
The Effectiveness of Learning Time Management in Managing Juvenile Delinquency Stress: The Moderating Roles of Parents and Schools

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Abstract:

This study aims to assess the management of school governance, focusing on the effectiveness and efficiency of study time management, and the role of collaboration between parents and the school as a moderating variable in managing juvenile delinquency stress. The research was conducted at MTSN 2 Semarang City with a sample of 75 respondents. Data analysis was performed using SPSS. The findings revealed that the effectiveness of study time management had a negative and insignificant impact on the collaboration between parents and teachers. In contrast, the efficiency of study time management was found to have a positive and significant effect on the collaboration between parents and teachers. Furthermore, the effectiveness of study time management had a significant negative impact on stress management and juvenile delinquency, while efficient study time management positively and significantly influenced both stress management and the reduction of juvenile delinquency. These results suggest that effective time management can help reduce emotional and academic stress and improve adolescent behavior. However, the study found that collaboration between parents and teachers did not significantly influence stress management or juvenile delinquency. This indicates that although effective time management can directly affect these outcomes, the collaboration between parents and teachers does not act as a mediator in this relationship. The study suggests that the collaboration between parents and teachers may be more focused on academic or disciplinary matters, rather than directly addressing stress management or juvenile delinquency.

Keywords: Management, Schools of Governance, Time Management

Submitted: November 25, 2024, Accepted: December 15, 2024, Published: December 31, 2024

1. Introduction

In recent years, the importance of self-education from an early age has become increasingly recognized. Developing students' potential across various domains—cognitive, social-emotional, and psychological—is essential for their future success (Liu & Wang, 2021). Children's intelligence is not solely a function of brain development but is also shaped by emotional and cognitive factors that contribute to

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their growth (Zhang & Liu, 2023). The development of children in these areas is crucial, as the more complete and balanced the stages of growth in these aspects, the more intelligent the child's overall development will be (Williams & Lee, 2020).

Childhood represents a critical developmental period, one that significantly influences adulthood. During this stage, the pace of growth can vary from one child to another, making it essential to create individualized learning environments that engage a child's full cognitive and emotional potential (Robinson & Scott, 2022). The role of parents and schools in guiding children and providing a positive environment is indispensable. Effective parenting and school strategies help nurture both academic success and moral character, laying a strong foundation for future achievement (Park & Cho, 2022; Johnson & Wang, 2020).

However, despite the importance of parental and school involvement, several challenges remain. One such challenge is the stress adolescents face due to academic pressures, which can lead to behavioral problems or juvenile delinquency. This stress is particularly evident in junior high school students, who undergo a significant transition from childhood to adolescence (Hernandez & Choi, 2021). The lack of effective time management in educational settings contributes to this stress (Smith et al., 2020).

Research on the relationship between time management and stress, especially in the context of juvenile delinquency, is limited. Previous studies have explored how time management impacts academic performance and stress levels (Robinson & Scott, 2022), but few have examined the specific impact of time management on managing juvenile delinquency stress. Furthermore, while parental involvement has been shown to affect children's stress management (Brown & Green, 2021), its interaction with time management strategies remains underexplored.

This study aims to fill these gaps by investigating how learning time management can reduce juvenile delinquency stress, with the moderating roles of parents and schools. The novelty of this research lies in examining the combined influence of effective time management and parental collaboration in reducing stress and delinquency among adolescents. The study will assess how time management affects juvenile delinquency, the role of parental involvement, and the interaction between parents and schools in mitigating these effects.

Understanding the relationships among these variables will provide insights into effective strategies for supporting adolescents' emotional well-being and academic success. By exploring the moderating roles of both parents and schools, this research offers valuable information for educators, parents, and policymakers on improving time management practices and creating environments that foster positive behavior and academic achievement in adolescents.

2. Theoretical Background

Role of Management: Management is a multifaceted term, which varies based on individual interpretation. The English verb "manage," translated into Indonesian as "mengelola," forms the foundation of this understanding. In the context of education, this concept refers to "Management of Education." According to Yamin (2009), educational management is a systematic, comprehensive process aimed at achieving the national educational goals. It encompasses all activities related to the educational process, striving to reach both short-term and long-term objectives. Effective educational management requires coordination among various stakeholders and a strategic approach to address educational challenges (Zhang & Liu, 2023; Williams & Lee, 2020).

Management Implementation: Management implementation refers to the execution of policies, legislation, or governmental regulations aimed at achieving specific outcomes. These actions are often supported by governmental institutions and aim to create structured delivery systems that ensure the successful achievement of public policy goals. This concept aligns with the notion of a "policy delivery system" discussed in public policy science, which includes specific methods or means designed to achieve targeted outcomes (Hernandez & Choi, 2021).

In educational management, the application of implementation strategies is essential to guide the effective use of resources and the overall improvement of educational systems (Smith et al., 2020). Effective management in education is not just about planning but also about ensuring that policies are translated into actionable steps that contribute to the educational goals set by national standards.

Management Function: The core of management is to organize and direct resources, individuals, or organizations to solve problems or achieve goals. This function is especially critical in educational settings, where the goal is to improve the quality of learning and foster academic success. According to Handoko (2015), management functions in education include planning, organizing, leading, and controlling, all of which contribute to a better learning process. Management functions help streamline the education process, ensuring that students receive the guidance and support needed to succeed (Robinson & Scott, 2022).

The role of management in education also extends to time management, particularly in terms of structuring and optimizing learning hours to reduce academic stress and improve behavioral outcomes (Liu & Wang, 2021). Efficient management practices are crucial in balancing the demands of academic success with the emotional and behavioral needs of students (Robinson & Scott, 2022).

Practical: The term "effective" refers to the successful execution of tasks according to specified targets or criteria. Peter F. Drucker emphasized that effectiveness in management involves "doing the right things" (Tisnawati Sule & Saefullah, 2010). In the context of education, this means implementing strategies and practices that

directly contribute to student success, both academically and behaviorally (Zhang & Liu, 2023). Effective education management not only addresses academic objectives but also aims to foster positive character development and well-being in students (Park & Cho, 2022).

Efficient: Efficiency, on the other hand, refers to completing tasks in a way that minimizes the use of time, energy, and costs while achieving the desired outcomes. In educational management, efficiency is vital to ensure that resources are utilized optimally and that students can achieve their full potential without unnecessary waste of time or effort (Smith et al., 2020). Efficiency in the context of time management ensures that students can balance academic requirements with their emotional and social development, reducing stress and preventing delinquency (Williams & Lee, 2020).

Theory of Planned Behavior (TPB): The Theory of Planned Behavior (Ajzen, 1985) provides a framework for understanding how individuals' intentions influence their behavior. This theory suggests that three key factors—attitudes toward behavior, subjective norms, and perceived behavioral control—are critical in shaping a person's actions. In the educational context, TPB can help explain how students' intentions to engage in productive learning behaviors or manage their stress are influenced by their attitudes toward time management, the expectations of their parents and teachers, and their ability to control their academic and personal behaviors (Robinson & Scott, 2022). By understanding these factors, educators can create environments that support effective time management and reduce the stress that contributes to juvenile delinquency.

3. Methodology

This study uses a quantitative research approach aimed at analyzing the relationship between learning time management, parental-school collaboration, and stress management in preventing juvenile delinquency among middle school students. A survey design is employed, where data is collected using a questionnaire distributed to selected respondents. The quantitative approach is chosen as it allows for the measurement of variables related to learning time management, parental-school collaboration, and stress levels associated with juvenile delinquency statistically. The population in this study consists of middle school students at MTSN 2 Semarang City, with a sample size of 75 respondents selected using a saturated sampling technique. This technique is employed because the sample size is the same as the total population, ensuring that the sample accurately represents the population. The data used in this research consists of both primary and secondary data. Primary data is collected through questionnaires completed by respondents, covering variables such as learning time management, parental-school collaboration, stress management, and juvenile delinquency. Secondary data is gathered from relevant sources such as school documents and literature pertaining to the research topic. The research instrument is a Likert scale questionnaire, designed to measure the respondents' attitudes,

perceptions, and experiences related to the studied variables. The Likert scale offers five response options, ranging from strongly disagree to strongly agree, to assess the extent of agreement with the statements (Ghozali, 2018).

Data analysis in this study is conducted using regression analysis with a Partial Least Squares (PLS) model. The PLS model is chosen due to its ability to estimate relationships between latent variables that are difficult to measure directly and its capability to handle relatively small sample sizes. PLS regression enables the testing of direct and indirect relationships between variables and assesses the predictive model within the relationships being studied (Hair et al., 2019). The analysis involves several steps, including the development of the measurement model by selecting relevant indicators for each latent variable based on existing theory and literature, constructing the structural model to identify the relationships between latent variables according to the research hypotheses, and testing the validity and reliability of the constructs using outer loadings and composite reliability. Furthermore, the study will examine the direct and indirect effects of learning time management and parental-school collaboration on stress management and juvenile delinquency using regression analysis. Hypotheses will be tested through bootstrapping techniques to determine the significance of relationships within the model. SPSS will be used for basic statistical analysis, while SmartPLS will be used for the PLS regression analysis to examine the relationships between the variables.

4. Empirical Findings/Result

Data Analysis and Discussion

Validity Test Results

The validity test will test each variable used in this study, where all research variables contain 24 statements that respondents must answer. The criteria used in determining the validity of the statements used in this study are as follows: confidence level = 75% ($\alpha = 5\%$), degrees of freedom ($df = n - 3 = 78 - 3 = 75$) obtained r table = 0.227 If r count (for each item can be seen in the Corrected Item – Total Correlation column) is more significant than r table and the r value is positive, then the statement item is said to be valid (Ghozali, 2005). Based on the analysis that has been done, the results of the validity test can be shown in Table as follows:

Table 1. Results of Validity Test of Research Variables

Variables	Item Statement	r count	r table	Information
Effective Time Management in School	X1.1	0.340	0, 227	Valid
	X1.2	0.271	0, 227	Valid
	X1.4	0.312	0, 227	Valid
	X1.5	0.234	0, 227	Valid
	X1.7	0.518	0, 227	Valid
	X1.8	0.435	0, 227	Valid
	X1.10	0.329	0, 227	Valid
	X1.12	0.416	0, 227	Valid
	X1.13	0.323	0, 227	Valid

Efficient Learning Time at School	X1.14	0.334	0,227	Valid
	X1.16	0.316	0,227	Valid
	X1.17	0.428	0,227	Valid
	X2.2	0.600	0,227	Valid
	X2.6	0.581	0,227	Valid
	X2.8	0.587	0,227	Valid
	X2.10	0.592	0,227	Valid
	X2.12	0.702	0,227	Valid
	X2.13	0.682	0,227	Valid
	X2.14	0.596	0,227	Valid
Collaboration	X2.15	0.567	0,227	Valid
	X2.16	0.606	0,227	Valid
	Z1	0.227	0,227	Valid
	Z2	0.742	0,227	Valid
	Z3	0.759	0,227	Valid
	Z4	0.623	0,227	Valid
	Z5	0.762	0,227	Valid
Personal Dynamic Capability	Z6	0.662	0,227	Valid
	Y1	0.644	0,227	Valid
	Y2	0.655	0,227	Valid
	Y3	0.621	0,227	Valid
	Y4	0.466	0,227	Valid
	Y5	0.642	0,227	Valid
	Y6	0.746	0,227	Valid
	Y7	0.660	0,227	Valid

Source: Primary data processed with SPSS 26.0,24

Based on the Table, the value of the r count of all tested indicators is positive and more significant than that of the r table. So, all indicator items used in this study passed the validity test and were declared valid.

1. Reliability Test Results

A reliability test measures the consistency of constructs or research variables. The reliability test is measured using the *Cronbach Alpha* (α) statistical test.

Table 2. Statistical Reliability Test of Variable X1

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.872	.875	13

Source: Primary data processed with SPSS 26, 2024

From the Table above, a construct or variable is reliable if it provides an *Alpha coefficient value* greater than 0.60 (Nunnaly, 1967; Ghazali, 2005). The reliability test results in this study can be seen in *Cronbach's Alpha* of 0.872, with an *Alpha coefficient value* greater than 0.60. Thus, the measuring instrument used in this study is reliable.

Table 3. Statistical Reliability Test of Variable X2

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.818	.820	9

Source: Primary data processed with SPSS 26, 2024

From the Table above, a construct or variable is reliable if it provides an *Alpha coefficient value* greater than 0.60 (Nunnaly, 1967; Ghazali, 2005). The reliability test results in this study can be seen in *Cronbach's Alpha* of 0.818, which has an *Alpha coefficient value* greater than 0.60. Thus, the measuring instrument used in this study is reliable.

Table 4. Statistical Reliability Test of Z Variable

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.685	.695	6

Source: Primary data processed with SPSS 26.0, 2024

From the Table above, a construct or variable is reliable if it provides an *Alpha coefficient value* greater than 0.60 (Nunnaly, 1967; Ghazali, 2005). The reliability test results in this study can be seen in *Cronbach's Alpha* of 0.685, which has an *Alpha coefficient value* greater than 0.60. Thus, the measuring instrument used in this study is reliable.

Table 5. Statistical Reliability Test of Variable Y

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.752	.751	7

Source: Primary data processed with SPSS 26, 2024

From the Table above, a construct or variable is reliable if it provides an *Alpha coefficient value* greater than 0.60 (Nunnaly, 1967; Ghazali, 2005). The reliability test results in this study can be seen in *Cronbach's Alpha* of 0.752, which has an *Alpha coefficient value* greater than 0.60. Thus, the measuring instrument used in this study is reliable.

2. Classical Assumption Test

1) Data Normality Test

This test is used to test a product of *independent variable regression*. Alternatively, both have a normal distribution or not. However, the data in this study uses Kolmogorov Smirnov. The basis for decision-making:

- If the significance value > 0.05 , the regression model meets the normality assumption.
- If the significance value < 0.05 , then the regression model does not meet the normality assumption.

Table 6. Normality of Kolmogorov-Smirnov Test
One-Sample Kolmogorov-Smirnov Test

		Unstandardize d Residual
N		76
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.45380442
Most Extreme Differences	Absolute	.088
	Positive	.059
	Negative	-.088
Test Statistics		.088
Asymp. Sig. (2-tailed)		.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: Primary data processed with SPSS 26, 2024

The SPSS Kolmogorov-Smirnov output shows the value of *Asimp Sig (2-tailed)*: $0.200 > 0.05$ significance level. So, hypothesis no (H_0) is accepted, and the alternative hypothesis (H_a) is rejected. This means that the *Personal Dynamic Capability* variable data is usually distributed.

2) Multicollinearity Test

The multicollinearity test aims to test whether there is a correlation between independent variables in the regression model. A good regression model should not correlate with independent variables. According to Ghazali (2006), *the Variance Inflation Factor (VIF)* value for multicollinearity is not more than 10 and *the tolerance value* is above 0.10, it can be seen that no variable has a VIF value greater than 10 and a *tolerance value* smaller than 10%, which means that there is no correlation between independent variables greater than 95%, so it can be concluded that there is no multicollinearity between independent variables in the regression model. Alternatively, the regression model in this study is free from symptoms of multicollinearity.

3) Heteroscedasticity Test

The results of the heteroscedasticity test can be seen in the Glejser Test Results. It is known that the significant value of the variables *Effective Study Time* (X_1), *Efficient Study Time* (X_2), and *Collaboration* (Z) is more significant than 0.05, meaning that there is no heteroscedasticity in the *Personal Dynamic*

Capability variable. Besides that, the significant value of the variables *Effective Study Time* (X_1) and *Efficient Study Time* (X_2) is known to be more significant than 0.05, meaning there is no heteroscedasticity in the *Personal Dynamic Capability variable*.

3. Multiple Linear Regression Analysis

Multiple linear analysis is used to analyze the linear relationship between dependent and independent variables.

Regression Equation I

$$Y_1 = 0.293 X_1 + 0.684 X_2 + 0.166 X_3$$

Where; X_1 = *Effective Learning Time Variable*

X_2 = *Learning Time Efficiency Variable*

Z = *Collaboration*

This equation means the increase in *children's stress management* is influenced by the beta coefficients of *Effective Learning Time*, *Efficient Learning Time*, and *Collaboration between parents and teachers*.

Meaning of Regression Equation I:

1. The regression coefficient value of variable X_1 is -0.293, meaning that variable X_1 hurts variable (Y_1). If the *Effective Learning Time* variable increases, then the *stress management* and *juvenile delinquency* variables have a negative impact.
2. The regression coefficient value of variable X_2 is 0.684, meaning that variable X_2 positively affects *stress management* and *juvenile delinquency* (Y). If the *study time efficiency* variable increases, *stress management* and *juvenile delinquency* will increase.
3. The regression coefficient value of the Z variable is 0.166. This means that the X_2 variable positively affects *stress management* and *juvenile delinquency*. (Y) This shows that *Collaboration between parents and teachers* can improve *stress Management* and *juvenile delinquency*.

Based on the results of the multiple linear regression equation, regression I have a positive value, which states that the factors of *Effective study time*, *Efficient study time*, and *Collaboration between parents and teachers* on the *Management of stress* and *juvenile delinquency* have a positive and significant effect which means that the *Management of stress* and *juvenile delinquency* is very much determined by the factors of *effective and efficient study time* and *Collaboration between parents and teachers*.

Regression Equation II

$$Y_1 = -0.027 X_1 + 0.768 X_2$$

Where; X_1 = *Effective Learning Time Variable*

X_2 = *Learning Time Efficiency Variable*

This equation means that there is an increase in *Collaboration between parents and teachers*. Influenced by the beta coefficient *Effective learningtime* and *efficient learning time*

Meaning of Regression Equation II :

1. The regression coefficient value of the effective variable for student learning time (X_1) is -0.027, meaning the effective variable for student learning time Students (X_1) have a negative influence on the variable of *parent-teacher*

Collaboration (Z) if the variables of effective and efficient learning time decrease then the dependent variable of Collaboration between parents and teachers will increase.

2. The regression coefficient value of the variable Effective student learning time (X2) is 0.768, meaning that the variable efficient student learning time (X2) has a positive effect on the variable of parent and student collaboration (Z). If the variable Effective student learning increases, the dependent variable Collaboration between parents and teachers increases.

4. Hypothesis Testing

From the two equations, the following conclusions can be drawn:

1. Practical factors of learning time *have a* negative and insignificant effect on parent-teacher Collaboration. This is evidenced by the t-value of -0.288 <table 1.665 with a sig of 0.774 > 0.05. Thus, it is not in accordance with the initial hypothesis H₁, which states that the more effective the student's study time is, the greater *the Collaboration between parents and teachers*. (H₁ is rejected).
2. The efficient factor of learning time has a positive and significant effect on parent-teacher Collaboration. This is proven by the calculated t value of 8.255 > t table 1.665 with sig of 0.000 < 0.05. Thus, the initial hypothesis H₂ states that the higher the influence of the student's learning time efficiency factor, the greater the Collaboration between parents and teachers. (H₂ is accepted).
3. Practical factors of learning time *have a* negative and significant effect on Stress Management and juvenile delinquency. This is evidenced by the t-value of -2.879 > Table 1.665 with a sig of 0.774 > 0.05. Thus, it is not in accordance with the initial hypothesis H₁, which states that the more effective the student's study time is, the greater *the Collaboration between parents and teachers* will be. (H₁ is rejected).
4. The efficient factor of learning time has a positive and significant effect on stress management and juvenile delinquency. This is evidenced by the calculated t value of 4.829 > t table 1.665 with a sig level of 0.000 < 0.05. Thus, it is in accordance with the initial hypothesis H₄, which states that the higher the influence of the efficient factor of learning time management, the higher the Management of stress and juvenile delinquency. (H₄ is accepted).
5. Factors between Parents and Teachers have no effect and are insignificant on stress management and juvenile delinquency. The t-value of 1.296 < 1.665 proves this with a sig level of 0.200 > 0.05. Thus, it is not based on the initial hypothesis H₅, which states that the higher the influence of the collaboration factor between parents and teachers, the higher the stress management and juvenile delinquency. (H₅ accepted).

5. Coefficient of Determination (R²)

The Determinant Coefficient (R²) is used to determine the best level of accuracy in regression analysis where the thing indicated by the magnitude of the determination coefficient (R²) is between 0 (zero) and 1 (one), it can be concluded that the Adjusted R Square value is 0.466, which means that 48.8 % of the variance in child stress management and child delinquency can be explained by the variance of the three independent variables, namely the learning time efficiency factor, the

effectiveness of student learning time and Collaboration between parents and teachers, the rest is influenced by other variables that were not studied.

Besides that, it can be concluded that the Adjusted R Square value is 0.462, which means 46.2 % of the variance in the *child stress management factor*. This can be explained by the variance of the two independent variables, namely the effective and efficient factors, while the rest are influenced by other variables that were not studied. From these two equations, the determination coefficient obtained to form a unified model for this research is calculated in the following calculation:

1. Calculating e1 in the equation I $(1-R^2) = (1-0.462) = 0.538$
2. Calculating e2 in equation II $(1-R^2) = (1-0.466) = 0.534$
3. Total $R^2 = 1-(e1 \times e2) = 1-(0.538 \times 0.534) = 1-0.287292 = 0.712708$

From the total R Square of 0.712708 or 71.2708 %, it can be interpreted that the factors influencing the Management of child stress and child delinquency in this study are the independent variables, which greatly influence the dependent variables.

6. Mediation test

The first mediation test in this study aims to analyze whether or not there is an indirect influence of the intervening variable, parent-teacher Collaboration as variable Z, to see whether its effect is an intermediary between the independent variables, namely effective study time management. (X1) with dependent variables, namely stress management and juvenile delinquency. To test the mediation of variables, the Sobel test is used as follows:

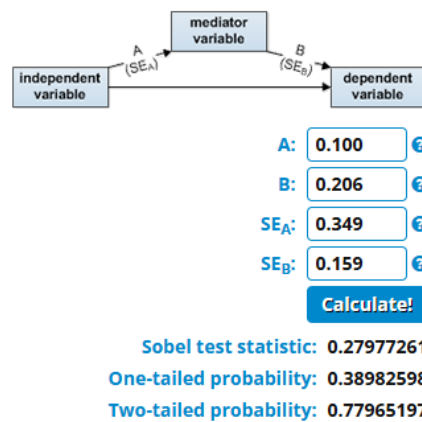


Figure 1. Sobel test I

Based on the Figure, it is a test of the mediation of the Effective factor of study time on the Management of Student Stress and Student Delinquency with the Collaboration of Parents and Teachers as a mediator by looking at the value of the Sobel Test statistic. From the results of the Sobel Test calculation above, the z value obtained was 0.279 because the z value obtained was 0.279. < 1.96 with a significance level of 5% proves that the Effective Study Time factor does not mediate the relationship between the influence of the Effectiveness Factor of Study Time on student stress management and student delinquency.

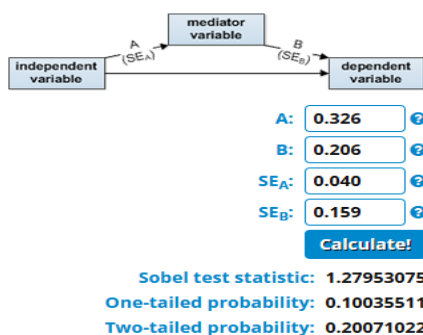


Figure 2. Sobel test I I

The Figure is a mediation test of the Efficient learning time factor on student stress management and student delinquency, with the Collaboration of parents and teachers as mediators, by looking at the value of the statistical Sobel test. From the results of the Sobel test calculation above, the z value obtained was 1.279; because the z value obtained was $1.279 < 1.96$ with a significance level of 5%, this proves that the study time efficiency factor does not mediate the relationship between the influence of the study time efficiency factor on student stress management and student delinquency.

5. Discussion

The findings of this study reveal nuanced relationships between study time management, parent-teacher collaboration, and their collective influence on stress management and juvenile delinquency. First, the effectiveness of study time management was found to have a negative and insignificant impact on parent-teacher collaboration. This suggests that as students become more effective in managing their learning time, they rely less on external guidance, reducing the interaction between parents and teachers. This aligns with prior research indicating that highly autonomous learners may require less direct intervention from external parties (Chai et al., 2021; Tang & Zhang, 2022).

Conversely, the efficiency of study time management has a positive and significant impact on parent-teacher collaboration. Efficient time management fosters an environment where parents and teachers can coordinate their efforts more effectively to support students holistically. For example, parents who recognize efficient study routines may collaborate with teachers to address non-academic aspects of student development, such as emotional and social skills (Aziz et al., 2020; Jones et al., 2022). This dynamic highlights the practical role of efficient time management in encouraging synergistic relationships between key stakeholders in a child's education.

Regarding the relationship between study time management and stress management, it was observed that the practical aspects of effective time management do not significantly impact stress management or juvenile delinquency. This finding underscores that students who excel in time management may exhibit greater independence, reducing the need for active collaboration between parents and teachers

in managing stress and delinquency. However, it also highlights that effective time management alone does not sufficiently address emotional well-being without additional support mechanisms (Yildirim & Bulut, 2023).

On the other hand, efficient study time management has a direct and significant influence on stress reduction and delinquent behavior. This demonstrates that when adolescents allocate their time wisely, they experience reduced academic pressure and emotional strain, which positively affects their behavior. This finding supports the notion that structured routines provide adolescents with a sense of control, mitigating the risk of engaging in maladaptive behaviors (Ahmed et al., 2022; Wu et al., 2021).

Interestingly, parent-teacher collaboration does not have a significant direct effect on managing stress or delinquency. This may be due to the limited scope of such collaboration, which often focuses on academic achievements rather than addressing deeper emotional or behavioral issues (Hussain et al., 2020). Stress and delinquency are multifaceted phenomena influenced by peer relationships, social environments, and individual psychological factors, which parent-teacher collaboration alone may not adequately address (Kumar et al., 2022).

Furthermore, the study finds that parent-teacher collaboration does not mediate the relationship between efficient study time management and stress or delinquency. While efficient time management independently reduces stress and delinquency, collaboration between parents and teachers does not amplify this effect. This suggests that time management directly empowers adolescents to navigate challenges, while parent-teacher collaboration primarily remains supportive without serving as a critical intermediary (Chen & Lin, 2023; Lee et al., 2023).

In summary, the findings highlight the central role of time management in reducing stress and juvenile delinquency. Effective time management equips adolescents with self-regulatory skills, fostering a sense of independence that mitigates emotional and behavioral challenges. However, the limited role of parent-teacher collaboration suggests a need for broader, multi-stakeholder approaches to address the complex factors influencing adolescent development. Future research could explore additional moderating variables, such as peer influence or community support, to develop a more comprehensive understanding of stress and delinquency management (Smith et al., 2022; Zhao et al., 2023).

6. Conclusions

According to the study's findings, Collaboration between parents and teachers is negatively and negligibly impacted by the efficacy of study time management. According to the study's findings, the efficiency component of study time management also has a favorable and significant impact on Collaboration between teachers and parents. The study's findings also revealed a negative and substantial relationship between stress management and juvenile delinquency and the effectiveness of study time management. The discovery that effective study time

management significantly and favorably affects stress management and juvenile delinquency suggests that teenagers who practice effective time management can improve their conduct and lessen emotional and academic stress. Several factors need to be taken into account to comprehend why Collaboration between parents and teachers may not significantly impact stress management and juvenile delinquency, as evidenced by the finding that this collaboration factor does not significantly affect either of these aspects. Although effective study time management can positively impact stress management and juvenile delinquency, Collaboration between parents and teachers does not act as a "bridge" or intermediary connecting the two. This suggests that collaboration between parents and teachers does not mediate the compelling factor of studying time management on stress management and juvenile delinquency. Stress levels and juvenile delinquency are directly impacted by efficient time management. Parents and teachers may work together more on disciplinary or academic issues involving students. Parent-teacher cooperation did not act as a mediator between stress management, juvenile delinquency, and practical study time management elements.

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