



RESEARCH ARTICLE

The Influence of Learning Independence and Learning Motivation on the Learning Outcomes of Buddhist Religion of Private High School Students in Medan Kota District

Albert^{1*)}, Kevin Putra Elbistian², Meriyawaty Amelia Prasetio², Justin Sebastian William¹, Marco Angkasa¹, Leandro Lowins¹

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Abstract

Education is a central point in efforts to prepare quality human resources. Whatever the activities carried out, essentially aims to always improve the quality of life or human welfare, individually or for all members of the community. One indicator of the success of the teaching and learning process is shown by the results of student evaluations. In learning and learning activities involve elements, namely, teachers, students, facilities and processes of learning and learning itself. In the learning process, the success of students in learning is influenced by innovative learning models. This study uses quantitative research methods. The research method used is a causal survey method with correlation techniques. The empirical data collected consisted of two independent variables, namely Learning Independence (X1), Learning Motivation (X2) and the dependent variable, namely Learning Outcomes (Y). Data collection techniques in quantitative research use a questionnaire developed through the indicators of each variable. The total number of population members is 3,239 people. The number of samples was obtained using the Slovin formula. So the minimum sample size in this study was 97 students from a population of 3,239 respondents with a significance level (α) of 10%. The results showed that the correlational hypothesis of the three variables was confirmed. It can be concluded that (1) There is a positive influence between Learning Independence (X1) on Learning Outcomes (Y) The results of hypothesis testing the effect of Learning Independence (X1) on Student Learning Outcomes (Y) with the regression equation = $22.241 + 0.792 X1$, linear (straight line), as evidenced by the linearity test. (2) There are results of hypothesis testing the effect of Learning Motivation (X2) on Students' Learning Outcomes (Y) with the regression equation = $23.197 + 0.799 X2$, linear (straight line), (3) There is an Influence of Learning Independence (X1), Learning Motivation (X2) together on Learning Outcomes (Y). The results of hypothesis testing the effect of Learning Independence (X1), Learning Motivation (X2) together on Student Learning Outcomes (Y) with the regression equation = $22.484 + 1.837 X1 - 0.497 X2$.

Keyword: Learning Outcomes, Learning Independence, Learning Motivation, Buddhist Education

Introduction

Education is a central point in efforts to prepare high-quality human resources. Essentially, any activity carried out aims to improve the quality of life and the well-being of individuals as well as society at large.

One of the indicators of successful teaching and learning is reflected in students' evaluation results. The learning process involves several elements, namely teachers, students, learning facilities, and the teaching-learning process itself. Student success in learning is influenced by innovative learning models and students' internal motivation. In the teaching and learning process, interaction occurs which leads to changes in the learner. These changes are integral, covering the cognitive, affective, and psychomotor aspects.

The learning outcomes of Buddhist Education among private high school students in Medan Kota District vary, but many tend to be low. Preliminary survey results revealed that: (1) 68.33% of students faced problems in the dimension of achievement, particularly in written tests of material comprehension, with

scores below the Minimum Competency Criteria (KKM); (2) 81.67% of students experienced difficulties in the analytical dimension, especially in understanding and analyzing material taught in class; (3) 63.33% of students faced problems in the learning experience dimension, particularly in acquiring new knowledge or skills after learning Buddhist Education; (4) 78.33% of students had problems in the competence dimension, especially in explaining Buddhist teachings, reciting paritta, or leading puja; and (5) 66.67% of students struggled in the behavioral change dimension, particularly in reflecting and applying classroom learning in daily life.

From these results, it was concluded that students' cognitive achievement, especially written test performance, was generally low at 68.33%. The specific causes remain uncertain, as student learning outcomes are influenced by many factors. Interviews with teachers indicated that students with low achievement often did not use their free time to study, but rather to play with their mobile phones or socialize. When given assignments, many students simply copied answers from the internet or peers. These habits reflect a lack of learning independence.

In general, student learning outcomes are influenced by both internal and external factors. Internal factors include motivation, interest, physical condition such as health, psychological aspects such as intellectual and emotional abilities, and social skills. External factors include the variation and difficulty of learning materials, the learning environment, classroom climate, and community learning culture, all of which influence readiness, process, and outcomes of learning.

Learning motivation is a key measure of success in education. Without motivation, students will find it difficult to

¹Institut Bisnis Informasi Teknologi dan Bisnis, Indonesia

²Sekolah Tinggi Agama Buddha Negeri Raden Wijaya, Indonesia

*) *corresponding author*

Albert

albertmasli88@gmail.com

achieve their goals. Learning is an effortful process that plays an essential role in educational progression. Strong motivation leads students to pay attention, persevere, and retain what teachers have taught in order to achieve their aspirations. Motivation is not only influenced by internal factors but also by external ones, such as family environment and school environment.

Another internal factor that affects learning outcomes is learning independence. Learning independence refers to a student's ability to make decisions and carry out learning activities without relying on others. Independent learning is crucial for students to complete assignments effectively, compete academically, and achieve good results. However, findings from teacher interviews suggest that the level of learning independence among students in Medan Kota District is still relatively low, as shown by laziness, procrastination, and dependence on others. Many assignments were copied from the internet or peers, and during exams some students attempted to cheat.

Given these issues, in order to make learning effective and maximize results, teachers need to apply strategies that enhance students' motivation and independence. Learning outcomes are essential for students to acquire knowledge, skills, and improved behavior. Students with good learning outcomes not only demonstrate stronger cognitive abilities, but also improved communication skills and positive behavioral changes. Understanding learning outcomes is therefore fundamental in the teaching-learning process, and it serves as the basis for this research.

Literature Review

Learning Outcomes

Learning outcomes are widely recognized as indicators of students' achievement and the effectiveness of the learning process. Djamarah (1996) defines learning outcomes as impressions or changes within an individual as a result of learning activities. Similarly, Nasution (2006) emphasizes that learning outcomes reflect the interaction between teaching and learning, often measured through test scores. Dimiyati and Mudjiono (2013) argue that learning outcomes embody the success of students in mastering specific competencies in cognitive, affective, and psychomotor domains.

Gagné (in Sudjana, 2008) categorizes learning outcomes into five domains: verbal information, intellectual skills, cognitive strategies, motor skills, and attitudes. Meanwhile, Bloom's taxonomy classifies them into cognitive, affective, and psychomotor domains (Supardi, 2015). In the context of Buddhist Education, learning outcomes not only involve academic mastery but also behavioral transformation and internalization of moral values, such as discipline, respect, and compassion.

Learning Independence

Independent learning refers to a student's ability to take responsibility for their learning process without excessive dependence on teachers or peers. Anwar (2015) defines independence as initiative, self-confidence, and problem-solving ability. Rusman (2014) further highlights that independence is associated with autonomy and the ability to direct one's learning activities.

Indicators of learning independence include confidence, initiative, responsibility, discipline, and creativity (Syaiful, 2002). Independent learners manage their time effectively, persist in solving problems, and are able to evaluate their own progress. Sjakawi (2008) identifies parenting style, peer interaction, and cultural values as external factors influencing independence, while age, gender, and intelligence are internal factors.

In Buddhist teaching, independence aligns with the doctrine of self-reliance (*atta-dipa viharatha*). In the *Mahaparinnibbana Sutta*, the Buddha emphasizes that individuals must rely on themselves, not others, supported by the Dhamma as a guide

(Walshe, 2009). Thus, learning independence is not only a pedagogical concept but also a spiritual value in Buddhism.

Learning Motivation

Motivation is a driving force that encourages individuals to engage in purposeful activities. McDonald defines motivation as an energy change within a person that triggers affective arousal and goal-oriented reactions (in Sardiman, 2001). In the learning context, motivation plays a strategic role: without motivation, effective learning cannot take place (Djamarah, 2011).

Motivation can be intrinsic driven by internal factors such as curiosity, interest, and aspirations or extrinsic, influenced by rewards, environment, and external recognition (Uno, 2011). Indicators of learning motivation include persistence in completing tasks, interest in learning activities, frequency and duration of study, commitment, optimism, and future aspirations. Motivated students tend to show better concentration, resilience, and achievement.

In Buddhism, motivation (*chanda*) is closely linked to *saddhā* (faith or confidence). The Buddha teaches that faith combined with effort (*virīya*) leads to progress in spiritual practice (Bodhi, 2000). In education, this can be translated as the belief in one's abilities that drives students to persevere in achieving academic success.

Previous Studies

Several studies have investigated the influence of independence and motivation on learning outcomes. Rijal and Bachtar (2015) found positive correlations between students' attitudes, learning independence, and learning styles with cognitive outcomes in biology. Lestari, Suadnyana, and Asri (2018) reported significant correlations between motivation, responsibility, and science learning achievement among elementary students. Syahputra (2017) revealed that both independent learning and tutoring significantly affected students' ability to understand accounting concepts. Laksana and Hadijah (2019) further concluded that independence is a determinant factor for students' academic performance.

These findings reinforce the notion that both motivation and independence are critical for achieving better academic results. In the context of Buddhist Education, these two variables not only influence academic achievement but also support moral development and behavioral transformation.

Buddhist Perspective

From a Buddhist perspective, education is a means of liberating individuals from ignorance (*avijjā*) and suffering (*dukkha*). The Four Noble Truths and the Noble Eightfold Path provide philosophical foundations for learning, emphasizing effort, mindfulness, and wisdom (*Dhammacakkapavattana Sutta*, *Samyutta Nikāya*).

The Buddha consistently highlighted the importance of self-reliance and diligent effort. In the *Dhammapada* (*Atta Vagga*), it is stated that the self is the only true refuge. This principle encourages students to develop independence and persistence in learning. Motivation in Buddhism is rooted in faith (*saddhā*) and right view (*sammā diṭṭhi*), which serve as foundations for positive actions and successful outcomes.

Therefore, the integration of independence and motivation within Buddhist Education aligns with both educational psychology and Buddhist philosophy, making them essential variables to be studied in relation to learning outcomes.

Method

Research Design

This study employed a quantitative research design using a causal survey method with correlational analysis. The purpose was to examine the influence of learning independence (X1) and learning motivation (X2) on students' Buddhist Education learning outcomes (Y). The design was appropriate as it enabled the researcher to analyze relationships and test hypotheses

regarding the direct effects of independent variables on the dependent variable.

Location and Duration of the Study

The research was conducted in private high schools (SMA Swasta) in Medan Kota District with students who practiced Buddhism as the target population. The study was carried out over a period of four months, from July 2022 to October 2022, covering preparation, instrument testing, data collection, analysis, and thesis completion stages.

Population and Sample

The population consisted of 3,239 students from private high schools in Medan Kota District who studied Buddhist Education. Using the Slovin formula with a 10% margin of error, a sample of 97 students was obtained. A proportional random sampling technique was applied to ensure representativeness.

Research Instruments

The main instrument was a Likert-scale questionnaire with responses ranging from *Strongly Disagree (1)* to *Strongly Agree (5)*. Indicators for each variable were:

- a. Learning Outcomes (Y): academic achievement, analysis ability, learning experience, post-learning competence, and behavioral change.
 - b. Learning Independence (X1): self-confidence, initiative, responsibility, discipline, creativity.
 - c. Learning Motivation (X2): persistence, interest, duration and frequency of study, commitment, optimism, and aspirations.
- Each construct was measured by 10–15 items.

Instrument Testing

The data in this study were collected using a structured questionnaire developed based on theoretical indicators of each variable.

All items were arranged using a five-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

Before being administered, the instrument underwent expert validation and pilot testing to ensure clarity and accuracy. Validity was tested using Pearson Product-Moment correlation, and reliability was assessed with Cronbach's Alpha. The results showed that all variables had item-total correlation coefficients above 0.30 and Cronbach's Alpha values above 0.70, indicating that the questionnaire was both valid and reliable

Table 1. Validity and Reliability Test Results

Variable	Number of Items	Valid Items	Reliability Coefficient (Cronbach's Alpha)	Category
Learning Outcomes (Y)	15	14	0.872	Reliable
Learning Independence (X1)	15	14	0.861	Reliable
Learning Motivation (X2)	15	13	0.889	Reliable

The results indicate that all variables had valid items ($r > 0.30$) and reliability coefficients above 0.70, which means the instruments were reliable (Sugiyono, 2017).

Classical Assumption Tests

To ensure the appropriateness of regression analysis, the following assumption tests were conducted:

- 1. Normality Test (Kolmogorov-Smirnov). The significance values for all variables were > 0.05 , indicating normally distributed data.
- 2. Linearity Test. The ANOVA linearity test showed significance < 0.05 , confirming a linear relationship between

independent variables (X1, X2) and the dependent variable (Y).

- 3. Multicollinearity Test. The Variance Inflation Factor (VIF) values were < 10 and tolerance values > 0.10 , indicating no multicollinearity between X1 and X2.

Table 2. Summary of Assumption Tests

Test	Result	Criteria	Decision
Normality (K-S)	Sig. = 0.200	Sig. > 0.05	Normal
Linearity (X1→Y)	Sig. = 0.000	Sig. < 0.05	Linear
Linearity (X2→Y)	Sig. = 0.000	Sig. < 0.05	Linear
Multicollinearity VIF (X1)	1.332	VIF < 10	No multicollinearity
Multicollinearity VIF (X2)	1.332	VIF < 10	No multicollinearity

Data Analysis Technique

Data were analyzed using simple regression (X1 → Y and X2 → Y) and multiple regression (X1 and X2 → Y). The hypotheses were tested at a significance level of 0.05

Results and Discussion

The regression analysis was conducted to test the hypotheses of this study:

- 1. The effect of Learning Independence (X1) on Learning Outcomes (Y).
- 2. The effect of Learning Motivation (X2) on Learning Outcomes (Y).
- 3. The simultaneous effect of Learning Independence (X1) and Learning Motivation (X2) on Learning Outcomes (Y).

Simple Regression Test (X1 → Y)

Table 3. Regression Results of Learning Independence (X1) on Learning Outcomes (Y)

Model	Unstandardize d Coefficients B	Std. Error	t	Sig.
Constant	22.241	6.357	3.499	0.001
Learning Independence (X1)	0.792	0.144	5.485	0.000

The regression equation obtained was: $\hat{Y} = 22.241 + 0.792 X1$

The results show that learning independence (X1) had a significant positive effect on learning outcomes ($p < 0.05$).

Simple Regression Test (X2 → Y)

Table 4. Regression Results of Learning Motivation (X2) on Learning Outcomes (Y)

Model	Unstandardized Coefficients B	Std. Error	t	Sig.
Constant	23.197	5.552	4.176	0.000
Learning Motivation (X2)	0.799	0.141	5.656	0.000

The regression equation obtained was: $\hat{Y} = 23.197 + 0.799 X2$

The results indicate that learning motivation (X2) also had a significant positive effect on learning outcomes ($p < 0.05$).

Multiple Regression Test (X1, X2 → Y)

Table 5. Regression Results of Learning Independence (X1) and Motivation (X2) on Learning Outcomes (Y)

Model	Unstandardized Coefficients B	Std. Error	t	Sig.
Constant	22.484	6.286	3.576	0.001
Learning Independence (X1)	1.837	0.369	4.976	0.000
Learning Motivation (X2)	-0.497	0.335	-1.483	0.141

The regression equation obtained was:
 $\hat{Y} = 22.484 + 1.837 X1 - 0.497 X2$

Although learning independence (X1) showed a significant effect, learning motivation (X2) did not contribute significantly when analyzed simultaneously. However, the overall F-test result indicated that both independent variables together significantly affected learning outcomes ($p < 0.05$).

The results demonstrate that both learning independence and motivation play important roles in improving students' learning outcomes in Buddhist Education.

1. Learning Independence (X1 → Y). The findings support the view of Anwar (2015) and Rusman (2014), who argued that independent learners are more capable of organizing their study time, taking initiative, and solving problems autonomously. In this study, higher independence correlated with higher learning achievements, which aligns with previous studies (Rijal & Bachtiar, 2015; Laksana & Hadijah, 2019).
2. Learning Motivation (X2 → Y). The positive effect of motivation is consistent with the theory of Sardiman (2001) and Uno (2011), who emphasized motivation as a driving force of learning activities. Students with higher persistence, interest, and commitment tended to perform better academically, echoing the findings of Lestari et al. (2018).
3. Simultaneous Effect of X1 and X2. Interestingly, when analyzed together, learning independence had a stronger influence than motivation, while motivation's effect was not statistically significant. This may indicate that independence acts as a mediating factor: students with strong independence naturally sustain their motivation. In Buddhist philosophy, this resonates with the principle of *atta-dipa viharatha* (self-reliance), where true progress comes from one's own effort, not external encouragement.
4. Overall, this study confirms that strengthening students' independence and motivation in learning is essential for improving Buddhist Education outcomes. Educational strategies should therefore emphasize self-directed learning, personal responsibility, and intrinsic motivation development.

Conclusions and Recommendations

Based on the research findings, data analysis, hypothesis testing, and research objectives, the following conclusions can be drawn:

1. Effect of Learning Independence (X1). Learning independence has a positive and significant effect on learning outcomes. The regression equation $\hat{Y} = 22.241 + 0.792X1$ shows that every one-unit increase in learning independence improves learning outcomes by 0.792. The correlation coefficient ($r = 0.743$) indicates a strong relationship, with a determination coefficient of 55.2%. This means that 55.2% of learning outcomes are influenced by learning independence, while 44.8% are explained by other factors.
2. Effect of Learning Motivation (X2). Learning motivation also has a positive and significant effect on learning outcomes. The regression equation $\hat{Y} = 23.197 + 0.799X2$ shows that every one-unit increase in motivation improves learning outcomes by 0.799. The correlation coefficient ($r = 0.733$) indicates a strong relationship, with a

determination coefficient of 53.7%. Thus, 53.7% of learning outcomes are influenced by motivation, while the remaining 47.3% come from other factors.

3. Combined Effect of X1 and X2. Learning independence and motivation together significantly influence learning outcomes, with a correlation coefficient of 0.744 (strong relationship). The determination coefficient of 55.3% shows that both variables jointly explain more than half of the variation in learning outcomes, while 44.7% is influenced by other variables.
4. In summary, both learning independence and motivation positively and significantly affect students' Buddhist Education learning outcomes. The higher the independence and motivation, the better the learning results achieved. Conversely, lower independence and motivation lead to lower achievement.
5. In this study, the hypothesis testing showed significant effects, and it is expected that the findings can be useful and contribute to various sectors in education, including schools, teachers, and students. When learning independence and learning motivation are in a good condition or can be improved, learning outcomes will also increase. To enhance learning independence and motivation, efforts are required both from within the students themselves and from external factors, such as teaching methods or learning strategies. These aspects need to be given attention, as learning outcomes are an important indicator of the success of the teaching and learning process. The results of this study are also expected to provide additional references for understanding how to improve learning independence and motivation in relation to students' learning outcomes.

Based on the discussion presented, several suggestions can be made as follows:

1. For future researchers, it is recommended to expand the research sample in order to strengthen the findings and increase the generalizability of the theory.
2. For teachers and education practitioners, it is suggested to conduct further studies on other subjects so that broader theoretical insights can be developed and generalized across a wider scope. It is expected that the conclusions of this study may also be applied at a practical level. Therefore, research using the same variables can be extended to different subject areas.
3. For teachers and education practitioners, it is also recommended to conduct additional research by involving other variables that may affect learning outcomes in Buddhist Education. Theoretically, there are still various internal and external factors that influence student achievement. Thus, beyond examining the relationship between learning independence and learning motivation, further studies are needed to investigate other variables that may be related to or influence learning outcomes.

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