International Journal of Learning Reformation in Elementary Education
Vol. 3, No. 03, pp. 164-175
journal.iistr.org/index.php/IJLREE
DOI: 10.56741/ijlree.v3i03.652

The Influence of Pocket Money on the Desire to Learn Mathematics Among Elementary School Students

[1]Deny Hadi Siswanto*, [1]Akhmad Hanama
Corresponding Author: *2207050007@webmail.uad.ac.id
[1] Ahmad Dahlan University, Yogyakarta, Indonesia

ARTICLE INFO

Article history
Received 27 June 2024
Revised 4 December 2024
Accepted 5 December 2024

ABSTRACT

This study aims to investigate the relationship between the provision of pocket money and the level of desire for mathematics learning among 6th-grade students at SD. Muhammadiyah Pulokadang, Bantul, Indonesia (a private elementary school). This study employs a symmetric correlational methodology with 30 students participating as the sample. Information was collected through the questionnaires and the examination of relevant documentation. Data analysis was performed using descriptive statistical techniques and inferential statistical methods. The results of the descriptive analysis indicate that the average score for the pocket money questionnaire was 59.23, indicating a sufficient category, while the average score for the desire to learn mathematics questionnaire was 66.40, indicating a good category. The regression coefficient results, with a significance level set at 5%, yielded a significance value of 0.021, which is less than 0.05. Based on these findings, there is a significant and positive relationship between the provision of pocket money and the level of desire to learn mathematics among students. Additionally, this also suggests that the provision of pocket money can have a positive influence on the level of desire to learn mathematics among 6th-grade students.

This is an open-access article under the CC–BY-SA license.

Keywords
Elementary School
Learning Interest
Mathematics
Pocket Money

Introduction

Education plays a central role in shaping character and stimulating individual potential [1]. According to Fatimah et al. [2] and Putri & Siswanto [3], the learning process provides a critical foundation for the intellectual, moral, and social development of students from an early age. Elementary School plays a crucial role in providing a solid foundation for knowledge and developing positive attitudes toward learning, as noted by Sitepu et al. [4]. At the elementary level, students begin to develop the academic and behavioral foundations that will support them throughout their learning lives.

One core subject that plays a strategic role in the cognitive development of students in mathematics [5]. According to Lestari et al. [6] and Hariyani et al. [7]Mathematics not only trains numerical abilities but also problem-solving and decision-making skills that are essential for daily life. Through mathematics, students learn how to approach and solve problems in a structured and systematic manner. Therefore, the role of elementary schools and mathematics education within them is very important in establishing a strong foundation for students' cognitive and academic development in the future.

Mastery of several mathematical concepts provides benefits in the academic context at the elementary level [8]. Moreover, Schulz [9] stated that mathematical concepts also form the basis of rational thinking and quality analysis at later stages of development. Learning mathematics trains students' logical thinking skills, problem-solving, pattern identification, and creativity in completing mathematical tasks [10]. Additionally, learning mathematics helps them face everyday challenges systematically and critically [11].

The explanation of the influence of economic factors on the learning process of students covers several aspects [12]. Economic factors play a significant role in the success of students' learning, as mentioned by Afandi et al. [13]. This is not limited to the influence of education but also includes various economic aspects that affect students' daily lives.

According to Handayani et al. [14], pocket money is a crucial form of financial support for students, especially at the elementary school level. Moreover, according to Asrofi & Mustikawati [15] and Kalla et al. [16], pocket money not only allows students to meet their basic needs, such as food and stationery but also enhances their sense of security and well-being, which is vital for concentration and participation in the learning process.

Zulkarnain et al. [17] added that adequate pocket money availability enables students to create a more conducive learning environment. With sufficient financial support, students can purchase books, stationery, and other learning materials needed to study effectively [18], [19]. Furthermore, they can attend additional lessons or extracurricular activities that can enrich their learning experiences.

Conversely, a lack of pocket money can be a serious impediment to academic achievement [20], [21]. Students who do not have adequate financial support may struggle to buy the necessary books or stationery, which can reduce their participation in learning activities. According to Siswanto et al. [22], this financial limitation can also diminish their motivation to achieve optimal academic performance because they may feel less capable compared to their peers who have better financial support. Adequate financial support, including sufficient pocket money, is an important factor in creating an optimal learning environment [23]. It helps students to focus more on learning, increases active participation, and motivates them to achieve high academic performance.

To improve learning achievement, it is crucial to seriously consider the factors influencing students' learning outcomes [24]. The challenge is how to encourage students to increase their enthusiasm for learning to achieve optimal performance. According to Munisamy et al. [25], learning enthusiasm can be influenced by internal and external factors, requiring research to find the right solutions to foster a learning spirit that supports the best achievements. Addressing this issue requires high motivation from students.

In the learning process, motivation is essential, where learning motivation can arise from external factors or oneself. Educational success depends on the learning process of students. Effective learning methods are crucial for good learning outcomes, so students with good study habits tend to live disciplined and responsible lives [26].

Additionally, families are responsible for providing children's education funds, which require significant costs. González-Pérez & Ramírez-Montoy [27] stated that parents with high socioeconomic status are more able to meet school needs compared to those with lower status, and this affects children's learning success. Education funds include school fees and operational costs such as pocket money. Pocket money helps the learning process, teaches responsibility in money usage and management, and is needed for transportation and snacks at school [28].

Understanding the role of pocket money in the context of learning encourages research related to its influence on the desire to learn mathematics at the elementary. By focusing on the relationship between pocket money and the desire to learn mathematics, valuable information is expected to be revealed about how this economic factor shapes students' perceptions and attitudes toward learning mathematics.

Material and Methods

This study is a quantitative research using a correlational design. The main objective of this study is to assess the correlation between the provision of pocket money and students' desire to learn. This study was conducted in January 2024 and involved all 6th-grade students

at Muhammadiyah Pulokadang Elementary School, totaling 30 students. The sampling was done using a saturated sampling technique according to Sugiyono [29]. In this study, data were collected through two main methods: a closed-ended questionnaire and documentation of the questionnaire distribution activities and the number of 6th-grade students. The use of closed-ended questionnaires allows the researcher to obtain structured and easily analyzable data, as respondents provide predetermined answers. Documentation of the questionnaire distribution activities helps ensure that the data collected is consistent and representative and provides a clear picture of the number of students involved in the study. The criteria used in this study are based on Widoyoko [30], which have been modified, and the results are then converted into data presented in Table 1.

Table 1. Classification of Validity Criteria

No	Score	Criteria
1	$81.00 \leq \bar{X} \leq 100.00$	Very good
2	$61.00 \leq \bar{X} \leq 80.99$	Good
3	$41.00 \leq \bar{X} \leq 60.99$	Enough
4	$21.00 \leq \bar{X} \leq 40.99$	Not Enough
5	$00.00 \leq \bar{X} \leq 20.99$	Very less

Furthermore, both descriptive and inferential statistical techniques were used to analyze the collected data. Descriptive statistics were employed to describe and summarize the data quantitatively, for instance, by calculating mean, median, mode, and frequency distribution. This provides an overview of the characteristics of the data obtained from the questionnaire. The purpose of this analysis process is to answer the research questions and test the proposed hypotheses. By using descriptive statistics, the researcher can understand the general patterns and basic characteristics of the collected data.

Meanwhile, inferential statistics allow the researcher to test the relationships between variables and determine whether the study's findings can be generalized to a larger population. Overall, the combination of systematic data collection methods and sophisticated analysis techniques ensures that the results of this study can provide meaningful and valid insights into the influence of economic factors on students' learning processes.

Results

The results of the survey on the provision of pocket money in the upper grades of Muhammadiyah Pulokadang Elementary School show significant variation in scores. The highest recorded score reached 89.33, while the lowest recorded score was 68.00. The mode of the data distribution was 82.67, with a median value of 79.33. The average score was 78.97, and the standard deviation of the data was 6.58. More detailed information regarding the distribution of pocket money provision by respondents can be found in the attached table.

Table 2. Description of the Pocket Money Provision Survey Results

Category	Result
N	30
Average score	59.23
Maximum Value	89.33
Minimum Value	68.00
Total Value	2369.33
Mode	82.67
Median	79.33
Mean	78.97
Std. Deviation	6.58

Based on Table 2, the average score from the pocket money provision survey was 59.23, which was then adjusted according to the established conversion guidelines. Therefore, it can be concluded that the provision of pocket money to 6th-grade students at Muhammadiyah Pulokadang Elementary School can be categorized as "moderate". After obtaining the average, highest, lowest, and median values, a distribution table was compiled to facilitate calculations. The frequency distribution table for the survey scores on pocket money provision is presented in Table 3.

Table 3. Frequency Distribution Table of Pocket Money Provision Survey Scores

Interval	fi	xi	$fi.xi$	percentage
68-72	8	70	560	23.53
73-77	4	75	300	12.61
78-82	7	80	560	23.53
83-87	6	85	510	21.43
88-92	5	90	450	18.91
Total	30	400	2380	100.00
Average	6	80	476	20.00

Table 3 above displays the frequency distribution of the pocket money provision survey scores for 6th-grade students at Muhammadiyah Pulokadang Elementary School. The lowest frequency is found in the score interval of 73-77 with a frequency of 4. Meanwhile, the highest frequency is in the score range of 68-72, with a frequency of 8, indicating that out of 17 student respondents, they received pocket money provision survey scores in the range of 64-68.

Based on the survey results regarding pocket money provision in the upper grades of Muhammadiyah Pulokadang Elementary School, the highest score obtained was 96.00, while the lowest was 81.33. The mode of the data is 86.67, with a median of 88. The average score was 88.53, with a standard deviation of 6.58. Further information regarding student mathematics learning interest data can be found in the following table.

Table 4 shows the average score from the mathematics learning interest survey was 66.40, which was then adjusted according to the established conversion guidelines. Therefore, it can be concluded that the provision of pocket money to 6th-grade students at Muhammadiyah Pulokadang Elementary School can be categorized as "good".

Table 4. Description of Mathematics Learning Interest Survey Results

Category	Result
N	30
Average score	66.40
Maximum Value	96.00
Minimum Value	81.33
Total Value	2656.00
Mode	86.67
Median	88.00
Mean	88.53
Std. Deviation	4.49

After obtaining the average, highest, lowest, and median values, a distribution table was created to facilitate calculations. The frequency distribution table for the survey scores on students' mathematics learning interests can be found in Table 5.

Table 5. Frequency Distribution Table of Pocket Money Provision Survey Scores

Interval	fi	xi	$fi.xi$	percentage
81-84	6	82.50	495	18.64
85-88	10	86.50	865	32.58
89-92	7	90.50	633.5	18.64
93-96	7	94.50	661.5	30.13
Total	30	354	2655	100
Average	7.50	88.50	663.75	25.00

Based on the frequency distribution of the pocket money provision survey scores for 6th-grade students at Muhammadiyah Pulokadang Elementary School, the data was processed using SPSS-25 to provide a clearer picture of the pocket money distribution.

In this study, testing was conducted using SPSS-25 with the Shapiro-Wilk test. The purpose of this test was to determine whether the processed data exhibited a normal distribution or not. Information regarding the results of the normality test for the variables of pocket money provision and mathematics learning interest level of students can be found in Table 6.

Table 6. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pocket Money	.122	39	.200*	.947	30	.142
Learning Interest	.130	30	.200*	.940	30	.091

* This is a lower bound of the true significance
a Lilliefors Significance Correction

Based on the presented table, it can be observed that the pocket money provision variable has a significance value of 0.142, which is greater than 0.05. Meanwhile, the mathematics learning interest variable obtains a significance value of 0.091 > 0.05. Therefore, the conclusion is that both variables in the study exhibit a normal distribution. Next, an ANOVA

test will be conducted to determine whether the sampled data comes from populations that have similar variability levels. The results of this test are available in Table 7.

Table 7. ANOVA Test Results

Score	Sum of Squares	df	Mean Square	F	Sig.
Between Group	8764610.400	1	8764610.400	33.164	.000
Within Groups	15328459.60	58	264283.786		
Total	24093070.00	59			

Based on the figure above, the significance value is 0.000. Deciding with a significance level of 5%, where the significance value 0.000 < 0.05, indicates that the significance value is lower than 0.05. This implies that the variance between the two data groups is homogeneous. Next, testing whether there is an influence of pocket money provision on mathematics learning interest (See Table 8).

Table 8. Regression Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	71066.785	635.924		11.176	.000
	Pocket Money	.197	.080	.421	2.454	.021

Dependent Variable: Learning Interest

From the figure above, a significance value of 0.021 was found, which is smaller than 0.05. Therefore, with the rejection of H_0, It indicates a positive and significant relationship between pocket money provision and the mathematics learning interest of students. The extent of the influence of pocket money on mathematics learning interest can be seen in the following Table 9.

Table 9. Magnitude of Influence

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.421[a]	.177	.148	284.55964

a Predictors: (Constant), Pocket Money

Based on the figure above, it is observed that the R Square value is 0.177, which means that pocket money has an influence of 17.7% on mathematics learning interest, while 82.3% is influenced by other unexamined variables.

Discussion

This study employed questionnaires to collect data from 30 6th-grade students at Muhammadiyah Pulokadang Elementary School. The research focused on the relationship between pocket money and students' level of interest in learning mathematics. Findings revealed that the average pocket money for 6th-grade students at Muhammadiyah Pulokadang

Elementary School reached a score of 59.23, categorized as "sufficient". This study supports the findings of [31] and [32], indicating a generally positive perception of pocket money.

Several key factors influencing pocket money include parents' understanding of its importance and family income. The average score of 59.23 indicates that, overall, students receive a reasonably adequate amount of pocket money according to the standards set in this study. The "sufficient" category suggests that the majority of students receive an adequate amount of pocket money to meet their basic needs during school hours. Parental understanding of the importance of providing pocket money plays a significant role [33].

Parents who grasp the significance of pocket money tend to provide adequate financial support to their children [34]. This understanding includes awareness that pocket money helps meet students' daily needs, such as purchasing food, stationery, and other educational necessities. Family income levels greatly influence the amount of pocket money provided to children [35].

Families with higher incomes tend to provide more pocket money because they have broader financial resources. With higher incomes, parents can allocate more money for their children's daily needs, including pocket money. Conversely, families with lower incomes may provide less pocket money due to financial constraints. Nevertheless, parents in lower-income families still strive to meet their children's needs to the best of their ability. Findings from [37] and [38], suggest that parents may seek other alternatives to support their children's needs, such as assistance from government programs or local communities, or by emphasizing the importance of wise money management to their children.

Overall, these income disparities demonstrate how economic factors can influence students' learning interests. Students from higher-income families have financial advantages that can support their academic achievements, while those from lower-income families may face additional challenges in meeting their educational needs.

In addition to income levels, parents also tend to provide pocket money based on their children's needs. This includes assessing the necessary costs for transportation, lunch, and other school activities. Parents who provide pocket money according to their children's needs help ensure that students have sufficient funds to fully participate in school activities without experiencing shortages. Overall, the questionnaire results align with the findings of [39] and [40], highlighting the significant roles of economic factors and parental understanding in determining the amount of pocket money given to students.

Adequate pocket money not only helps students meet their daily needs but also creates a more conducive environment for learning and academic achievement. According to [40], with good financial support, students can focus more on learning activities and be more motivated

to achieve higher academic performance. These findings are consistent with the findings of [42] and [43], emphasizing the importance of regular pocket money in contributing to students' educational success.

The learning interest of 6th-grade students at Muhammadiyah Pulokadang Elementary School, as seen in this study, averages a score of 66.40, categorized as "good". This is consistent with the views of [43], who highlight the key role of interest in achieving academic success. Learning facilities also play a crucial role, with this study showing that such facilities can enhance students' enthusiasm and learning outcomes.

Findings from [46] and [47] indicate that students' learning interests are influenced by various internal and external factors. Pocket money is considered a significant internal factor in enhancing students' learning interests. A positive and significant correlation between pocket money and students' learning interests was also found, emphasizing the importance of this factor in shaping students' learning interests.

This study is expected to contribute to the development of more effective mathematics learning strategies in elementary schools. Furthermore, these findings are expected to enhance the understanding of parents, teachers, and relevant parties regarding the importance of pocket money in shaping students' learning interests. With a better understanding of this, more effective support programs can be designed to improve the quality of mathematics learning and motivate students to develop their learning interests.

Conclusion

Based on the research question formulation and the research findings obtained, it can be concluded that the provision of pocket money to 6th-grade students at Muhammadiyah Pulokadang Elementry School averages a score of 59.23, classified as a sufficient level. Furthermore, the mathematics learning interest of 6th-grade students averages a score of 66.40, categorized as good. A deeper examination of the data reveals a positive and significant correlation between pocket money and mathematics learning interest among 6th-grade students at Muhammadiyah Pulokadang Elementary School. This is confirmed through the regression coefficient with a significance level of 5%, yielding a value of $0.021 < 0.05$. This value indicates a moderate correlation, suggesting that higher pocket money leads to higher mathematics learning interest among students, and conversely, lower pocket money correlates with lower learning interest. These findings indicate that pocket money can have a positive influence on the mathematics learning interest of 6th-grade students at Muhammadiyah Pulokadang Elementary School. For future research, it would be beneficial to explore modifications in the relationship between pocket money and students' interests, achievements, and motivation in subjects other than mathematics.

References

[1] N. Munafiah, C. Novianti, and F. Ferianto, "The Position of Teachers in the Development of Early Childhood Character Education," *Al-Athfaal J. Ilm. Pendidik. Anak Usia Dini*, vol. 6, no. 1, pp. 54–62, 2023, doi: 10.24042/ajipaud.v6i1.15884.

[2] S. S., F. Fatimah, A. Syamsuddin, and A. H. Dewantara, "Character Development Model for Early Childhood Learners at Islamic Kindergarten," *Didakt. J. Kependidikan*, vol. 17, no. 1, pp. 43–57, 2023, doi: 10.30863/didaktika.v17i1.5122.

[3] H. A. Putri and D. H. Siswanto, "Teaching at The Right Level (TaRL) as an Implementation of New Education Concepts in the Insights of Ki Hajar Dewantara," *Indones. J. Educ. Sci. Technol.*, vol. 3, no. 2, pp. 89–100, 2024, doi: https://doi.org/10.55927/nurture.v3i2.9297.

[4] J. W. Sitopu, M. Khairani, M. Roza, L. Judijant, and Aslan, "The Importance Of Integrating Mathematical Literacy in the Primary Education Curriculum: A Literature Review," *Int. J. Teach. Learn.*, vol. 2, no. 1, pp. 121–134, 2024.

[5] D. H. Siswanto, K. Tanikawa, E. K. Alghiffari, M. Limori, and D. D. Aprilia, "A Systematic Review: Use of GeoGebra in Mathematics Learning at Junior High School in Indonesia and Japan," *J. Pendidik. Mat.*, vol. 7, no. 1, pp. 1–20, 2024, doi: http://dx.doi.org/10.21043/jpmk.v7i1.26201.

[6] E. D. Lestari, N. Rizkalla, and P. Purnamaningsih, "the Effect of Perceived University Support, Entrepreneurial Self-Efficacy and Proactive Personality in Promoting Student Entrepreneurial Intention in Indonesia," *J. Manag. Bus. Educ.*, vol. 5, no. 2, pp. 169–197, 2022, doi: 10.35564/jmbe.2022.0011.

[7] M. Hariyani, T. Herman, D. Suryadi, and S. Prabawanto, "Exploration of Student Learning Obstacles in Solving Fraction Problems in Elementary School," *Int. J. Educ. Methodol.*, vol. 8, no. 3, pp. 505–515, 2022.

[8] T. Koponen, T. Aro, P. Peura, M. Leskinen, H. Viholainen, and M. Aro, "Benefits of Integrating an Explicit Self-Efficacy Intervention With Calculation Strategy Training for Low-Performing Elementary Students," *Front. Psychol.*, vol. 12, no. August, 2021, doi: 10.3389/fpsyg.2021.714379.

[9] A. Schulz, "Assessing student teachers' procedural fluency and strategic competence in operating and mathematizing with natural and rational numbers," *J. Math. Teach. Educ.*, 2023, doi: 10.1007/s10857-023-09590-7.

[10] M. I. Rosyada and S. E. Wibowo, "Analysis of Mathematics Problem-Solving Steps Given Student Learning Styles," *AKSIOMA J. Progr. Stud. Pendidik. Mat.*, vol. 12, no. 1, pp. 1332–1343, 2023.

[11] D. H. Siswanto, D. G. A. Maretha, E. K. Alghiffari, and K. R. Mahmudah, "Design and Testing of Scientific-based SPLDV Flip Worksheets," *Indones. J. Educ. Sci. Technol.*, vol. 3, no. 2, pp. 75–88, 2024, doi: https://doi.org/10.55927/nurture.v3i2.9312.

[12] D. H. Siswanto and N. R. N. Peni, "Publication Trend on the Plomp Development Model in Mathematics Education," *Asian Pendidik.*, vol. 3, no. 2, pp. 71–80, 2023, [Online]. Available: https://doi.org/10.53797/aspen.v3i2.9.2023

[13] M. M. Afandi, W. Astiwi, H. A. Putri, N. Wahyuni, E. K. Alghiffari, and D. H. Siswanto, "Optimizing Marketing Strategies for Micro, Small, and Medium Enterprises (MSMEs) through Digital Marketing Training," *Civ. J. Pengabdi. Masy.*, vol. 1, no. 1, pp. 37–49, 2024, [Online]. Available: https://journal.idscipub.com/civitas/article/view/349

[14] E. D. Handayani, E. Kusnawati, N. M. Sari, P. Yaniawati, and M. I. Zulkarnaen, "Implementation of geogebra-assisted creative problem-solving model to improve problem solving ability and learning interest students," *Al-Jabar J. Pendidik. Mat.*, vol. 13, no. 1, pp. 33–48, 2022, doi: 10.24042/ajpm.v13i1.11341.

[15] M. Asrofi, M. Pd, and E. Mustikawati, "Menumbuhkan Literasi Keuangan Melalui Progam Market Day di SDIT Lukman AlHakim Internasional," *AN NUR J. Stud. Islam*, vol. 12, no. 2, pp. 185–208, 2020, [Online]. Available: https://jurnalannur.ac.id/index.php/An-Nur/article/view/83

[16] S. G. P. Kalla, M. L. Nur, and D. Boeky, "Determinants of Breakfast Habits for Fatukoa Elementary School Students in Kupang City During the COVID-19 Pandemic," *J. Community Health*, vol. 4, no. 3, pp. 191–197, 2022, [Online]. Available: https://doi.org/10.35508/ljch

[17] Z. Zulkarnain, B. S. Wijaya, U. A. Jaya, and M. Afrizal, "Penyuluhan Peningkatan Literasi Keuangan di Kalangan Siswa dan Warga Sekolah," *J. Hum. Educ.*, vol. 4, no. 1, pp. 443–457, 2024.

[18] H. Febrianti, Y. Aulia, and S. Yolanda, "Education Financing in Realizing Quality Education," *Int. J. Educ. Dyn.*, vol. 5, no. 2, pp. 281–288, 2023.

[19] O. A. Ajani, "Challenges of school resources management for curriculum delivery in South African Rural High Schools: Principals' perceptions on the way forward," *Int. J. Res. Bus. Soc. Sci. (2147-*

4478), vol. 12, no. 6, pp. 275–285, 2023, doi: 10.20525/ijrbs.v12i6.2709.
[20] R. P. Raj and S. P. Chand, "Access and Equity: The Relationship Between Parent's Socioeconomic Status and Secondary School Student's Academic Achievement," *Int. J. Instr.*, vol. 16, no. 3, pp. 1013–1032, 2023, doi: 10.29333/iji.2023.16354a.
[21] M. U. Al Ansyari and Hasbi, "The Effect Of Parents ' Socioeconomic Status And Pocket Money Management On Financial Self-Efficacy Through Informal Economic Education At Sdn Inpress Karunrung," *IJEVSS International J. Educ. Vocat. Soc. Sci.*, vol. 03, no. 01, pp. 455–472, 2024, [Online]. Available: https://e-journal.citaconsultindo.or.id/index.php/IJEVSS
[22] D. H. Siswanto, H. Kuswantara, and N. Wahyuni, "Implementation of Problem Based Learning Approach Culturally Responsive Teaching to Enhance Engagement and Learning Outcomes in Algebraic Function Limit Material," *Educ. JSMT*, vol. 12, no. 1, pp. 80–88, 2024.
[23] A. A. Waldani, C. C. Dewi, H. K. Ningrum, P. Kusumaningrum, and R. Cahyaningrum, "Pengaruh Latar Belakang Ekonomi Orang Tua dan Motivasi Belajar Mahasiswa terhadap Prestasi Belajar di Fakultas Ekonomi Universitas Negeri Semarang Alifia," *J. Educ. Technol.*, vol. 1, no. 1, pp. 30–36, 2021.
[24] S. Timotheou *et al.*, *Impacts of digital technologies on education and factors influencing schools' digital capacity and transformation: A literature review*, vol. 28, no. 6. Springer US, 2023. doi: 10.1007/s10639-022-11431-8.
[25] A. Munisamy, S. Sahid, and M. Hussin, "Socioeconomic Sustainability for Low-Income Households: The Mediating Role of Financial Well-Being," *Sustain.*, vol. 14, no. 15, 2022, doi: 10.3390/su14159752.
[26] A. B. P. D. A. F. Syah, L. Rachmawati, and D. H. Siswanto, "Validity and Practicality of the Game-Based Learning Media for Mathematical Logic Using the Quiz Whizzer Application," *JOELI J. Educ. Learn. Innov.*, vol. 1, no. 2, pp. 107–118, 2024, doi: http://doi.org/10.72204/xpxg2d74.
[27] L. I. González-Pérez and M. S. Ramírez-Montoy, "Components of Education 4.0 in 21st Century Skills Frameworks: Systematic Review," *Sustain.*, vol. 14, no. 3, pp. 1–31, 2022.
[28] P. H. Witono, "Pengaruh Pendidikan Keuangan di Keluarga, Uang Saku dan Gaya Hidup Terhadap Pembentukan Karakter Mahasiswa," *Indones. Character J.*, vol. 1, no. 1, pp. 1–8, 2023, doi: 10.21512/icj.v1i1.10306.
[29] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Bandung: Alfabeta, 2019.
[30] E. P. Widoyoko, *Penilaian Hasil Pembelajaran Di Sekolah*. Yogyakarta: Yogyakarta: Pustaka Pelajar, 2018.
[31] D. N. Assah and N. Nurlailah, "Pengaruh Uang Saku dan Gaya Hidup terhadap Minat Menabung," *J. Kolaboratif Sains*, vol. 5, no. 6, pp. 333–342, 2022, doi: 10.56338/jks.v5i6.2501.
[32] D. H. Siswanto, "Dampak Uang Saku Terhadap Keinginan Belajar Matematika Pada Murid Sekolah Dasar," *J. Lingk. Mutu Pendidik.*, vol. 21, no. 1, pp. 37–46, 2024, doi: https://doi.org/10.54124/jlmp.v21i1.121.
[33] L. Murugiah, R. Ismail, H. M. Taib, S. D. Applanaidu, and M. N. H. B. H. Long, "Children's understanding of financial literacy and parents' choice of financial knowledge learning methods in Malaysia," *MethodsX*, vol. 11, no. August, 2023, doi: 10.1016/j.mex.2023.102383.
[34] M. Amorim, "Socioeconomic Disparities in Parental Spending after Universal Cash Transfers: The Case of the Alaska Dividend," *Socioecon. Disparities Parent. Spend. Socioecon.*, vol. 101, no. 1, pp. 252–280, 2021.
[35] Fatimah, Y. Fitria, and Y. Erita, "Pengaruh Pembelajaran Tematik Terpadu Connected Terhadap Pembelajaran Matematika Siswa Sekolah Dasar," *J. Perseda*, vol. 4, no. 2, pp. 110–120, 2023, [Online]. Available: https://jurnal.ummi.ac.id/index.php/perseda
[36] G. B. Melton and J. D. McLeigh, "The Nature, Logic, and Significance of Strong Communities for Children," *Int. J. Child Maltreatment Res. Policy Pract.*, vol. 3, no. 2, pp. 125–161, 2020, doi: 10.1007/s42448-020-00050-w.
[37] L. A. Gennetian, E. Shafir, J. L. Aber, and J. De Hoop, "Behavioral Insights into Cash Transfers to Families with Children," *Behav. Sci. Policy*, vol. 7, no. 1, pp. 71–92, 2021, doi: 10.1177/237946152100700107.
[38] P. Böhm, G. Böhmová, J. Gazdíková, and V. Šimková, "Determinants of Financial Literacy: Analysis of the Impact of Family and Socioeconomic Variables on Undergraduate Students in the Slovak Republic," *J. Risk Financ. Manag.*, vol. 16, no. 4, 2023, doi: 10.3390/jrfm16040252.
[39] Y. Maulidina and T. Kurniawati, "The Effect of E-Money, Economic Literacy and Parents' Income on Consumptive Behavior," *Econ. Educ. Anal. J.*, vol. 11, no. 2, pp. 191–200, 2022, doi: 10.15294/eeaj.v11i2.54254.
[40] Y. F. Lee, G. J. Hwang, and P. Y. Chen, "Impacts of an AI-based chatbot on college students' after-

class review, academic performance, self-efficacy, learning attitude, and motivation," *Educ. Technol. Res. Dev.*, vol. 70, no. 5, pp. 1843–1865, 2022, doi: 10.1007/s11423-022-10142-8.
[41] C. Duquennois, "Fictional Money, Real Costs: Impacts of Financial Salience on Disadvantaged Students," *Am. Econ. Rev.*, vol. 112, no. 3, pp. 798–826, 2022, doi: 10.1257/AER.20201661.
[42] T. Şengönül, "A Review of the Relationship between Parental Involvement and Children's Academic Achievement and the Role of Family Socioeconomic Status in this Relationship," *Pegem Egit. ve Ogr. Derg.*, vol. 12, no. 2, pp. 32–57, 2022, doi: 10.47750/pegegog.12.02.04.
[43] N. Azis and Amiruddin, "Motivasi Guru Pendidikan Agama Islam Dalam Meningkatkan Minat Belajar Siswa," *TARBAWI J. Pendidik. Agama Islam*, vol. 5, no. 1, pp. 56–74, 2020, [Online]. Available: https://journal.unismuh.ac.id/index.php/tarbawi/article/view/3344
[44] G. Maheshwari, K. L. Kha, and A. R. A. Arokiasamy, *Factors affecting students' entrepreneurial intentions: a systematic review (2005–2022) for future directions in theory and practice*, vol. 73, no. 4. Springer International Publishing, 2023. doi: 10.1007/s11301-022-00289-2.
[45] Suradin, M. Yusnan, Tarno, L. Saputra, and S. Omar, "Enhancing Student Motivation to Learn Using Self-Determination Theory as a Framework," *Bul. Edukasi Indones.*, vol. 2, no. 03, pp. 113–120, 2023, doi: 10.56741/bei.v2i03.240.

Authors



Deny Hadi Siswanto is a student in the Master of Mathematics Education at the Faculty of Teacher Training and Education, Ahmad Dahlan University, Yogyakarta. As a student, he developed creative and effective teaching methods and monitored individual student learning progress. (email: 2207050007@webmail.uad.ac.id).



Akhmad Hanama is a student at the Master of Education Management at the Faculty of Teacher Training and Education, Ahmad Dahlan University, Yogyakarta. As a student, he developed creative and effective teaching methods and encouraged student collaboration. (email: akhmad2107046016@webmail.uad.ac.id).