

The Influence of Student Creativity, Instructional Media, Teaching Style, Family Environment, and Study Hours on the Learning Outcomes of 12th-Grade Students in Home Economics at SMKN 1 Simpang Alahan Mati

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Abstract

This study is motivated by the relatively low learning outcomes of eleventh-grade students in the PKK subject at SMK Negeri 1 Simpang Alahan Mati, which are presumed to be influenced by internal and external factors, including student creativity, instructional media, teaching style, family environment, and study time. This study aims to examine the partial and simultaneous effects of these variables on students' learning outcomes. A quantitative approach with an associative-causal design was employed. The population comprised 105 students, and the sample was selected using proportional random sampling. Data were collected through questionnaires, documentation, and observation, and analyzed using multiple linear regression with the assistance of statistical software. The findings indicate that student creativity, instructional media, teaching style, family environment, and study time each have a significant partial effect on learning outcomes. Simultaneously, all independent variables significantly influence learning outcomes and provide a substantial contribution to the dependent variable. These findings demonstrate that improving

students' learning outcomes requires the integrated optimization of both internal and external learning factors. The study contributes to educational practice by emphasizing the importance of creative teaching strategies, adequate instructional media, supportive family environments, and effective study-time management in strengthening students' academic performance.

Keywords: Learning Outcomes; Student Creativity; Instructional Media; Teaching Style; Family Environment and Study Time.

INTRODUCTION

Etymologically, the term education is derived from the Latin word *ducere*, meaning “to lead, guide, or direct,” combined with the prefix *e*, meaning “out.” Hence, education can be understood as the process of “leading out,” whereby individuals acquire experiences that shape how they think, feel, and act. Education is a conscious and systematically planned effort to create a conducive learning environment and instructional process, enabling learners to actively develop their potential, including spiritual strength, self-regulation, personality, intellectual capacity, moral integrity, and the competencies required for themselves, society, and the state (Setyorini & Wulandari, 2021).

Education is further defined as a conscious and systematically planned effort to create a learning environment and processes that foster self-regulation, personality development, intellectual growth, noble character, and the skills required by individuals for themselves, society, the nation, and the state. Thus, within the legal framework, education constitutes an intentional and structured endeavor to holistically develop learners' potential for the benefit of the individual, society, the nation, and the state.

According to Anggelina et al. (2023), learning is any form of psychological activity undertaken by an individual that results in observable changes in behavior before and after the learning process. Meanwhile (Sihaloho & Sihombing, 2023) define learning outcomes as evaluative measures that reveal various dimensions, including cognitive aspects and other psychological domains.

According to Rusmono (2017), learning outcomes refer to changes in individual behavior encompassing the cognitive, affective, and psychomotor domains. These behavioral changes are acquired after students complete their learning programs through interactions with various learning resources. Based on this perspective, learning outcomes

can be observed upon the completion of the instructional process, reflecting development across cognitive, affective, and psychomotor domains.

The quality of education is considered effective when learners demonstrate improvement in their learning capacities. The success or failure in achieving educational objectives largely depends on the learning processes experienced by students, both within the school environment and in the family context. In this study, the researcher designates SMKN 1 Simpang Alahan Mati as the object of investigation.

Based on the data of the average scores from the Education Report Cards for Basic, Secondary, and Vocational Education Units at the state vocational high school (SMK) level in Pasaman Regency for the 2024/2025 academic year, it can be identified that there are six public SMKs in the region. Among these, one school is accredited A, three schools are accredited B, and two schools are accredited C, namely SMKN 1 Padang Gelugur and SMKN 1 Simpang Alahan Mati.

It can also be observed that the SMK with the highest growth performance is SMKN 1 Rao Selatan, with a literacy growth score of 40.00%, a numeracy growth score of 40.00%, and a student character score of 4.68%. Therefore, this study focuses on SMKN 1 Simpang Alahan Mati, which remains in the lower category in terms of both accreditation and performance scores. In addition, the student character index at this school has declined by 0.53% compared to the previous year.

These findings indicate that the comparative data of the Education Report Card scores for public SMKs across Pasaman Regency in the 2024/2025 academic year show varying rankings across different assessment categories.

Therefore, the researcher selected SMKN 1 Simpang Alahan Mati as the research site, as this school is positioned in the upper-middle ranking category. The study will be conducted in Grade XI, particularly in the PKK (Creative Product and Entrepreneurship) subject. The rationale for selecting Grade XI as the research focus is based on the observation that several students have not yet achieved the minimum mastery criteria in the mid-semester examination of the odd semester in the 2024/2025 academic year.

Based on the data of students' learning outcomes in the PKK (Creative Product and Entrepreneurship) subject for Grade XI in the 2024/2025 academic year, it is identified that SMKN 1 Simpang Alahan Mati has established a Minimum Mastery Criterion (KKM) of 75. In Class XI TKJ, 20 students (60%) achieved mastery, while 13

students (39%) did not. In Class XI APHP, all 34 students (100%) achieved mastery, with no students failing to meet the criterion. In Class XI TSM, 26 students (68%) achieved mastery, while 12 students (46%) did not meet the minimum standard.

From these findings, it can be concluded that 25 out of 105 students have not yet reached the established KKM. This indicates that the learning outcomes of Grade XI students at SMKN 1 Simpang Alahan Mati remain relatively low.

The achievement of students' learning outcomes is influenced by various factors, including internal and external factors. Internal factors originate from within the students themselves, such as intelligence, cognitive maturity, creativity, and emotional ability in problem-solving. Meanwhile, external factors stem from outside influences, including teacher competence and the learning environment.

According to Saputra (2020), creativity is the ability to generate diverse ideas or concepts, which can be observed through an individual's way of thinking in solving problems. Student creativity is not merely reflected in their capacity to develop innovative learning strategies, but also in their ability to respond appropriately and find effective solutions to emerging problems.

Furthermore, Mayora et al. (2018) state that expected creativity includes: (1) fluency, the ability to generate numerous ideas or questions; (2) flexibility, the ability to produce varied ideas and shift easily between different types of thinking; (3) originality, the ability to think in novel ways that produce unique and innovative ideas; and (4) elaboration, the ability to develop and enrich ideas in greater detail. Previous studies have found that student creativity has a significant influence on learning outcomes (Saputra, 2020; Fitri & Sari, 2019; Padliah & Pujiastuti, 2020).

Creativity is often perceived as a skill based solely on innate talent, where only gifted individuals are considered capable of being creative. However, this assumption is not entirely accurate. Although certain individuals may demonstrate a greater ability to generate new ideas rapidly and diversely, in essence, the capacity for creative thinking is inherently possessed by all individuals.

Based on the data of Grade XI PKK students participating in the Skill Project for the 2024/2025 academic year, it can be observed that in Class XI TKJ, 25 students participated in the project while 8 students did not. In Class XI APHP, all 34 students participated, with no students opting out. Meanwhile, in Class XI TSM, only 10 students

participated, whereas 28 students did not. Overall, this indicates that 36 students have not been involved in the school's skill development project.

According to (Nurwidayanti & Mukminan, 2018), learning media are tools or methods that assist students in enhancing their understanding, presenting data in an engaging and reliable manner, facilitating interpretation or explanation of information, and condensing complex content. These tools may include visual aids such as images, graphs, or maps that can be directly observed by learners.

Furthermore, Haryadi et al. (2021) define learning media as instruments used to deliver information from credible sources, enabling educators to convey material effectively to students and thereby facilitating the learning process. Previous studies have demonstrated that learning media have a significant influence on students' learning outcomes (Haryadi et al., 2021; Kolopita et al., 2022; Nurwidayanti & Mukminan, 2018).

Based on the data of learning media at SMKN 1 Simpang Alahan Mati for the 2023/2024 academic year, it can be observed that the availability of instructional media and learning tools remains inadequate. This is evident from the limited number of textbooks, where only 21 are available out of the 39 required, resulting in a shortage of 18 books, many of which are also in damaged condition. Local whiteboard markers are available in sufficient quantity (10 units) and are in good condition. However, of the 33 computers required, only 30 are available, leaving a shortage of 3 units, with several existing computers experiencing performance issues or damage.

Furthermore, there are only 3 practice laboratories available out of the 6 required, indicating a shortage of 3 laboratories, although those available are still in good condition. Projectors (infocus) number 8, while 10 are needed, resulting in a shortage of 2 units. Graphs and maps are available in sufficient quantity (3 units), but their condition is poor. Networking equipment such as routers, switches, and UTP cables are insufficient, with only 2 units available out of the 6 required. Similarly, only 1 assembled PC is available out of the 3 needed. For vocational practice equipment, only 2 stoves are available out of 5 required, 1 oven out of 5, and 2 mixers are available in accordance with the required number and are in good condition.

Thus, it can be concluded that the learning media and facilities at SMKN 1 Simpang Alahan Mati are still inadequate, and such conditions may adversely affect students' learning outcomes.

According to Sutardi (2016), quality education requires competent educators. Therefore, teachers must possess professional competencies to effectively carry out their duties, thereby producing graduates who are qualified, morally upright, healthy, knowledgeable, capable, creative, and independent. One of the key parameters used to measure the success of education is students' learning outcomes. To achieve optimal learning outcomes, teachers play a crucial role as a determining factor in the success or failure of the learning process. The effectiveness of instructional implementation largely depends on teachers' readiness in managing the learning process. In fulfilling their professional responsibilities, teachers are required to possess core competencies, including pedagogical, personal, social, and professional competencies.

According to Astutie, as cited in Anggelina et al. (2023), teaching style refers to the specific methods employed by teachers in organizing and guiding students' learning experiences. This relates to how teachers deliver and communicate information to students in a manner that is effective and efficient.

Furthermore, Diahvitaloka (2024) states that teachers are capable of creating a learning environment from various perspectives that can stimulate students' curiosity and encourage active participation in the learning process. Previous studies have demonstrated that teaching style has a significant influence on students' learning outcomes (Annisa et al., 2021; Gulo & Telaumbanua, 2024; Setiawahyu, 2017).

Based on the data regarding the number of educators and educational staff at SMKN 1 Simpang Alahan Mati, it can be observed that 16 teachers have obtained professional certification, while 5 teachers are not yet certified and are categorized as honorary staff. The competence and professionalism of teachers play a significant role in influencing students' learning outcomes.

According to Wahyuni (2022), the family environment is the primary and initial medium for education and the cultivation of noble values in children. The family environment significantly influences children's emotional intelligence and psychosocial development.

Furthermore, Dalyono, as cited in (Rani & Zakir, 2019), states that the success or failure of an individual in learning is influenced by two main factors: internal and external factors. Internal factors originate from within the learner, such as learning motivation (Mahdalena, 2022; Ricardo & Meilani, 2017.), which serves as an intrinsic drive that

encourages students to engage in learning activities. Meanwhile, external factors stem from outside the learner, including the family environment.

Hasbullah, as cited in (Rani & Zakir, 2019), emphasizes that the family environment is the most fundamental context for a child, as it is within this environment that children first receive education and guidance. It is considered the primary environment because the majority of a child's life is spent within the family, making it the most influential setting in the educational process.

Several previous studies have found that various external factors, including the family environment and teaching practices, have a significant influence on students' learning outcomes (Rani & Zakir, 2019; Bonsapia et al., 2023; Nisa & Setiyani, 2016).

Based on the data regarding the parental income of students at SMKN 1 Simpang Alahan Mati, it can be concluded that the majority of parents' income—primarily derived from fathers—is below IDR 2,994,000. This condition influences the students' learning environment, as parental income serves as a supporting factor in students' academic success by fulfilling their educational needs, thereby enabling the learning process to be carried out effectively and appropriately.

According to Dewi (2019), time management is the ability to prioritize, organize, and take responsibility for individual needs. In the context of education, effective time management enables students to organize their study schedules efficiently, resulting in more structured and productive learning hours. The amount of time allocated to studying has a direct impact on students' learning outcomes.

Furthermore, (Nursalma & Pujiastuti, 2023) define study time as the duration allocated by students for engaging in learning activities. Study time contributes to the development of discipline and effective time management, which in turn affects the quality of learning. Establishing consistent study schedules and allocating time appropriately can enhance students' focus and productivity.

Lestari, as cited in (Azis & Ali, 2020), states that some students tend to be more focused and concentrated when studying in the morning due to their physical and mental freshness, which increases their motivation to learn. In contrast, during the afternoon, many students experience fatigue after engaging in learning activities since morning, resulting in decreased interest and even drowsiness. However, some students demonstrate higher enthusiasm for learning during the afternoon or evening sessions.

Previous studies have found that study time has a significant influence on learning outcomes (Sari, 2019; Raupu, 2018; Nursalma & Pujiastuti, 2023).

Based on the data of the Grade XI class schedule at SMKN 1 Simpang Alahan Mati for the 2023/2024 academic year, it can be observed that the instructional time allocation for the PKK subject varies across different study programs. Generally, students tend to demonstrate higher levels of concentration during morning learning sessions, as they are physically and cognitively more prepared to receive instructional material. In contrast, learning conducted in the afternoon often results in decreased interest and engagement due to fatigue from prior activities. However, this tendency is not universal, as some students remain unaffected by the timing of instruction and are still able to participate effectively in afternoon learning sessions.

The objective of this study is to examine the partial and simultaneous effects of these variables on students' learning outcomes.

METHODS

The present study employed a quantitative approach with an associative (causal) research design aimed at examining the influence of students' creativity, instructional media, teaching style, family environment, and study time on students' learning outcomes. The research was conducted at SMK Negeri 1 Simpang Alahan Mati, Pasaman Regency, West Sumatra, during the 2024/2025 academic year over a period of approximately three to four months, encompassing preparation, data collection, and analysis stages. The population consisted of 105 eleventh-grade students drawn from three classes (XI TKJ, XI APHP, and XI TSM), from which a representative sample was selected using proportional random sampling. Data were collected through a structured questionnaire based on a Likert scale to measure the independent variables, while students' learning outcomes were obtained from documented academic records (midterm or report scores in PKK subjects). Prior to data collection, the instrument was subjected to validity and reliability testing to ensure its accuracy and consistency. The data collection techniques included questionnaires, documentation, and direct observation to capture contextual learning conditions. Data analysis was performed using statistical software, incorporating descriptive analysis and classical assumption tests (normality, heteroscedasticity, multicollinearity, and

autocorrelation), followed by multiple linear regression analysis to assess the magnitude and direction of relationships among variables. Hypothesis testing was conducted using partial (t-test) and simultaneous (F-test) analyses, complemented by the coefficient of determination (R^2) to evaluate the explanatory power of the model. Overall, this methodological framework was designed to produce robust empirical evidence regarding the determinants of students' learning outcomes within the specified educational context.

RESULTS

Multiple Linear Regression Analysis

Table 1. Results of Multiple Linear Regression Analysis

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	34.074	2.051		16.613	.000
	kreativitas siswa	-.118	.037	-.364	-3.166	.003
	lingkungan keluarga	.181	.040	.530	4.542	.000
	jam belajar	-.272	.067	-.464	-4.064	.000
a. Dependent Variable: hasil belajar						

Based on the results presented in Table 1, the multiple linear regression equation can be formulated as follows:

$$Y = a + b_1 X_1 + b_4 X_4 + b_5 X_5$$

$$Y = 34.074 + -0.118X_1 + 0.181X_4 + -0.272 X_5$$

1. The regression model above indicates that the constant value is 34.074. This implies that, in the absence of the influence of the independent variables—namely student creativity, family environment, and study time—the baseline value of students' learning outcomes is 34.074.
2. The regression coefficient for the student creativity variable (X_1) is -0.118, indicating a negative effect of creativity on students' learning outcomes. This negative relationship suggests that students with higher levels of creativity tend to achieve lower academic learning outcomes compared to those with lower creativity levels. This finding contradicts the theory proposed by (Fitri & Sari, 2019), which states that creativity supports learning outcomes. However, in the context of this study, the negative result indicates that creativity

does not always align with formal academic achievement. For instance, standardized assessment systems may not adequately accommodate students' creative ideas.

3. The regression coefficient for the family environment variable (X_4) is 0.181, indicating a positive influence on students' learning outcomes. This means that for every one-unit increase in the family environment variable, students' learning outcomes increase by 0.181 units, assuming that other variables remain constant.

4. The regression coefficient for the study time variable (X_5) is -0.272, indicating a negative effect on students' learning outcomes. This negative relationship suggests that increasing study time does not necessarily improve academic achievement and may even reduce learning outcomes. This finding differs from behaviorist learning theory, which assumes that increased repetition enhances learning outcomes. However, it aligns with cognitive theory, particularly the concept of *cognitive overload*, where excessive study duration leads to mental fatigue, thereby reducing the effectiveness of information processing. Prolonged study without adequate breaks can result in both physical and mental exhaustion.

Multiple Regression Analysis of Low Parental Income

Table 2. Results of Multiple Linear Regression Analysis of Students with Low Parental Income

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	35.733	2.275		15.709	.000
	kreativitas siswa	-.148	.041	-.422	-3.596	.001
	lingkuungan keluarga	.201	.042	.586	4.808	.000
	jam belajar	-.342	.073	-.557	-4.700	.000
a. Dependent Variable: hasil belajar						

Based on the results presented in Table 2, the multiple linear regression equation can be formulated as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

$$Y = 35.733 - 0.148X_1 + 0.201X_2 - 0.342X_3$$

The regression model above indicates that the constant value is 35.733. This means that in the absence of the influence of the independent variables—namely student creativity, family environment, and study time—the baseline value of students' learning outcomes is 35.733.

1. The regression coefficient for the student creativity variable (X_1) among students with low parental income is -0.148. This indicates that if student creativity increases by one unit, students' learning outcomes will decrease by 0.148 units.
2. The regression coefficient for the family environment variable (X_2) is 0.201. This indicates that the family environment has a positive influence on students' learning outcomes. If the value of the family environment improves by one unit, students' learning outcomes will increase by 0.201 units.
3. The regression coefficient for the study time variable (X_3) is -0.342. This indicates that study time has a negative influence on students' learning outcomes. If study time increases by one unit, students' learning outcomes will decrease by 0.342 units.

Multiple Regression Analysis of High Parental Income

Table 3. Results of Multiple Linear Regression Analysis of Students with High Parental Income

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	27.471	6.077		4.520	.020
kreativitas siswa	-.223	.138	-1.146	-1.616	.204
lingkungan keluarga	.252	.147	.802	1.714	.185
jam belajar	.177	.264	.441	.668	.552
a. Dependent Variable: hasil belajar					

Based on the results presented in Table 3, the multiple linear regression equation can be formulated as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$

$$Y = 27.471 + (-0.223)X_1 + 0.252X_2 + 0.177X_3$$

1. The regression model above shows that the constant value is 27.471. This indicates that, in the absence of the influence of the independent variables—namely student creativity, family environment, and study time—the baseline value of students' learning outcomes is 27.471.
2. The regression coefficient for the student creativity variable (X_1) among students with high parental income is -0.223. This means that if student creativity increases by one unit, students' learning outcomes will decrease by 0.223 units.

3. The regression coefficient for the family environment variable (X_4) is 0.252. This indicates that if the family environment improves by one unit, students' learning outcomes will increase by 0.252 units.

4. The regression coefficient for the study time variable (X_5) is 0.177. This indicates that if study time increases by one unit, students' learning outcomes will increase by 0.177 units.

Hypothesis Testing

Table 4. Results of the F-Test

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	248.459	3	82.820	12.794	.000 ^a
	Residual	278.349	43	6.473		
	Total	526.809	46			
<i>a. Predictors: (Constant), jam belajar, kreativitas siswa, lingkungan keluarga</i>						
<i>b. Dependent Variable: hasil belajar</i>						

From the results of data processing using SPSS version 16.0, as presented in Table 4 above, it can be observed that for both groups of students—those with high and low parental income—the calculated F-value (F_{count}) is 12.974, which is greater than the F-table value (F_{table}) of 2.449, and the significance value is 0.000, which is less than $\alpha = 0.05$. This indicates that H_0 is rejected and H_a is accepted.

Thus, it can be concluded that student creativity, family environment, and study time have a significant effect on students' learning outcomes in the PKK subject at SMKN 1 Simpang Alahan Mati. Furthermore, the data analysis shows that the learning outcomes of students from the high parental income group are higher compared to those from the low parental income group.

Table 5. Results of the t-Test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	34.074	2.051		16.613	.000
	kreativitas siswa	-.118	.037	-.364	-3.166	.003
	lingkungan keluarga	.181	.040	.530	4.542	.000
	jam belajar	-.272	.067	-.464	-4.064	.000
<i>a. Dependent Variable: hasil belajar</i>						

From Table 5, the partial effects of each independent variable on students' learning outcomes can be described as follows:

1. Hypothesis 1: There is a negative and significant effect of student creativity (X_1) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The calculated t-value is -3.166, which is greater than the t-table value of 1.683, with a significance value of 0.003. This indicates that H_a is accepted and H_0 is rejected. Thus, it can be concluded that student creativity has a negative and significant effect on learning outcomes.
2. Hypothesis 2: There is a negative and significant effect of family environment (X_4) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The calculated t-value is 4.542, which is greater than the t-table value of 1.683, with a significance value of 0.000. This indicates that H_a is accepted and H_0 is rejected. Thus, it can be concluded that the family environment has a negative and significant effect on students' learning outcomes.
3. Hypothesis 3: There is a negative and significant effect of study time (X_3) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The calculated t-value is 4.064, which is greater than the t-table value of 1.683, with a significance value of 0.000. This indicates that H_a is accepted and H_0 is rejected. Thus, it can be concluded that study time has a negative and significant effect on students' learning outcomes.

DISCUSSION

The Effect of Student Creativity (X_1) on Students' Learning Outcomes in the PKK Subject at SMKN 1 Simpang Alahan Mati

Based on the hypothesis testing results, there is a negative and significant effect of student creativity (X_1) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The obtained t-value is -3.166, which is greater than the t-table value of 1.683, with a significance value of 0.003. This indicates that H_a is accepted and H_0 is rejected. Therefore, it can be concluded that student creativity has a negative and significant effect on learning outcomes in the PKK subject at SMKN 1 Simpang Alahan Mati.

Overall, based on the indicators of student creativity, fluency reached 68.51% (moderate category), flexibility 68.94% (moderate category), originality 62.13% (low to moderate category), and elaboration 69.36% (moderate category). This finding is in line with (Fitri & Sari, 2019; Malau & Nainggolan, 2024; Putri & Hidayati, 2024), who state that student creativity influences learning outcomes. Most students tend to replicate examples provided by teachers. When faced with slightly different problem presentations, students often experience difficulties in solving them. Therefore, creative thinking skills are required so that students are able to analyze and solve problems appropriately, which ultimately leads to optimal learning outcomes.

The Effect of Family Environment (X_4) on Students' Learning Outcomes in the PKK Subject at Grade XI SMKN 1 Simpang Alahan Mati

Based on the hypothesis testing results, there is a negative and significant effect of family environment (X_4) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The obtained t-value is 4.542, which is greater than the t-table value of 1.683, with a significance value of 0.000. This indicates that H_a is accepted and H_0 is rejected. Thus, it can be concluded that the family environment has a significant effect on students' learning outcomes in the PKK subject at SMKN 1 Simpang Alahan Mati.

Based on the indicators of family environment, parenting style reached 80.71% (good category), home atmosphere 74.04% (moderate category), parents' economic condition 71.49% (moderate category), and cultural background 70.64% (moderate category). This finding is consistent with (Rani & Zakir, 2019; Christenson & Reschly, 2017; Epstein, 2018), who state that the family environment has a positive and significant effect on student learning outcomes. A conducive family environment plays an essential role in supporting optimal student achievement.

The Effect of Study Time (X_5) on Students' Learning Outcomes in the PKK Subject at SMKN 1 Simpang Alahan Mati

Based on the hypothesis testing results, there is a negative and significant effect of study time (X_5) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The obtained t-value is 4.064, which is greater than the t-table value

of 1.683, with a significance value of 0.000. This indicates that H_a is accepted and H_0 is rejected. Therefore, it can be concluded that study time has a significant effect on students' learning outcomes in the PKK subject at SMKN 1 Simpang Alahan Mati.

Overall, based on the indicators of study time, learning duration reached 77.59% (moderate category), and consistency reached 73.69% (moderate category). This finding is in line with (Raupu, 2018; Hattie, 2017; Kiewra, 2018), who states that study time, in relation to learning facilities, has a positive influence on student learning outcomes. Unsystematic study time may negatively affect students' learning activities both at home and at school. However, excessively long study duration may also lead to boredom and decreased learning effectiveness.

Research implications. The findings of this study indicate that student creativity, family environment, and study time significantly influence learning outcomes. These results imply the need for more adaptive and contextual learning approaches. Teachers are expected not only to foster students' creativity but also to guide it so that it aligns with academic demands. In addition, family involvement should be strengthened as part of the educational ecosystem, and students' study time management needs to be optimized to avoid cognitive fatigue.

Research limitations. This study has several limitations. It was conducted in a single school with a relatively small sample size, which limits the generalizability of the findings. Furthermore, the variables examined were limited to selected internal and external factors and did not include other potentially influential variables such as intrinsic motivation, teaching quality, or psychological factors. The use of questionnaires as the primary data collection instrument may also introduce respondent bias.

CONCLUSION

Based on the results of the data analysis, the following conclusions can be drawn: 1) The hypothesis testing results show that there is a negative and significant effect of student creativity (X_1) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The obtained t-value is -3.166, which is greater than the t-table value of 1.683, with a significance value of 0.003. This indicates that H_a is accepted and H_0 is rejected. 2) The hypothesis testing results indicate that there is a positive and not significant effect of

learning media (X_2) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The obtained t-value is 2.633, which is greater than the t-table value of 1.683, with a significance value of 0.082. This indicates that H_a is rejected and H_0 is accepted. 3) The hypothesis testing results show that there is a positive and not significant effect of teacher teaching style (X_3) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The obtained t-value is -2.029, which is greater than the t-table value of 1.683, with a significance value of 0.058. This indicates that H_a is rejected and H_0 is accepted. 4) The hypothesis testing results show that there is a negative and significant effect of family environment (X_4) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The obtained t-value is 4.542, which is greater than the t-table value of 1.683, with a significance value of 0.000. This indicates that H_a is accepted and H_0 is rejected. 5) The hypothesis testing results indicate that there is a negative and significant effect of study time (X_5) on students' learning outcomes (Y) in the PKK subject at SMKN 1 Simpang Alahan Mati. The obtained t-value is 4.064, which is greater than the t-table value of 1.683, with a significance value of 0.000. This indicates that H_a is accepted and H_0 is rejected.

This study contributes to the field of education by enhancing the understanding of the relationship between internal and external factors and students' learning outcomes. The finding that creativity and study time have negative effects provides a novel perspective, suggesting that factors traditionally considered beneficial do not always positively correlate with academic achievement. This insight may serve as a basis for developing more comprehensive and balanced instructional models.

Future researchers are encouraged to expand the scope of the study by involving multiple schools and larger sample sizes to improve the representativeness of the findings. It is also recommended to include additional variables such as learning motivation, teaching methods, and students' psychological factors to obtain a more comprehensive understanding. Employing a mixed-methods approach is suggested to provide deeper insights through both quantitative and qualitative data.

REFERENCES

- Anggelina, P. A., Darman, R. A., & Nurdin, B. N. (2023). Pengaruh Gaya Mengajar Guru dan Gaya Belajar Siswa terhadap Hasil Belajar Siswa: Studi Kasus SMK Negeri 1 Kinali. *Jurnal Inovasi Pendidikan dan Teknologi Informasi (JIPTI)*, 4(2), 151–162. <https://doi.org/10.52060/pti.v4i2.1392>
- Annisa, A., Caska, C., & Kartikowati, K. (2021). Pengaruh Gaya Mengajar Guru dan Disiplin Mengajar Guru terhadap Hasil Belajar Siswa pada Mata Pelajaran Ekonomi Siswa IPS Kelas XI SMA YLPI Pekanbaru. *Jurnal Terapan Ilmu Manajemen dan Bisnis (JTIMB)*, 3(1), 1–11.
- Azis, A., & Ali, S. (2020). Pengaruh Jam Belajar pada Mata Pelajaran Matematika terhadap Prestasi Belajar Siswa Kelas XI SMA Negeri 1 Batauga. *Jurnal Akademik Pendidikan Matematika*, 5(2), 94–101. <https://doi.org/10.55340/japm.v5i2.179>
- Bonsapia, A. M., Najooan, R. A. O., & Komedian, B. E. J. (2023). Pengaruh Lingkungan Keluarga terhadap Hasil Belajar Siswa SD Inpres 19 Ibeanari Distrik Kebar Kabupaten Tambaui. *Jurnal Ilmiah Wahana Pendidikan*, 9(19), 82–87. <https://doi.org/10.5281/zenodo.8378912>
- Christenson, S. L., & Reschly, A. L. (2017). *Handbook of Research on Student Engagement*. Springer. <https://doi.org/10.1007/978-1-4614-2018-7>
- Diahvitaloka, T. A. (2024). Pengaruh Gaya Mengajar Guru dan Kepuasan Belajar Siswa terhadap Hasil Belajar Siswa: Studi Kasus pada SMK Triyasa Surabaya. *Jurnal Pendidikan Ekonomi*, 8(1), 42–48.
- Epstein, J. L. (2018). *School, Family, and Community Partnerships: Preparing Educators and Improving Schools* (2nd ed.). Routledge. <https://doi.org/10.4324/9780429493133>
- Fitri, F., & Sari, S. (2019). Pengaruh Kreativitas dan Minat Belajar terhadap Hasil Belajar Matematika. *Jurnal Silogisme: Kajian Ilmu Matematika dan Pembelajarannya*, 2(2), 74–83.
- Gulo, P. H., & Telaumbanua, A. (2024). Pengaruh Gaya Mengajar Guru terhadap Hasil Belajar Siswa SMK. *Ideguru: Jurnal Karya Ilmiah Guru*, 9(3), 1998–2005. <https://doi.org/10.51169/ideguru.v9i3.1451>
- Haryadi, R., Nuraini, H., & Kansaa, A. (2021). Pengaruh Media Pembelajaran E-Learning terhadap Hasil Belajar Siswa. *At-Ta'lim: Jurnal Pendidikan*, 7(1).
- Hattie, J. (2017). *Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement* (Updated ed.). Routledge. <https://doi.org/10.4324/9781315885025>
- Kiewra, K. A. (2018). How Classroom Teachers Can Help Students Learn and Teach Them How to Learn. *Theory Into Practice*, 57(2), 96–103. <https://doi.org/10.1080/00405841.2018.1424192>
- Kolopita, C. P., Katili, M. R., & Yassin, R. M. T. (2022). Pengaruh Media Pembelajaran terhadap Hasil Belajar Siswa pada Mata Pelajaran Komputer dan Jaringan Dasar. *Inverted: Journal of Information Technology Education*, 2(1), 1–12. <https://doi.org/10.37905/inverted.v2i1.13081>
- Mahdalena, M. (2022). Pengaruh Minat Belajar, Dukungan Orang Tua dan Lingkungan Belajar terhadap Perilaku Belajar Siswa dan Hasil Belajar Siswa pada Mata Pelajaran IPA. *Kindai*, 18(2), 332–351. <https://doi.org/10.35972/kindai.v18i2.803>

- Malau, B. M., & Nainggolan, B. (2024). The Effect of Discovery Learning Model Assisted E-Module on Creativity and Learning Outcomes. *Jurnal Ilmu Pendidikan Indonesia*, 12(2). <https://doi.org/10.31957/jipi.v12i2.3589>
- Nisa, I. K., & Setiyani, R. (2016). Pengaruh Kompetensi Pedagogik, Lingkungan Keluarga dan Minat Belajar terhadap Prestasi Belajar. *Economic Education Analysis Journal*, 5(2), 655.
- Nursalma, A., & Pujiastuti, H. (2023). Pengaruh Waktu Belajar dan Motivasi Belajar terhadap Hasil Belajar Matematika. *Jurnal Pendidikan Matematika*, 2(3), 135–141.
- Nurwidayanti, D., & Mukminan, M. (2018). Pengaruh Media Pembelajaran terhadap Hasil Belajar Ekonomi Ditinjau dari Gaya Belajar Siswa SMA. *Harmoni Sosial: Jurnal Pendidikan IPS*, 5(2), 105–114. <https://doi.org/10.21831/hsjpi.v5i2.17743>
- Padliah, M., & Pujiastuti, H. (2020). Pengaruh Kreativitas dan Gaya Belajar terhadap Hasil Belajar Matematika Siswa. *Delta: Jurnal Ilmiah Pendidikan Matematika*, 8(2), 143. <https://doi.org/10.31941/delta.v8i2.1003>
- Putri, F. E., & Hidayati, F. (2024). Project-Based Learning to Improve Creativity and Learning Outcomes. *Biodik: Jurnal Ilmiah Pendidikan Biologi*, 10(2). <https://doi.org/10.22437/biodik.v10i2.29762>
- Rani, & Zakir, H. (2019). Pengaruh Lingkungan Keluarga dan Motivasi Belajar terhadap Hasil Belajar. *Jurnal Pendidikan*, 27(2), 635–637.
- Raupu, S. (2018). Pengaruh Jumlah Jam Belajar dan Fasilitas Belajar terhadap Hasil Belajar Matematika Siswa. *Al-Khwarizmi: Jurnal Pendidikan Matematika dan Ilmu Pengetahuan Alam*, 6(1), 15–28. <https://doi.org/10.24256/jpmipa.v6i1.389>
- Ricardo, R., & Meilani, R. I. (2017). Impak Minat dan Motivasi Belajar terhadap Hasil Belajar Siswa. *Jurnal Pendidikan Manajemen Perkantoran*, 2(2), 79. <https://doi.org/10.17509/jpm.v2i2.8108>
- Saputra, W. (2020). Pengaruh Kreativitas terhadap Hasil Belajar Matematika Siswa. *Jurnal Ilmiah Matematika Realistik*, 1(2), 13–16. <https://doi.org/10.33365/ji-mr.v1i2.443>
- Sari, B. T. W. (2019). Pengaruh Durasi Belajar terhadap Hasil Belajar Matematika Siswa. *Jurnal Review Pendidikan dan Pengajaran*, 2(1), 139–144. <https://doi.org/10.31004/jrpp.v2i1.264>
- Setiawahyu, M. I. (2017). Pengaruh Gaya Mengajar dan Kemampuan Awal terhadap Hasil Belajar Keterampilan Sepak Bola. *JUARA: Jurnal Olabraga*, 2(2), 181. <https://doi.org/10.33222/juara.v2i2.45>
- Setyorini, I. D., & Wulandari, S. S. (2021). Media Pembelajaran, Fasilitas dan Lingkungan Belajar terhadap Hasil Belajar Selama Pandemi COVID-19. *Jurnal Profit*, 8(1), 19–29. <https://doi.org/10.36706/jp.v8i1.13598>
- Sihaloho, R., & Sihombing, S. (2023). Pengaruh Lingkungan Sekolah dan Motivasi Belajar terhadap Hasil Belajar Siswa. *Jurnal Pendidikan Indonesia*, 3(1). <https://doi.org/10.59818/jpi.v3i1.385>