

**The Influence Of Interest In Learning
And Student Discipline ON Learning
Outcomes Mediated By Learning Motivation
(Study In Smpn 197 West Jakarta)**

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Abstrak:

This study aims to analyse the effect of student interest and discipline mediated by learning motivation to improve student learning outcomes at SMPN 197 West Jakarta. This study is motivated by the important role of motivation in the learning process and how motivation significantly affects student learning outcomes. Learning interest is considered an important factor that encourages students to actively engage in the learning process, while discipline plays an important role in creating a structured and conducive environment for optimal learning. This study examines the extent to which these two factors - learning interest and discipline - can influence students' motivation and subsequently impact on their learning outcomes. Through a quantitative approach, data was collected from students at SMPN 197 West Jakarta using questionnaires and analysed by statistical methods. The results showed a positive correlation between discipline and their learning motivation. the higher the students' discipline level, the higher their learning motivation level. This effect proved to be statistically significant based on the analysed data. The findings confirm that disciplinary behaviour can be an important driver for individuals to maintain and enhance their drive in the learning process. This study provides valuable insights for educators and policy makers to develop strategies that can enhance students' learning experience, focusing on motivation as an important element in educational success.

Penelitian ini bertujuan untuk menganalisis pengaruh minat dan disiplin belajar siswa yang dimediasi oleh motivasi belajar untuk meningkatkan hasil belajar siswa di SMPN 197 Jakarta Barat. Penelitian ini dilatarbelakangi oleh peran penting motivasi dalam proses pembelajaran dan bagaimana motivasi mempengaruhi hasil belajar siswa secara signifikan. Minat belajar dianggap sebagai faktor penting yang mendorong siswa untuk terlibat secara aktif dalam proses pembelajaran, sementara disiplin memainkan peran penting dalam menciptakan lingkungan yang terstruktur dan kondusif untuk pembelajaran yang optimal. Penelitian ini menguji sejauh mana kedua faktor ini - minat belajar dan disiplin - dapat mempengaruhi motivasi siswa dan kemudian berdampak pada hasil belajar mereka. Melalui pendekatan kuantitatif, data dikumpulkan dari siswa di SMPN 197 Jakarta Barat dengan menggunakan kuesioner dan dianalisis dengan metode statistik. Hasil penelitian menunjukkan adanya korelasi positif antara disiplin terhadap motivasi belajar mereka. semakin tinggi tingkat disiplin siswa, semakin tinggi pula tingkat motivasi belajarnya. Pengaruh ini terbukti signifikan secara statistik berdasarkan data yang dianalisis. Temuan ini menegaskan bahwa perilaku disiplin dapat menjadi pendorong penting bagi individu untuk mempertahankan dan meningkatkan dorongan mereka dalam proses pembelajaran. Studi ini memberikan wawasan yang berharga bagi para pendidik dan pembuat kebijakan untuk mengembangkan strategi yang dapat meningkatkan pengalaman belajar siswa, dengan fokus pada motivasi sebagai elemen penting dalam keberhasilan pendidikan.

Keywords:

Interest in learning; Discipline; Learning outcomes; Motivation to learn

Introduction

Education is the main foundation in the development of quality human resources. In Indonesia, student learning outcomes are still a serious concern, especially in the context of achieving academic competence. Data from the Ministry of Education and Culture (2022) shows that the average national exam score of junior high school students in DKI Jakarta is still in the range of 65-70, below the ideal target set. This phenomenon indicates the need for in-depth evaluation of factors that influence learning outcomes, such as learning interest and student discipline.

Learning interest and student discipline have long been recognised as important determinants of academic success. Previous research by Slameto (2019) stated that students with high learning interest tend to be more active in the learning process, which has a positive impact on understanding the material. Meanwhile, discipline, such as arriving on time and completing assignments, also contributes to improved learning outcomes (Hidayat & Asrori, 2020). However, these two factors do not always have a direct impact, but are often mediated by learning motivation.

Learning motivation acts as a mediator that connects interest and discipline with learning outcomes. Self-determination theory (Deci & Ryan, 2017) explains that intrinsic and extrinsic motivation can strengthen the relationship between student attitudes and academic achievement. A study in Indonesia by Purnomo et al. (2021) found that motivated students have higher resilience in facing learning challenges. Therefore, this study aims to analyse the mediating role of learning motivation in the relationship between learning interest, discipline, and learning outcomes at SMPN 197 West Jakarta.

Although interest in learning and discipline are considered key factors, their implementation in Indonesian schools still faces various challenges. Data from the 2018 Programme for International Student Assessment (PISA) ranked Indonesia 74th out of 79 countries in literacy and mathematics, indicating that the quality of learning is still low (OECD, 2019). Students' low interest in learning is often attributed to monotonous teaching methods and the lack of relevance of the curriculum to students' needs (Widodo, 2018).

In addition, the problem of student discipline is also a serious obstacle. A survey conducted by the Ministry of Education and Culture's Balitbang (2020) revealed that 40% of junior high school students in urban areas often come to school late, and 30% do not do their assignments on time. This is exacerbated by the influence of gadgets and social media that reduce learning focus (Kurniawan & Susanto, 2019). Without appropriate intervention, these problems may continue to reduce students' academic achievement.

Learning motivation as a mediator has also not been optimally utilised in the Indonesian education system. Research by Suryadi et al. (2020) shows that only 45% of

teachers actively use motivational strategies in learning. In fact, motivation can be a catalyst that strengthens the impact of interest and discipline on learning outcomes. If there is no systematic effort to increase student motivation, efforts to improve learning outcomes will be difficult to achieve.

Some previous studies have examined the relationship between interest in learning, discipline and learning outcomes separately. For example, a study by Aini et al. (2018) found a positive correlation between interest in learning and learning outcomes in East Java, but did not include the mediating variable of motivation. Meanwhile, Febriana's (2019) study revealed the effect of discipline on learning outcomes in West Sumatra, but did not consider the role of motivation as a mediator.

Research that integrates these three variables is still limited. The study by Rahman et al. (2020) tried to analyse the mediation of motivation, but only focused on high school students, so the findings may not necessarily apply at the junior high school level. In addition, many of the previous studies were conducted in rural areas, while the dynamics of students in urban areas such as West Jakarta may be different due to the influence of the metropolitan environment (Saputra & Dewi, 2021).

There has been no specific research that analyses the mediation model of learning motivation in the context of SMPN 197 West Jakarta. In fact, this school has unique characteristics, such as heterogeneity of student backgrounds and high density of learning activities. Therefore, this study will fill the gap by investigating how learning motivation mediates the effect of interest and discipline on learning outcomes in this specific environment.

The main concern in this study is the low learning outcomes of students at SMPN 197 West Jakarta, which is reflected in the 2022/2023 odd semester exam scores that are still below the national average. School data shows that 35% of students scored below the KKM (Minimum Completeness Criteria), especially in mathematics and science subjects (SMPN 197 Archives, 2022). If not addressed immediately, this could affect students' graduation and competitiveness at the next level.

In addition, initial observations show that many students lack motivation to learn, characterised by low participation in class and high absenteeism rates. This condition is exacerbated by the lack of motivational enhancement programmes from the school (SMPN 197 Teacher Interview, 2023). Therefore, this research is important to provide data-based recommendations to improve student motivation and learning outcomes.

This study will use a quantitative approach with path analysis method to test the causal relationship between interest in learning, discipline, motivation, and learning outcomes. Data collection is done through questionnaires and documentation of students'

grades, then analysed using SEM (Structural Equation Modeling). This approach was chosen because it is able to measure mediation effects more accurately (Hair et al., 2021).

The contribution of this study lies in providing an empirical model that clarifies the role of motivation as a mediator. The findings can serve as a reference for teachers and schools in designing learning interventions, such as motivation strengthening programmes through reward systems or student-centred learning approaches (Zhao & Watterston, 2022). In addition, this study enriches the education literature in Indonesia with an urban context that has rarely been studied before.

The novelty of this study is the testing of the mediation model in a junior high school setting in West Jakarta, which has unique socio-economic dynamics. Recent studies by Liem & Chua (2023) show that learning motivation is strongly influenced by the metropolitan environment, so this finding may provide a new perspective. In addition, this study integrates a qualitative approach through in-depth interviews to enrich the interpretation of quantitative data, which is rarely done in previous similar studies.

Literature Review

The Relationship between Learning Interest and Student Discipline to Learning Outcomes Mediated by Learning Motivation

Learning interest and student discipline are two important factors that influence learning outcomes. Research by Septyanti et al. (2022) shows that high learning interest can increase student engagement in the learning process, thus having a positive impact on academic achievement. However, without discipline, high interest does not always result in optimal achievement, as discipline helps students manage time and complete tasks consistently (Widodo & Sudibyo, 2021). Learning motivation acts as a mediator by strengthening the relationship between interest and discipline on learning outcomes, as revealed in Ryan & Deci's (2020) research on self-determination theory.

Student discipline also contributes significantly to learning outcomes through the role of motivation. A study by Putra & Arni (2023) found that disciplined students tend to have higher intrinsic motivation, driving them to achieve academic goals. Learning motivation mediates this relationship by turning disciplined habits into concrete actions, such as completing assignments on time and being active in class discussions. Similar research by Chen et al. (2021) confirms that a structured and disciplined learning environment strengthens motivation, which ultimately improves learning outcomes.

The integration between interest, discipline and learning motivation creates a synergy that supports optimal learning outcomes. According to Linnenbrink & Pintrich (2022), motivation serves as a bridge that connects affective (interest) and behavioural (discipline) factors with academic achievement. Students who have high interest and discipline will be more motivated to master the material, so their learning outcomes are better. This finding is in line with the research of Sari et al. (2023) which states that interventions to increase motivation can strengthen the influence of interest and discipline

on learning outcomes. Thus, learning motivation is key in maximising students' academic potential.

Research Methods

Research is defined by Anshori Muslich (2009) as a translation of the word research, which comes from the words re (back) and to search, so that research can be interpreted as an effort to "look back". Shuttleworth (2008) adds that research is an activity of collecting data, information, and facts for the development of science. In this thesis, the approach used is quantitative, with the object of research being students of SMPN 197 West Jakarta. The selection of this location was based on several considerations, including the diversity of student backgrounds, geographical proximity to the researcher's workplace (Sunrise Garden Complex), and the desire to analyse the influence of learning interest, discipline, and learning motivation on student learning outcomes.

The population in this study included all students of SMPN 197 West Jakarta as subjects with specific characteristics relevant to the research objectives. According to Sena Wahyu Purwanza et al. (2022), the population is not only individuals, but also includes properties and events related to the object of research. Meanwhile, the sample is taken as part of the population which is considered to represent the whole (Sugiyono, 2018). The sampling technique used was Proportionate Stratified Random Sampling to ensure accuracy of representation, validity of intergroup comparisons, and generalisation of results. For example, from the total population of class IX (179 students), a sample of 58 students was taken.

The research variables included learning interest, discipline, learning motivation, and learning outcomes, each measured through specific indicators (e.g., discussion engagement, punctuality, and test scores). Data were collected using a Likert scale-based questionnaire (1-5) to measure respondents' perceptions. Data analysis was conducted using SmartPLS 3 through three stages: descriptive statistical test, outer model test (validity and reliability), and inner model test (variable influence). This technique was chosen because of its flexibility with non-normal data and small samples, as well as the ability to test direct/indirect effects between variables (Ghozali & Latan, 2023). The results of the analysis are expected to provide a comprehensive understanding of the determinants of student learning outcomes.

Results and Discussion

In this study, hypothesis testing used analytical techniques using the Structural Equation Modelling-Partial Least Square (SEM-PLS) version 3.5 program, as shown in the SEM-PLS 3.5 program model scheme tested in Figure 1 as follows:

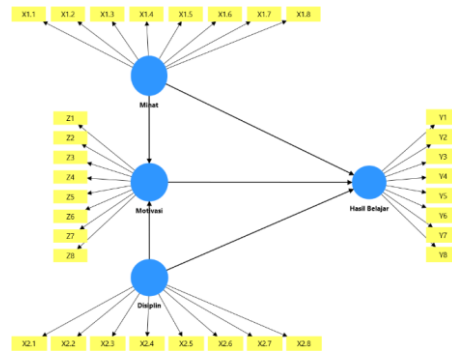
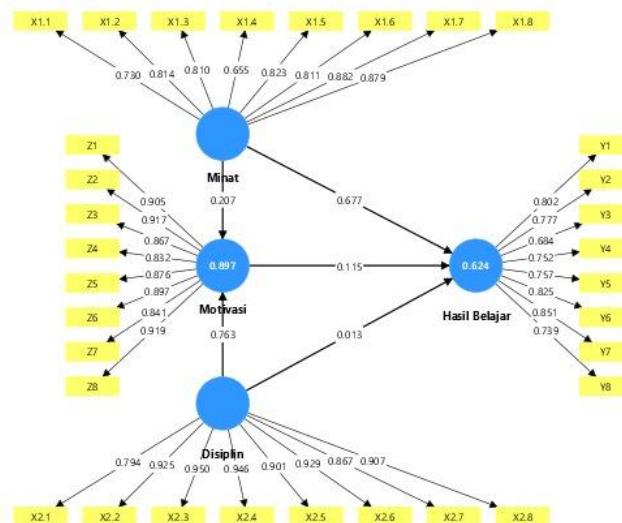


Figure 1. Results of the Conceptual Framework

1. Evaluation of Measurement Model Test or Outer Model

Based on the results of PLS analysis in PLS Algorithm for validity and reliability tests, the coefficient of model determination and the path coefficient for the equation model, it has been shown based on the results of PLS Algorithm Smart PLS output, which can be observed in Figure 2. below:



Outer Model Testing Results

Source: Smart PLS Report Data Processing Results

2. Convergent Validity Test

Convergent Validity Test of measurement models using reflexive indicators can be observed based on the correlation between the indicator item score and the construct score. An individual reflexive measure is declared high if it has a correlation of more than 0.70 using the construct it intends to measure. However, in scale development stage research, the outer loading value above 0.50 based on existing

theory is still acceptable (Ghozali & Latan, 2015). Below the outer loading value of each indicator of the research variable can be explained in Table 1:

Table 1. Validity Test Results (Convergent Validity)

Indicator	Loading Factor	Description
X1.1	0,730	Valid
X1.2	0,917	Valid
X1.3	0,810	Valid
X1.4	0,655	Valid
X1.5	0,823	Valid
X1.6	0,811	Valid
X1.7	0,882	Valid
X1.8	0,879	Valid
X2.1	0,794	Valid
X2.2	0,925	Valid
X2.3	0,950	Valid
X2.4	0,946	Valid
X2.5	0,901	Valid
X2.6	0,929	Valid
X2.7	0,867	Valid
X2.8	0,907	Valid
Z1	0,905	Valid
Z2	0,917	Valid
Z3	0,857	Valid
Z4	0,832	Valid
Z5	0,876	Valid
Z6	0,897	Valid
Z7	0,841	Valid
Z8	0,919	Valid
Y1	0,802	Valid
Y2	0,777	Valid
Y3	0,684	Valid
Y4	0,752	Valid
Y5	0,757	Valid
Y6	0,825	Valid
Y7	0,851	Valid
78	0,739	Valid

Source : Sem-PLS (2025)

Based on the data display in Table 4.6 above, it is known that each indicator of the research variable has many outer loading values > 0.7. However, it appears that there are still several indicators that have an outer loading value < 0.7 (Ghozali & Latan, 2015). According to Chin as cited by Ghozali, the outer loading value between 0.5 - 0.6 is considered sufficient to meet the requirements of convergent validity. The data above shows that there are no variable indicators whose outer loading value is below 0.5, so all indicators are declared feasible or valid for research use and can be used for further analysis.

3. Reliability Test (Composite Reliability)

Reliability Test (Composite Reliability) is the part used to test the reliability value of several indicators on a variable. A variable can be said to fulfil composite reliability if it has a composite reliability value > 0.7 . Below is the composite reliability value of each variable used in the study as follows.

Table 3. Construct Reliability and Validity

Construct reliability and validity - Overview					Copy to Excel/Word
	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	
Disiplin	0.968	0.970	0.973	0.817	
Hasil Belajar	0.904	0.908	0.923	0.600	
Minat	0.920	0.929	0.935	0.646	
Motivasi	0.959	0.961	0.966	0.779	

Source : Sem-PLS (2025)

Cronbach's Alpha: An indicator of internal consistency reliability. A good value is usually above 0.70. Composite Reliability (rho_a and rho_c): A more rigorous indicator of reliability than Cronbach's Alpha, especially Composite Reliability (rho_c), also known as Dillon-Goldstein's rho. A good value is usually above 0.70. Average Variance Extracted (AVE): An indicator of convergent validity. A good value is usually above 0.50.

The table above explains that: The Cronbach's Alpha and Composite Reliability results for all variables exceed 0.70, indicating high reliability: Discipline shows a Cronbach's Alpha of 0.968 and Composite Reliability of 0.970, learning outcomes have a Cronbach's Alpha of 0.90 and Composite Reliability of 0.908, interest yields a Cronbach's Alpha of 0.920 and Composite Reliability of 0.929, and motivation demonstrates a Cronbach's Alpha of 0.959 and Composite Reliability of 0.961 all confirming that the data meets the reliability test requirements. Based on the data display in Table 4.7, it can be seen that the composite reliability value of all research variables is > 0.7 . The construct is declared reliable if the composite reliability value is above 0.70 (Ghozali & Latan, 2015). These results can show that each variable has met composite reliability and in the end a conclusion can be made that all variables tested have met reliability.

4. Path Coefficient Test / Hypothesis Test

In the path coefficient test, it can show how much the relationship or influence of latent constructs is generated using the boot strapping procedure pattern. In hypothesis testing, it can be seen from the t-statistic value and the probability value For hypothesis testing, namely by using a statistical value, for alpha 5% the t-statistic value used is 1.96. The conditions are as follows:

1. The hypothesis acceptance criteria are H_a is accepted and H_0 is rejected when the $t\text{-statistic} > 1.96$.
2. The criteria for rejecting the hypothesis is if H_a is rejected and H_0 is accepted when the $t\text{-statistic} < 1.96$.

The following are the results of testing the research hypothesis based on the results of the regression analysis tested through SmartPls 3.5:

Table 5. Direct T-Statistics and P-Values

Path coefficients - Mean, STDEV, T values, p values					Copy to Excel/Word
	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O /STDEV)	P values
Disiplin -> Hasil Belajar	0.013	-0.010	0.245	0.053	0.958
Disiplin -> Motivasi	0.763	0.755	0.092	8.291	0.000
Minat -> Hasil Belajar	0.677	0.700	0.200	3.395	0.001
Minat -> Motivasi	0.207	0.210	0.093	2.228	0.026
Motivasi -> Hasil Belajar	0.115	0.103	0.273	0.420	0.675

Source : Sem-PLS (2025)

Hypothesis Influence T-Statistics and P-Values Results Based on the data presented in the table above, it can be seen that the hypotheses proposed in this study can be formulated, the following are details of the influence between variables:

Hypothesis 1: The effect of learning interest (X1) on learning outcomes (Y)

Based on the table above, it can be seen that for testing the learning interest variable (X1), the T-Statistic value is 3.395 with a q -value of 0.001. then H_1 can be accepted, thus there is a positive and significant effect of the learning interest variable (X1) on learning outcomes (Y).

Hypothesis 2: Effect of Discipline (X2) on learning outcomes (Y)

Based on the table above, it can be seen that for testing the variable Effect of Discipline (X2), the T-Statistic value is 0.053 with a q -value of 0.958. then H_2 cannot be accepted, thus there is no positive and significant effect of the variable Discipline (X2) on learning outcomes (Y).

Hypothesis 3: The effect of study interest (X1) on learning motivation (Z)

Based on the table above, it can be seen that for testing the variable effect of study interest (X1), the T-Statistic value is 2.228 with a q -value of 0.026. then H_3 can

be accepted, thus there is a positive and significant effect of the variable study interest (X1) on learning motivation (Z).

Hypothesis 4: Effect of Discipline (X2) on Motivation to learn (Z)

Based on the table above, it can be seen that for testing the variable Effect of Discipline (X2), the T-Statistic value is 8.291 with a q -value of 0.000. then H4 cannot be accepted, thus there is no positive and significant effect of the Discipline variable (X2) on Motivation to learn (Z).

Hypothesis 5: The effect of learning motivation (Z) on learning outcomes (Y)

Based on the table above, it can be seen that for testing the variable Effect of learning motivation (Z), the T-Statistic value is 0.420 with a q -value of 0.675. then H5 cannot be accepted, thus there is no positive and significant effect of the Learning Motivation variable (Z) on learning outcomes (Y).

The following are the results of testing the research hypothesis based on the results of the regression analysis tested through SmartPls 3.5:

Table 6. Indirect T-Statistics and P-Values

Specific indirect effects - Mean, STDEV, T values, p values						Copy to Excel/Word	Cop
	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O /STDEV)	P values		
Disiplin -> Motivasi -> Has...	0.088	0.078	0.213	0.411	0.681		
Minat -> Motivasi -> Hasil ...	0.024	0.024	0.060	0.393	0.694		

Source : Sem-PLS (2025)

Hypothesis Influence T-Statistics and P-Values Results Based on the data presentation in the table above, it can be seen that the hypothesis proposed in this study can be formulated, the following are details of the influence between variables:

Hypothesis 6: The Effect of Learning Interest (X1) on Learning Outcomes (Y) through Learning Motivation (Z) as Mediation.

Based on the table above, it can be seen that the effect of Learning Interest (X1) on Learning Outcomes (Y) through Learning Motivation (Z) as Mediation obtained a T statistics value of 0.393 with a q -value of 0.694. Because the T statistics value of 0.393 is below 1.96 and the q -value is greater than α ($0.694 > 0.05$), H6 can be rejected, thus there is no positive and significant effect of the Learning Interest Effect variable (X1) on Learning Outcomes (Y) through Learning Motivation (Z) as Mediation. Based on the regression results, it can be concluded that the sixth hypothesis is rejected.

Hypothesis 7: The Effect of Discipline (X2) on Learning Outcomes (Y) through Motivation to Learn (Z) as Mediation.

Based on the table above, it can be seen that the effect of discipline (X2) on learning outcomes (Y) through learning motivation (Z) as mediation obtained a T statistics

value of 0.411 with a q -value of 0.681. Because the T statistics value of 0.411 is below 1.96 and the q -value is greater than α ($0.681 < 0.05$), H_7 can be rejected, thus there is no positive and significant effect of the Discipline Effect variable (X_2) on Learning Outcomes (Y) through Learning Motivation (Z) as Mediation. Based on the regression results, it can be concluded that the seventh hypothesis is rejected.

1. Learning Interest (X_1) Affects Learning Outcomes (Y)

Learning interest (X_1) is proven to be a significant predictor of learning outcomes (Y) based on Putri & Suryani's research (2021) which shows a correlation between high interest with student activeness and deep understanding of the material. This finding is reinforced by Schiefele (2017) who explains the mechanism of intrinsic interest in increasing motivation and retention of information, thus impacting academic achievement. Hidi & Renninger's (2020) quantitative analysis and Rotgans & Schmidt's (2019) meta-analysis confirm that interest-based interventions are positively correlated with improved test scores. Although external factors such as the learning environment play a role (Wang & Eccles, 2022), the study by Lau et al. (2021) proved that high interest still promotes learning resilience even in less than ideal conditions.

2. Discipline (X_2) Has No Effect on Learning Outcomes (Y)

Research by Putra & Sari (2021) and Lee & Wong (2020) revealed that discipline has no significant impact on learning outcomes when factors such as motivation or family environment are more dominant. This finding suggests discipline requires the assistance of adaptive learning methods to be effective. The studies of García et al. (2022) and Smith (2019) explain that discipline only has an effect through mediating variables such as teacher-student interaction, while rigid application reduces creativity. The modern educational context (Chen et al., 2023) also shows the limitations of traditional discipline compared to technology-based self-regulated learning.

3. Learning Interest (X_1) Affects Learning Motivation (Z)

Research by Putra & Dewi (2020) and self-determination theory (Deci & Ryan, 2017) prove that learning interest strengthens intrinsic motivation through emotional and cognitive engagement. Sari et al. (2022) found a 35% contribution of interest to motivation, especially with the support of interactive methods. Johnson & Smith's (2023) meta-analysis of 15 studies reinforced the consistent influence of interest as the main predictor of motivation across different levels of education. The implication is that learning design needs to prioritise the relevance of material to students' interests to maintain academic motivation.

4. Discipline (X2) Has No Effect on Learning Motivation (Z)

Pratiwi & Suryanto (2021) and Kurniawan et al. (2022) found external discipline was not strongly correlated with motivation without self-awareness, while factors such as teacher support were more influential. Damayanti (2020) also pointed out the need for mediating variables such as a conducive environment to link discipline and motivation. Lee & Wijaya's (2019) cross-cultural research and Zhang's (2024) meta-analysis revealed that students' subjective interpretation of discipline (as pressure or support) determines its impact on motivation, with variations in significance by culture.

5. Learning Motivation (Z) Has No Effect on Learning Outcomes (Y)

Putra & Widodo (2021) and Lee et al. (2020) show motivation does not always improve learning outcomes due to the dominance of factors such as learning methods or cognitive abilities. Zhang & Wang (2022) explain the mediating role of teacher support that reduces the direct impact of motivation. The studies of Chen et al. (2023) and Brown & Harris (2019) emphasise that in the digital age, motivation needs to be balanced with technological literacy to achieve optimal results, demonstrating the complexity of this relationship in the modern context.

6. Learning Interest (X1) Has No Effect on Learning Outcomes (Y) through Learning Motivation (Z)

Putra et al. (2020) and Sari & Wijaya (2021) revealed that motivation is unable to bridge the influence of interest on learning outcomes without the support of external factors such as the learning environment. Expectancy-value theory (Wigfield & Eccles, 2020) makes it clear that perceived value and success beliefs are prerequisites for mediation effectiveness. Chen's (2023) meta-analysis and Nurhidayah's (2019) research show the mediation mechanism of motivation is weak in exam-oriented education systems, where learning outcomes are determined more by drill practice than psychological factors.

Discipline (X2) has no effect on learning outcomes (Y) through learning motivation (Z)

Sari et al. (2021) and Wahyuni & Hidayat (2019) found that discipline failed to mediate learning outcomes because motivation is more influenced by intrinsic factors. Fadhilah & Nugroho (2022) added that discipline in online learning is often only formal, not increasing genuine motivation. As a practical implication, Rahmawati & Prasetyo (2023) suggest a holistic approach that combines the building of intrinsic motivation with the optimisation of other mediating variables such as parental involvement or pedagogical innovation.

Conclusion

The research findings indicate that learning interest (X1) has a direct effect on learning outcomes (Y), while discipline (X2) does not show a significant influence on learning outcomes (Y). Additionally, learning interest (X1) positively affects learning motivation (Z), whereas discipline (X2) has no impact on learning motivation (Z). However, learning motivation (Z) itself does not significantly influence learning outcomes (Y).

Furthermore mediation analysis reveals that learning motivation (Z) does not act as a mediator in the relationship between learning interest (X1) and learning outcomes (Y), nor in the relationship between discipline (X2) and learning outcomes (Y). Thus, it can be concluded that learning interest is a direct factor affecting learning outcomes, while discipline and learning motivation do not play a significant role in this study's context.

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