

Self-directed learning model and student independence in learning Buddhist religion of state senior high school I Tanjung

Diana¹, Ayu Andriyaningsih², Sutiyono³

^{1,2,3} Buddhist Education Department, Jinarakkhita Buddhist College of Lampung, Indonesia

diana@sekha.kemenag.go.id

Abstract: The purpose of this study was to examine the effect of *the* self-directed learning model on the learning independence of Buddhist students at State Senior High School I Tanjung. The problems encountered by students included a lack of initiative in overcoming problems and completing assignments, frequent copying of their friends' answers, a lack of responsibility in completing and submitting assignments, and a lack of discipline in the learning process. This study is expected to increase students' learning independence to achieve maximum learning outcomes. Self-Directed Learning is a learning model that allows students to manage the learning process independently, with initiative and freedom to learn. Through this approach, students can improve their abilities and achieve better learning outcomes. Self-Directed Learning aims to develop knowledge, skills, achievements, and individual development independently. This study used a quantitative approach with a survey method. The population in this study consisted of 92 respondents from State Senior High School I Tanjung who were Buddhist students in the 2024/2025 academic year. The results of this study indicate that *the Self-Directed Learning* model has a positive effect on the learning independence of Buddhist students at State Senior High School I Tanjung. Based on regression analysis, *Self-Directed Learning* contributes significantly to shaping students' learning independence, while some of their learning independence is influenced by other factors, such as the school environment, family, and peers. This confirms that *the Self-Directed Learning model* is one of the components in shaping learning independence.

Keywords: Learning Model, Self-Directed Learning, Learning Independence

1. Introduction

Advances in science and technology in the 21st century require every individual to possess 4C skills (creative, communication, critical thinking, and collaboration). Competition in various fields will become increasingly fierce in line with the rapid development of science and technology. Therefore, the student generation in Indonesia needs to be equipped with skills that can support future progress in order to broaden their horizons and knowledge. To face challenges in the fields of science and technology and prepare superior human resources, the government strives to educate the Indonesian people through education [1].

Efforts to improve educational progress include providing students with opportunities for independent learning. By improving independent learning skills, critical thinking

abilities, and self-confidence, students can be better prepared to face academic and professional challenges. Continuous learning and lifelong self-development also become easier to achieve when independent learning is implemented. All these aspects make independent learning a key factor in accelerating educational progress and creating more skilled and empowered individuals [2]. Buddha said that "You yourself must strive, the Tathagata is only a guide" (Dhp.276). Buddha indirectly expected his disciples to practise the teachings he had given them independently. The Buddha only shows the way to attain liberation. "The Buddha cannot liberate beings depending on themselves; no one can make others pure" (Dhp.165).

However, in reality, not everything goes according to plan. This shows that independent learning is still not optimal or can be said to be low due to several factors, including (1) low learning discipline among students, (2) low responsibility in completing assignments given by educators, (3) lack of confidence in their own answers, leading them to copy the answers of their classmates or peers, and (4) low initiative among students in participating in learning. This can be seen in the learning process that is currently taking place in the classroom, where most students only rely on the lessons delivered by the educators teaching in the classroom [3]. The world of education today is required to innovate in learning in order to strengthen the independence of student learning in terms of objectives, programmes, models, processes, methods, and evaluation methods. To that end, educators need to carefully select learning models so that the chosen models are appropriate for various aspects of learning, making them efficient and interesting. Thus, the educational process cannot be separated from the learning process that takes place in the classroom or at school [4].

The learning process in the classroom is inseparable from how the classroom is managed and the use of various learning models that are innovative knowledge transfer processes. One effective learning model is the Self-Directed Learning model. The Self-Directed Learning model is a learning model that allows students to manage the learning process independently, with initiative and freedom to learn. Through this approach, students can improve their abilities and achieve better learning outcomes. This is in line with what Buddha said in the Lohicca Sutta, which explains that a good educator can choose the model needed according to the conditions and potential, and that educators can be used as guidance in shaping good character. The contents of the sutta should be taken into consideration by educators in determining good learning models, methods and strategies (D.XII:20-55).

The Self-Directed Learning model encourages students to take the initiative, with or without the help of others, to analyse their own learning needs, formulate their own learning objectives, identify learning resources, select and implement appropriate learning strategies, and evaluate their own learning achievements [2]. The Self-Directed Learning model places more emphasis on skills, processes and systems than on content and tests. Through the application of this learning model, learners are given autonomy in managing their learning, which will lead to independent learning. Independent learning can be defined as the characteristics, attitudes, and abilities possessed by learners to carry out learning activities independently or with the help of others based on their own

motivation to master certain competencies so that they can be used to solve problems encountered in the real world. The Self-Directed Learning model encourages students to take the initiative, either with the help of others or independently, to analyse their own learning needs. Students are also encouraged to formulate their own learning objectives, identify relevant learning resources, and select and implement learning strategies that suit their learning styles and needs. In addition, students are also encouraged to independently evaluate their own learning outcomes to determine the extent of their competency achievement.

Based on the results of interviews conducted by the researcher on 1 November 2024, it was found that the problems faced by Buddhist students at SMA Negeri I Tanjung were a lack of confidence in their answers, leading some students to copy their friends' answers. In addition, students lack responsibility in completing and submitting assignments given by educators, resulting in some students not completing and submitting their homework on time. Furthermore, there is a lack of discipline among students in the learning process, as students do not arrive on time. This is also supported by research [5] which found that there are difficulties in learning independently. This is because many students still depend on the resources provided by educators. Similarly, when educators give assignments, students depend on their friends, lack motivation to learn, become bored, and lack enthusiasm.

Based on the above description, it is necessary to conduct research to examine more deeply the "Effect of the Self-Directed Learning Model on the Learning Independence of Buddhist Students at SMA Negeri I Tanjung". This research is needed to understand the Self-Directed Learning model as the main variable and whether the Self-Directed Learning model can help increase student learning independence. This study is expected to prove the hypothesis regarding the effect of the Self-Directed Learning model on the learning independence of Buddhist students at Tanjung State Senior High School I. This study also aims to further understand how Self-Directed Learning plays a role as the main variable in supporting the creation of an active, independent, and responsible learning atmosphere. Thus, it is hoped that the results of this study can explain the extent of the effect of this learning model in improving the quality of the students' learning process. In addition, this study is expected to produce empirical data that can be used as a basis for formulating more appropriate and effective learning strategies. This study can also be used as a consideration for educators in choosing a learning approach that suits the characteristics of students, especially in an effort to foster independent learning. Thus, this study is expected to prove the hypothesis regarding the positive influence of the Self-Directed Learning model on the learning independence of Buddhist students at SMA Negeri 1 Tanjung. The results of this study are expected to make a real contribution to the development of learning practices in schools, as well as serve as a reference for similar studies in the future.

Self-Directed Learning is a learning model that allows students to manage the learning process independently, with initiative and freedom to learn. Through this approach, students can improve their abilities and achieve better learning outcomes. Self-Directed Learning aims to develop knowledge, skills, achievements, and individual development

independently. Self-Directed Learning also allows students to manage the learning process in the form of self-initiative, independence, self-regulation, and self-exploration. Self-Directed Learning provides students with freedom in learning activities to develop optimal learning independence [6].

Independence is the ability to act independently without dependence on others, while learning is the process of acquiring knowledge or skills [7]. Independence reflects a person's ability to manage themselves to achieve better development [8]. Learning is understood as the process of knowledge transfer. Meanwhile, independent learning is a process of self-development carried out independently, without depending on others. The Buddha taught his monks to always practise the Dhamma and Vinaya, even after his passing. The Buddha's hope for his disciples was that they would be able to stand on their own two feet, both in the learning process and in their daily lives. In the Sigalovada Sutta, it is hoped that everything will be done with full responsibility, enthusiasm, and determination to achieve the highest results (DN.III:31). In this context, the Buddha encouraged his disciples to be independent in learning and training themselves, with the determination to achieve liberation. Referring to the Buddha's explanation, Wedemeyer's research in [9] reinforces that independent learning is a way of learning that gives greater degree and freedom, responsibility and authority to learners in planning and implementing learning activities.

2. Method

In this study, the researcher used a quantitative approach with a survey method to collect and analyse the data. Quantitative descriptive analysis is a statistical analysis used to describe, summarise, and analyse quantitative data. The quantitative approach is a research method based on the philosophy of positivism, which is used to collect data to study a population or sample using research tools. The data analysis is quantitative/statistical with the aim of testing predetermined hypotheses [10]. The sampling technique used in this study was non-probability sampling. According to [11], non-probability sampling is a sampling technique that gives equal opportunity to every element or member of the population to be selected as a sample. This means that the sample is part of the population and has the same characteristics. This can be interpreted as taking a sample from the total population to represent it in the research. The sampling technique used in this research is non-probability sampling with purposive sampling. According to Sugiyono (2017:85), purposive sampling is a sampling technique used to determine the sample to be studied according to certain standards, with the aim of obtaining more representative data.

Research design is an action plan that includes various components used in research and activities carried out during the research process [12]. This research design includes a series of steps, beginning with initial observations to identify phenomena and problems in the field. This step is important so that researchers gain a deep understanding of the real conditions of the students, so that they can formulate a more targeted research focus [13]. This research design includes a series of steps starting from initial observation, preparation of the background of the problem, identification and formulation of the

research problem, to the preparation of conclusions. In addition, the researcher also compiled a relevant theoretical basis related to the Self-Directed Learning model and learning independence, determined the research variables, designed data collection instruments, collected data through questionnaires, analysed the data, and formulated conclusions and suggestions based on the results obtained.

The collected data was then grouped based on each respondent variable and analysed to answer the research questions and test the hypotheses that had been formulated previously. In the analysis process, the researcher used the SPSS version 23.0 (Statistical Program for the Social Sciences) data processing program to ensure that the analysis results obtained were more accurate, measurable, and reliable. With this approach and method, it is hoped that the research results can provide a clear picture of the effect of the Self-Directed Learning model on students' learning independence. The collected data was then grouped based on each respondent variable that had been determined in this study. Data grouping was carried out to make it easier for researchers to read, process, and draw meaning from the data obtained. This stage is the first step before the researcher conducts a more in-depth analysis to answer the research questions. After the data is grouped, the next step is to analyse the data to answer the research questions and test the hypotheses that have been formulated previously. The analysis is carried out systematically so that the results obtained truly reflect the actual conditions in the field. Thus, the research findings can be scientifically accounted for.

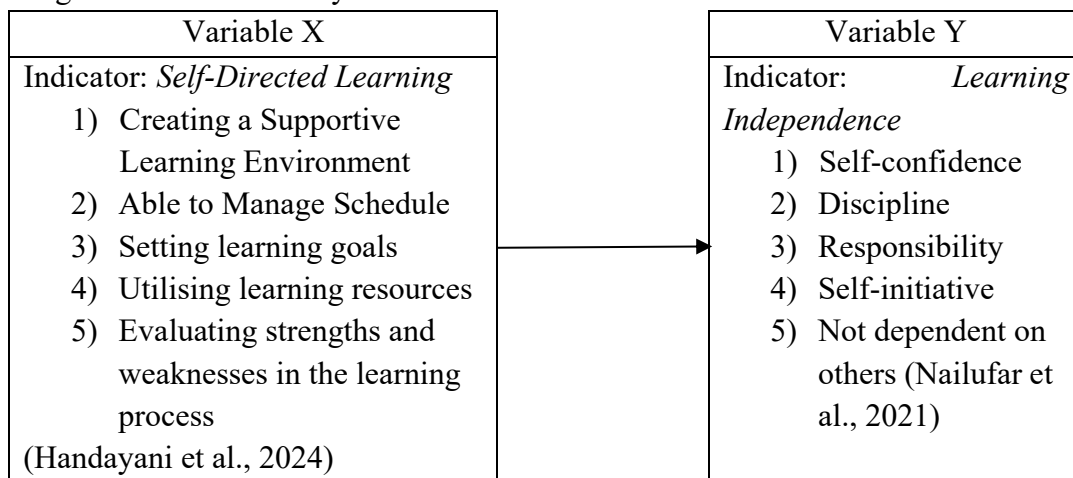


Figure 1. Conceptual Framework

3. Results and Discussion

3.1. Results

Based on the results of the instrument trial that has been conducted, the validity of the instrument for measuring the effect of the Self-Directed Learning model on learning independence was tested using the SPSS version 23.0 programme. Of the total 80 items compiled in the questionnaire, 40 items represented the Self-Directed Learning variable and 40 items represented the learning independence variable. The validity test results showed that there were 38 valid items in the Self-Directed Learning variable and only 2 items were declared invalid. Meanwhile, in the learning independence variable, there

were 37 valid items and 3 invalid items. These items were declared invalid because the rhitung value obtained was smaller than the rtabel at a significance level of 0.05, with a total of 30 respondents in the pilot test, namely 0.361. Thus, the invalid items were then removed so that the instruments used were truly suitable for measuring the variables under study. After the invalid items were removed, the total number of statement items used in this study became 75 items that were considered feasible and valid. Thus, it can be concluded that most of the statement items compiled by the researcher have met the criteria for good validity. This indicates that the instrument used can accurately measure the aspects to be studied in accordance with the research objectives. This valid instrument will then be used to collect primary data from selected respondents. The existence of a valid instrument is expected to produce data that is relevant, objective, and scientifically accountable, so that the research results truly reflect the actual conditions in the field.

Table 1. Instrument Reliability Test

Reliability Statistics	
Cronbach's Alpha	Number of Items
.981	75

Source: Results of data processing in 2025 using SPSS 23.0

Based on the results of the instrument reliability test, statistical analysis conducted using SPSS version 23.0 shows that the Cronbach's Alpha value is 0.981. This value is well above the minimum reliability standard, which is generally 0.70, so it can be concluded that this research instrument has a very high level of reliability. Thus, the instrument used in this study can be trusted to produce consistent and stable data. In addition, because the instrument has met the validity and reliability requirements, it is suitable for use in collecting data on the effect of the Self-Directed Learning model on students' learning independence. These results also indicate that the items in the questionnaire are able to measure the research variables accurately, thereby supporting the optimal achievement of the research objectives.

The purpose of conducting a normality test is to determine whether the distribution of residual values in this study is normal or not. Normality testing is an important requirement in parametric statistical analysis because normally distributed data will produce more accurate and reliable analyses. Thus, the validity of the research results can be guaranteed. In this study, the normality test was conducted using the One Sample Kolmogorov-Smirnov method. This test was chosen because it is able to measure data normality effectively, especially when the sample size is relatively large. The data is said to be normally distributed if the test significance value is greater than the significance level of 0.05 or 5%. Based on the results of the normality test conducted on data from 92 respondents, a significance value (2-tailed) of 0.200 was obtained. This significance value is greater than 0.05, so it can be concluded that the residual data used in this study is normally distributed. This means that the data meets one of the basic assumptions of linear regression analysis. With the fulfilment of the normality assumption, data analysis can proceed to the next stage without any deviation from the basic assumptions. The results of the normality calculation using the One Sample Kolmogorov-Smirnov test can be seen

in the table below as supporting evidence showing that the data distribution has met the normality criteria.

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test			
		Unstandardised Residual	
N		92	
Normal Parameters ^{a,b}	Mean		.000000
	Standard Deviation		9.55237137
Most Extreme Differences	Absolute		.055
	Positive		.046
	Negative		-.055
Test Statistic		.055	
Asymp. Sig. (2-tailed) ^c		.200 ^d	
Monte Carlo Sig. (2-tailed) ^e	Sig.		.713
	99%	Lower	.701
	Confidence	Bound	
	Interval	Upper	.724
		Bound	

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

e. Lilliefors' method based on 10,000 Monte Carlo samples with a starting seed of 2,000,000.

Source: Data processed in 2025 using SPSS 23.0

The homogeneity test was conducted as one of the requirements in the Independent Sample Test analysis using the Compare Means One Way ANOVA method. The basic assumption in ANOVA analysis is that the variances of the populations being compared must be equal or homogeneous. The test criteria indicate that if the significance value is greater than 0.05 or 5%, it can be concluded that the variances of the data groups being tested are equal or homogeneous. The basic assumption in ANOVA analysis states that the variances of the populations being compared must be homogeneous or equal. If this assumption is not met, the test results may be less valid and the interpretation of the data may be inaccurate. Therefore, the homogeneity test is the initial stage that must be fulfilled before researchers proceed to the hypothesis testing stage. The criteria for testing homogeneity are determined based on the significance value generated from the homogeneity test output. If the significance value is greater than 0.05 or 5%, it can be concluded that the variance of the data groups being tested is the same or homogeneous. Conversely, if the significance value is less than 0.05, the variance is considered non-homogeneous and requires further handling or adjustment of the analysis. For more

detailed information on the results of this homogeneity test, see the following Test of Homogeneity of Variances table.

Table 3. Homogeneity Test Results

Tests of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Variable X and Y	Based on Mean	.771	1	182	.381
	Based on Median	.509	1	182	.476
	Based on Median and with adjusted df	.509	1	175.536	.476
	Based on trimmed mean	.700	1	182	.404

Source: Data processed in 2025 using SPSS 23.0

Based on the results of the homogeneity test obtained from the Test of Homogeneity of Variances output, it is known that the significance value for the Self-Directed Learning model variable and the learning independence variable is 0.404. Because this significance value is greater than 0.05, it can be concluded that the two data groups have the same variance or are homogeneous. Thus, the data meets the assumption of homogeneity so that it can proceed to the next stage of analysis using ANOVA.

This study aims to analyse how the Self-Directed Learning model can influence students' learning independence. Using valid and reliable research instruments, data was collected from a representative number of respondents, enabling a comprehensive analysis of the two variables. Data analysis techniques were used to answer the research questions posed through hypotheses. A hypothesis is a tentative answer whose truth must be proven through research [20]. This hypothesis was tested as a tentative answer to the question, "Is there an effect of the Self-Directed Learning model on the learning independence of Buddhist students at SMA Negeri I Tanjung?" Hypothesis testing in this study used a simple linear regression formulation, and the data was obtained using SPSS 23.0. For more details, see the table below.

Table 4. Regression Equation Output

Coefficients ^a					
Model		Unstandardised Coefficients		Standardised Coefficients	
		B	Std. Error	Beta	t
1	(Constant)	-8.941	8.059		-1.109
	X	1,011	.057	.881	17,671

a. Dependent Variable: Learning Independence

Source: Data analysis results for 2025 using SPSS 23.0

Based on the output results by reading the coefficients, a constant value of -8.941 was obtained, which means that if the Self-Directed Learning model has a value of 1.011, the consistent value of the learning independence variable is -8-Directed Learning model has a value of 0, the consistent value of the learning independence variable is -8.941. The regression coefficient on the Self-Directed Learning model variable (X) is 1.011, meaning

that if the Self-Directed Learning model experiences an increase or development, the learning independence variable (Y) will increase by 1.011.

Based on the data analysis, the t-value is 17.671 and the t-table value with $df=n-2$ is $df=90$, which is 1.661 with a significance value of 0.000 because the absolute value of t-value $17.671 < 1.661$ and significance $0.000 < 0.05$, so H_0 is rejected and H_a is accepted. A positive coefficient means that the Self-Directed Learning model has a positive effect on the learning independence of Buddhist students at SMA Negeri I Tanjung. Based on these results, H_0 is rejected and H_a is accepted, so it can be concluded that the Self-Directed Learning model has a positive effect on the learning independence of Buddhist students at SMA Negeri I. The hypothesis testing criteria use an alpha of 5% (0.05), where H_0 is rejected if < 0.05 by reading the following ANOVA table.

Table 5. ANOVA Analysis Output

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	28,809.885	1	28,809.885	312,263	.000 ^b
1 Residual	8,303,550	90	92,262		
Total	37,113.435	91			

a. Dependent Variable: Learning Independence

b. Predictors: (Constant), Self-Directed Learning Model

Source: Data processed in 2025 using SPSS 23.0

Based on the ANOVA analysis output, the Fcount value obtained was 312.263 with a significance level of 0.000. Because this significance value is much smaller than 0.05, it is not necessary to match it with the Ftable value, as SPSS automatically and accurately provides significance information. A significance value of $0.000 < 0.05$ indicates that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. Thus, it can be concluded that the Self-Directed Learning model has a positive and significant effect on students' learning independence. This means that the better the implementation of this learning model, the higher the level of student learning independence. This proves that Self-Directed Learning is able to encourage students to be more active, independent, disciplined, and responsible in managing their own learning process. Therefore, educators are expected to continue to develop and apply this learning model so that learning objectives can be achieved optimally and students are better prepared to face learning challenges in the future.

Table 6. R Square Determination Coefficient Values

Model Summary ^b				
Model	R	R Square	Adjusted R-Square	Standard Error of the Estimate
1	.881 ^a	.776	.774	9.60529
a. Predictors: (Constant), Self-Directed Learning Model X				
b. Dependent Variable: Learning Independence Y				

Source: Data analysis results for 2025 using SPSS 23.0

The coefficient of determination in the table above is indicated by an R Square value of 0.776. This value shows that 77.6% of the variation in students' learning independence can be explained by the application of the Self-Directed Learning model. Meanwhile, the remaining 22.4% is influenced by other factors outside this learning model that were not analysed in the study, such as family environment, internal motivation, peer support, or other learning methods used at school. These findings indicate that the Self-Directed Learning model makes a significant and dominant contribution to improving student learning independence. Therefore, educators need to continue to optimise the application of this model with varied, creative strategies that are appropriate to the characteristics of the students, so that the learning outcomes achieved are maximised. In addition, cooperation between educators, parents, and the school environment is also necessary to support the creation of a conducive learning atmosphere so that students can grow into independent, responsible individuals who are ready to face the challenges of learning in the future.

3.2. Discussion

Based on the results of data analysis and hypothesis testing, it is known that the Self-Directed Learning model has a positive and significant effect on student learning independence. These findings indicate that the application of the Self-Directed Learning model is very important because it can increase learning independence, which in turn can encourage students to actively participate in every learning activity. Through this model, students become more confident in expressing their opinions, asking questions, and participating in class discussions. In addition, students also tend to be more disciplined and responsible in completing assigned tasks, as well as more obedient to school rules. By getting used to learning independently, it is hoped that students can develop a proactive attitude, critical thinking skills, and lifelong learning skills that are very much needed in facing the challenges of today's global era.

The Self-Directed Learning model encourages students to manage and control their learning process independently, on their own initiative, and gives them the freedom to determine the learning method that best suits their individual needs and abilities. The application of this learning model provides various benefits, including increasing a sense of responsibility for the learning process, fostering self-confidence, accustoming students to think critically and reflectively, and training their ability to make decisions

independently. In addition, the Self-Directed Learning model also prepares learners to face future learning challenges, as they become accustomed to flexible, self-centred learning. Thus, it is hoped that learners will grow into more independent, disciplined individuals who are able to develop the attitudes and skills necessary for lifelong learning.

In addition, the Self-Directed Learning model also prepares students to face future learning challenges, as they become accustomed to flexible, self-centred learning. Students are trained to be able to recognise their strengths and weaknesses, so that they can design effective and efficient learning strategies in accordance with the goals they want to achieve. Thus, it is hoped that students can grow into individuals who are more independent, disciplined, and able to develop the attitudes and skills necessary for lifelong learning. This learning model also helps to foster a culture of continuous learning in school and outside school. Learners are expected not only to rely on educators as their main source of information, but also to actively seek, explore, and make optimal use of various other learning resources. Thus, learners' learning abilities are not limited to the classroom, but can be applied to deal with various real-life problems in everyday life.

The results of this study are in line with Handayani's research, which states that there is a significant relationship between the Self-Directed Learning model and learning independence [14]. This means that with the Self-Directed Learning model, students can increase their learning independence. Self-Directed Learning is a learning model that allows students to manage the learning process independently, with initiative and freedom to learn. Through this approach, learners can improve their abilities and achieve better learning outcomes. Self-Directed Learning aims to develop knowledge, skills, achievements, and individual development independently. In Cakkavatti Sihanada Sutta, "Be an island unto yourself, be a protector unto yourself, let there be no other protector" (DN.III:26). In this sutta, Buddha emphasises not to depend on others. Always strive to become a better person, with all your own efforts.

Self-Directed Learning is an innovative model that provides opportunities for students to take the initiative in the independent learning process. Through Self-Directed Learning, students can diagnose learning needs, set learning goals, identify learning resources, and select and apply appropriate learning strategies. In addition, students can evaluate the results of the learning process that has been carried out. Thus, independent learning is a learning process that strongly emphasises student autonomy during their academic journey [15]. The application of this model also helps students develop critical thinking skills, self-confidence, and the ability to make the right decisions in facing various academic and non-academic challenges.

The Self-Directed Learning model is expected to create full awareness and responsibility among learners in the learning process and task completion. It improves learners' critical thinking skills in obtaining information, making decisions, and solving problems. In addition, learners can manage their time and develop self-discipline in carrying out the learning process. Self-Directed Learning provides learners with freedom in learning activities to develop optimal learning independence [6]. Thus, the application of this learning model not only focuses on achieving learning outcomes but also on forming sustainable learning character, enabling learners to become lifelong learners.

Self-Directed Learning will also enable students to manage the learning process in the form of self-initiative, independence, self-regulation, and self-exploration. In Sigalovada Sutta, it is expected that everything is done with full responsibility, enthusiasm, and determination to achieve the highest results (DN.III:31). This teaching emphasises the importance of carrying out every obligation with the right attitude, wholeheartedly, and with sincere intentions for the good of oneself and others.

Based on data analysis, it is known that the Self-Directed Learning model among students at Tanjung State Senior High School I is relatively high, with most students able to learn independently. In terms of creating a supportive learning atmosphere, students are able to choose and create a comfortable and quiet learning environment during the learning process so that they do not feel bored or distracted. The high implementation of Self-Directed Learning is also evident in the independence of students in determining learning objectives, selecting relevant material, and managing their study time well. Students are able to utilise various available learning resources, including textbooks, the internet, and discussions with peers, to support their in-depth understanding of the material. This shows that students not only have the technical ability to manage the learning process, but also have high intrinsic motivation to continuously improve their knowledge and skills.

In terms of creating a supportive learning environment, students demonstrate the ability to choose and create a comfortable and conducive learning environment. They can adjust the learning space to make it quiet, tidy, and minimise distractions, so that the learning process can be more effective and enjoyable. This helps students to stay focused and not get bored easily. The ability of students to create a supportive learning atmosphere proves that they are aware of their responsibility for their own learning process. Thus, it is hoped that the Self-Directed Learning model can continue to be applied and developed so that students' independence in learning will increase in line with the demands of learning in the future. In addition, the ability to create a supportive learning atmosphere will also foster students' confidence and independence in making learning decisions, so that they are better prepared to face various situations and academic challenges independently.

On the indicator of scheduling, the results show that Buddhist students at SMA Negeri I Tanjung can set priorities for learning tasks and are able to make learning plans so that the learning process runs in a structured manner. On the indicator of determining learning objectives, students gave high ratings, indicating that they are able to set more specific and measurable learning objectives according to their own abilities. In terms of utilising learning resources, students independently search for and study materials from various sources. Furthermore, on the indicator of evaluating strengths and weaknesses in the learning process, students are able to reflect on their own learning progress independently.

When viewed in detail for each indicator, the students' self-confidence is relatively high. This can be seen from the students' courage in giving suggestions, input, and asking questions during the learning process. This self-confidence shows that students do not hesitate to participate actively and express their opinions. The discipline indicator also shows encouraging results. Most students are able to complete tasks on time according to

the predetermined schedule. In addition, the students' sense of responsibility is also high, as evidenced by their seriousness in completing and submitting assignments in an orderly manner without having to be constantly reminded. In terms of initiative, most students showed a proactive attitude by independently seeking additional learning resources through books, journals, and the internet. In addition, their ability to not depend on others was also high, as seen in their habit of trying to evaluate their own learning outcomes. All these findings reinforce that the students of SMA Negeri 1 Tanjung have a good level of learning independence.

The results of the data analysis on the discipline of students at SMA Negeri I Tanjung show that the overall level of learning independence is in the high category. Details of each indicator reveal that: first, students' self-confidence is high, as seen from their willingness to give suggestions and ask questions; second, student discipline is high, with most students completing their assignments on time; third, student responsibility is high, with most students collecting and completing assignments on time; fourth, self-initiative is high, as seen from the fact that most students seek additional learning resources themselves through books, journals and the internet; and finally, students' independence from others is also high, as seen from the fact that most students evaluate their learning outcomes independently.

In this variable of Self-Directed Learning, the data shows that, in general, students give positive assessments with a high level of achievement. This means that students are accustomed to managing and controlling their learning process independently. Students are also considered to have the initiative to determine learning objectives, select relevant learning resources, and evaluate learning outcomes independently. Similarly, in terms of learning independence, most students demonstrate a high level of learning independence. Students are considered capable of demonstrating confidence, discipline, responsibility, and initiative in carrying out learning activities. These results prove that students have developed an awareness of independent learning without being completely dependent on educators. These findings show that students at SMA Negeri 1 Tanjung are able to optimally apply the Self-Directed Learning model. The application of this model has a positive impact on the development of students' learning independence. Thus, it is hoped that this learning model can continue to be developed so that students are better prepared to face learning challenges in the future.

In the Self-Directed Learning model variable, the data shows that, in general, students give positive assessments with high achievement levels. This indicates that students are accustomed to managing and controlling their learning process independently, have the initiative to seek learning resources, and are able to develop learning strategies according to their individual needs. Similarly, in the learning independence variable, most students showed a high level of independence. This can be seen from the students' attitude of being able to take responsibility for completing tasks, being disciplined in complying with learning rules, being confident in expressing their opinions, and actively making learning decisions without always having to depend on others. Based on these results, it can be concluded that students at SMA Negeri 1 Tanjung are able to apply the Self-Directed Learning model well, thereby having a significant positive impact on improving their

learning independence. It is hoped that with this achievement, students can continue to develop their independent learning skills as preparation for facing educational challenges in the future.

Based on the above explanation, the descriptive analysis shows that most of the items in the research instrument are in the high category. This can be seen in the Self-Directed Learning model variable, which generally received positive assessments with a high level of achievement. Similarly, in the learning independence variable, students showed a level of learning independence that was in the high category. This indicates that students at SMA Negeri I Tanjung are able to apply the Self-Directed Learning model, thereby having a positive impact on their learning independence. These findings indicate that the application of the Self-Directed Learning model is not only well received by students, but also encourages them to be more active, responsible, and disciplined in managing their independent learning process.

4. Conclusion

There is a positive and significant relationship between the Self-Directed Learning model and student learning independence. The extent of the influence of the Self-Directed Learning model on learning independence can be seen from the R Square value, which shows that this model contributes significantly to improving the quality of education. However, some aspects of student learning independence are also influenced by other factors that were not analysed in this study. These findings indicate that the Self-Directed Learning model is an important factor in encouraging student learning independence. Therefore, the application of this learning model needs to be continuously developed and adapted to the characteristics and needs of students so that learning objectives can be optimally achieved. In addition, educators are also expected to be able to create a learning environment that supports and motivates students to learn independently, be responsible, and take the initiative in managing their learning process.

Therefore, the application of this learning model needs to be continuously developed and adapted to the characteristics and needs of students so that learning objectives can be achieved optimally. In addition, educators are also expected to be able to create a learning environment that supports and motivates students to learn independently, responsibly, and take initiative in managing their learning process. A conducive learning environment will foster students' confidence to express their opinions, ask questions, and engage in discussions, making learning more active and interactive. With the implementation of the Self-Directed Learning model, students are also expected to develop lifelong learning habits, which are very important in today's era of globalisation. The habit of independent learning not only helps students complete academic tasks, but also equips them with the ability to continue to develop in line with the changing times. The independence in learning that is formed will train students to become resilient, disciplined, creative, and able to solve problems independently.

Educators, as facilitators, also have a strategic role in guiding and motivating students to stay on the right learning path. Educators are expected to be able to design varied, innovative, and flexible learning methods so that students do not feel bored in learning.

The provision of diverse learning resources, such as modules, digital references, and group discussion activities, can support the maximum implementation of the Self-Directed Learning model. In addition, schools are also expected to support the implementation of this model by providing adequate learning facilities, such as a well-stocked library, internet access, and comfortable study rooms. Parental involvement can also provide positive support in building students' independence in learning at home. Cooperation between educators, schools, parents, and students themselves will be an important factor in creating an independent and high-quality learning environment. Furthermore, the implementation of the Self-Directed Learning model also encourages students to get used to evaluating their own learning achievements. Students are expected to be able to identify weaknesses and strengths in the learning process so that they can formulate improvement measures for the future. This will shape the reflective and critical mindset that is much needed in education and everyday life. Thus, it can be concluded that the Self-Directed Learning model plays a significant role in increasing student learning independence. The successful implementation of this model requires the joint commitment of all parties involved. It is hoped that with continuous support and development, students will grow into an independent and responsible generation, ready to face future challenges with strong learning skills.

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