

Implications of Teacher Competency and Learning Models on Student Motivation and Discipline Based on SMART-PLS

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ABSTRACT

Learning is a cognitive process that enables students to engage in critical thinking, interact with information, and subsequently apply their knowledge to solve issues. The dynamic classroom approach enhances students' active learning, fosters student motivation, and promotes collaborative interactions among students, reducing conflicts and fostering discipline in both the classroom and the school. This study examines the Moving class model, teacher pedagogic competence, motivation, and learning discipline using the SmartPLS application-based Structural Equation Model (SEM). The location in this study was a state senior high school in Ambon, with samples obtained by simple random sampling of 41 students for the experimental class and 40 for the control class. The results obtained were that the validity and reliability tests on the outer model showed a value of Standardized Loading Factors (SLF) > 0.7, Construct Reliability (CR) > 0.5, and Average Variance Extracted (AVE) > 0.5, so it was said to be valid and reliable. In contrast, in the Inner model, the dependent variable simultaneously influences learning motivation (Y) with an R Square value of 0.672 and learning discipline (Z) of 0.506, so the model is categorized as moderate. The Goodness of Fit (GoF) index shows Q square > 0 and RMSE < 0.05 and has predictive relevance, indicating relevant exogenous latent variables. The significance test for proving the hypothesis showed that all variables had a positive and significant effect with a t-statistic > 1.96 and a p-value < 0.05. Limitations in this study include the arrangement of students, fluency in learning, and utilization of learning resources. As a continuation of this research, other research variables regarding personality, professionalism, and social competence and their influence on learning outcomes and self-efficacy can be studied.

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1. INTRODUCTION

Education serves as the basis for developing exceptional, high-caliber, and self-reliant individuals who actively contribute to progress (Sintara & Pramusinto, 2015). In order to enhance the intellectual capacity of the nation and state, it is crucial for all stakeholders to actively engage in education, which

concurrently plays a pivotal role in fostering progress and advancement (Hasnadi & Nurmalina, 2022). The educational process encompasses two distinct concepts: learning and teaching (Kusumawardani & Rustiana, 2015). Education plays a crucial role in shaping human traits and character by instilling ethical and aesthetic values. Hence, education not only prioritises the dissemination of knowledge but also underscores the transmission of values to enhance excellence. The field of education is undergoing notable advancements (Rahman et al., 2019). The enhancement of learning quality necessitates the incorporation of several values, such as intellectual, religious, social, and ethical values, which should be integrated as integral components of a comprehensive quality-based approach (Lomu & Widodo, 2018). The fundamental determinant of enhancing the quality of education is the incorporation of the learning process into the knowledge transfer technique (Putrielis, 2018).

Learning is a process with the involvement of teachers and students in interacting to instill knowledge and values (Satriami et al., 2021). In addition, this teaching process is the core of the entire education system, with the role of educators as the main factor (Huda, 2018). By instilling knowledge through this knowledge transfer procedure, the teacher plays a vital role in developing the desired teaching process (Putrielis, 2018). The development of this learning is directed at developing cognitive skills, attitudes, and beliefs, as well as behaviors and practices to develop student activities in learning (Ho et al., 2023). Learning development is desired in generating student activity, including by applying learning models, which in turn can affect learning activities and are carried out by teachers who are competent in their fields where students are expected to be motivated and have discipline in learning (Marina et al., 2019; Lasaiba & Lasaiba, 2022). Using learning models that can develop activeness and creativity, scientific attitudes, and skills that give more freedom can help students become more independent learners in learning. One of them is the moving class model.

The movement of students marks the moving class model of teaching and learning activities according to their participating lesson. Thus, it is necessary to have subjects or similar subjects for convenience in the implementation process and for teachers to manage teaching activities in team teaching (Ibrahim et al., 2022). The moving class model aims to restore student learning motivation and form collaboration between students so that interactions between students will be created, reducing conflicts that can lead to indiscipline in class and school (Oemar, 2003; Marina et al., 2019). The moving class model is characterized by a private space that each teacher must own, and students are directed to move from each class, marked by the naming of each field of study in each class (Hanun, 2019). This model generates a stimulus for students to be more active and creative and is based on a system where students visit the teacher in class (Sagala, 2013; Putrielis, 2018). In implementing the moving class model, it is necessary to define a management strategy that includes the management of student movements, the management of study rooms, and the management of the learning process (Marina et al., 2019).

In addition to the above, in improving the quality of a lesson, the teacher factor becomes a determining factor in terms of performance or ability (Daga et al., 2023). Educators play an essential role in shaping student learning experiences and determining understanding in acquiring the skills necessary to become an effective educator and are one aspect of teaching expertise that is recognized as a phenomenon based on experience (Koc & Celik, 2015; Pekkarinen et al., 2023). Competence is an integration of aspects of knowledge, skills, and attitudes. Knowledge consists of concepts, facts and figures, ideas and theories that are well established and support an understanding of a particular field; skills are defined as the ability to carry out processes to achieve results, and attitudes describe the disposition and mindset to act on ideas, people or situations (Moreira et al., 2023). The ability to develop learning programs, interact with or manage learning processes, and carry out comprehensive evaluations falls under the umbrella of "pedagogical competence" (Hakiki, 2020). The ability to understand students as a whole, including child psychology development, is referred to as pedagogic competence (Ho et al., 2023). Furthermore, pedagogical competencies (teaching and learning strategies and planning and management) are skills, abilities, and talents developed exclusively in an environment (Moreira et al., 2023). Pedagogic competence includes understanding students, designing

and implementing learning, evaluating learning outcomes, and developing students' potential by implementing technology and information in learning activities (Dari & Yulhendri, 2019).

While motivation is directly related to the development of student attitudes and persistent efforts to achieve a goal in participating in learning activities. Motivation is the ability (will) to do something and becomes a force to generate perseverance and enthusiasm in carrying out an activity (Suparji, 2012; Kompri, 2016; Putrielis, 2018). Motivation drives a person to achieve his goals at a certain level (Lomu & Widodo, 2018). Motivation can cause changes in one's thoughts, feelings, and emotions, which lead to achieving the desired goals (Nurhamida, 2018). In motivation, there is a desire that can move, flow, and guide the thoughts and actions of each student (Rahman et al., 2019). The successful application of Keller's (1987) concept of motivation includes attention, relevance, confidence, and satisfaction across various instructional settings by highlighting the positive influence of student motivation on learning (Li & Keller, 2018; Ucar & Kumtepe, 2020; Lin et al., 2021). Research in the last few decades has proven that motivation is very effective in increasing students' willingness to learn (Pintrich, 2003; Lan et al., 2018; Chai et al., 2020; Jong, 2020). Some things that show someone is motivated to learn include: (1) a strong desire; (2) needs and drives; (3) future wishes and dreams; (4) learning appreciation; (5) interest in learning; and (6) a supportive learning environment (Agsya et al., 2019).

The discipline focuses on efforts to manage self-control and cognitive behavior in people or groups to comply with laws and regulations based on encouragement and standardization within oneself (Chotimah & Oktarina, 2019). When teachers can understand their students, students' self-confidence will increase. The implication is that when teachers can collaborate with students, a positive disciplinary approach will benefit their lives (Erşen & Kan, 2019). In addition, the handling of problem students needs to be given proper guidance by avoiding harsh disciplinary actions so that they can direct students to better behavior baik (Huang & Anyon, 2020; Yaakob et al., 2023). Forming the character of this discipline is very important, which positively impacts students with good personalities (Afidah & Tirtoni, 2023). This discipline will encourage obedience, independence, consistency, confidence, and concern for others (Satriami et al., 2021). Discipline in student learning includes adherence to school rules, student discipline in paying attention to lessons, discipline in study time and doing assignments assigned by the teacher, and use of learning facilities (Ekawati & Putra, 2022; Rahmadani & Fitriani, 2023; Tu'u, 2004).

Based on the results of initial observations on students of a state senior high school in Ambon, there is a tendency for students to need more motivation to participate in learning activities. Because of the need for teacher competence in encouraging student achievement and the need for more use of learning models in stimulating student learning activities, which seem monotonous with the lecture method, triggers student burnout. It can ultimately impact discipline when students refrain from obeying school rules with other bad habits. Therefore, the researcher wants to introduce the moving class learning model, which is expected to bring students closer to class subjects and the flexibility of class design to reduce boredom in learning. Besides that, it can create a more harmonious relationship between teachers and students in stimulating a more innovative learning climate and has an impact on student learning progress which is easier to monitor to reduce conflicts between students related to student discipline in learning.

2. METHODS

This research is quantitatively based using SEM (Structural Equation Model) and processed with Smart PLS software to analyze the data. This study focuses on revealing the model structurally (path), and the relationship between the variables studied. This model examines variable assessments to general conclusions based on theory, facts, and empirical evidence. It is done by collecting information from the sample under study to describe the various subsets of the population. In this study, the population was all students of class X at SMAN 13 Ambon who were spread over seven classes, totaling

288 students. Determination of the sample by simple random sampling, based on class randomly without regard to the population level.

Furthermore, two research classes were obtained: the experimental class in class X1 totaling 41 students, and the control class in class X5 totaling 40 students. The variables of this study include exogenous variables, namely the moving class model and teachers' pedagogical competence; learning motivation is the endogenous intervening variable, and learning discipline is the endogenous dependent variable. In Table 1, the research variables are presented as follows.

Table. 1 Variable and Research Indicators

Research Variables		Research Indicators	
Variable exogenous	The moving class learning model	1.	Management of student movement
		2.	Study room management
		3.	Learning process management
Variable exogenous	Teacher Pedagogic Competence	1.	Understanding of students
		2.	Design and implementation of learning
		3.	Application of ICT in learning activities
		4.	Evaluation of learning outcomes
Variable endogenous	Motivation to learn (Variable endogenous intervention)	1.	High desire
		2.	Wishes and dreams for the future
		3.	Appreciation for learning
		4.	A conducive learning environment
Variable endogenous	Study Discipline (Bound endogenous variable)	1.	Compliance with study time
		2.	Compliance in carrying out lesson assignments
		3.	Compliance with the use of learning facilities

Based on the variables developed, the research hypothesis is: (1) Instrument indicators have validity and reliability. (2) Based on empirical data, the model explains the relationship between the moving class model and the pedagogic abilities of teachers with learning motivation and learning discipline. (3) There is a relationship between the moving class model, the teacher's pedagogic abilities, and learning motivation and discipline. This study uses ordinal data extracted from questionnaires with closed questions and uses a Likert scale to measure variables as indicators. SEM is a type of statistical analysis that looks at the relationship between variables. This model consists of three sizes: (1). Designing the Inner model to determine the relationship between variables, (2) and designing the Outer model to determine validity and reliability. (3) Goodness of fit in validating the performance of structural measurement models and (4) hypothesis testing and interpretation.

The designing of an outer model based on Confirmatory Factor Analysis (CFA) to assess validity and reliability. The validity test uses convergent validity, which is assessed based on the standardized loading factor (SLF) or loading factor and average variance extracted (AVE). An indicator that shows high convergent validity is if the value of the extreme loading is more significant than 0.70 and AVE is greater than 0.50. To assess reliability, namely by construct test and variance extract on each latent variable which is a measure of the internal consistency that is formed and the level of the construct. Meanwhile, the variance extracted assesses the total variance based on the indicators extracted by the construct. To calculate the construct reliability and variance values extracted with Microsoft Excel d obtained from the output standard regression weights values for each indicator. For variables with good reliability, if the value range is > the cut-off, which is 0.7 (Ghozali, 2016).

The design of the structural model (Inner model) determines the relationship between variables which is carried out after testing the validity and reliability, and then evaluates the relationship between latent constructs and is evaluated based on the coefficient of determination (R²) and the path coefficient. R² measures the magnitude of the influence of the independent variable on the dependent. The criteria for an R² value > 0.67 show that the model is in a suitable category; 0.33 and 0.67 indicates a moderate category, while <0.33 is categorized as weak. On the other hand, Adjusted R Square is the

value of R Square corrected with standard error and shows a more substantial range in assessing an exogenous variable to explain endogenous variables. Goodness of Fit (GoF) is applied to validate structural measurement models' performance. GoF is based on the Stone Geisser Q² Value criterion, which refers to the Q Square predictive relevance test, which serves to validate the model. The developed model has predictive relevance if the Q Square number > 0 so that it can be concluded that exogenous variables are appropriate as variables that can predict endogenous variables. Meanwhile, it is said to have minimal predictive relevance if the Q Square number < 0 . To see the deviation of a model based on the population covariance matrix on the Root mean square error (RMSEA). The RMSEA value < 0.05 indicates that the model is a close fit, and a value > 0.05 means the model is a good fit (Ghozali, 2016).

Hypothesis testing based on testing of the Inner model includes the value of the path coefficient and T-Statistics. To determine which hypotheses can be accepted or rejected based on the significance value between constructs, T-Statistics, and p-values. T-Statistics based on the Rules of Thumb, namely > 1.96 . The beta coefficient is positive and significant, and the significance is based on a p-value of 0.05 (5%)—path coefficients ranging from +1 to -1. Positive values indicate positive relationships between variables, and negative values indicate negative relationships between variables. The magnitude of the value of the path coefficient is in the range of 1, then it shows a better relationship and is proven based on the significance test (Ghozali, 2016).

3. FINDINGS AND DISCUSSION

3.1. Descriptive statistics

This study uses fourteen indicators to form four latent variables. Latent variables are divided into two endogenous latent variables: learning motivation with four indicators (MB1, MB2, MB3, and MB4) and learning discipline with three indicators (DB1, DB2, DB3). Meanwhile, two exogenous latent variables, namely the moving class learning model with three indicators (MC1, MC2, and MC3) and teacher pedagogic competence with four indicators (KGP1, KGP2, KGP3, and KGP4) (Figure 1).

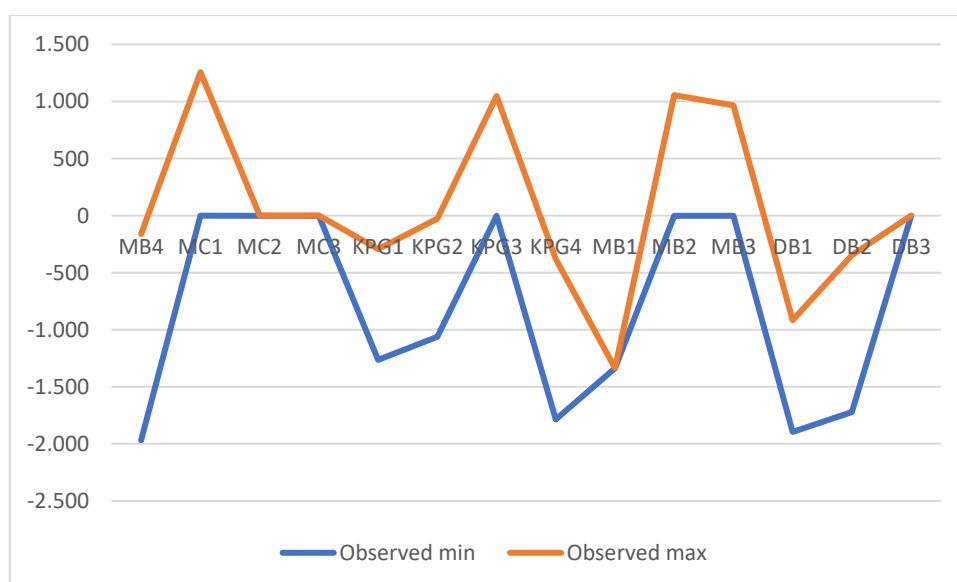


Figure 1. The value of the Observed Min and Observed Max of the research indicators

3.2. Measurement Model (Outer Model)

The outer Model determines how each block of indicators is formed between latent variables. The measurement is based on Confirmatory Factor Analysis (CFA) to assess validity and reliability.

Validity is measured based on Standardized Loading Factors (SLF) and AVE, while reliability is based on CR and Variance Extracted (VE). Table 2 shows the validity test based on the SLF value for all indicators and shows an SLF value > 0.7 so that the indicator is valid in measuring its construct. Where it is known from the endogenous variables, the Moving class model on the MC3 indicator has the highest SLF value of 0.961. The Teacher Pedagogic Competence in the KPG3 category has the highest SLF score of 0.877. For learning motivation, the MB3 indicator has the highest SLF score of 0.924, while for learning disciplines, the DB3 indicator has the highest SLF score of 0.904. The results of the discriminant test performed are shown in Table 2.

Table 2 Confirmatory Factor Analysis (CFA)

Variable	Indicator	SLF	CR	VE
Moving class learning model (X1)	MC1	0.954	0.953	0.958
	MC2	0.952		
	MC3	0.961		
Teacher Pedagogic Competency (X2)	KPG1	0.873	0.860	0.860
	KPG2	0.841		
	KPG3	0.877		
	KPG4	0.763		
Learning Motivation (Y)	MB1	0.909	0.915	0.918
	MB2	0.891		
	MB3	0.924		
	MB4	0.846		
Study Discipline (Z)	DB1	0.789	0.753	0.795
	DB2	0.755		
	DB3	0.904		

For the reliability test, the calculation results in table 2 show the moving class model variable with CR 0.953, teacher pedagogical competence 0.860, learning motivation 0.915, and learning discipline 0.753. The CR values of these four variables are more significant than the cut-off value of 0.7. This indicator has good conclusive reliability. For the moving class model variable, VE is 0.958; pedagogic competence is 0.860; motivation is 0.915; and study discipline. For all indicators, it shows a value of > 0.5 , so the indicator is reliable in measuring its construct. The Discriminant Validity test is carried out by comparing the Average Variance Extracted, abbreviated as AVE. The results of the discriminant test performed are presented in Table 3.

Table 3 Discriminant Validity Test

Variable	Moving Class Model (X1)	Pedagogic Competency (X2)	Learning Motivation (Y)	Study Discipline (Z)
Moving class learning model (X1)	-	-	-	-
Study Discipline (Z)	0.826	-	-	-
Pedagogic Competency (X2)	0.642	0.667	-	-
Learning Motivation (Y)	0.557	0.602	0.852	-

Table 3 shows that the AVE value has a value greater than 0.5, so it is said to have fulfilled the requirements; besides that, each variable is different from the others and is mutually correlated between moving class and learning discipline and pedagogical competence with values of 0.826 and 0.357, respectively. Thus, the correlation between constructs does not represent other construct phenomena.

3.3. Structural Model (Inner Model)

Model Inner Model determines the relationship between variables. After testing the validity and reliability, the next step is to evaluate based on the coefficient of determination (R²) described in Table 4.

Table 4 Results of the Evaluation of the Structural Equation Model

Latent Variable	R-square	R-square adjusted
Learning Motivation (Y)	0.672	0.653
Study Discipline (Z)	0.506	0.463

Table 4 shows the R Square value of the simultaneous effect of both the latent moving class model (X1) and pedagogic competence (X2) on motivation (Y) of 0.672 with an adjusted r square of 0.653, so it can be concluded that all exogenous variables (X1 and X2) simultaneously affect Y, namely 0.653 (65.3%). Whereas for learning discipline (Z), it is 0.506, and the adjusted r squared is 0.463, as well as all exogenous variables (X1 and X2) which simultaneously influence Z by 0.463 (46.3%). The calculation of the two latent variables from the R² value shows that the model is between 0.33 - 0.67, meaning it is in the medium category. Adjusted R Square is the value of R Square corrected with standard error and shows a more substantial range in assessing an exogenous variable to explain endogenous variables. For a combination of path coefficient diagrams, it can be seen in Figure 2.

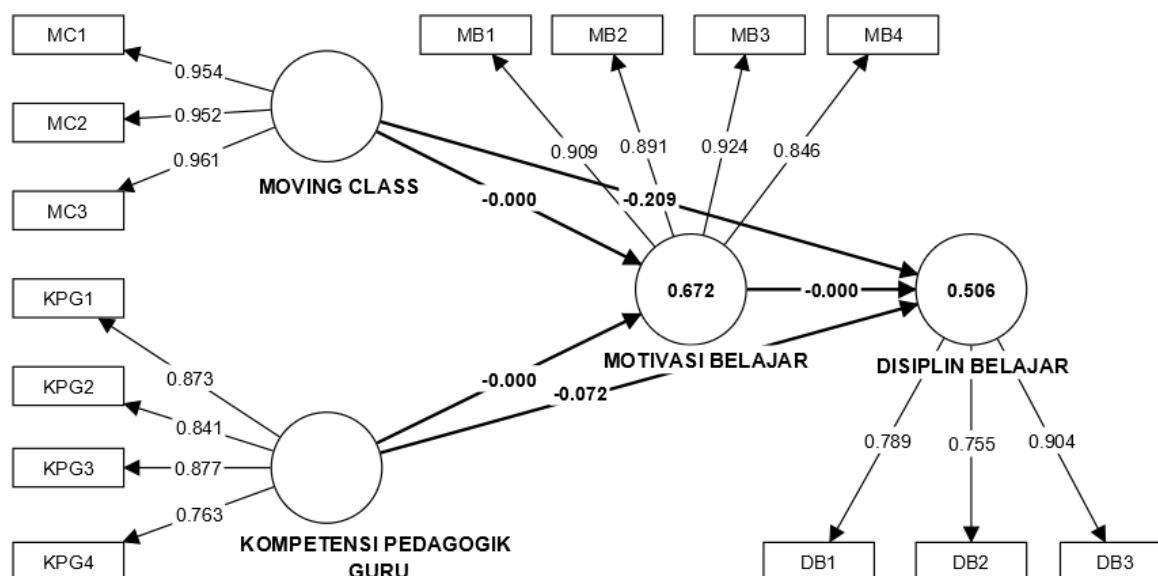


Figure 2. Path diagram

Figure 2 shows that more than 90% of each variant in the three indicators, namely MC1, MC2, and MC3, can be explained by the latent variable Moving class model. The teacher's Pedagogic Competency latent variable can explain the variance of KGP1, KPG2, KPG3, and KPG4 indicators, which is more than 75%. Variants of MB1, MB2, MB3, and MB4 can each be explained by the latent variable of learning motivation above 89%. Learning discipline variables can explain the variance of DB1, DB2, and DB3, each of more than 75%. Thus, the overall latent variable can explain the variance of the indicator that measures above 75%. To validate the overall structural model, using the Goodness

of Fit (GoF). The GoF index is a single measure for validating the performance of composite measurement models and structural models. Then measure the Root mean square error (RMSE) to see the deviation of the parameter values of a model. The calculation results are described in Table 5 below.

Table 5. Inner Model (Q-Square Predictive Relevance)

Variable	Q ² - square	RMSE
Learning Motivation (X)	0.416	0.834
Study Discipline (Z)	0.497	0.884

Table 5 shows that the Q square of learning motivation (Y) is 0.416, and the Q square of learning discipline (Z) is 0.497. These numbers have a good value because the numbers at Q Square > 0 have the right predictive relevance, as variables can predict endogenous variables. For the parameter deviation value based on the RMSE value, learning motivation (Y) is 0.834, and learning discipline (Z) is 0.884 and shows a value of <0.05, so the model is said to be a good fit. Hypothesis testing based on testing of the Inner model includes the value of the path coefficient and T-Statistics. To determine which hypotheses can be accepted or rejected based on the significance value between constructs, T-Statistics, and p-values. T-Statistics. To determine whether the hypothesis can be accepted or rejected, that is by looking at the significance value between constructs, T-statistics, and p-values presented in Table 6.

Table 6. Path Coefficient

Hypothesis	Original Sample (O)	Track	T Statistics (O/STDEV)	P value
H1	0.343	X → Y	4,981	0.00
H2	0.302	X → Y	4,057	0.00
H3	0.327	X → Z	4,827	0.00
H4	0.243	X → Z	2,672	0.047
H5	0.257	Y → Z	2,701	0.007

Table 6 shows that all of these variables have a t-statistic > 1.96 and a p-value < 0.05, while the original sample value is positive. The t-statistic value uses the Rules of Thumb, namely T-Statistic > 1.96, and a significance level of p-value 0.05 (5%). In more detail, the results of the interpretation from table 7 in proving the hypothesis are explained as follows:

- 1) Hypothesis 1 is accepted where the t_statistic is 4.981 > 1.98 and the p-value is 0.000 < 0.005 meaning that the moving class model has a positive and significant effect on learning motivation.
- 2) Hypothesis 2 is accepted where the t-statistic is 4.057 > 1.98 and the p-value is 0.000 < 0.000, meaning that the teacher's pedagogical competence has a positive and significant effect on learning motivation.
- 3) Hypothesis 3 is accepted where the t statistic is 4,827 < 1.98 and the p-value is 0.000 > 0.005, meaning that the moving class model significantly affects learning discipline.
- 4) Hypothesis 4 is accepted where the t-statistic is 2,672 > 1.98 and the p-value is 0,047 < 0,000; a teacher's pedagogic competence has a positive and significant effect on learning discipline.
- 5) Hypothesis 5 is accepted where the t statistic is 2,701 < 1.98 and the p-value is 0.007 > 0.005, meaning that learning motivation significantly affects learning discipline.

3.4. Discussion

The test between the use of *the moving class model* and students' learning motivation is seen from the learning outcomes (*p-value* 0.00). The findings from this study are consistent with previous results using comparative analysis to show substantial differences between *the moving class model* and learning motivation, such as Marina et al. (2019), which partially show the effect of the moving class model on

student motivation. Putrielis (2018) used path analysis, but the research findings showed no significant correlation between changing classes and learning motivation. Hanun (2019) used regression analysis in the *moving class learning model* and showed an increase in motivation and learning outcomes. Using descriptive qualitative research, Ibrahim et al. (2022) examines the strategy for implementing the *Moving class model*, categorized as good with 61.18% in 61% -80%. A suitable learning model can motivate students to achieve goals at a certain level (Lomu & Widodo, 2018). This educational paradigm has the potential to stimulate students to actively and creatively engage in the learning process, so enhancing their motivation to study. Consequently, it can lead to cognitive, emotional, and behavioural transformations that facilitate the attainment of targeted educational objectives. (Nurhamida, 2018). The *moving class* learning model aims to develop student learning motivation that can move, flow, and guide the thoughts and actions of each student (Rahman et al., 2019). Achieving optimal results in applying the *moving class model* about motivation is directly related to developing students' attitudes toward participating in learning activities (Suparji, 2012; Kompri, 2016; Putrielis, 2018). The successful application of Keller's (1987) concept of motivation includes attention, relevance, confidence, and satisfaction in various learning settings by highlighting the positive influence of student motivation on the use of appropriate learning models (Li & Keller, 2018; Lin et al., 2021; Ucar & Kumtepe, 2020). Research in the last few decades has proven that the role of learning models has boosted student motivation in increasing students' willingness to learn (Pintrich, 2003; Lan et al., 2018; Chai et al., 2020; Jong, 2020).

With a *p-value* of 0.00, the results showed a correlation between the teacher's pedagogic abilities and students' learning motivation. The conclusion of this study is in line with other researchers, namely that there is a substantial relationship between student motivation and teacher pedagogical abilities that have a significant effect (Hakiki 2020; Huda 2018), the relationship to disciplinary variables and a partial effect (Antariani et al., 2021 ; Marina et al. , 2019 ; Lumbantobing, 2003), with pedagogic innovation in the utilization of Information and Communication Technology (ICT) (Komar et al., 2022) , with the development of digital literacy in the development of pedagogic competencies (Souza et al., 2020), the use of pedagogic tools that combined with teaching style (Chiknaverova & Obdalova, 2022), digital pedagogic ability enhancement in online-based teaching (Noguera et al., 2022; Ho et al., 2023), use of pedagogic content and significant effect both simultaneously and partially (Rahman et al. 2019), modeling multi-level structural equations for both cognitive and affective students, to increase student learning motivation (Keller et al., 2017). develop training programs that influence teacher pedagogical competence (Pekkarinen et al., 2023), create a classroom climate and manage classes effectively, and are supported by teacher knowledge in developing good teaching programs (Ghonji et al., 2015; Moreira et al., 2023). These researchers investigated teacher pedagogic competence and the influence of increasing student motivation. The teacher's pedagogical ability is the dominant factor influencing the quality of learning in increasing student learning motivation (Baglier et al., 2014; Benwari & Dambo, 2014; Daga et al., 2023). With pedagogic competence, teachers can actualize various student potentials in learning motivation (Dari & Yulhendri, 2019).

Based on the findings, the *moving class model* significantly affects student learning discipline with a *p-value* of 0.00. Findings from the study by Marina et al. (2019) partially show the effect of the *moving class model* on student learning discipline. Chotimah & Oktarina, (2019) show that the use of the *moving class model* positively and significantly affects learning discipline. Lomu & Widodo, (2018) explain that discipline develops primarily because of internal standards and the belief that what is done is appropriate and beneficial to themselves and their environment. Having discipline is very important for learning tasks. Assist learning activities by fostering a relaxed and conducive learning environment. Elements that affect the success of each lesson, one of which is discipline. Sandoff & Widell (2008) stated that individual behavior could be controlled and predicted with discipline. Using the *moving class model* forms a collaboration between students so that interaction between students will be created, reducing conflicts that can lead to indiscipline in class. This situation will awaken students who are motivated

to learn, including by disciplining themselves in learning so that they are more focused on building their character in achieving a goal (Agsya et al., 2019).

Based on the teacher's pedagogical skills test, it has a significant effect on learning discipline, with a *p-value* of 0.047. This study's findings align with several studies, including assessing teacher competency, which partially affects student learning discipline and their relationship with motivational variables (Antariani et al., 2021; Marina et al., 2019). With an emphasis on developing teacher competence as a factor essential in learning that has an impact on student behavior (Satriami et al., 2021); with learning management and students' psychological development approaches to handling it (Nurhamida, 2018; Simba et al., 2018). focusing on efforts to manage self-control and student behavior in complying with laws and regulations at school (Chotimah & Oktarina, 2019). building collaboration between teachers and students to show positive student discipline in classroom learning activities (Erşen & Kan, 2019); proper guidance by avoiding disciplinary action. Hard work can direct students to better behavior (Huang & Anyon, 2020; Yaakob et al., 2023). Some of the research above shows the effect of teacher pedagogical competence on student learning discipline with the various methods used. Disciplinary problems with teacher pedagogical have led to a tendency to learn from students. In some countries, it has become a big problem. In Brazil, teachers face problems that occur among students related to student discipline and continue to develop until a prolonged conflict is created (Rizzotto & França, 2022). Meanwhile, Kenya legalized homeschooling as an alternative form of education in cases of student indiscipline (Tweni et al., 2022).

The findings of learning motivation testing affect student learning discipline, with a *p-value* of 0.007, and the effect is significant. The findings of this study are in line with several researchers who examined this problem and showed that there is a relationship between learning discipline and student learning motivation (Sihombing et al., 2023), there is a positive and directed relationship between motivation and learning discipline (Atunde & Aliyu, 2019), there is a substantial relationship and a positive correlation between learning motivation and learning discipline (Agustin et al., 2017), with the formation of disciplinary character that has a positive effect on student learning motivation (Lomu & Widodo, 2018; Afidah & Tirtoni, 2023), discipline has a positive effect and significant to motivation, disciplined students tend to stay focused on their educational goals and aspirations, manage their time well, work harder in the academic field, and show determination to succeed academically (Erşen & Kan, 2019), the influence of learning motivation on discipline, will then contribute to student academic achievement (Steve & Charles, 2020). Motivation and discipline are not correlated due to a lack of relevant teaching and learning materials and high teacher workload (Verner et al., 2022); the line on motivation is unrelated, i.e., between group or environment and individual characteristics, and various disturbances in the period certain (Abdimuradovich, 2022). Student discipline needs to be handled appropriately by the teacher, which will encourage obedience, independence, consistency, confidence, and caring (Satriami et al., 2021). Discipline gradually rains the mind and character to become a person with self-control (McKinney et al., 2023). Discipline can make students develop a positive self-concept, which can increase achievement motivation (Herpratiwi & Tohir, 2022).

4. CONCLUSION

Validity testing *and* reliability in *the outer model* for all endogenous *Moving class* variables, teacher's pedagogic competence, motivation, and learning discipline show that the value of *Standardized Loading Factors* (SLF) > 0.7 and *Construct Reliability* (CR) > 0.5. These findings show that the indicator is valid and reliable in measuring the Construct. The difference between one variable and another, based on the *Discriminant Validity test with the Fornell-Lacker test of the Average Variance Extracted* (AVE), has above 0.5. It is said to have fulfilled the requirements that the value of each variable is greater than the correlation variables and different from each other, indicated by the results obtained. The *Inner model* based on the *R Square* value of the simultaneous or simultaneous effect of *moving class model* (X1) and

teacher pedagogic competence (X2) on learning motivation (Y) is 0.672 with an *adjusted r fair value* of 0.653; as for learning discipline (Z) is 0.506 with an *adjusted r squared value* of 0.463. The results of the calculation of the two latent variables from the value of R^2 indicate the model is a value of 0.33 - 0.67, which means the model is categorized as moderate. For model validation based on *Goodness of Fit (GoF)*, it shows $Q\ square > 0$ and has *predictive relevance*, which shows relevant exogenous latent variables (appropriate) and $RMSE < 0.05$, so it is said to be a *good fit model*. Testing the significance or *bootstrapping* to prove the hypothesis based on the path coefficient and *T-statistics* shows that all variables have a positive and significant effect with a *t-statistic value* > 1.96 and a *p-value* < 0.05 .

The limitations in this study are the application of the moving class learning model, where it is still challenging to condition and manage students, there is no fluency in learning due to schedule changes, and the use of learning resources still needs to be optimal. As a continuation of this research, other research variables can be studied, which are not only limited to pedagogic competence but also to personality competence, professionalism, and social, and its influence is not only on motivation and learning discipline but can also be seen in learning outcomes, self-efficacy, etcetera.

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