



## The Effect of Learning Style and Learning Motivation on Student Achievement in Economics Education

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### **Abstract**

Learning achievement is one of a person's motives in pursuing education, learning achievement is influenced by various factors such as learning styles and learning motivation. So the purpose of this research was to determine the effect of learning styles and learning motivation on student achievement. The research methodology is ex-post facto with a quantitative approach. Respondents in this research were 84 students. The method of data analysis in this research uses multiple regression. The results of the research are as follows: 1). Learning style has a positive and significant influence on learning achievement, 2). Learning motivation has a positive and significant influence on learning achievement, 3). Learning style and learning motivation together affect student learning achievement by 10.2% and 89.8% influenced by variables outside this research.

**Keywords:** *Learning Style; Learning Motivation; Learning Achievement*

### **Introduction**

Learning achievement is one of the goals of a person in taking education, not even a student or student. According to Ratnasari (2018), a person's learning achievement is influenced by internal and external factors, one of the internal factors is learning style, motivation, and so on. Learning style is a combination in which a person absorbs, and then organizes and finally processes that information (De Porter & Hernacki, 1992). Where in the current era, you must be able to adapt offline to online learning so that you can achieve good learning achievements.

The learning style of a student in its application has a positive effect on student learning achievement (Runtu & Tompoliu, 2019). The findings of research conducted by Wahyuni (2021) show the same thing where learning style has a positive effect on learning achievement. In the research of Baticulon et al (2021) where learning styles have a significant impact on student achievement, so they are more motivated. Motivation is an encouragement from certain parties to increase the spirit or performance of a person (Efendi et al 2020).

The learning motivation of a student has a positive and significant influence on learning achievement (Rafiola et al, 2020). The research of Zheng et al (2020) found that a student's learning

motivation has a significant impact on learning achievement. The same thing was found by Yustina et al (2020) that learning motivation had a positive and significant impact on learning achievement.

Based on the phenomenon and various research results, it can be seen that learning styles and learning motivation have a relationship with learning achievement. The purpose of this research was to determine the effect of learning styles and learning motivation on learning achievement. so that in the future it can contribute to decision-making in an educational institution in order to achieve good educational goals.

## **Learning Style**

Learning style is a combination in which a person absorbs, and then organizes and finally processes that information (De Porter & Hernacki, 1992). According to Searson and Dunn (2001) learning style is a collection of personal characteristics that make learning effective for some people and not effective for others. Learning styles relate to the way children learn, as well as the preferred way of learning. Students, in general, will find it difficult to process information in a way that they feel uncomfortable with. Students have their own learning needs, learn in different ways, and process information in different ways (Keefe, 1988). Characteristics of learning styles have several groups, namely auditory, visual, tactile (Hamzah & Koni, 2012).

## **Learning Motivation**

Motivation is a desire in an individual that requires moving and achieving goals (Mathis & Jackson, 2006). Motivation is a psychological process that generates and directs behavior towards the achievement of goals (Kreitner et al, 2001). According to Alderfer (1969), motivation is the tendency of students to carry out learning activities that are driven by a desire to achieve the best possible achievement or learning outcomes. Sholihin, 2019). Motivation is an encouragement from certain parties to increase the spirit of performance of a person (Efendi et al 2020). Motivation is divided into two types, namely intrinsic and extrinsic (Hamalik, 2003).

## **Learning Achievement**

Learning achievement is the level of humanity that students have in accepting, rejecting, and assessing information obtained in the teaching and learning process (Hamdu & Agustina, 2011). According to Nasution (1987), learning achievement is "perfection that a person achieves in thinking, feeling and doing, learning achievement is said to be perfect if it meets three aspects namely: cognitive, affective, and psychomotor, otherwise, it is said to be an unsatisfactory achievement if a person has not been able to meet the targets in the three criteria. the. Meanwhile, Te Winkel et al (2006) said that "learning achievement is a proof of learning success or a student's ability to carry out learning activities according to the weight achieved".

## ***Research Framework and Hypothesis***

### **The Effect of Learning Style on Learning Achievement**

Research conducted by Runtu and Tompoliu (2019) found that learning styles have a positive influence on learning styles. The findings of research conducted by Wahyuni (2021) and Surjono (2015) show the same thing where learning style has a positive effect on learning achievement. In the research of Baticulon et al (2021), Tambunan (2021), and Wang et al (2006) where learning styles have a significant impact on student achievement, so they are more motivated.

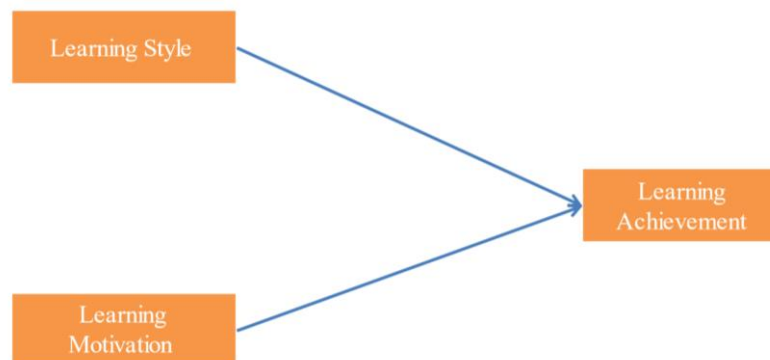
H<sub>1</sub>: learning style has a positive and significant influence on learning achievement.

## The Effect of Learning Motivation on Learning Achievement

Research conducted by Rafiola et al (2020) and Allensworth et al (2021) found that the learning motivation of a student has a positive and significant influence on learning achievement. Research conducted by Zheng et al (2020) found that a student's learning motivation has a significant impact on learning achievement. The same thing was found by Yustina et al (2020) and Ricci (2021) that learning motivation has a positive and significant influence on learning achievement.

H<sub>2</sub>: learning motivation has a positive and significant influence on learning achievement

Based on various theoretical explanations, research findings, and developing hypotheses regarding the influence of learning styles and learning motivation on learning achievement. So the research framework in (Figure 1) is as follows:



**Figure 1. Research Framework**

### Methodology

This research uses ex-post facto research with a quantitative approach. According to Pangastuti et al (2020), ex-post-facto is research conducted to examine events that have occurred and then trace back to find out the factors that can cause the emergence of that event. While the quantitative approach is data in the form of numbers or qualitative data that is numbered (Sugiyono, 2015). The method of data analysis in this study used multiple regression. The population in this study were 84 students of 2013 Economics Education, Yogyakarta State University, the sampling technique is total sampling.

### Findings

Table 1 below is the results of multiple regression analysis of research data, with the results of the study as follows

Variable	Koef. Regression (B)	T Statistic	Sig
Learning Styles	0.003	8.760	0.000
Learning Motivation	0.006	12.215	0.000
Constant		3.323	
R		0.319	
R <sup>2</sup>		0.102	
F Statistic		4.582	
Sig		0.013	

Source: Primary data processed

### **The Effect of Learning Style on Learning Achievement**

Based on the results of the regression analysis, it is known that learning styles have an influence on learning achievement, indicated by the regression coefficient value of 0.003. At the 5% significance level, it is known that the t-count value is 8,760 with a significance of 0.000. With these results, the first hypothesis can be accepted that learning styles have a positive and significant influence on learning achievement.

### **The Effect of Learning Motivation on Learning Achievement**

Based on the results of the regression analysis, it is known that learning motivation has an effect on learning achievement, indicated by the regression coefficient value of 0.006. At the 5% significance level, it is known that the t-count value is 12,215 with a significance of 0.000. With these results, the second hypothesis can be accepted that learning motivation has a positive and significant influence on learning achievement.

### **Coefficient of Determination R Square ( $R^2$ )**

The coefficient of determination R Square is used to show how big the percentage of learning style and learning motivation variables together in influencing work performance variables. The results of multiple regression analysis show that the coefficient of determination  $R^2$  has a value of 0.102 or it can be said that 10.2% of learning achievement is influenced by the variables of learning style and learning motivation. While the remaining 89.8% is influenced by other variables not included in this study.

## ***Discussion***

### **The Effect of Learning Style on Learning Achievement**

Based on the results of research that has been analyzed there is a positive and significant influence between learning styles on learning achievement. This is indicated by the regression coefficient value of 0.003. At the 5% significance level, it is known that the t-count value is 8,760 with a significance of 0.000. So it can be concluded that the higher the learning style, the higher the learning achievement. On the other hand, the lower the learning style, the lower the learning achievement.

The results of this study are supported by the findings of Runtu and Tompoliu (2019) who found that learning styles have a positive influence on learning styles. Also, the findings of research conducted by Wahyuni (2021) show the same thing where learning style has a positive effect on learning achievement. In the research of Baticulon et al (2021) where learning styles have a significant impact on student achievement, so they are more motivated.

### **The Effect of Learning Motivation on Learning Achievement**

Based on the results of research that has been analyzed there is a positive and significant influence between learning motivation on learning achievement. This is equal to the regression coefficient value of 0.006. At the 5% significance level, it is known that the t-count value is 12,215 with a significance of 0.000. So it can be said that learning motivation will be higher learning achievement. On the other hand, the lower the motivation to learn, the lower the learning achievement.

The results of this study are supported by the findings of Rafiola et al (2020) who found that the learning motivation of a student has a positive and significant influence on learning achievement. Research conducted by Zheng et al (2020) found that a student's learning motivation has a significant impact on learning achievement. The same thing was found by Yustina et al (2020) that learning motivation had a positive and significant impact on learning achievement.

## Coefficient of Determination R Square (R<sup>2</sup>)

The results of this study indicate that there is a positive and significant influence between learning styles and learning motivation on learning achievement. This is indicated by the results of the test results with F test which obtained a calculated F value of 4.582 with a significance value of 0.013 or  $F < 0.05$ . The coefficient of determination R Square is used to show how big the percentage of learning style variables and learning motivation is in influencing learning achievement variables. The results of multiple regression analysis show that the coefficient of determination R<sup>2</sup> has a value of 0.102 or it can be said that 10.2% of learning styles and learning motivations affect learning achievement. While the remaining 89.8% is influenced by other variables that do not exist in this study. With the result that the higher student learning achievement will increase the number of Education (Efendi et al, 2019)

## Conclusion

Based on the results and discussion in the study, we can conclude that; 1). Learning style has a positive and significant influence on learning achievement, 2). Learning motivation has a positive and significant influence on learning achievement, 3). Learning style and learning motivation together affect student learning achievement by 10.2% and 89.8% influenced by variables outside this study. Together with the limitations in this study, it can be used as reference material for further research in the future

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