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THE INFLUENCE OF PARENTAL EDUCATION LEVEL, SOCIO-ECONOMIC STATUS, AND LEARNING MOTIVATION ON THE ACADEMIC PERFORMANCE OF HIGH SCHOOL STUDENTS AT SEKOLAH INDONESIA DAVAO, PHILIPPINES

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Abstract (English)
Education is a process that continuously transfers knowledge, skills, values, and attitudes to develop intellectual abilities and prepare individuals for societal roles. Learning outcomes are influenced by factors such as parental education levels, socioeconomic status, and learning motivation. This study examines the relationship between these factors and academic performance among high school students at Sekolah Indonesia Davao (SID) in Davao City, Philippines. Conducted from February to May 2024, the research involved 39 students using a 1-5 Likert scale questionnaire via Google Forms, and multiple linear regression analysis was employed to assess the impact of the independent variables on academic performance. The results indicated that the overall model was not significant (p-value = 0.5530), meaning the independent variables did not significantly explain the variance in academic performance. Individual analysis of Parental Education Level, Socioeconomic Status, and Learning Motivation also showed non-significant results, with all p-values exceeding 0.05. The fit statistics supported these findings, with an R^2 value of 0.0573 indicating very weak explanatory power, and negative adjusted R^2 (-0.0235) and predicted R^2 (-0.1820) values highlighting the model's poor performance. The study concludes that these factors do not significantly impact the academic performance of SID students, suggesting the need for further research to identify other variables that might better explain the variability in academic performance among high school students at SID.

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parental education level, socio-economic status, learning motivation, learning outcomes

1. Introduction

Education can be defined as a socially organized process that involves the continuous transfer of knowledge, skills, values, and attitudes (Chazan, 2022). Education is a cumulative process that focuses on developing intellectual abilities, skills, and attitudes to enhance individual capabilities (Adesemowo & Sotonade, 2022). Education aims not only to impart knowledge and skills but also to empower individuals, prepare them for life in society, transmit values and ethics, encourage personal growth, and facilitate holistic development (Al-Shuaibi, 2014; Macur, 2020).

According to Chotimah et al., education is a vital necessity for every individual and can be obtained through informal, formal, and non-formal channels. Individuals first receive education within the family, which provides fundamental lessons such as manners, ethics, and morals (Chotimah et al., 2017). Sulfasyah and Arifin stated that education can come from formal environments such as schools or other formal institutions that have competence in the field of education. The community environment (non-formal) also plays an important role in determining the success of an individual's education, where individuals must apply the knowledge they have gained from their families and formal environments (Sulfasyah & Arifin, 2017).

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The main focus of the learning process is to achieve optimal learning outcomes, which is the goal of student engagement in educational activities. Learning outcomes are concise, measurable statements that describe what students will learn, the skills they must acquire, and the knowledge or values they should demonstrate upon completing a course or program. These outcomes articulate the specific knowledge, skills, and abilities that students are expected to possess by the end of their learning experience. Learning outcomes guide educators in designing courses, assessments, and learning strategies to ensure that students achieve the intended educational objectives (Andreev, 2023). Several common factors can lead to unsatisfactory learning outcomes. Teacher-related factors include ineffective teaching methods, insufficient knowledge, lack of experience, low motivation, and poor classroom management, all of which can negatively impact student learning, including a poor teaching and learning environment, lack of resources, and inadequate support from school staff, all of which can contribute to unsatisfactory learning outcomes (Brainard, 2021; Mabena & Mokgosi, 2020; Mupa & Isaac, 2015).

Unsatisfactory student learning outcomes can be influenced by a lack of interest, motivation, and engagement with the subject matter, making it difficult for students to achieve satisfactory learning results (Berdida, 2023; John, 2018)(Al Husaini & Ahmad Shukor, 2023). According to Utari and Widodo, learning motivation can be defined as a process where needs drive an individual to engage in a series of learning activities aimed at achieving specific goals through persistent effort. This process is primarily based on motivation, enabling individuals to achieve good performance (Utari & Widodo, 2019). Enhancing student learning motivation is essential as it can significantly impact learning outcomes. Students with higher motivation tend to achieve better learning results (Lestari, 2019).

Parental education levels can influence a child's learning motivation. Parents with higher education levels often have higher academic expectations for their children and help with the learning process at home. These parents also provide opportunities and support for their child's academic development, enhancing motivation and school engagement. Parents who believe in their child's abilities and encourage curiosity and perseverance help foster intrinsic motivation. Conversely, parents who are controlling, use rewards or punishments, or display negative attitudes towards academics can hinder a child's motivation. Actively involved parents who create a supportive learning environment at home help their children develop a sense of competence and a positive attitude towards learning, leading to better motivation and engagement in school (Usher & Kober, 2012).

Research shows that early parental involvement can directly influence a child's achievement in kindergarten, which in turn affects their motivation in first grade. Highly motivated children tend to perform better academically, leading to increased parental engagement and support (Momoko Hayakawa, Michelle M. Englund, Mallory N. Warner-Richter & Reynolds, 2016). Parental education levels can influence a child's learning motivation by shaping parental beliefs and expectations, providing learning opportunities, and encouraging parental involvement in education. These factors can contribute to increased intrinsic motivation and school engagement, leading to better academic performance.

Parental economic status and DNA influence children's educational achievement, with economic factors having a greater impact than genetic factors. Children's educational success is determined 47% by genetic factors and 63% by family socio-economic factors. Children with a high genetic predisposition for education and from wealthy, highly educated families have the greatest potential for educational success, reaching up to 77%. In contrast, only 21% of children

from low socio-economic status families with low genetic predisposition continue to higher education levels (Arif, 2020).

The socioeconomic status of parents, which forms the basis for children's development and success in learning, can influence learning outcomes. The number of social classes within each community varies relative to the economic and social conditions present in society, as well as the backgrounds and interests of the individuals involved (Anggraeni & Setiaji, 2018). The socioeconomic status of parents can relate to their economic conditions and significantly influence the formation of children's character. The financial situation of the family can provide broad opportunities for children to develop their potential through education. The socioeconomic status (SES) of parents influences parents' decision-making processes in selecting quality schools for their children's education (Sumarno et al., 2018). The family's socioeconomic status and parents' low education levels can negatively impact children's learning outcomes. These factors may hinder achieving satisfactory academic results and limit educational opportunities and resources, thereby restricting students' access to the learning process (Li & Qiu, 2018; Xing, 2023)(Khan, 2024). The educational level of parents can also influence learning outcomes due to the tendency of some parents not to prioritize higher education (Xing, 2023).

Based on the background, this study aims to examine the influence of parental education level, socio-economic status, and learning motivation on the academic performance in economics of high school students at Sekolah Indonesia Davao (SID) in the Philippines. Specifically, the research seeks to understand how these three factors—parental education level, socio-economic status, and learning motivation—interact and contribute to the academic outcomes of students in economics. By investigating these relationships, the study hopes to provide insights into the extent to which each factor impacts student performance, thereby informing strategies to enhance educational achievement among high school students at Sekolah Indonesia Davao.

2. Methodology

This study was conducted from February 2024 to May 2024 at SID, located at Ecoland Subdivision Basketball Court, Brgy. 76-A Ecoland Dr, Matina, Davao City, 8000 Davao del Sur, Philippines. This study is a qualitative research project using questionnaires distributed to high school students at SID as respondents. The questionnaire was distributed via a Google Forms link, with response options provided on a 1-5 Likert scale. The Likert scale used in this study is presented in Table 1.

Table 1. Likert Scale

Scale	Details
1	Sangat Tidak Setuju (STS)
2	Tidak Setuju (TS)
3	Ragu-ragu (R)
4	Setuju (S)
5	Sangat Setuju (S)

The population for this study consists of 39 high school students at SID, Philippines. According to Suharsimi Arikunto's method, populations with fewer than 100 individuals can be used in their entirety (Ginting et al., 2022). Therefore, this study will include the entire population of 39 high school students at SID, Philippines. The total population, which is SID High School students, Philippines, is presented in Table 2 based on the grade level.

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Table 2. Research data population (SITASI)

Grade	Batch	Amount
10th Grade	2023	10 Students
11th Grade	2022	10 Students
12th Grade	2021	19 Students
Total		39 Students

This study comprises three variables: Parental Education Level (X1), Socio-Economic Status (SSE) (X2), Learning Motivation (X3), and Academic Performance (Y). Instrument development for each variable was conducted to establish conceptual definitions, operational definitions, and indicators defining each variable. The results of instrument development will be formulated into questions for the questionnaire to be completed by respondents. Based on the instrument development results, six questions were formulated to measure each value of X1, X2, and X3, to then assess their influence on Y.

This study utilizes primary data, thus data collection was conducted directly by high school students at Sekolah Indonesia Davao (SID), Philippines, online using validated and reliable items concerning X1, X2, X3 and Y as research variables. The data obtained will be analyzed using multiple linear regression, which studies the relationship between a dependent variable and one or more independent variables to estimate the population mean or the mean of the dependent variable based on known values of the independent variables.

Before conducting multiple linear regression analysis, testing classic assumptions is necessary. These assumptions include several tests: normality test to examine data distribution using the Kolmogorov-Smirnov method, autocorrelation test to assess correlations between a period t and its previous period (t-1) or between independent variables and the dependent variable, heteroskedasticity test to determine if error variation in a regression model is constant, and multicollinearity test which refers to situations where there is a strong or near-perfect linear relationship between independent variables in a regression model.

The Individual Parameter Significance Test (t-test) is conducted to assess the extent to which each independent variable used in this study individually explains the dependent variable partially within the general equation:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

The established criterion involves comparing the calculated t-value with the critical t-value from the t-table at a predetermined significance level of 0.05 ($\alpha = 0.05$). The criteria used to accept or reject the null hypothesis (H_0) are as follows:

- H_0 is accepted if significance > 0.05 (not influential)
- H_0 is rejected if significance < 0.05 (influential)

A Model Feasibility Test (F-Test) needs to be conducted to determine whether all independent variables collectively have a significant impact on the dependent variable. Specifically, this test assesses the influence of parental education level, socioeconomic status, and learning motivation on academic outcomes. The general equation used for the F test is (Sangadji et al., 2013):

$$F_n = \frac{R^2/k}{(1-R^2)/(n-k-1)}$$

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The hypotheses used in the F-Test are:
- $H_0: \beta i = 0$, indicating that the independent variables have no effect on the dependent variable
- $H_0: \beta i > 0$, indicating that the independent variables do have an effect on the dependent variable.

Decision criteria:
- Accept H_0 if the significance level is greater than 0.05 (not influential)
- Reject H_0 if the significance level is less than 0.05 (influential)

3. Results and Discussions

This study examines four variables: Parental Education Level (X1), Socioeconomic Status (X2), Learning Motivation (X3), and Learning Outcomes (Y). The respondents are students from Sekolah Indonesia Davao in the Philippines, from the 2020–2022 cohorts. The population of the study consists of 39 individuals. Descriptive statistics obtained from IBM SPSS software for each variable, based on the collected data, are presented in Table 3.

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Dev	Variance
X1	39	15	30	23.67	4.028	16.228
X2	39	14	30	21.56	4.031	16.252
X3	39	18	30	25.56	3.409	11.621
Valid N	39					

The data analysis process began with prerequisite tests, including normality, heteroscedasticity, and linearity tests, using IBM SPSS software.

3.1. Normality Test

The normality test was conducted using the One-Sample Kolmogorov-Smirnov method to determine the significance value of the residuals and assess the data distribution. The results of the normality test using the One-Sample Kolmogorov-Smirnov method are presented in Table 4.

Table 4. Results of Kolmogorov - Smirnov Normality Test

			Unstandardized Residual
N			39
Normal Parameters[a,b]	Mean		1. .0000000
	Std. Deviation		6.03258521
Most Extreme Differences	Absolute		.107
	Positive		.051
	Negative		-.107
Test Statistic			.107
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.304
	99% Confidence Interval	Lower Bound	.293
		Upper Bound	.316

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The One-Sample Kolmogorov-Smirnov normality test yielded a significance value of 0.200, indicating that the data are normally distributed. The normal distribution graph is presented as a histogram in Figure 1.

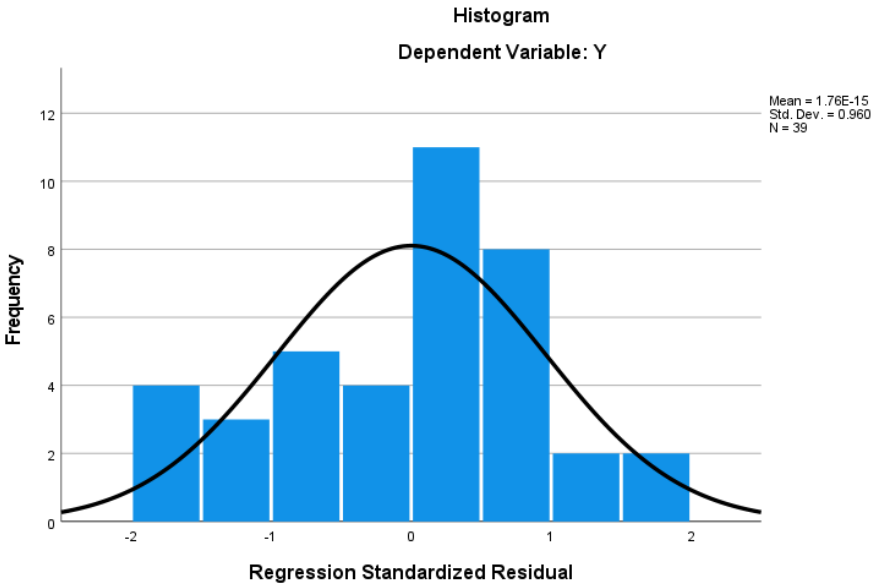

Figure 1. Normal Distribution Graph

3.2. Heteroscedasticity Test

The Glejser method is employed to detect heteroscedasticity symptoms in data analysis, determining whether there are differences in variance within the research data. Decision-making is based on the significance value: if the significance value is greater than 0.05, it can be concluded that there is no heteroscedasticity and heteroscedasticity is considered present when the significance value is less than or equal to 0.05. The results of heteroscedasticity testing using the Glejser method are presented in Table X.

Table 5. Results of Heteroscedastisity Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	71.998	8.311		8.663	.000		
	X1	-.073	.372	-.047	-.197	.845	.464	2.154
	X2	.074	.359	.048	.206	.838	.497	2.011
	X3	.437	.336	.240	1.299	.203	.790	1.265

Based on the results of the heteroscedasticity test, the following conclusions can be made:

- Parental Education Level (X1) has a significance value of 0.845, indicating no heteroscedasticity.
- Socioeconomic Status (X2) has a significance value of 0.838, indicating no heteroscedasticity.
- Learning Motivation (X3) has a significance value of 0.203, indicating no heteroscedasticity.

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3.3. Linearity and Hypothesis Test

A linearity test was conducted on the dataset to determine the relationship between the independent and dependent variables. The linearity test was performed using the Design Expert 13 software with a linear analysis model. The results of the linearity test are shown in Table 6.

Table 6. ANOVA for Linear Model Result

Source	Sum of Squares	df	Mean Square	F-value	p-value	
Model	84.08	3	28.03	0.7093	0.5530	not significant
X1	1.54	1	1.54	0.0389	0.8449	
X2	1.67	1	1.67	0.0423	0.8383	
X3	66.63	1	66.63	1.69	0.2026	
Residual	1382.90	35	39.51			
Cor Total	1466.97	38				

The model as a whole is not significant (p-value = 0.5530), indicating that the independent variables (X1, X2, X3) do not explain a significant portion of the variance in the dependent variable. Additionally, none of the individual factors (X1, X2, X3) are significant, as their p-values are all well above 0.05. Most of the variance in the data is explained by the residual (error), suggesting that the independent variables account for very little of the variability in the dependent variable. The equation in terms of actual factors, which can be used to predict the response for given levels of each factor in this particular dataset, is as follows:

$$Y = 71.99842 - 0.073236(X_1) + 0.073745(X_2) + 0.436950(X_3)$$

The results of the regression analysis, presented as fit statistics or coefficients of determination, are shown in Table 7. The R^2 value of 0.0573 is quite low, and the negative adjusted R^2 and predicted R^2 values of -0.0235 and -0.1820 indicate that the model fails to explain the variability in the dependent variable and performs poorly in predicting new data. These statistics collectively suggest that the independent variables do not significantly explain the variance in the dependent variable, and the model is not a good fit for the data.

Table 7. Fit Statistics / Coefficient of Determination Results

Std. Dev.	6.29		**R^2**	0.0573
Mean	83.03		**Adjusted R^2**	-0.0235
C.V. %	7.57		**Predicted R^2**	-0.1820
			Adeq Precision	2.8260

4. Conclusion

A study aimed to examine the relationship between Parental Education Level (X1), Socioeconomic Status (X2), Learning Motivation (X3), and Academic Performance (Y) among high school students was conducted from February 2024 to May 2024 at SID, located at Ecoland Subdivision Basketball Court in Davao City, Philippines. This study included 39 students, and data were collected using a 1-5 Likert scale questionnaire distributed via Google Forms.

The regression analysis revealed that the model as a whole was not significant (p-value = 0.5530), indicating that the independent variables—parental education level, economic status, and learning motivation—do not explain a significant portion of the variance in academic performance . Additionally, none of the individual factors (X1, X2, X3) were found to be significant, with all p-values exceeding 0.05.

The fit statistics further support these findings, with an R^2 value of 0.0573 indicating very weak explanatory power. The negative adjusted R^2 (-0.0235) and predicted R^2 (-0.1820) values highlight the model's poor performance in both explaining the existing data and predicting new data. Based on these results, the independent variables of Parental Education Level, Socioeconomic Status, and Learning Motivation do not significantly explain the academic performance of the students in this study. The model's poor fit and low predictive power indicate the need for further research to identify other factors that might better explain the variability in academic performance among high school students at SID.

Nomenclature

t : t-Test Value
r : Multiple Regression Coefficient Value
n : Number of Respondents
Fn : F-Test Value
R : Multiple Regression Analysis Coefficient
k : Number of Independent Variables
n : Sample Size

References

Adesemowo, P., & Sotonade, O. A. (2022). *BASIC OF EDUCATION: THE MEANING AND SCOPE OF EDUCATION*.

Al-Shuaibi, A. (2014). *The Importance of Education*.

Al Husaini, Y., & Ahmad Shukor, N. S. (2023). *Factors Affecting Students' Academic Performance: A review*. *12*, 284–294.

Andreev, I. (2023). *Learning Outcomes*. https://www.valamis.com/hub/learning-outcomes

Anggraeni, E., & Setiaji, K. (2018). PENGARUH MEDIA SOSIAL DAN STATUS SOSIAL EKONOMI ORANG TUA TERHADAP PERILAKU KONSUMTIF MAHASISWA. *Economic Education Analysis Journal*, *7*(1), 172–180. https://journal.unnes.ac.id/sju/eeaj/article/view/22868

Arif, A. (2020). Kondisi Sosial Ekonomi Keluarga Kunci Keberhasilan Pendidikan. In *kompas.id*. https://www.kompas.id/baca/ilmu-pengetahuan-teknologi/2020/01/02/kondisi-sosial-ekonomi-keluarga-kunci-keberhasilan-pendidikan

Berdida, D. J. E. (2023). Resilience and academic motivation's mediation effects in nursing students' academic stress and self-directed learning: A multicenter cross-sectional study. *Nurse Education in Practice*, *69*, 103639. https://doi.org/https://doi.org/10.1016/j.nepr.2023.103639

Brainard, P. C. (2021). *Factors Affecting Quality Teaching and Learning Outcomes in Teacher Education in Sierra Leone*. *8*(10), 94–112.

Chazan, B. (2022). What is "education"? In B. Chazan (Ed.), *Principles and Pedagogies in Jewish Education* (pp. 13–21). Springer International Publishing. https://doi.org/10.1007/978-3-030-83925-3_3

Chotimah, L. N., Ani, H. M., & Widodo, J. (2017). PENGARUH STATUS SOSIAL EKONOMI ORANG TUA TERHADAP PRESTASI BELAJAR SISWA (Studi Kasus Siswa Kelas VIII SMP Negeri 1 Jember Tahun Ajaran 2016/2017). *JURNAL PENDIDIKAN EKONOMI: Jurnal Ilmiah Ilmu Pendidikan, Ilmu Ekonomi Dan Ilmu Sosial*, *11*(1), 75. https://doi.org/10.19184/jpe.v11i1.5004

Ginting, I., Habeahaan, S., & Sihotang, H. (2022). Kontribusi Media LCD Terhadap Prestasi Belajar PAK dan Motivasi Belajar PAK Siswa SMP Masehi GBKP Berastagi. *Indonesian Journal of Christian Education and Theology*, *1*(1), 1–5. https://doi.org/10.55927/ijcet.v1i1.1104

John, A. (2018). 10 causes of poor academic performance in school. In *EduAnsa*. https://www.eduansa.com/10-causes-of-poor-academic-performance-in-school-most-students-never-admit-8/

Khan, M. (2024). *Facts behind the poor academic performance of students in school*. https://www.linkedin.com/pulse/facts-behind-poor-academic-performance-students-school-mahrukh-khan

Lestari, E. D. (2019). Pengaruh Lingkungan Keluarga, Disiplin Belajar, Kompetensi Sosial Guru, Dan Kesiapan Belajar Terhadap Motivasi Belajar. *Economic Education Analysis Journal*, *2*(1), 18–23.

Li, Z., & Qiu, Z. (2018). How does family background affect children's educational achievement? Evidence from Contemporary China. *The Journal of Chinese Sociology*, *5*(1), 13. https://doi.org/10.1186/s40711-018-0083-8

Mabena, N., & Mokgosi, P. N. (2020). *FACTORS CONTRIBUTING TO POOR LEARNER PERFORMANCE IN MATHEMATICS : A CASE OF SELECTED SCHOOLS IN MPUMALANGA PROVINCE , SOUTH AFRICA*. *7864*.

Macur, G. (2020). THE PURPOSE OF EDUCATION. *International Journal of Advanced Research*, *8*, 983–985. https://doi.org/10.21474/IJAR01/10391

Momoko Hayakawa, Michelle M. Englund, Mallory N. Warner-Richter, and A. J., & Reynolds. (2016). The Longitudinal Process of Early Parent Involvement on Student Achievement: A Path Analysis. *Physiology & Behavior*, *176*(3), 139–148.

Mupa, P., & Isaac, T. (2015). *Factors contributing to ineffective teaching and learning in primary schools : Why are schools in decadence ? 6*(19), 125–133.

Sangadji, Mamang, E., & Sopiah. (2013). *Perilaku Konsumen : Pendekatan Praktis Disertai Himpunan Jurnal Penelitian*.

Sulfasyah, S., & Arifin, J. (2017). Implikasi Pendidikan Nonformal Pada Remaja. *Equilibrium: Jurnal Pendidikan*, *4*(2), 1–8. https://doi.org/10.26618/equilibrium.v4i2.506

Sumarno, G., Stephani, M. R., & Wibowo, R. (2018). Keterampilan Motorik Kasar dan Halus Anak Usia Dini Usia 4-5 Tahun pada Kelompok Sosial Ekonomi Status Orang Tua Tingkat Menengah. *TEGAR: Journal of Teaching Physical Education in Elementary School*, *2*(1), 60–65. https://doi.org/10.17509/tegar.v2i1.16273

Usher, A., & Kober, N. (2012). What Roles Do Parent Involvement , Family Background , and Culture Play in Student Motivation ? *The George Washington University*, *2009*, 1–14.

Utari, R. A., & Widodo, J. (2019). PENGARUH KEPEMIMPINAN INSTRUKSIONAL GURU DAN FASILITAS KELAS TERHADAP PRESTASI BELAJAR SISWA MELALUI MOTIVASI BELAJAR. *Economic Education Analysis Journal*, *7*(3), 1040–1055. https://doi.org/10.15294/eeaj.v7i3.28338

Xing, Z. (2023). *Explore How Family Factors Affect Students ' Academic Performance -Based on Literature Analysis*. *10*, 91–98.