



JOURNAL

**THE EFFECT OF LEARNING INTEREST, LEARNING MOTIVATION AND
FAMILY ENVIRONMENT ON LEARNING OUTCOMES OF BASIC
ACCOUNTING SUBJECTS (A Study on Students of State Vocational High School 48
Jakarta)**

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Abstract

This study aimed to examine the influence of learning interest, learning motivation, and family environment on students' learning outcomes in Basic Accounting at State Vocational High School 48 Jakarta. The study involved a population of 143 students enrolled in the Accounting Program, from which 105 respondents were selected using proportional random sampling. A quantitative research approach with a survey method was employed, and data were collected through a structured questionnaire. The collected data were analyzed using descriptive statistics, validity and reliability tests, normality test, multiple linear regression analysis, hypothesis testing (t-test and F-test), and coefficient of determination analysis. The findings indicate that: (1) learning interest has a positive and significant effect on students' learning outcomes; (2) learning motivation has a positive and significant effect on students' learning outcomes; (3) family environment has a positive and significant effect on students' learning outcomes; and (4) learning interest, learning motivation, and family environment simultaneously have a positive and significant effect on students' learning outcomes. These findings suggest that improving students' learning outcomes requires not only strengthening internal factors, such as learning interest and learning motivation, but also fostering a supportive family environment that facilitates effective learning.

Keywords: learning interest, learning motivation, family environment, students' learning outcomes

BACKGROUND

As we enter the Industry 4.0 era in the 21st century, Indonesia faces a situation in which every aspect of life must be able to withstand the impacts that will arise and adapt accordingly. Education is one of the sectors that will be affected by this era. According to Fadil (2023), education is a key factor influencing whether a nation's civilization will advance or not. In line with this, Suratinah, Lestari, & Julinas (2022) also argue that a country's level of human capital education is directly proportional to its progress. Learning outcomes indicate the extent to which students have achieved intended knowledge, skills, and attitudes after instruction. In vocational accounting education, strong outcomes are important because students must master concepts and procedures that form the foundation for later subjects and workplace competence. Achievement is shaped not only by instructional delivery and cognitive ability but also by internal learner conditions and the social environment surrounding study.

The following is a ranking of the education systems of countries in the world.

Country	Education Rank 2024	Education Rank 2023
South Korea	1	19
Denmark	2	10
Netherlands	3	11
Belgium	4	18
Slovenia	5	45
Japan	6	6
Germany	7	3
Finland	8	12
Norway	9	13
Ireland	10	21
Singapore	11	20
United Kingdom	12	2
China	13	23
...	...	...
Indonesia	67	58

Figure 1. 1 Education Rangkings by Country

Source: World Population Review



Based on the figure, it can be seen that the top ten countries with the best education systems are developed countries. This aligns with the opinion of Octavianus et al. (2026), who stated that education is a crucial factor and the spearhead of national progress (Adnyana & Yudaparmita, 2022). A good quality education in a nation indicates that the nation's progress is also improving (Hasanah et al., 2024).

Based on the figure, Indonesia ranked 67th in 2024, down from 58th the previous year. Educational quality can be measured by the Programme for International Student Assessment (PISA) scores. PISA is an assessment program aimed at measuring the knowledge and skills of 15-year-olds in the areas of science literacy, mathematics literacy, and reading literacy (Suwarno & Ardani, 2022).



Figure 1.2 Graph of OECD PISA scores

Source: OECD Publication PISA 2022 Result Vol.1

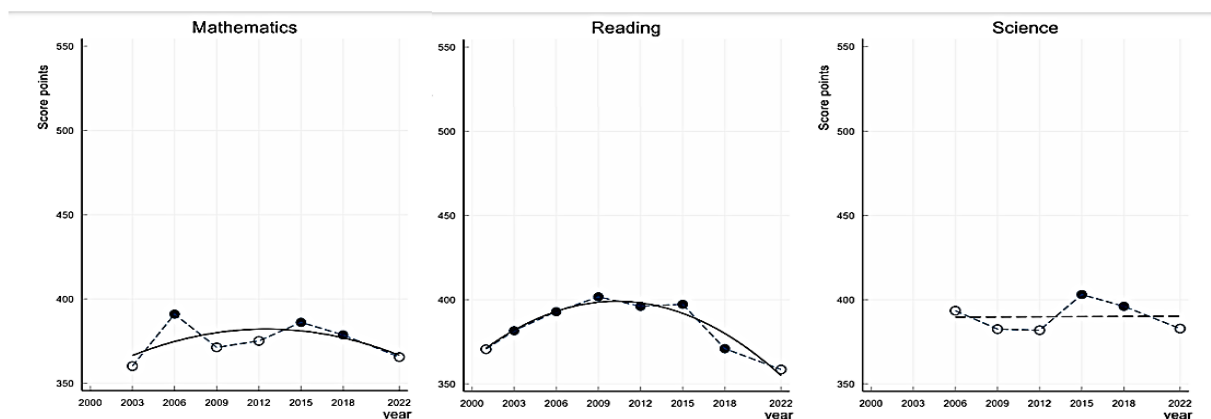


Figure 1.3 Graph of Indonesia's PISA scores

Source: OECD Publication PISA 2022 Result Vol.1

Based on the two graphs above, it can be seen that Indonesia's PISA score is still below the average PISA score. In 2022, Indonesia's math literacy score was 366, while the average PISA score was 480. For reading literacy, the score was 359, while the average score was 482. Finally, Indonesia's science literacy score was 383, with the average PISA score being 491. Overall, Indonesia's PISA score remains below the average. Therefore, it is crucial for the government to strive to improve the outcomes and quality of education in Indonesia.

There are many factors that can influence learning outcomes. These factors are divided into two categories: internal and external. Kapitan & Aseng (2023) state that internal factors are those that originate from within the student, such as physiological factors (physical condition, health, and physical disabilities) and psychological factors (motivation, interests, talents, study habits, and concentration). Meanwhile, external factors are aspects outside the student, including family factors (parents' educational background and parenting style, relationships among family members, and the family environment), school factors (teaching methods, learning methods, and supporting facilities and infrastructure), and other factors such as the community environment.



Learning interest refers to sustained attention, enjoyment, curiosity, and active involvement in learning activities. Interested students are more likely to focus on explanations, ask questions, practice accounting procedures, and persist when tasks become difficult.

Learning motivation provides the drive to set goals, exert effort, seek help, complete assignments, and continue learning. Although related, interest and motivation represent distinct mechanisms: interest concerns attraction and engagement, while motivation concerns direction, intensity, and persistence.

The family environment is the first social setting in which study habits, discipline, expectations, and emotional support are developed. Parental attention, relationships among family members, the atmosphere at home, and economic resources can facilitate or hinder learning. A supportive home may provide time, space, materials, encouragement, and monitoring. Conversely, weak involvement or an uncondusive atmosphere can reduce the benefit of school instruction.

Earlier studies generally identify positive relationships between these factors and achievement, but findings vary by subject, school context, and measurement. Edriani, Harmelia, & Gumanti (2021), Oknaryana & Irfani (2022), Ratnasari & Sudarwanto (2022), and Riadin & Estimutri (2022) show that there is a positive and significant relationship between learning motivation and academic achievement. Furthermore, studies by Anggraini et al (2022), Datu, Tumurang, & Sumilat (2022) and Pratama & Ghofur (2021) indicate that there is a positive and significant relationship between learning motivation and learning outcomes. Furthermore, research conducted by Fredy, Kakupu, & Sormin (2022) and Lestari & Listiadi (2022) showed that there is a positive and significant relationship between the family environment and learning outcomes. Meanwhile, research by Annaual & Ghofur (2021) found that the family environment has no effect on student learning outcomes. And based on research by Kurniawati, Husniati, & Oktaviyanti (2023), there is no significant relationship between learning motivation and learning outcomes.

This study focuses on 10th- and 11th-grade students taking Basic Accounting at SMKN 48 Jakarta. The objective is to analyze the partial and simultaneous effects of learning interest, learning motivation, and family environment on learning outcomes.

THEORETICAL FRAMEWORK AND HYPOTHESES

Internal and external determinants of learning outcomes

The grand theory used in this study is Kelley's (1973) Attribution Theory. This theory explains how people arrive at conclusions about "why," that is, what underlies a person's decision to take a particular action or act in a certain way (Muliawan, Dwita, & Helmayunita, 2021). This theory also emphasizes the question of whether internal or external factors cause a person's behavior. A person's behavior is expressed in the form of student learning outcomes (Pratama & Ghofur, 2021).

Furthermore, this study also develops Skinner's (1963) behaviorist learning theory. This theory emphasizes learning outcomes, namely changes in behavior that can be observed, measured, and assessed concretely (Salamah et al., 2021) as a result of the interaction between stimulus (Annaual & Ghofur, 2021) and response. Learning outcomes are obtained through the process of strengthening the responses that emerge from the student's learning environment (Mytra et al., 2022), both internal and external (Salamah et al., 2021).

Based on these two theoretical foundations, it can be concluded that human behavior, specifically learning outcomes, is influenced by several factors, grouped into internal factors (originating within each individual) and external factors (originating outside or within the individual's environment). Interest and motivation are examples of internal factors. The family environment is also an example of an external factor that influences learning outcomes.

Learning Interest

According to Rohman & Wulandari (2022), learning interest is a student's attraction to learning activities without coercion from others. In line with this view, Hidayah, Fajriyah, & Kartinah (2023) explain that learning interest is the sense of enjoyment, fascination, or attention that students have toward learning activities, which is typically demonstrated through active and enthusiastic behavior in learning. Therefore, it can be concluded that learning interest is a student's attraction to a particular learning experience, during which they feel enthusiastic and happy. Furthermore, learning interest also makes it easier for students to focus their minds and attention on the lesson.

Learning Motivation

According to S. Anggraini & Sukartono (2022), learning motivation is the drive to learn in order to acquire knowledge, skills, and active attitudes, as well as a sense of joy and comfort when engaging in classroom learning activities. In line with this, Widila et al. (2025) also add that learning motivation is the tendency of students to engage in learning activities driven by a desire to achieve the highest possible level of academic achievement or learning outcomes. Thus, it can be concluded that learning motivation is the drive expressed consciously or unconsciously to engage in learning activities in order to achieve goals and attain the highest possible level of achievement and learning outcomes.



Family Environment

Hadian, Maulida, & Faiz (2022) explain that the family environment is the first learning environment for children during early childhood. Kartika, Suhartono, & Rokhmaniyah (2021) also note that the family environment is a key factor in supporting a child's educational success. Families play a role in guiding and reinforcing children's behavior and enhancing their cognitive development. Thus, it can be concluded that the family environment is a child's first educational institution; both positive and negative influences are easily and rapidly absorbed. The family is one of the key factors supporting a child's success in education.

HYPOTHESIS DEVELOPMENT

Learning interest on learning outcome

According to Wiradarma, Suarni, & Renda (2021), in efforts to improve student learning outcomes, student interest in learning is essential as a key determinant for achieving learning objectives. Furthermore, Yendi & Hayati (2020) also state that the higher a student's interest, the more likely they are to engage in classroom learning activities and achieve optimal learning outcomes. Oknaryana & Irfani (2022) state that if a student learns with high interest, their learning will be more effective and enthusiastic due to their enjoyment of the subject being studied, resulting in better learning outcomes. This aligns with the findings of Edriani, Harmelia, & Gumanti (2021) and Ratnasari & Sudarwanto (2022), who state that interest in learning is a factor that exerts a significant and strong positive influence on the learning process and the achievement of learning outcomes, as students' interest motivates them to study more diligently.

H1: Learning interest has a positive and significant effect on learning outcomes.

Learning motivation on learning outcome

According to Datu, Tumurang, & Sumilat (2022), Fredy, Kakupu, & Sormin (2022), and Lestari & Listiadi (2022), learning motivation (intrinsic and extrinsic) is one of the factors that influence students' learning outcomes and academic achievement. Learning motivation enables students to prepare themselves for learning activities, making it easier for them to focus their attention and absorb knowledge more efficiently. Furthermore, according to T. P. Anggraini et al. (2022), learning motivation can drive a student's willingness to learn and achieve better learning outcomes. Agustiningtyas & Surjanti (2021) also note that high motivation in learning is essential because, without it, students will lack enthusiasm for their learning activities. Their research indicates that learning motivation is directly proportional to learning outcomes.

H2: Learning motivation has a positive and significant effect on learning outcomes.

Family Environment on learning outcome

Utami et al. (2024) also note that a supportive family environment encourages students to be more enthusiastic about learning, which can have a positive impact on their academic performance. In line with this, Suhartono et al. (2024) state that since a family environment fosters mutual interaction among its members, the family environment is crucial for a child's learning outcomes. According to Manullang & Silitonga (2022), to encourage the achievement of optimal learning outcomes, students must recognize that factors such as the family, school, and community environments also influence their learning outcomes.

H3: Family environment has a positive and significant effect on learning outcomes.

Learning interest, learning motivation, family environment on learning outcome

Kapitan & Aseng (2023) state that students' academic success is influenced by various factors, including both internal factors such as health, intelligence, interests, talents, and motivation and learning styles, as well as external factors, such as the family, school, community, and surrounding environment. Edriani, Harmelia, & Gumanti (2021) also note that student learning outcomes are influenced by both internal and external factors. Internal factors include intelligence, attitude, talent, interests, and student motivation, while the environment is an external factor.

H4: Learning interest, learning motivation, and family environment simultaneously affect on learning outcomes.

Code	Hypothesis
H1	Learning interest has a positive and significant effect on learning outcomes.
H2	Learning motivation has a positive and significant effect on learning outcomes.
H3	Family environment has a positive and significant effect on learning outcomes.
H4	Learning interest, learning motivation, and family environment simultaneously affect on learning outcomes.



METHOD

The study used a quantitative survey design at State Vocational High School 48 Jakarta. The population consisted of 143 students in the Accounting and Institutional Finance program. Proportional random sampling produced 105 respondents from four classes: X-AKL 1, X-AKL 2, XI-AKL 1, and XI-AKL 2. The sample included 11 male students (10.5%) and 94 female students (89.5%).

Variable	Measurement
Learning outcomes (Y)	Mid-semester summative assessment score for Basic Accounting.
Learning interest (X1)	Questionnaire indicators covering enjoyment or attraction, student involvement or activity, and attention.
Learning motivation (X2)	Questionnaire indicators covering desire to succeed, future aspirations, learning needs and encouragement, and a conducive learning environment.
Family environment (X3)	Questionnaire indicators covering family relationships, parenting, home atmosphere, and family economic conditions.

RESULTS

Respondent profile and descriptive statistics

Class	Frequency	Percentage
X-AKL 1	28	26.7%
X-AKL 2	26	24.8%
XI-AKL 1	29	27.6%
XI-AKL 2	22	21.0%
Total	105	100.0%

Variable	Minimum	Maximum	Mean	Std. deviation
Learning interest	32	110	76.12	19.002
Learning motivation	25	86	59.52	15.260
Family environment	36	127	92.35	23.255
Learning outcomes	90	100	97.77	2.903

Learning outcomes are concentrated near the upper end of the scale: 50 students obtained scores of 100 and the mean was 97.77. This ceiling concentration should be considered when generalizing the estimated relationships. Learning interest and family environment were described as relatively high, whereas motivation showed more room for improvement.

Residual Normality

One-Sample Kolmogorov-Smirnov Test of residual

		Unstandardized Residual
N		105
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.60432083
Most Extreme Differences	Absolute	.056
	Positive	.056
	Negative	-.048
Test Statistic		.056
Asymp. Sig. (2-tailed)		.200 ^{c,d}

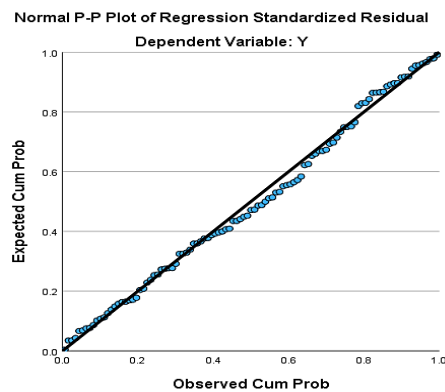


Figure 4.1 Normality Probability Plot
Source : Output SPSS

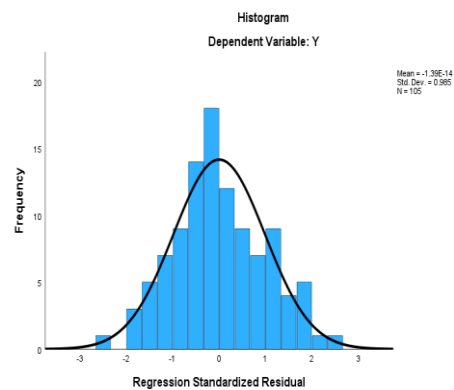


Figure 4.2 Normality Histogram
Source : Output SPSS

The Kolmogorov-Smirnov value was 0.200 or more than 0.05. The data distribution lies around the diagonal line and extends straight along that line; this indicates that the data are normally distributed. The results of the normality test using a histogram also show that the distribution of the standardized residuals forms a pattern resembling a normal curve (bell-shaped curve). This is evident from the frequency distribution, which is concentrated around the mean and tapers off on both sides of the curve.

Autocorrelation

An autocorrelation test is conducted to determine whether or not there is a correlation among the residuals and to ensure that the regression model satisfies the classical assumptions, so that the results of the analysis are reliable and suitable for conclusions.

Autocorrelation Test

R	R ²	Adjusted R ²	Std. error of estimate	Durbin – Watson
.978	.957	.955	.613	1.957

If the DW value falls between d_U and $4 - d_U$, then there is no autocorrelation. Based on the results of the autocorrelation test, the Durbin-Watson statistic is 1.957. Based on the calculations, we find that $1.74 < 1.957 < 2.26$, which means that $d_U < dw < 4 - d_U$; therefore, it can be concluded that there is no autocorrelation in the regression model.

Multicollinearity

A multicollinearity test is conducted to determine whether there is a relationship or correlation among the independent variables in a regression model. A good regression model is one in which there is no correlation among the independent variables; if a correlation exists, the regression model suffers from multicollinearity. If the VIF value is < 10 and tolerance is > 0.1 , then there is no multicollinearity. Conversely, if the VIF value is > 10 and the tolerance is < 0.1 , then multicollinearity is detected.

Coefficients^a

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.	Collinearity Statistic	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	86.036	.256		336.312	<.001		
Learning Interest	.054	.008	.354	6.736	<.001	.156	6.424
Learning Motivation	.046	.009	.243	5.421	<.001	.213	4.690
Family Environment	.053	.006	.422	8.409	<.001	.170	5.879

Multicollinearity Test

Based on the results of the multicollinearity test, it was found that all independent variables had a tolerance value > 0.10 and a VIF value < 10 . Variable X_1 (interest in learning) had a tolerance value of 0.156 and a VIF of 6.242. Variable X_2 (learning motivation) has a tolerance value of 0.213 and a VIF of 4.690, and variable X_3 (family environment) has a



tolerance value of 0.170 and a VIF of 5.879. Thus, it can be concluded that the regression model does not exhibit multicollinearity.

Heteroscedasticity (Glejser test)

Heteroscedasticity can occur due to unequal variation in the variables within a regression model. Glejser test can be used to detect heteroscedasticity. In this test, if the significance level is > 0.05 , then there is no heteroscedasticity.

**Glejser Test
Coefficients^a**

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.	Collinearity Statistic	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.677	.150		4.516	<.001		
Learning Interest	.005	.005	.268	1.085	.281	.156	6.424
Learning Motivation	-.008	.005	-.336	-1.592	.114	.213	4.690
Family Environment	-.001	.004	-.076	-.321	.794	.170	5.879

Based on the results of the heteroscedasticity test using the Glejser method, it was found that variable X1 had a significance value of 0.281, variable X2 had a value of 0.114, and variable X3 had a value of 0.749. All of these independent variables have significance values greater than 0.05; therefore, it can be concluded that the regression model satisfies the classical assumption of heteroscedasticity and is thus suitable for use in this research.

Multiple regression estimates

Multiple linear regression is a regression analysis that explains the relationship between the response variable (dependent variable) and the factors influencing several predictor variables (independent variables). This analysis is used to predict the value of the dependent variable when the independent variables change, either positively or negatively.

Predictor	B	Std. error	Standardized β	t	p-value
Constant	86.036	.256		336.312	< 0.001
Learning interest	0.054	0.008	0.354	6.736	< 0.001
Learning motivation	0.046	0.009	0.243	5.421	< 0.001
Family environment	0.053	0.006	0.422	8.409	< 0.001

From the table above, the following multiple regression equation can be derived:

$$Y = 86.036 + 0.054 X1 + 0.046 X2 + 0.053 X3$$

This means that if the values of X1, X2, and X3 are all equal to 0, then the value of Y is 86.036. The coefficient of X1 is 0.054, which means that if the value of X1 increases by 1 unit, the value of Y will increase by 0.054, with a constant (α) of 86.036. The positive value of the X1 coefficient indicates a positive relationship between learning motivation and academic achievement. Furthermore, the coefficient for X2 is 0.046, meaning that if the value of X2 increases by 1 point, the value of Y will increase by 0.046, with a constant (α) of 86.036. The positive value of the X2 coefficient indicates a positive relationship between learning motivation and academic achievement. This suggests that as students' learning motivation increases, their academic achievement also improves.

Meanwhile, the regression coefficient for X3 is 0.053, which means that if the value of X3 increases by 1 point, the value of Y will increase by 0.053, with a constant (α) of 86.036. The positive value of the X3 coefficient indicates a relationship between the family environment and learning outcomes: as support from the family environment increases, so do learning outcomes.

Partial hypothesis test

Hypothesis	Relationship	B	t	p-value	Decision
H1	Learning interest $\rightarrow$ learning outcome	0.054	6.736	< 0.001	supported
H2	Learning motivation $\rightarrow$ learning outcome	0.046	5.421	< 0.001	supported
H3	Family environment $\rightarrow$ learning outcome	0.053	8.409	< 0.001	supported



Learning interest produce $t = 6.736$ with $p < 0.001$. Because the coefficient was positive and statistically significant, H1 was supported. Learning motivation produced $t = 5.421$ with $p < 0.001$, supporting H2. Family Environment produced $t = 8.409$ with $p < 0.001$, supporting H3. At the conventional 5% level, all three predictors retained a positive unique association with learning outcomes after the remaining predictors were controlled.

Simultaneous model test

Source	Sum of squares	df	Mean square	F	p-value
Regression	838.335	3	279.445	743.104	<0.001
Residual	37.981	101	0.376	-	-
Total	876.317	104	-	-	-

The regression model produced $F = 743.107$ with $p < 0.001$. From the table above, it can be seen that the calculated F-value is 743.104, which is greater than the F-table of 2.69 at a significance level of 0.05. This indicates that there is a significant simultaneous effect of learning interest, learning motivation, and family environment on learning outcomes.

Model explanatory power

R	R ²	Adjusted R ²	Std. error of estimate	Durbin – Watson
.978	.957	.955	.613	1.957

Based on the table above, it can be seen that the R value is 0.978, indicating a strong correlation between the independent variables and the dependent variable. The adjusted R-value of 0.955 indicates that the variables of interest in learning (X1), motivation to learn (X2), and family environment (X3) collectively influence and account for 95.5% of the variation in the dependent variable Y (learning outcomes), while the remaining 4.5% is explained by other variables outside the scope of this study.

DISCUSSION

The Effect of Learning Interest on Students' Learning Outcomes

The findings of this study indicate that learning interest has a positive and significant effect on students' learning outcomes in basic accounting subjects. This result is supported by the t-test analysis ($t = 6.736$; $p = 0.001$), indicating that students with higher learning interest tend to achieve better academic performance. Learning interest encourages students to be more attentive, actively participate, and engage in the learning process.

The results show that students' learning interest is mainly reflected through active involvement and responsibility in completing academic tasks. These findings are consistent with previous studies by Atikah & Jumrah (2024), Iskandar & Nurulita (2023), Lubis, Solehudin, & Safitri (2024), and Pathuddin et al (2025), which confirmed that learning interest contributes significantly to learning outcomes. Therefore, implementing engaging and relevant learning strategies is important to strengthen students' interest and academic achievement.

The Effect of Learning Motivation on Students' Learning Outcomes

This study demonstrates that learning motivation has a positive and significant effect on students' learning outcomes, as indicated by the t-test result ($t = 5.421$; $p = 0.001$). Motivation serves as an important factor that encourages students to be persistent, disciplined, and committed in achieving academic goals. Students with higher motivation tend to show greater effort in completing learning activities and overcoming academic difficulties.

The findings indicate that a conducive learning environment is the strongest aspect supporting students' motivation, while future career orientation remains relatively lower. These results are in line with previous studies by Datu, Tumurang, & Sumilat (2022) Mangangantung, Wentian, & Rorimpandey (2022), Nurrawi et al (2023), and Pham & Ngo (2026), which



emphasized the significant role of motivation in improving learning outcomes. Thus, continuous encouragement and meaningful learning experiences are needed to enhance students' motivation.

The Effect of Family Environment on Students' Learning Outcomes

The results reveal that family environment has a positive and significant effect on students' learning outcomes, with the strongest influence among the studied variables ($t = 8.409$; $p = 0.001$). A supportive family environment provides students with emotional support, learning facilities, and a comfortable atmosphere that contributes to better academic achievement. The findings highlight that family economic conditions and learning support at home play an important role in students' educational success. These results support previous studies by Jumiarti, Nurhasanah, & Saputra (2023), Machmud & Ramadhan (2022), Septianingrum & Fitrayati (2024), and Zhao & Zhao (2022), which found that family support significantly affects students' academic performance. Therefore, collaboration between schools and families is essential to create an environment that supports student learning.

The Simultaneous Effect of Learning Interest, Learning Motivation, and Family Environment on Students' Learning Outcomes

The simultaneous test confirms that learning interest, learning motivation, and family environment collectively have a positive and significant effect on students' learning outcomes. The F-test result shows a value of 743.104 with a significance level of 0.001, while the Adjusted R Square value of 0.955 indicates that these variables explain 95.5% of the variation in students' learning outcomes.

These findings demonstrate that academic achievement is influenced by the interaction between internal and external factors. Learning interest and motivation represent students' internal factors, while family environment provides external support for learning development. This finding aligns with Damayanti (2022), Darmawan, Rizka, & Aini (2026), and Majid, Azizurrahman, & Rahman (2022), emphasizing that improving learning outcomes requires a balanced approach involving students, educators, and families.

CONCLUSION AND IMPLICATIONS

This study concludes that learning interest, learning motivation, and family environment have positive and significant effects on students' learning outcomes in basic accounting subjects. Students with higher learning interest tend to be more actively engaged in the learning process, while strong learning motivation encourages persistence, discipline, and achievement-oriented behavior.

Among the examined variables, family environment was found to have the most dominant influence on students' learning outcomes. This finding highlights that parental support, attention, supervision, and a conducive home learning atmosphere play an important role in supporting students' academic achievement. Furthermore, learning interest, motivation, and family environment collectively contribute to improving students' learning outcomes.

The findings suggest that improving students' academic performance requires collaboration between schools, teachers, parents, and students. Teachers are encouraged to apply innovative and interactive learning strategies to enhance students' interest and motivation, while parents should continue providing educational support and a supportive learning environment at home. These efforts may contribute to optimizing students' achievement, particularly in basic accounting education.

LIMITATION AND FUTURE RESEARCH

This study has several limitations that should be acknowledged. First, the study population was limited to students from a single vocational high school in East Jakarta, which may restrict the generalizability of the findings. Future studies are recommended to involve multiple schools with broader geographical coverage to obtain more representative results. Additionally, this study only examined the effects of learning interest, learning motivation, and family environment on students' learning outcomes, while other potential influencing factors were not included.

Furthermore, data collection relied on self-reported questionnaires, which may be influenced by respondents' honesty, understanding, and subjective perceptions. The limitations of time, cost, and research resources also affected the comprehensiveness of this study. Future research should consider incorporating additional variables, such as study habits, self-regulation, and self-reinforcement, while applying more diverse data collection methods and conducting more comprehensive research designs to provide deeper insights into factors affecting students' learning outcomes.

REFERENCES

- Adnyana, K. S., & Yudaparmita, G. N. A. (2022). Pengaruh Implementasi Pendekatan Keterampilan Proses Terhadap Hasil Belajar IPS di SD Kecamatan Sukasada. *Edukasi: Jurnal Pendidikan Dasar*, 3(1), 1. <https://doi.org/10.55115/edukasi.v3i1.2300>
- Agustiningtyas, P., & Surjanti, J. (2021). Peranan Teman Sebaya dan Kebiasaan Belajar Terhadap Hasil Belajar Melalui Motivasi Belajar Di Masa Covid-19. *Edukatif: Jurnal Ilmu Pendidikan*, 3(3), 794–805.



<https://doi.org/10.31004/edukatif.v3i3.454>

- Angraini, S., & Sukartono. (2022). Upaya Guru dalam Meningkatkan Motivasi Belajar Peserta Didik di Sekolah Dasar. *Jurnal Basicedu*, 6(3), 5287–5294. <https://doi.org/https://doi.org/10.31004/basicedu.v6i3.3071>
- Angraini, T. P. ... Pauweni, K. A. Y. (2022). Pengaruh Kecerdasan Emosional dan Motivasi Belajar Terhadap Hasil Belajar Matematika Siswa. *Jambura Journal of Mathematics Education*, 3(1), 1–9. <https://doi.org/10.34312/jmathedu.v3i1.11807>
- Annaual, A. R., & Ghofur, M. A. (2021). Lingkungan Keluarga dan Motivasi Belajar terhadap Hasil Belajar Mata Pelajaran Ekonomi pada Pembelajaran Daring. *EDUKATIF: JURNAL ILMU PENDIDIKAN*, 3(5), 2114–2122. <https://doi.org/https://doi.org/10.31004/edukatif.v3i5.761>
- Atikah, N., & Jumrah. (2024). Pengaruh minat terhadap hasil belajar matematika siswa. *Al-Irsyad Journal Of Mathematics Education (IJME)*, 3(2), 100–113. <https://doi.org/https://doi.org/10.58917/ijme.v3i2.127>
- Damayanti, A. (2022). FAKTOR-FAKTOR YANG MEMPENGARUHI HASIL BELAJAR PESERTA DIDIK MATA PELAJARAN EKONOMI KELAS X SMA NEGERI 2 TULANG BAWANG TENGAH. *Prosiding SNPE FKIP Universitas Muhammadiyah Metro*, 1(1), 99–108. <https://prosiding.ummetro.ac.id/index.php/snpe/article/view/28>
- Darmawan, D., Rizka, T. A., & Aini, D. N. (2026). Pengaruh Lingkungan Keluarga dan Motivasi Belajar terhadap Hasil Belajar Peserta didik di tingkat SMP. *Al-Zayn: Jurnal Ilmu Sosial & Hukum*, 4(2), 1935–1951. <https://doi.org/https://doi.org/10.61104/alz.v4i2.4601>
- Datu, A. R., Tumurang, H. J., & Sumilat, J. M. (2022). Pengaruh Motivasi Belajar terhadap Hasil Belajar Siswa di Tengah Pandemi Covid-19. *Jurnal Basicedu*, 6(2), 1959–1965. <https://doi.org/https://doi.org/10.31004/basicedu.v6i2.2285>
- Edriani, D., Harmelia, & Gumanti, D. (2021). Pengaruh Minat dan Kemandirian Belajar terhadap Hasil Belajar Siswa Jurusan Akuntansi di SMK Negeri 1 Painan. *Edukatif: Jurnal Ilmu Pendidikan*, 3(6), 4506–4517. <https://doi.org/10.31004/edukatif.v3i6.1479>
- Fadil, K. (2023). Peran Guru Dalam Penanaman Sikap Anti Bullying Verbal Dalam Pembelajaran PKN di Sekolah Dasar. *Attadrib: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 6(1), 123–133. <https://doi.org/https://doi.org/10.54069/attadrib.v6i1.411>
- Fredy, Kakupu, A. F., & Sormin, S. A. (2022). PENGARUH LINGKUNGAN KELUARGA TERHADAP PRESTASI BELAJAR SISWA SEKOLAH DASAR. *Prima Magistra: Jurnal Ilmiah Kependidikan*, 3(3), 314–320. <https://doi.org/https://doi.org/10.37478/jpm.v3i3.1937>
- Hadian, V. A., Maulida, D. A., & Faiz, A. (2022). Peran lingkungan keluarga dalam pembentukan karakter. *Jurnal Education and Development*, 10(1), 240–246. <https://doi.org/https://doi.org/10.37081/ed.v10i1.3365>
- Hasanah, N. ... Putri, K. H. (2024). Analisis Faktor Penghambat dan Upaya untuk Peningkatan Mutu Pendidikan di Sekolah Dasar Negeri. *Jiip - Jurnal Ilmiah Ilmu Pendidikan*, 7(3), 3162–3169. <https://doi.org/10.54371/jiip.v7i3.3769>
- Hidayah, N. C., Fajriyah, K., & Kartinah. (2023). ANALISIS MINAT BELAJAR SISWA MELALUI MEDIA GAMBAR SISWA KELAS 2 SDN SAWAH BESAR 01. *Didaktik: Jurnal Ilmiah PGSD FKIP Universitas Mandiri*, 9(2), 3966–3976. <https://doi.org/https://doi.org/10.36989/didaktik.v9i2.1239>
- Iskandar, R., & Nurulita, H. (2023). Pengaruh Minat Belajar terhadap Hasil Belajar Ekonomi. *Jurnal Ilmiah Ilmu Perndidikan (JIIP)*, 6(12), 9818–9822. <https://doi.org/https://doi.org/10.54371/jiip.v6i12.2895>
- Jumiarti, Nurhasanah, & Saputra, H. H. (2023). THE INFLUENCE OF FAMILY ENVIRONMENT ON STUDENT LEARNING OUTCOMES IN SOCIAL STUDIES CONTENT FOR FOURTH GRADE STUDENTS AT SDN 38 AMPENAN. *Jurnal Syntax Admiration*, 4(8), 1109–1127. <https://doi.org/doi:https://doi.org/10.46799/jsa.v4i7.671>
- Kapitan, S. F., & Aseng, A. C. (2023). Faktor-Faktor yang Mempengaruhi Keberhasilan Belajar Ekonomi. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, 09(2), 891–902. <https://doi.org/http://dx.doi.org/10.37905/aksara.9.2.891-902.2023>
- Kartika, W. I., Suhartono, & Rokhmaniyah. (2021). Hubungan antara Lingkungan Keluarga dan Hasil Belajar IPS Siswa di Sekolah Dasar. *EDUKATIF: JURNAL ILMU PENDIDIKAN*, 3(4), 1318–1325. <https://doi.org/10.31004/edukatif.v3i4.555>
- Kurniawati, E., Husniati, & Oktaviyanti, I. (2023). Hubungan Motivasi Belajar dengan Prestasi Belajar IPS Pada Siswa Kelas IV SDN Gugus 3 Kecamatan Langgudu. *Jurnal Ilmiah Profesi Pendidikan*, 8(1b), 475–481. <https://doi.org/https://doi.org/10.29303/jipp.v8i1b.1183>
- Lestari, D. R., & Listiadi, A. (2022). Peran Motivasi Belajar Dalam Memediasi Lingkungan Keluarga Dan Kemandirian Belajar Terhadap Hasil Belajar Akuntansi Keuangan Menengah 1. *Jurnal Pendidikan Akuntansi (JPak)*, 10(3), 304–314. <https://doi.org/https://doi.org/10.26740/jpak.v10n3.p304-314>
- Lubis, M., Solehudin, R. H., & Safitri, N. D. (2024). Seberapa pengaruh media, fasilitas, dan minat belajar terhadap hasil belajar ekonomi siswa? *Jurnal Pn eleitian Tindakan Kelas*, 1(3), 180–187. <https://doi.org/https://doi.org/10.61650/jptk.v1i3.285>
- Machmud, A., & Ramadhan, I. A. (2022). High school learning outcomes : The effect of self-regulation, resilience, and family environment. *Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan*, 41(3), 764–778. <https://doi.org/https://doi.org/10.21831/cp.v41i3.43562>



- Majid, M. S., Azizurahman, A., & Rahman, A. (2022). Faktor-Faktor yang Mempengaruhi Hasil Belajar Mata Pelajaran Pendidikan Agama Islam. *INTIQAD: JURNAL AGAMA DAN PENDIDIKAN ISLAM*, 14(1), 12–20. <https://doi.org/https://doi.org/10.30596/intiqad.v14i1.8623>
- Mangangantung, J. M., Wentian, S., & Rorimpandey, W. H. F. (2022). Pengaruh Kreativitas Guru dan Motivasi Belajar Siswa Terhadap Hasil Belajar Siswa Kelas V SD Negeri di Kecamatan Wanea. *Jurnal Inovasi Teknologi Pendidikan*, 9(1), 15–24. <https://doi.org/https://doi.org/10.21831/jitp.v9i1.49942>
- Manullang, T., & Silitonga, M. (2022). DETERMINAN HASIL BELAJAR ANAK : LINGKUNGAN KELUARGA, LINGKUNGAN SEKOLAH, DAN LINGKUNGAN MASYARAKAT. *JKKP (Jurnal Kesejahteraan Keluarga Dan Pendidikan)*, 9(1), 92–101. <https://doi.org/http://doi.org/10.21009/JKKP.091.08>
- Muliawan, H., Dwita, S., & Helmayunita, N. (2021). Pengaruh Skema Kompensasi Dan Religiusitas Terhadap Penilaian Etis Manager Atas Investasi Berlebihan Pada CSR. *JURNAL EKSPLORASI AKUNTANSI*, 3(2), 264–278. <https://doi.org/10.24036/jea.v3i2.333>
- Mytra, P. ... Irmayanti, I. (2022). Implementasi Teori Belajar Behavioristik dalam Pembelajaran Matematika. *JTMT: Journal Tadris Matematika*, 3(2), 45–54. <https://doi.org/10.47435/jtmt.v3i2.1253>
- Nurrawi, A. E. P. ... Mubarak, S. (2023). Motivasi Belajar Siswa Terhadap Hasil Belajar Matematika. *PlusMinus: Jurnal Pendidikan Matematika*, 3(1), 29–38. <https://doi.org/https://doi.org/10.31980/plusminus.v3i1.1220>
- Octavianus, B. ... Lao. (2026). *Penggerakan Sumber Daya Pendidikan sebagai Upaya Peningkatan Kualitas Pendidikan Berkelanjutan di SD Inpres Taekiu Kabupaten Timor Tengah Selatan manusia . Ia memiliki peran krusial dalam membentuk kualitas sumber daya manusia.* 3(5), 1010–1024. <https://doi.org/https://doi.org/10.61722/jinu.v3i5.11384>
- Oknaryana, & Irfani, O. (2022). Pengaruh Minat Belajar dan Kedisiplinan Siswa Terhadap Hasil Belajar Siswa. *Jurnal Ecogen*, 5(2), 261. <https://doi.org/10.24036/jmpe.v5i2.13152>
- Pathuddin ... M, B. (2025). The effect of time management and interest in learning mathematics : A case study of senior high school students in Palu Indonesia on students ' learning achievement. *Heliyon*, 11(3), 1–8. <https://doi.org/10.1016/j.heliyon.2025.e42048>
- Pham, T. C., & Ngo, T. T. A. (2026). Telematics and Informatics Reports How AI tutor features influence motivation and learning outcomes : psychological pathways in high school STEM education. *Telematics and Informatics Reports*, 22(June), 1–24. <https://doi.org/10.1016/j.teler.2026.100344>
- Pratama, H. J., & Ghofur, M. A. (2021). Pengaruh Motivasi Belajar dan Lingkungan Belajar Terhadap Hasil Belajar Mata Pelajaran Ekonomi Siswa Saat Pembelajaran Daring. *EDUKATIF : JURNAL ILMU PENDIDIKAN*, 3(4), 1568–1577. <https://doi.org/10.31004/edukatif.v3i4.621>
- Ratnasari, D., & Sudarwanto, T. (2022). Pengaruh Kemandirian Belajar dan Minat Belajar Terhadap Hasil Belajar Penataan Produk pada Siswa SMK. *EDUKATIF : JURNAL ILMU PENDIDIKAN*, 4(3), 4444–4459. <https://doi.org/10.31004/edukatif.v4i3.2963>
- Riadin, A., & Estimutri, E. S. (2022). PENGARUH MOTIVASI BELAJAR DAN MINAT BELAJAR TERHADAP HASIL BELAJAR IPA PESERTA DIDIK PADA ERA MERDEKA BELAJAR. *HOLISTIKA: Jurnal Ilmiah PGSD*, 6(2), 108–114. <https://doi.org/https://doi.org/10.24853/holistika.6.2.108-114>
- Rohman, Y. T. N., & Wulandari, R. N. A. (2022). Pengaruh Motivasi, Minat dan Kesiapan Belajar Siswa terhadap Hasil Belajar Siswa Kelas X OTKP (Studi Kasus Mata Pelajaran Simulasi dan Komunikasi Digital Metode Blended Learning). *Jurnal Pendidikan Tambusai*, 6(2), 13067–13080. <https://doi.org/https://doi.org/10.31004/jptam.v6i2.4524>
- Salamah, U. ... Soumena, I. M. P. H. (2021). Application of Behavioristic Learning Theory in Learning “Ta’lim Afkar.” *Proceedings of the International Conference on Engineering, Technology and Social Science (ICONETOS 2020)*, 529(Iconetos 2020), 620–624. <https://doi.org/10.2991/assehr.k.210421.090>
- Septianingrum, C. H., & Fitrayati, D. (2024). MOTIVASI BELAJAR DAN LINGKUNGAN KELUARGA TERHADAP HASIL BELAJAR SISWA KELAS XI MATA PELAJARAN EKONOMI. *Jurnal Pendidikan Ekonomi (JUPE)*, 12(1), 1–7. <https://doi.org/https://doi.org/10.26740/jupe.v12n1.p1-7>
- Suhartono ... Permana, D. (2024). *Analisis Faktor Lingkungan Keluarga dalam Membentuk Kemandirian Belajar Siswa.* 11(3), 232–241. <https://doi.org/https://doi.org/10.30599/jpia.v11i3.3877>
- Suratinah, Lestari, I., & Julinas, E. (2022). Hubungan Kepribadian dan Konsep Diri Dengan Hasil Belajar Siswa Pada Mata Pelajaran Pendidikan Kewarganegaraan di Kelas V SDN 01 Kalideres. *JURNAL SYNTAX IMPERATIF : Jurnal Ilmu Sosial Dan Pendidikan*, 3(1), 10. <https://doi.org/10.36418/syntax-imperatif.v3i1.144>
- Suwarno, M., & Ardani, R. A. (2022). Kemampuan Literasi Matematika Siswa Berdasarkan PISA Level 4. *Square : Journal of Mathematics and Mathematics Education*, 4(2), 107–115. <https://doi.org/10.21580/square.2022.4.2.12401>
- Utami, D. S. ... Cinantya, C. (2024). Pentingnya Motivasi dalam Meningkatkan Hasil Belajar Peserta Didik Sekolah Dasar. *MARAS: Jurnal Penelitian Multidisplin*, 2(4), 2071–2082. <https://doi.org/https://doi.org/10.60126/maras.v2i4.557>



- Widila, A. ... Efrizal, D. (2025). Pentingnya Motivasi Siswa Terhadap Hasil Belajar Di Sekolah Menengah Pertama Negeri 06 Kota Bengkulu. *JKIP : Jurnal Kajian Ilmu*, 5(4), 1058–1064. <https://doi.org/https://doi.org/10.55583/jkip.v5i4.1206>
- Wiradarma, K., Suarni, N., & Renda, N. (2021). Analisis Hubungan Minat Belajar terhadap Hasil Belajar Daring IPA Siswa Kelas III Sekolah Dasar. *MIMBAR PGSD Undiksha*, 9(3), 408. <https://doi.org/10.23887/jjgsd.v9i3.39212>
- Yendi, M. S., & Hayati, A. F. (2020). Pengaruh Bimbingan Belajar Online (Ruangguru) dan Minat Belajar Terhadap Hasil Belajar Ekonomi Kelas X di SMA Negeri 3 Padang. *Jurnal Ecogen*, 3(1), 87. <https://doi.org/10.24036/jmpe.v3i1.8528>
- Zhao, L., & Zhao, W. (2022). Impacts of family environment on adolescents ' academic achievement : The role of peer interaction quality and educational expectation gap. *Frontiers in Psychology*, 13(September), 1–17. <https://doi.org/10.3389/fpsyg.2022.911959>