection involved three methods: tests to assess students' numeracy literacy, questionnaires to evaluate their self-efficacy, and documentation to obtain information on academic achievement. The instruments for numeracy literacy and self-efficacy were developed based on structured

question items. Details of the instruments and their respective blueprints are presented in Table 2 Han et al., 2017) and Table 3 (Bandura, 1986). Both the numeracy literacy test and the self-efficacy questionnaire were confirmed to be valid and reliable, with reliability coefficients of 0.683 and 0.897, respectively

Table 2. Numeracy Literacy Question Grid

Learning Outcomes	Numeracy Literacy Indicators	Question Indicator	Question Level	Number of Questions
Students understand the process of identifying living things according to their characteristics; the nature and The properties of substances, physical and chemical changes, and the methods for separating simple mixtures; the organizational system of life, functions, and abnormalities or disorders that appear in the organ system; interactions between living things and their environment in designing efforts to prevent and overcome climate change; and the inheritance of traits and the application of biotechnology in the surrounding environment. Students measure the physical aspects they encounter and utilize a variety of movements and forces, pressure, and simple machines.	Utilizing different symbols and numbers to address problems in various real-life situations.	Students have the ability to explain the meaning of symbols commonly used in everyday life.	C2	1
	Examine different types of information (graphs, tables, charts, diagrams, and other similar representations).	Students have the ability of analyzing the nutritional value chart of coffee.	C4	2
		Students have the ability in analyzing information presented in diagrams and graphs.	C4	3
	Analyzing results to forecast outcomes and make well-informed decisions.	Students have the ability to interpret the information presented	C5	3
		Students have the ability of making decisions and predicting outcomes based on the information presented.	C5	4

Table 3. Self-Efficacy Measurement Questionnaire Grid

No	Indicators	Number of Statements	
		<i>Favourable</i>	<i>Unfavourable</i>
1	Task Difficulty Level	4	4
2	Strength of Belief	5	5
3	Broad Field of Attitude (Generality)	4	4
Total		13	13

To assess the relationship among the variables in the study, data analysis was conducted using the Pearson product-moment correlation to evaluate the connection between numeracy literacy skills and students' learning outcomes, as well as the relationship between self-efficacy and student learning outcomes. Additionally, multiple correlation tests were performed on the research data to examine the combined relationship between numeracy literacy skills, self-efficacy, and student learning outcomes.

FINDINGS AND DISCUSSION

1. The Relationship between Numeracy Literacy and Learning Outcomes

Before conducting the hypothesis test, the data were initially tested for normality to assess whether the distribution follows a normal pattern. The normality test was performed using the Chi-square test. The results indicated a significance value (sig.) > 0.050, specifically 1.000 (Table 4). This enables us to conclude that the data follows a normal distribution.

Table 4. Results of Normality Test with Chi-Square

	Unstandardized Residual
Chi-Square	14.576 ^a
Df	182
Asymp. Sig.	1.000

After performing the normality test, a correlation test was conducted using the Pearson product-moment test. This test aimed to assess the hypotheses and determine if there is a relationship between numeracy literacy and learning outcomes. The results of the correlation test are presented in Table 5 below.

Table 5. Results of Numeracy Literacy Correlation Test with Learning Outcomes

Correlations			
		Numeracy Literation	Learning Outcomes_
Numeracy Literation	Pearson Correlati on	1	.482**
	Sig. (2- tailed)		.000
	N	198	198
Learning Outcomes	Pearson Correlati on	.482**	1
	Sig. (2- tailed)	.000	
	N	198	198

** . Correlation is significant at the 0.01 level (2-tailed).

As shown in the table above, the Sig. value is 0.000, indicating a significant relationship between numeracy literacy and the learning outcomes of eighth-grade students. The calculated r value of 0.482 suggests a moderate correlation between numeracy literacy and student learning outcomes. Based on the correlation coefficient value, the determination coefficient between numeracy literacy and self-efficacy can be calculated using the formula $KD = R^2 \times 100\%$ so that the determination coefficient value is 0.232 or 23.2%. This can be said that learning outcomes are influenced by numeracy literacy by 23.2% and the rest is influenced by other variables. To see the distribution of data on the correlation of numeracy literacy with learning outcomes, see the graph in Figure 1.

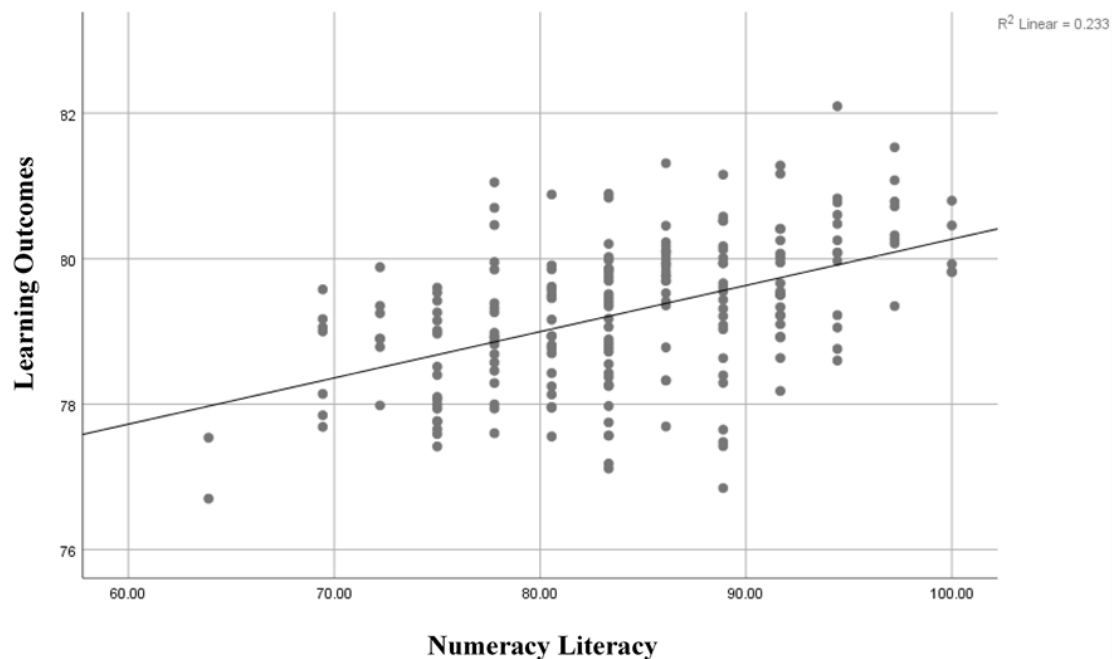


Figure 1. Scatter Plot Graph of Correlation of Numeracy Literacy with learning outcomes

Based on the figure, it can be observed that the data points are distributed along an upward diagonal line. The direction of the data distribution that follows the upward diagonal line indicates that the relationship between variables is positive. This indicates that as students' numeracy literacy increases, their learning outcomes also improve. The study results demonstrate a positive relationship between numeracy literacy and the comprehension of the structure and function of living organisms among eighth-grade students, showing a moderate correlation. This is in line with a study by Rosmalah & Hur'ainun (2023), the results of the data processing and analysis concluded that there is a positive and significant relationship between numeracy literacy and learning outcomes. Additionally, A moderate-level correlation exists between the numeracy literacy variable and the learning outcome variable, as indicated by the correlation coefficient value.

A positive and significant relationship exists between numeracy literacy and learning outcomes, suggesting that students are able to solve problems using a variety of numbers and make accurate, informed decisions. This follows a study by Afandi et al., (2021) that students with strong numeracy literacy can make informed decisions by analyzing information presented in various formats, such as graphs, tables, and charts, and solving problems using different numbers and symbols associated with basic

mathematics. If students also have numeracy literacy skills, they can facilitate their learning process and work effectively, thus achieving better learning outcomes (Fitriana & Ridlwan, 2021). In addition, it was also emphasized in the research conducted by Rosmalah & Hur'ainun (2023) that numeracy literacy is very important for students to understand a world full of numbers and data. This helps them think rationally and systematically when making relevant decisions.

The study results showed a moderate correlation between numeracy literacy and the learning outcomes of eighth-grade students. This shows that in addition to numeracy literacy, learning outcomes are also influenced by other factors. Some of these factors include internal and external aspects. Some things that are included in the internal aspect are learning motivation, learning interest and learning readiness. Some things that are included in the external aspect are the conditions in the surrounding environment. This is in line to study by Jufrida et al., (2019), which found that factors influencing learning outcomes are not limited to numeracy literacy; there are several other internal and external factors. Internal factors refer to elements that stem from within the student and can influence their learning outcomes. External factors, on the other hand, are those that come from the student's environment, such as influences from their family. The study results clearly stated that students with strong numeracy

literacy skills can support the learning process, thereby providing good learning outcomes. When students have good numeracy literacy skills, students will easily understand and solve problems related to numeracy in everyday life and will improve student learning outcomes.

2. The Relationship between Self-Efficacy and Learning Outcomes

Before performing the hypothesis test, the data was assessed for normality. A normality test using the Chi-square method was conducted to determine if the data followed a normal distribution. The results showed a significance value of 1.000 (Table 6), which is greater than 0.050, indicating that the data follows a normal distribution.

Table 6. Results of Normality Test with Chi Square

	Unstandardized Residual
Chi-Square	14.576 ^a
Df	182
Asymp. Sig.	1.000

After the normality test was conducted, a correlation test using the Pearson product-moment test was performed. The purpose of this test was to evaluate the hypotheses and determine if there is a relationship between self-efficacy and learning outcomes. The findings from the correlation test are presented in Table 7 below.

Table 7. Results of the Correlation Test of Self-Efficacy with Learning Outcomes

Correlations			
	Self-Efficacy		Learning Outcomes
Self-Efficacy	Pearson Correlation	1	.915**
	Sig. (2-tailed)		.000
	N	198	198
Learning Outcomes	Pearson Correlation	.915**	1
	Sig. (2-tailed)	.000	
	N	198	198

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the table above, the Sig. value is 0.000, leading to the conclusion that a relationship exists between self-efficacy and the learning outcomes of eighth-grade students. The calculated r value of 0.915 indicates a very strong correlation. Based on the correlation coefficient value, the determination coefficient between numeracy literacy and self-efficacy can be calculated using the formula $KD = R^2 \times 100\%$ so that the determination coefficient value is 0.837 or 83.7%. This can be said that learning outcomes are influenced by self-efficacy by 83.7% and the rest is influenced by other variables. To see the distribution of data on the correlation of numeracy literacy with learning outcomes, see the graph in Figure 2.

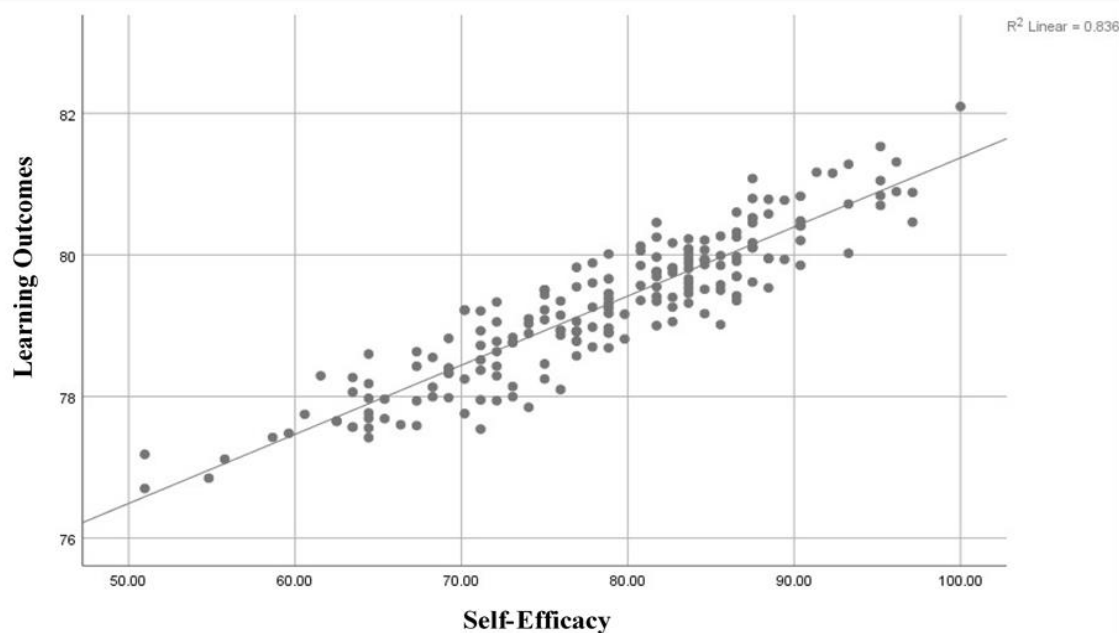


Figure 2. Scatter Plot Graph of Correlation of Self-Efficacy with Learning Outcomes

Based on the graphic image, it can be seen that the data is spread along an upward diagonal line. The direction of the data distribution that follows the upward diagonal line indicates that the relationship between variables is positive. This suggests that as a student's self-efficacy increases, their learning outcomes are likely to improve. The findings of research conducted reveal a significant and positive relationship between self-efficacy and the learning outcomes of eighth-grade students, with a very strong correlation. This aligns with the study by Apriliani et al., (2022), where data processing and analysis showed a positive and a significant correlation was found between self-efficacy and learning outcomes. The relationship between the self-efficacy and learning outcome variables was identified as having a very strong correlation.

The positive and significant relationship between self-efficacy and student learning outcomes suggests that self-efficacy can influence and enhance student learning outcomes. This is because self-efficacy can help someone in making decisions, the determination and persistence they demonstrate in overcoming challenges, as well as the degree of fear and composure they experience when tackling life's tasks. Self-efficacy also allows students to plan actions, demonstrate new behaviors, respond proactively and creatively, and provide solutions to problems and challenges presented in their lives or solve problems (Mukti & Tentama, 2019). Furthermore, emphasized by Zagoto

(2019), self-efficacy gives students resilience and strength in facing difficult situations at school, as well as developing an attitude of not getting bored easily, never giving up, and not spending too much time solving problems and schoolwork. Students with high self-efficacy are believed to have the ability to manage their own learning strategies, allowing them to master various learning tasks and easily achieve success, ultimately enhancing their learning outcomes.

The study results revealed a very strong correlation between self-efficacy and the learning outcomes of eighth-grade students, indicating that self-efficacy has a significant impact on learning outcomes. This is because self-efficacy is able to increase students' confidence in their ability to complete tasks, the way they learn and Facing challenges plays a crucial role in their learning outcomes. This is consistent with the view expressed by Zagoto (2019), the stronger the student's self-efficacy, the more it will encourage students to remain calm and find solutions to the problems they have. The efforts and perseverance that students make will produce achievements. This self-efficacy is a positive indicator for conducting self-assessments which are useful for learning to know and understand yourself and your abilities.

In addition, Self-efficacy is also closely linked to students' confidence in their ability to complete tasks, overcome challenges, and reach academic goals. This belief affects how students plan, motivate themselves, and behave during the

learning process. This is consistent with the view of Naser et al., (2024) that self-confidence supported by high self-efficacy also contributes to increased student achievement. When students believe they can succeed, they tend to try harder and study more. Students see every challenge in the form of assignments or exams that they face as an opportunity to show their abilities rather than obstacles that cannot be overcome. This can improve students' academic abilities when they work hard and focus on achieving their goals. This can also be related to the opinion of Apriliani et al., (2022) that every student needs high self-efficacy. Students with high self-efficacy have confidence in their ability to adapt to situations and predict outcomes that align with their abilities. Students continue to try hard and meet their needs until the end. Students with a high level of self-efficacy demonstrate a strong motivation to learn and firmly believe in their ability to succeed in acquiring new knowledge. Moreover, students with a high level of self-efficacy are able to enjoy lessons that may be challenging for them. As a result, a student's learning outcomes are likely to improve when their self-efficacy is high.

According to Bandura (1977), self-confidence facilitates participation in learning activities and can affect the level of performance and motivation. This opinion emphasizes that a person's self-efficacy is a supporting factor in the achievements that students will achieve. Students

who aim for academic success and high learning outcomes must also possess a strong sense of self-efficacy in their learning process. Because self-confidence can affect a person's performance and resilience in completing schoolwork. In addition, according to Apriliani et al., (2022), Self-efficacy is a key internal factor that can significantly influence learning outcomes. Self-efficacy is the strongest internal factor influencing learning outcomes. This is because self-efficacy affects students' abilities in the learning process. In addition, self-efficacy affects any activity carried out by students. The study results clearly indicate that when students possess strong self-efficacy, it supports the learning process, leading to better learning outcomes. Students are able to easily understand and address problems related to their daily lives, which in turn enhances their overall learning performance.

3. Simultaneous Relationship between Numeracy Literacy and Self-Efficacy on Learning Outcomes

The test used to determine the strength of the relationship between numeracy literacy, self-efficacy, and learning outcomes simultaneously is a multiple correlation test using the F test. Decision-making in this test is based on the Sig. F Change value. The results of the multiple correlation test are presented in Table 8.

Table 8. Results of the Multiple Correlation Test

Model Summary^b					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.957 ^a	.916	.915	.297	.916	1056.740	2	195	.000

Based on the test results, the Sig. F Change value is less than 0.050, specifically 0.000, indicating a relationship between numeracy literacy, self-efficacy, and the learning outcomes of eighth-grade students. The strength of the relationship between those variables is reflected in the R-value of 0.957, signifying a very high level of correlation. Based on the correlation coefficient value, the determination coefficient between numeracy literacy and self-efficacy with learning outcomes is calculated using the formula $KD = R^2 \times 100\%$ so that the determination

coefficient value is 0.915 or 91.5%. This can be said that the contribution of the two variables is able to influence learning outcomes by 91.5% and is influenced by other factors. Based on the research that has been conducted, there is a relationship between numeracy literacy and self-efficacy with the learning outcomes of eighth-grade students, characterized by a very strong correlation. Numeracy literacy and self-efficacy are key factors that influence student learning outcomes. Thus, teachers and students need to work together so that numeracy literacy and self-

efficacy skills continue to increase in order to get good learning outcomes.

Numeracy literacy is defined as the ability to apply reasoning by analyzing and understanding statements through activities that involve manipulating mathematical symbols or language (Dhena & Kua, 2023). The presence of self-efficacy is crucial in the learning process because it helps students who perceive mathematical symbols and language as difficult to understand overcome these challenges. This is in line with the view of Faiza et al., (2024) in the process of learning, self-confidence is very important for students because it can help in overcoming the idea that mathematics is difficult and scary for students who may be less talented. Increasing self-confidence in students is very important because it can motivate them to complete mathematical assignments or projects. Students who have numeracy literacy skills tend to be able to consider every decision made so that they are able to analyze, solve numbers and symbols, especially when learning science. Therefore, a strong sense of self-efficacy is needed to ensure that all decisions are in accordance with expectations. This statement aligns with the perspective of Robbins & Judge (2015), who assert that Individuals with low levels of self-efficacy are more likely to give up when faced with challenges, whereas those with high levels of self-efficacy are more likely to persist and put in more effort to overcome difficulties, enabling them to solve problems and make decisions more effectively.

One of the factors that influences numeracy literacy and self-efficacy is environmental factors. One of the supports from the environment is getting support from the family. If someone has good environmental conditions and gets support from the family, the student's numeracy literacy and self-efficacy will increase so that the student's learning outcomes will also increase. This is supported by the opinion of Khasanah & Abduh (2023), when students possess strong numeracy literacy skills, it positively impacts their learning outcomes. When numeracy literacy is measured independently with learning outcomes, the results are in the moderate category. This is because the measurement only looks at students' cognitive abilities in processing numerical and mathematical information. However, when numeracy literacy and self-efficacy are measured simultaneously with learning outcomes, the

results are very strong because self-efficacy provides emotional and motivational encouragement that strengthens the use of numeracy skills in real situations. This is supported by the opinion of Faiza et al., (2024) which states that self-efficacy plays a role in increasing students' courage to try, innovate, and persist in facing challenges. Research indicates that students with high self-efficacy are more confident in using their numeracy skills, which leads to improved learning performance. Further strengthened by the opinion of Mellyzar et al., (2022) that Numeracy literacy encompasses the skills to understand, analyze, and use mathematical concepts in everyday situations. However, without confidence in their abilities (self-efficacy), students may hesitate or be afraid to try to solve complex problems so numeracy literacy becomes less than optimal if not supported by high self-efficacy. Based on the research findings, it can be concluded that numeracy literacy and self-efficacy are key factors that influence student learning outcomes. If students lack strong numeracy literacy and self-efficacy, their learning outcomes are likely to be low, and the learning goals set by teachers may not be achieved.

CONCLUSION

Based on the research findings, it can be concluded that there is a positive relationship between numeracy literacy and the learning outcomes of eighth-grade students, categorized as moderate. Additionally, a positive relationship exists between self-efficacy and the learning outcomes of eighth-grade students, classified as very strong. Furthermore, a positive and significant relationship is observed between numeracy literacy, self-efficacy, and the learning outcomes of eighth-grade students, also categorized as very strong.

ACKNOWLEDGEMENT

Thank you to SMAN 4 Tanjungpinang for helping to facilitate and support the implementation of this research.

REFERENCES

- Afandi, F., Jafar, M. I., & Adnan, K. (2021). Hubungan Kemampuan Literasi Numerasi dengan Hasil Belajar Matematika Siswa

- Kelas V SD Gugus II. *JIKAP PGSD: Jurnal Ilmiah Ilmu Kependidikan*, 5(3), 423–430.
- Aminah, S., Wijaya, T. T., & Yuspriyati, D. (2018). Analisis kemampuan komunikasi matematis siswa kelas viii pada materi himpunan. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 2(1), 15–22.
- Apriliani, M. A., Nurhasanah, N., & Maksum, A. (2022). Hubungan efikasi diri dengan hasil belajar PPKn kelas IV SDN Kecamatan Bekasi Timur. *Jurnal Pemikiran Dan Pengembangan Sekolah Dasar (JP2SD)*, 10(2), 214–227.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191.
- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ*, 1986(23–28), 2.
- Bandura, A. (2013). The role of self-efficacy in goal-based motivation. *New Developments in Goal Setting and Task Performance*, 147–157.
- Dhena, G. V. A., & Kua, M. Y. (2023). Upaya Peningkatan Literasi, Numerasi dan Penggunaan Media Pembelajaran IPA pada Pelaksanaan Pengenalan Lapangan Persekolahan (PLP) di SDI Tarawaja. *Jurnal Citra Magang Dan Persekolahan*, 1(4), 166–177.
- Ekowati, D. W., Astuti, Y. P., Utami, I. W. P., Mukhlishina, I., & Suwandayani, B. I. (2019). Literasi Numerasi Di SD Muhammadiyah.(ELSE) Elementary School Education Journal: Jurnal Pendidikan dan Pembelajaran Sekolah Dasar. DOI: <https://doi.org/10.30651/Else.V3i1>, 2541.
- Faiza, K. L., Zumrotun, E., & Sutriyani, W. (2024). Kemampuan Literasi Numerasi Ditinjau Dari Efikasi Diri Siswa Kelas V SD Negeri 2 Tahunan. *JURNAL PEMBELAJARAN DAN MATEMATIKA SIGMA (JPMS)*, 10(1), 1–7.
- Fitriana, E., & Ridlwan, M. K. (2021). Pembelajaran transformatif berbasis literasi dan numerasi di sekolah dasar. *TRIHAYU: Jurnal Pendidikan Ke-SD-An*, 8(1).
- Hamidah, H., Nirwansyah, N., Dwiyan, R., & Puspita, R. A. (2020). *Panduan pembelajaran Tematik Integratif jenjang Sekolah Dasar*.
- Han, W., Susanto, D., Dewayani, S., Pandora, P., Hanifah, N., Miftahussururi., Nento, M. N., & Akbari, Q. S. (2017). “Materi Pendukung Literasi Numerasi.” *Kementrian Pendidikan Dan Kebudayaan, Tim GLN Kemendikbud.*, 8(9), 1–58. <https://repository.kemdikbud.go.id/11628/1/materi-pendukung-literasi-numerasi-rev.pdf>
- Jufrida, J., Basuki, F. R., Pangestu, M. D., & Prasetya, N. A. D. (2019). Analisis Faktor Yang Mempengaruhi Hasil Belajar Ipa Dan Literasi Sains Di Smp Negeri 1 Muaro Jambi. *Edufisika: Jurnal Pendidikan Fisika*, 4(02), 31–38.
- Kalsum, U., & Sulastris, S. (2023). Analisis Kemampuan Literasi Numerasi Peserta Didik pada Kelas 5 SDN 027 Takatidung. *PASCAL (Journal of Physics and Science Learning)*, 7(1), 20–26.
- Khasanah, M., & Abduh, M. (2023). Pengaruh kemampuan literasi numerasi dan dukungan orang tua terhadap hasil belajar matematika soal cerita di sekolah dasar. *Jurnal Elementaria Edukasia*, 6(4), 1529–1543.
- Kurniawan, B., Wiharna, O., & Permana, T. (2017). Studi analisis faktor-faktor yang mempengaruhi hasil belajar pada mata pelajaran teknik listrik dasar otomotif. *Journal of Mechanical Engineering Education*, 4(2).
- Mellyzar, M., Unaida, R., Muliani, M., & Novita, N. (2022). Hubungan self-efficacy dan kemampuan literasi numerasi siswa: Ditinjau berdasarkan gender. *Lantanida Journal*, 9(2), 499127.
- Mukti, B., & Tentama, F. (2019). Faktor-faktor yang mempengaruhi efikasi diri akademik. *Prosiding Seminar Nasional Magister Psikologi Universitas Ahmad Dahlan*, 8(8), 341–347.
- Naser, M. J. A., Masnawati, E., & Darmawan, D. (2024). *Pengaruh Efikasi Diri , Fasilitas Belajar , dan Kemandirian Belajar terhadap Hasil Belajar Siswa Minu Berbek Waru*. 07(01), 599–612.
- Puspaningtyas, N. D., & Ulfa, M. (2020). Pelatihan soal matematika berbasis literasi numerasi pada siswa SMA IT Fitrah Insani. *Jurnal Pengabdian Masyarakat MIPA Dan Pendidikan MIPA*, 4(2), 137–140.
- Robbins, S. P., & Judge, T. A. (2015). Perilaku

- organisasi (Organizational behavior 16th edition). *Jakarta: McGraw Hill Dan Salemba Empat.*
- Rosmalah, S., & Hur'ainun, K. (2023). Hubungan antara kemampuan literasi numerasi dengan hasil belajar matematika siswa kelas tinggi. *Jurnal Pendidikan*, 2(4).
- Salsabilah, A. P., & Kurniasih, M. D. (2022). Analisis kemampuan literasi numerasi ditinjau dari efikasi diri pada peserta didik SMP. *Edumatica: Jurnal Pendidikan Matematika*, 12(2), 138–149.
- Salvia, N. Z., Sabrina, F. P., & Maula, I. (2022). Analisis kemampuan literasi numerasi peserta didik ditinjau dari kecemasan matematika. *ProSANDIKA UNIKAL (Prosiding Seminar Nasional Pendidikan Matematika Universitas Pekalongan)*, 3(1), 351–360.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif dan RND* (Ke 2). Alfa Beta.
- Toharudin, U., Rahmat, A., & Kurniawan, I. S. (2019). The important of self-efficacy and self-regulation in learning: How should a student be? *Journal of Physics: Conference Series*, 1157(2), 22074.
- Zagoto, S. F. L. (2019). Efikasi diri dalam proses pembelajaran. *Jurnal Review Pendidikan Dan Pengajaran (JRPP)*, 2(2), 386–391.