



## The Relationship between Motivation and Student Learning Independence in Hybrid Based Learning

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### Abstract

This study aims to examine the relationship between student learning motivation and learning independence in hybrid-based learning in the Geography Education Study Program. A correlative research design was employed, with 95 students selected through stratified random sampling, comprising 51 students from the class of 2024 and 44 from the class of 2025. Data were collected using a Likert-scale questionnaire and analyzed through descriptive statistics, Pearson product-moment correlation, and three prerequisite tests (normality, linearity, and multicollinearity). Normality test results yielded significance values of 0.035 for learning motivation and 0.174 for learning independence, indicating normal distribution. The linearity test produced a deviation value of 0.473, and the multicollinearity test showed tolerance and VIF values of 1.000. Descriptive analysis revealed mean scores of 80% for learning independence and 75% for learning motivation. Correlation analysis demonstrated a significant positive relationship between learning motivation and learning independence in hybrid-based learning ( $r = 0.678$ ,  $p = 0.000$ ). These findings suggest that strengthening intrinsic motivation through engaging hybrid learning strategies should be prioritized by educators and curriculum designers to foster greater student autonomy in learning.

### Keywords

hybrid learning; learning motivation; self-directed learning

## INTRODUCTION

The digital transformation of higher education has accelerated a shift away from conventional learning models toward more flexible, technology-integrated approaches. Among these, hybrid learning, defined as the structured integration of face-to-face and online components aimed at optimising learning effectiveness and flexibility, has gained

increasing adoption across universities worldwide (Helsa et al., 2023; Indah et al., 2024; Niyomves et al., 2024). Hybrid learning is not simply a combination of online and offline learning, but also an effort to combine direct interaction between learning technologies and empower students to manage their learning process. In this context, the success of hybrid learning is not solely determined by its technical design but, more critically, by the extent to which students can meet the heightened demands of autonomous learning. Also, studies show that hybrid learning can increase student motivation when its implementation is well-designed and considers the balance of the learning process, access to digital learning resources, and instructor support for student engagement (Gedera et al., 2025).

Students must be actively involved in the hybrid learning process for it to be successful. Increasing student engagement in learning depends on several factors, one of which is student self-motivation to learn. One of the most important factors motivating students to participate in lectures is a genuine interest in the material they are learning (Baizuri, 2025). Learning motivation encompasses internal dimensions such as the desire to achieve academic goals, curiosity, and achievement motivation, which directly influence student engagement in academic tasks and activities (Firdous & Riaz, 2023; Fakhri et al., 2023). In hybrid learning, motivated students tend to be more proactive in utilizing both online and offline learning resources, making the learning process more meaningful. Research shows a significant relationship between learning motivation, self-directed learning, and academic achievement, with increased readiness for independent learning positively correlated with academic achievement (Yurdal & Toraman, 2023).

Alongside motivation, self-directed learning (SDL) constitutes a critical competency demanded by hybrid learning. SDL is reflected in students' ability to manage their time, set learning goals, and proactively seek relevant resources without relying entirely on instructor direction (Suherman & Marsofiyati, 2024). Research indicates that well-designed hybrid learning has been effective in fostering students' self-regulation and intrinsic motivation (Gedera et al., 2025; Ningsih & Anggraini, 2025). As the degree of autonomy required in hybrid environments intensifies, the development of SDL becomes increasingly central to academic success.

Although the relationship between learning motivation and self-directed learning has been examined in the contexts of fully online (e-learning) and conventional face-to-face learning (Fitriani et al., 2020; Broadbent & Poon, 2015; Almaiah et al., 2020). Another

study suggests that highly motivated students tend to have better self-control in terms of time management, strategies, and evaluation of their learning (Deasyanti & Armeini, 2007). Most existing studies do not distinguish hybrid learning from purely online instruction, although the two approaches present meaningfully different conditions in terms of student interaction, supervision, and autonomy demands. Furthermore, prior research has tended to be context-generic, without accounting for the disciplinary characteristics of specific study programmes that may moderate the relationship between motivation and self-directed learning. This gap underscores the need for targeted empirical inquiry situated within a hybrid learning context defined by its own unique pedagogical demands.

The Geography Education Study Programme was selected as the research context for reasons both epistemological and pedagogical. Geographically informed learning is inherently demanding in its scope: beyond conceptual understanding, it requires students to develop analytical competencies in spatial reasoning, cartographic interpretation, remote sensing, and the study of real-world geographic phenomena (Prihadi et al., 2022). These demands make hybrid learning particularly relevant, as it enables the integration of digital exploration tools, such as interactive maps, GIS platforms, instructional videos, and virtual field simulations, with contextual face-to-face activities. As such, this study programme represents an empirically appropriate and strategically meaningful setting in which to examine the relationship between the two variables within an authentic and complex hybrid learning ecosystem.

The novelty of this study lies in three respects. First, it specifically investigates the relationship between learning motivation and self-directed learning within a hybrid learning context thereby addressing an empirical gap that has received limited scholarly attention. Second, by situating the study within the Geography Education Study Programme, it generates contextually grounded findings that reflect the intrinsically high autonomy demands of the discipline, offering greater specificity than prior generic studies. Third, the findings are expected to contribute practically to the design of hybrid learning strategies that consciously incorporate intrinsic motivation development as a prerequisite for fostering learning independence. Against this backdrop, this study aims to examine the relationship between learning motivation and student self-directed learning in hybrid-based learning within the Geography Education Study Programme.

## **THEORETICAL SUPPORT**

### **Hybrid Learning**

Hybrid learning is an instructional approach that integrates face-to-face components with online learning in a structured and complementary manner. This approach is not simply a combination of two learning modes, but rather a pedagogical design that aims to optimize the strengths of each mode to create a more flexible, personalized, and effective learning experience (Helsa et al., 2023; Indah et al., 2024). In the context of higher education, hybrid learning allows students to access materials online while still benefiting from direct interaction with lecturers and fellow students in the classroom.

Dziuban et al., (2018) stated that effective hybrid design requires alignment between learning objectives, activities, and assessments in both modes. Furthermore, Niyomves et al., (2024) stated that the success of hybrid learning is highly dependent on the readiness of the technological infrastructure, the digital competence of teachers, and the readiness of students to learn independently. Meanwhile, Gedera et al., (2025) found that the implementation of well-designed hybrid learning that pays attention to the balance of the learning process and teacher support has been proven to be able to significantly increase student engagement and motivation.

### **Learning Motivation**

Learning motivation is a psychological construct that refers to both internal and external drives that encourage individuals to initiate, maintain, and complete learning activities. The most widely employed theoretical lens for understanding learning motivation is Self-Determination Theory (SDT), originally developed by Deci and Ryan (1985) and subsequently elaborated in the context of educational settings (Ryan & Deci, 2017; Vansteenkiste et al., 2020). SDT posits that human motivation exists on a continuum from extrinsic regulation to intrinsic motivation, characterised by genuine interest, curiosity, and inherent enjoyment in learning. Central to SDT are three basic psychological needs: autonomy (the sense of volition over one's actions), competence (the perception of effectiveness), and relatedness (a sense of connection with others). When these needs are satisfied within the learning environment, intrinsic motivation is nurtured and individuals are more likely to engage in deeper, self-directed learning behaviours (Ningsih & Anggraini, 2025; Firdous & Riaz, 2023).

In the context of digital and hybrid learning, learning motivation encompasses dimensions such as the desire to achieve academic goals, intellectual curiosity, self-efficacy, and mastery orientation (Fakhri et al., 2023). Research by Baizuri. R.A., (2025) emphasized that genuine interest in the lecture material is one of the strongest predictors of student engagement in hybrid sessions. Meanwhile, Keyserlingk et al., (2025) emphasized that learning motivation acts as both a trigger and a regulator of effective and sustainable learning habits. These findings collectively affirm that motivation is not merely an initial condition but a dynamic variable that continues to develop and is reshaped by the learning experience itself.

### **Self-directed Learning**

Self-directed learning (SDL) is defined as a process in which individuals, with or without the assistance of others, take the initiative to diagnose learning needs, formulate goals, identify learning resources, select and implement appropriate strategies, and evaluate their own learning outcomes (Murad & Varkey, 2020). In contemporary theoretical developments, SDL is understood not merely as a technical skill but as a disposition reflecting an individual's psychological readiness to assume responsibility for their own learning process (Suherman & Marsofiyati, 2024). This conception aligns closely with Self-Regulated Learning Theory (SRL), as developed by Zimmerman (2000) and further elaborated by Panadero, (2017) and Pintrich, (2000), which describes learning as a cyclical, metacognitively driven process encompassing three phases: forethought (goal setting and strategic planning), performance (self-monitoring and strategy execution), and self-reflection (evaluating outcomes and adjusting approaches).

A further theoretical contribution comes from Social Cognitive Theory (SCT), proposed by Bandura (1997) is shaped by the dynamic interaction among personal cognitive factors, behaviour, and environmental influences, a process Bandura termed reciprocal determinism (Hinduja et al., 2024). Central to SCT is the concept of self-efficacy: an individual's belief in their own capacity to execute the actions required to produce specific outcomes. In the context of learning motivation and SDL, self-efficacy operates as a critical mediating mechanism. Students with high self-efficacy are more likely to set ambitious learning goals, persist in the face of challenges, and deploy a wider range of self-regulatory strategies (Zimmerman, 2000). Recent empirical evidence further

supports this: Putwain et al., (2021) found that academic self-efficacy significantly predicted both motivational persistence and self-regulated learning behaviours in higher education students, while Ting et al., (2025) demonstrated that self-efficacy mediates the relationship between learning motivation and independent learning performance in blended learning contexts. In hybrid learning settings, where students encounter both digital and face-to-face challenges, perceived self-efficacy in managing independent learning tasks thus shapes both the quality of motivation and the degree of self-directed behaviour exhibited.

### **The Relationship between Learning Motivation and Self-directed Learning**

Theoretically, the relationship between learning motivation and learning independence has received widespread attention from contemporary educational researchers. Broadbent & Poon, (2015) found in their systematic review that learning motivation is one of the strongest predictors of students' self-regulated learning behavior in online environments, which is the core of learning independence. Students with high motivation tend to set more specific learning goals, are more persistent in facing academic challenges, and are better able to adjust their learning strategies adaptively.

Several empirical studies support this proposition. Previous research found a positive and significant correlation between learning motivation and students' academic independence in the context of online learning (Fitriani et al., 2020). Furthermore, Almaiah et al., (2020) in their study in the context of e-learning found that students with strong intrinsic motivation demonstrated significantly higher levels of SDL, including in the dimensions of time management and independent learning resource search. These findings provide a strong empirical basis that learning motivation is a significant predictor of the development of learning independence, especially in learning environments that demand high autonomy such as hybrid learning. Based on the theoretical framework and empirical evidence above, this study suspects a positive and significant relationship between learning motivation and students' learning independence in the context of hybrid learning.

### **METHOD**

This study employed a quantitative methodology with a correlational design. This study examined the correlation between learning motivation (independent variable) and

student learning independence (dependent variable) in a hybrid-based learning environment. This study was conducted in the odd semester of the 2025/2026 academic year in the Geography Education Study Program. The study population included all Geography Education Study Program students enrolled in hybrid learning during the odd semester of the 2025/2026 academic year, totaling 181 students.

The sample was identified using a stratified random sampling method, which involves randomly selecting a sample by grouping the population into several strata based on student year (Arikunto, 2019). This study used a sample size of 95 students, considered representative of the population as it encompasses more than 50% of the total population. The sample size for each stratum was determined proportionally, resulting in 51 students from the class of 2024 and 44 students from the class of 2025 as study participants.

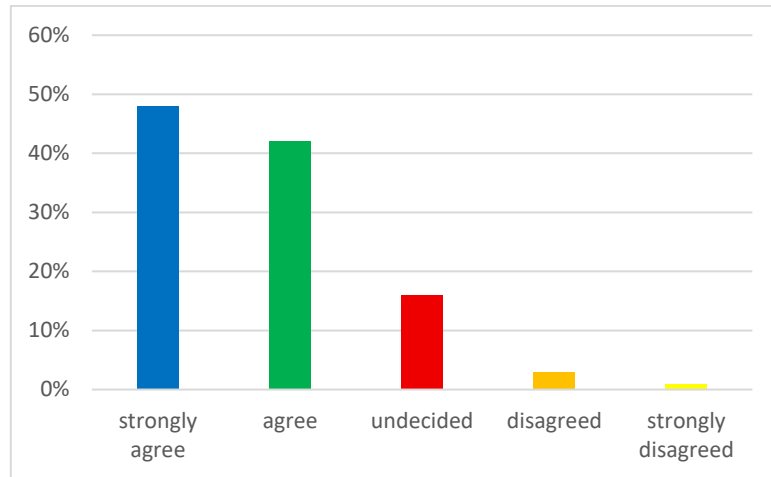
This study used questionnaires and documentation as data collection techniques. The questionnaire was used to collect data on students' learning motivation and learning independence in a hybrid learning environment. The questionnaire used a Likert scale with five response options: strongly agree, agree, neutral, disagree, and strongly disagree. Descriptive analysis was used to describe students' learning motivation and learning independence. After that, prerequisite tests were conducted, including normality, linearity, and multicollinearity tests. Then, a correlation study was conducted to confirm the relationship between learning motivation and students' learning independence using the product-moment formula with the help of SPSS 25.

## **RESULT AND DISCUSSION**

The data analysis results indicate that learning motivation has a positive relationship with student learning independence in the Geography Education Study Program during hybrid learning. The following is a more complete explanation of the research findings:

### **Student Learning Motivation in Hybrid Learning**

The descriptive analysis of student learning motivation variables was obtained through a questionnaire consisting of several indicators: learning persistence, learning interest, goal orientation, achievement drive, and active involvement. The descriptive analysis was conducted to determine the tendency of students' learning motivation levels during hybrid learning.



**Figure 1.** Frequency Distribution of Student Learning Motivation

Table 1 shows that, in hybrid learning, the majority of students were highly motivated to learn. Overall, 75% of students responded positively to statements promoting learning motivation, as evidenced by the prevalence of "strongly agree" responses at 45% and "agree" at 30%.

Conversely, 19% of students were classified as "undecided," indicating that some students still have a moderate level of motivation to learn. The number of students who disagreed was relatively low, at 4%, and the number who strongly disagreed was much lower, at 1%. Based on these percentages, the number of students who lacked motivation to learn in hybrid courses is relatively small.

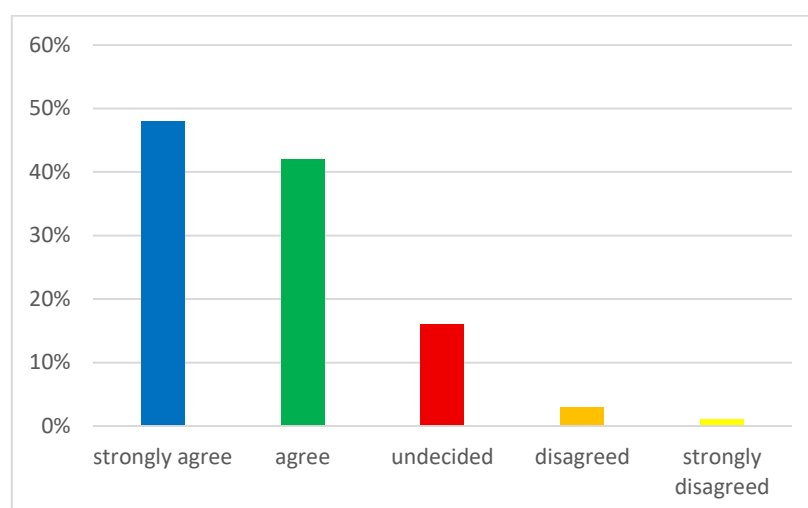
Based on this data, hybrid learning in the Geography Education Program is an excellent way to foster student enthusiasm for learning. By combining face-to-face and online learning, hybrid learning provides a more flexible learning experience. Digital learning options, including instructional videos, online discussion forums, and multimedia-based learning materials, are available to students in addition to direct instruction from the instructor.

Thanks to these factors, students can take an active role in their learning and instruction, which increases their interest and enthusiasm for the subject matter. Students who have a strong desire to learn tend to be more willing to put in the necessary effort in class, complete assignments on time, and make good use of all available learning materials. This aligns with research that finds students are more motivated to learn when given more freedom of action in their hybrid learning environment. According to Hendrowati et al., (2025), by combining online resources with face-to-face instruction, hybrid classes can

spark student interest and inspire them to work harder. Furthermore, Pamungkas et al., (2023) showed that hybrid learning can increase student motivation, as it allows them to learn more independently and adapt the learning process to their own needs. Based on the majority of positive responses to learning motivation indicators, it can be concluded that hybrid learning generally improves student motivation, particularly in the Geography Education Study Program.

### Student Self-directed Learning in Hybrid Learning

The results of the descriptive study regarding the learning independence variable were collected through a questionnaire that measured levels of self-control, learning initiative, responsibility, self-monitoring, and utilization of learning resources. This study aims to determine the level of independence that students have in their learning process while attending hybrid lectures.



**Figure 2.** Frequency Distribution of Student Self-directed Learning

Figure 2 shows that the majority of students demonstrated a high level of independence in participating in hybrid learning. Eighty percent of students responded positively to the learning independence indicator, as evidenced by the majority of “agree” responses (42%), followed by “strongly agree” (48%). At the same time, 16% of students were “undecided,” indicating that some students still exhibit a low level of learning independence. Only 3% disagreed and 1% strongly disagreed, which is a very small number. Given these figures, it is clear that very few students experienced difficulties due to a lack of learning independence.

One possible explanation for the high level of student learning independence is that hybrid learning encourages students to take a more active role in their own education. Students are expected to take the initiative in managing their own study time, accessing materials independently using digital platforms, and completing various academic assignments, in addition to receiving learning materials directly in class.

Learning videos, online modules, online discussion forums, and other forms of digital literature are more easily accessible to students in a hybrid learning environment. Students are encouraged to enhance their independent learning skills in this environment, allowing for a more flexible and effective learning approach. The results of this study align with other research showing that hybrid learning can help students become more independent and proficient in self-directed learning (Gedera et al., 2025). Students with strong independent learning are more likely to successfully manage their own learning techniques and adapt to the challenges that arise in technology-based learning.

Therefore, the implementation of a hybrid learning model by the Geography Education Study Program has the potential to successfully encourage a high level of independent learning in students. This means that the hybrid learning system can develop students' independent learning abilities while supporting learning flexibility.

### **Relationship between learning motivation and student self-directed learning in Hybrid Learning**

The relationship between learning motivation and student independent learning in hybrid-based learning was tested using the Pearson Product-Moment correlation test. However, before conducting the correlation test, prerequisite tests consisting of normality, linearity, and multicollinearity tests were necessary to ensure that the data met statistical assumptions. The following describes the results of the prerequisite tests and correlation tests:

#### **Normality Test**

The one-sample Kolmogorov-Smirnov test was used to determine whether the data exhibited a normal distribution. The results of the normality test can be seen in Table 1 below.

**Table 1.** Data Normality Test Results

<b>Variables</b>	<b>Sig. Kolmogorov-Smirnov</b>	<b>Description</b>
<b>Learning Motivation</b>	0,035	Data is Normally Distributed
<b>Self-directed Learning</b>	0,174	Data is Normally Distributed

Table 1 shows the results of the normality test, which shows that the student learning autonomy variable has a p-value of 0.174 and the learning motivation variable has a p-value of 0.035. It can be concluded that the research data is normally distributed because the p-values for both variables are greater than the significance threshold of 0.05. To conduct a correlation analysis using Pearson product-moment correlation, the data must meet one of the assumptions.

### Linearity Test

To establish a linear relationship between student learning motivation and learning autonomy, a linearity test was conducted. Deviation from Linearity Analysis was used to conduct this test.

**Table 2.** Linearity Test Results

<b>Relationship between Variables</b>	<b>Sig. Deviation from Linearity</b>	<b>Description</b>
<b>Learning Motivation</b>	0,473	Linear Relationship
<b>Self-directed Learning</b>		

Deviation from Linearity has a significance level of 0.473 according to Table 2. A p-value greater than 0.05 indicates that students' motivation to learn is directly proportional to their level of academic independence. This indicates that increased student motivation to learn tends to be followed by increased student learning independence.

### Multicollinearity Test

The purpose of the multicollinearity test is to determine whether the variables in the analytical model are closely related. Table 3 below displays the results of the multicollinearity test.

**Table 3.** Multicollinearity Test Results

<b>Variable</b>	<b>Tolerance</b>	<b>VIF</b>	<b>Description</b>
<b>Learning Motivation</b>	1,000	1,000	There is no multicollinearity

The results of the study showed that the Tolerance and VIF values were both 1.000, as shown in Table 3. Therefore, there was no multicollinearity among the research variables, as both Tolerance and VIF values were greater than 0.10. Therefore, the learning motivation variable can be used to analyze its relationship with student learning independence.

#### Pearson Product-Moment Correlation Test

After all initial requirements were met, a correlation analysis was conducted using the Pearson Product-Moment correlation test to determine the relationship between learning motivation and student learning independence in hybrid learning.

**Table 4.** Pearson Product-Moment Correlation Test Results

Variables	r count	r table	Sig. (p)	Description
Learning Motivation Self-Directed Learning	0,678	0,202	0,000	Significant

Table 4 shows a significant positive relationship between students' academic independence and their desire to learn, with a correlation value of 0.678. The significance value is  $0.000 < 0.05$ , and the calculated r value (0.678) is higher than the table r value (0.202). Therefore, it can be concluded that in hybrid-based learning, there is a significant correlation between students' learning motivation and academic independence.

The findings of this study indicate that students' level of learning independence directly correlates with their motivation to learn. Students with a strong desire to succeed academically are more likely to take the initiative to plan their study sessions, manage their time, and seek additional assistance as needed. These results align with other studies that suggest that learning motivation is a key driver in guiding an individual's learning behavior (Firdous & Riaz, 2023). Students who are highly intrinsically motivated tend to be more independent and adept at managing their own learning.

Fitriyani et al., (2020), confirmed a positive correlation between students' learning motivation and their independence in online learning, further strengthening these findings. Furthermore, recent research shows that students with high learning motivation tend to be more active users of digital learning materials and have better self-management skills in their learning (Keyserlingk et al., 2025; Gedera et al., 2025).

In the context of geography learning, the relationship between motivation and independent learning is crucial because geography learning emphasizes not only understanding theoretical concepts but also analytical skills, the use of spatial technology, and the study of geographical phenomena, which require independent exploration of learning resources. Hybrid learning provides opportunities for students to utilize various digital learning resources, such as interactive maps, Geographic Information Systems (GIS), instructional videos, and online discussion forums, which can increase student engagement in the learning process.

Encouraging student motivation to learn is a crucial component of a hybrid learning environment that can foster student independence in the classroom. Therefore, lecturers should incorporate learning technology relevant to geography courses into their lessons, assign problem-solving-based assignments, and utilize interactive learning media to increase student enthusiasm during the learning process.

## CONCLUSION

This study confirms a positive and significant relationship between learning motivation and self-directed learning among Geography Education students in a hybrid learning context ( $r = 0.678$ ,  $p = 0.000$ ), with mean scores of 75% and 80% respectively. These findings empirically support the integrated theoretical framework of SDT, SRL Theory, and SCT, affirming that intrinsic motivation is a prerequisite for self-regulatory learning behaviour, and that self-efficacy moderates how motivation is translated into autonomous action. This study contributes context-specific evidence to the underexplored intersection of motivation and SDL in hybrid learning within a geographically distinctive discipline. Practically, educators should design hybrid learning environments that explicitly nurture autonomy, competence, and motivational scaffolding. Future research should investigate self-efficacy as a mediating variable and employ longitudinal designs to track the developmental trajectory of motivation and SDL across academic semesters.

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