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# THE INFLUENCE OF LEARNING STYLES AND SCHOOL ENVIRONMENT ON LEARNING MOTIVATION AND ITS IMPLICATIONS ON STUDENT LEARNING OUTCOMES IN ECONOMICS SUBJECTS

**(Survey on Students of Grade X and XI Social Sciences Program at SMA Negeri 8 Tasikmalaya in the 2022/2023 Academic Year)**

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***Abstract***

*This study aims to determine the influence of learning styles and the school environment on learning motivation and its implications for learning outcomes. The study adopts a quantitative survey research method with an explanatory survey research design. The population for this study comprises X and XI social studies students of SMA Negeri 8 Tasikmalaya in the 2022/2023 academic year, totaling 427 individuals. The sampling technique used is Proportional Random Sampling, resulting in a sample size of 207 respondents. Data is collected through questionnaires, and the data analysis technique employed is Path Analysis or path analysis. Based on the results of data processing, it is found that learning style does not have a significant effect on learning motivation (with a significance value of 0.218). On the other hand, the school environment significantly influences learning motivation (with a significance value of 0.002). Moreover, learning styles do not significantly impact learning outcomes (with a significance value of 0.323), whereas the school environment significantly affects learning outcomes (with a significance value of 0.006). Additionally, learning motivation significantly influences learning outcomes (with a significance value of 0.001). Furthermore, the study reveals that learning styles do not have a significant effect on learning outcomes through learning motivation, as indicated by the t-count value of 0.969. However, the school environment significantly influences learning outcomes through learning motivation, with a t-statistic value of 2.149.*

***Keywords:*** *Learning Motivation, Learning Outcomes, Learning Style, School Environment*

## 1. INTRODUCTION

Education is one of the essential components that play a crucial role in determining the fate of a nation. In a country, education can be considered good if it can improve the quality of human resources. According to the Republic of Indonesia Law No. 20 of 2003 Article 1, education is defined as a conscious and planned effort to create a learning atmosphere and learning process that is conducted by students actively with the aim of developing their potential to possess spiritual and religious strength, self-control, personality, intelligence, noble character, as well as the necessary skills for themselves and the nation's society and state.

To achieve the objectives of education, a learning process must be conducted. Generally, in Indonesia, the learning process takes place in the school environment.

Schools, as educational institutions, provide facilities to facilitate the learning process. The purpose of the learning process is to achieve learning outcomes because the success of learning activities can be seen through the students' learning outcomes in the learning process. The learning outcomes obtained by students become a benchmark to determine whether they truly understand all the materials presented by the teacher. The accumulated learning outcomes are then considered by teachers to assess the students' level of competence.

Several factors influence learning outcomes, which generally originate from internal and external factors. Internal factors come from within a person, such as learning styles. Students, as individuals learning in an educational institution, have their own characteristics and learning styles. Some students have a visual learning style, relying on sight; some have an auditory learning style, relying on hearing; while others have a kinesthetic learning style, relying on physical activities. Therefore, teachers must meet the students' learning needs by adjusting their teaching style to match the students' learning style with the material to be taught.

External factors that influence learning outcomes come from outside the individual, and one of them is the school environment. The environment is the most important and fundamental aspect of human life. A good environment will shape good personalities, whereas a poor environment will shape negative personalities. The school environment is where the learning activities take place, and it can significantly affect students' learning outcomes. The school environment includes the school itself, facilities and infrastructure, learning resources, learning media, the atmosphere and implementation of teaching and learning activities, and other aspects. A good school environment is expected to positively influence students, leading to better behavior. A favorable school environment will support the success of the school and have a positive impact on students.

Motivation is the driving force that comes from within or outside a person to ignite their enthusiasm and passion in carrying out a task. In the context of learning activities, learning motivation plays a crucial role as it drives students to be ready to participate in learning at school. The motivation that students have for learning significantly affects their ability to achieve optimal learning outcomes in the learning process. When students have high learning motivation, it indirectly cultivates diligence in them, enabling them to achieve good learning outcomes. Therefore, learning motivation is essential for students in the learning process.

Based on observations conducted at SMAN 8 Tasikmalaya in classes X and XI of the Social Studies Program, it is known that the learning outcomes of students in economics subjects tend to be low. This is evident from the results of the Final Semester Exam (UAS) in economics, where many students still receive grades below the Minimum Completeness Criteria (KKM). The KKM applied at the school for the economics subject is 65 for Class X and 73 for Class XI. Here is the data for the UAS results in economics subject for Class XI:

**Table 1. Results of Odd Semester Final Tests**

| No | Class | Number of Students | Students Above KKM | Students Below KKM | Minimum Score (KKM) | Average Value of Odd Semester |
|---|---|---|---|---|---|---|
| 1 | X IPS 1 | 35 | 10 | 25 | 65 | 56,97 |
| 2 | X IPS 2 | 37 | 5 | 32 | 65 | 54,88 |
| 3 | X IPS 3 | 37 | 5 | 32 | 65 | 49,71 |
| 4 | X IPS 4 | 37 | 12 | 25 | 65 | 57,08 |
| 5 | X IPS 5 | 35 | 9 | 26 | 65 | 55,85 |
| 6 | X IPS 6 | 36 | 14 | 22 | 65 | 57,77 |
| 7 | XI IPS 1 | 34 | 10 | 24 | 73 | 64,21 |
| 8 | XI IPS 2 | 36 | 11 | 25 | 73 | 66,25 |
| 9 | XI IPS 3 | 36 | 9 | 27 | 73 | 61,68 |
| 10 | XI IPS 4 | 34 | 16 | 18 | 73 | 71,15 |
| 11 | XI IPS 5 | 35 | 9 | 26 | 73 | 67,05 |
| 12 | XI IPS 6 | 35 | 8 | 27 | 73 | 59,08 |
| Total | | 427 | 118 | 309 | | |

Source: Class X and XI Economics Subject Teachers

Based on the data above, the learning outcomes obtained by students in the economics subject are still low, with many students achieving results below the Minimum Completeness Criteria (KKM). This is affected by several factors, both internal and external. Generally, learning outcomes are affected by factors that originate from within oneself (internal) and from outside (external). Internal factors include psychological aspects such as intelligence, attention, interest, talent, motivation, and readiness, while external factors include family, school, and community aspects.

Several factors influence the high or low grades achieved in learning outcomes. These factors can originate from within the students themselves or from external sources. One of the factors that can influence learning outcomes from within the students is their learning style. Based on observations during PLP II activities at SMAN 8 Tasikmalaya, most students are interested in visual and auditory learning styles. They tend to pay more attention when presented with learning videos or images. However, this focus does not last long due to other factors such as a crowded classroom and students talking during the learning process, which makes it difficult to concentrate.

External factors that influence learning outcomes come from outside the students, and one of them is the school environment. Several school environmental factors that can influence learning outcomes include teaching methods, curriculum, teacher-student relationships, school facilities, and the condition of the building. Based on observations during PLP I and II activities at SMAN 8 Tasikmalaya, the school environment is quite good. The teacher-student relationship is positive as teachers and students interact during and outside of class, and the classroom condition supports a comfortable and orderly learning environment. In the teaching and learning activities, many teachers still use lecture techniques. The available facilities are generally sufficient, although there is a

limited number of projectors, making it challenging for teachers who want to use projectors in supporting their teaching, as they must be shared.

Another essential factor in learning outcomes is learning motivation. Motivation significantly influences learning outcomes as it drives students to participate actively in learning activities. When students have high learning motivation, they tend to be diligent in their studies. Based on observations during PLP II at SMAN 8 Tasikmalaya, some students have low learning motivation. This is evident from their less active participation during discussions and question-answer sessions in the learning process. Additionally, the afternoon schedule for economics classes affects students' motivation, which tends to be lower compared to morning classes, as students are already tired in the afternoon. However, there are still some students with good learning motivation who are attentive and enthusiastic during the afternoon classes.

Learning outcomes are the results obtained by students in the teaching and learning process. These outcomes serve as a benchmark for teachers to assess the extent of changes that occur in students after the learning activities. Learning outcomes can be observed and measured through the students' knowledge, attitudes, and skills. As prospective teachers or educators, it is essential to understand the learning outcomes of students in the learning process. With learning outcomes, teachers can assess the students' success in mastering the subject matter and the appropriateness or effectiveness of the teaching methods used. Learning outcomes will help teachers determine the students' competency achievement during and after the learning process. They provide feedback for students to identify their weaknesses and strengths in achieving learning objectives.

## 2. LITERATURE REVIEW

### 2.1. Learning Outcomes

Learning is a process undertaken by individuals to expand and acquire desired knowledge, attitudes, abilities, and skills (Kompri, 2017). To achieve a change in behavior, one must learn. According to Wardhana and Djalaluddin (2021:5), learning can be defined as all activities undertaken by an individual that result in different behaviors before and after learning. This change in behavior occurs due to new experiences, acquiring knowledge after learning, and engaging in practice.

The aim of teaching and learning activities is to achieve good learning outcomes. According to (Parwati et al., 2018), learning outcomes are indicators used to measure whether someone has engaged in learning activities or not. Another perspective, as stated by Gagne (Dahar, n.d.), identifies five abilities expected in teaching or instruction, three of which are cognitive, affective, and psychomotor. These abilities indicate a change in behavior in an individual.

Based on the definitions mentioned above, it can be concluded that learning outcomes are changes in behavior in an individual obtained through measurement, including knowledge, attitudes, and skills as a result of learning.

As for Gagne's categories of learning abilities used as indicators of learning outcomes (Dahar, n.d.), they are intellectual skills, cognitive strategies, verbal information, attitudes, and motor skills.

## 2.2. Learning Motivation

Motivation comes from the word "*motive*," which can be interpreted as an activated driving force. According to Sardiman (2018), motivation is the driving force within a person to engage in specific activities in pursuit of a goal. In the context of learning, learning motivation can be described as the overall driving force within students that leads to learning activities, ensures the continuity of learning activities, and provides direction to learning activities (Sardiman, 2018). Meanwhile, Uno (2023) defines learning motivation as the desire and willingness to succeed, the drive to learn, and the aspiration for future dreams. Learning motivation encourages individuals to engage more actively and enthusiastically in learning activities. It can be internally and externally driven in students, urging them to improve their behavior in the learning process.

Based on these definitions, learning motivation is an inner driving force or a change in behavior that occurs during various activities, such as work or learning, aiming to achieve satisfying and more effective results in those activities.

Uno (2023) provides indicators used in learning motivation, including the desire and will to succeed, the drive and need for learning, hope for future aspirations, appreciation in learning, interesting learning activities, and a conducive learning environment.

## 2.3. Learning Styles

Learning style is an approach that explains how individuals learn or the methods each person takes to focus on processes and master difficult and new information through different perceptions (Ghufron & Suminta, 2010). According to Widiasworo (2015), a person's learning style is a combination of how they absorb, organize, and process acquired information. Keefe's definition, cited by Ghufron & Suminta (2010)a, describes learning style as "cognitive, affective, and physiological factors that provide relatively stable indicators of how learners feel, relate to others, and react to the learning environment. A learning style is a preferred or favored way of processing and understanding information by learners."

Based on the above description, learning style in this study refers to the approach or method used by students to receive, process, and understand information according to their preferred styles (visual, auditory, and kinesthetic) to achieve optimal results.

Indicators used in learning styles according to De Porter & Hernacki (2000) are visual learning style, which includes learning through seeing, learning through images or visuals, organizing and neatness, and visual memory; auditory learning style, which includes learning through hearing, learning by reading, sensitivity to music, and susceptibility to noise; and kinesthetic learning style, which includes learning through movement, learning through experiences or practice, body language usage, and susceptibility to boredom.

## 2.4. School Environment

The school environment, according to Sari (2019), is a part of the educational environment where teaching and learning activities take place, from primary to secondary education levels. As a place for individuals to receive education, the school environment directly or indirectly influences students. (Wahyuningsih & Djazari, 2013) explains that the school environment includes all elements that have an impact and meaning for students in the teaching and learning activities that occur in the school, whether in the social (physical) environment or the academic environment.

Based on the above opinions, it can be concluded that the school environment is part of the educational environment used by students to engage in learning activities according to their educational level, which includes the physical school environment, the social environment, and the academic environment of the school to achieve desired learning objectives.

Indicators used in the school environment according to (Slameto, 1988) include school discipline, student-teacher relationships, student-student relationships, the atmosphere of the school building, and teaching aids.

## 3. RESEARCH METHOD

The method used in this research is a quantitative approach using an explanatory survey research design. According to Sugiono (2013:8), quantitative research is based on the philosophy of positivism, where this method is used to examine a specific population and sample, collect data using research instruments, conduct quantitative or statistical data analysis, with the aim of testing predetermined hypotheses. In this study, there are three types of variables: learning styles and school environment as independent variables, learning outcomes as the dependent variable, and learning motivation as the intervening variable.

The population in this study consists of students in grades X and XI of SMA Negeri 8 Tasikmalaya for the Academic Year 2022/2023, totaling 427 students. The sampling technique used is Non-probability Sampling with Proportional Random Sampling. The sample size used in this study is 207 representative students from grades X and XI of the social science programs. Data collection was conducted using a questionnaire distributed to respondents online through Google Form. The questionnaire contains research instruments derived from each indicator of the respective variables used as research measuring tools, which were then tested for validity and reliability.

Data analysis techniques involved calculating the interval scale values for each variable to determine their categories concerning the research subjects. Subsequently, preconditions for the analysis were tested, followed by path analysis. The relationships between the independent and dependent variables can be depicted in the following diagram:

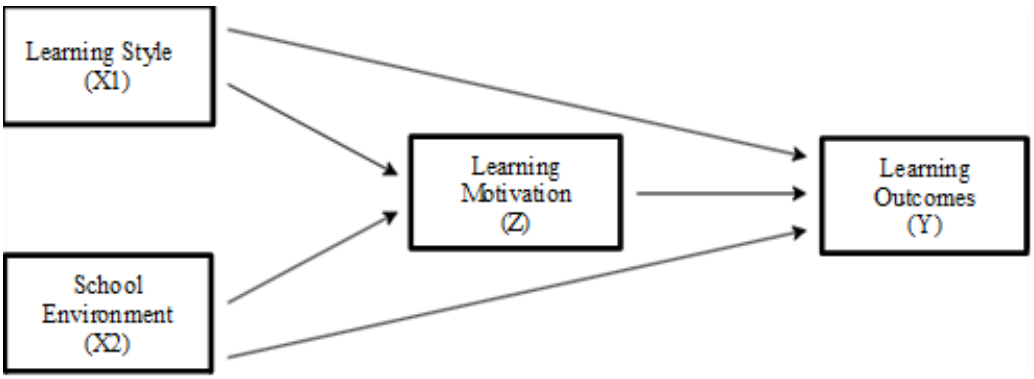



**Figure 1. Research Framework**

## 4. RESULT AND DISCUSSION

### 4.1. Research Result

This section describes the results of the research variables. Learning outcome variables are categorized based on their interval level values which are categorized into 5 as follows:

**Table 1. Classification of Grading for Each Learning Outcome Indicator**

| Values | Grading Classification |
|---|---|
| 5.382 – 9.687,6 | Very Low |
| 9.678,6 – 13.993,2 | Low |
| 13.993,2 – 18.298,8 | Medium |
| 18.298,6 – 22.604,4 | High |
| 22.604,4 – 26.910 | Very High |

Source: Results of Research Data Processing

Based on this table, it can be seen that students in grades X and XI IPS have high learning outcomes. These results are obtained based on indicators of intellectual skills, cognitive strategies, verbal information, attitudes and motor skills. This shows the difference between the UAS results in the previous pre-research which showed that there were still many students with low learning outcomes. This is likely when conducting pre-research has not asked more specific things related to learning outcomes and simple measurements because it only asks for the score.

Furthermore, the learning motivation variable is categorized into 5 categories based on the interval level value, which is as follows:

**Table 2. Classification of Grading for Each Learning Motivation Indicator**

| Values | Grading Classification |
|---|---|
| 6.624 – 11.923,2 | Very Low |
| 11.923,2 – 17.222,4 | Low |
| 17,222,4 – 22.521,6 | Medium |
| 22.521,6 – 27.820,8 | High |
| 27.820,8 – 33.120 | Very High |

Source: Results of Research Data Processing

Based on this table, it can be seen that students in grades X and XI IPS have high learning motivation. These results are obtained based on indicators that there is a desire and desire to succeed, there are encouragement and needs in learning, there are hopes and future goals, there are rewards in learning, there are interesting activities in learning, and there is a conducive learning environment.

Furthermore, learning style variables are categorized into 5 categories based on the value of the interval level, which is as follows:

**Table 3. Classification of Grading for Each Learning Style Indicator**

| Values | Grading Classification |
|---|---|
| 4.968 – 8.942,4 | Very Low |
| 8.942,4 – 12,916,8 | Low |
| 12.916,8 – 16.891,2 | Medium |
| 16.891,2 – 20.865,6 | High |
| 20.865,6 – 24.840 | Very High |

Source: Results of Research Data Processing

Based on this table, it can be seen that students in grades X and XI IPS have a high learning style. These results are obtained based on indicators of visual learning styles, auditory learning styles, and kinesthetic learning styles. Based on the total score of the learning style instrument, there is a qualification division according to the indicator. Visual learning style obtained 36% of the total score, auditory learning style obtained 33% of the total score, and kinesthetic learning style obtained 31% of the total score. This means that the visual learning style is more dominantly used by X and XI social studies students of SMA Negeri 8 Tasikmalaya in the 2022/2023 school year.

Furthermore, the school environment variable is categorized into 5 categories based on the value of the interval level, which is as follows:

**Table 4. Classification of Ratings for Each Indicator of School Environment**

| Values | Grading Classification |
|---|---|
| 4.554 – 8.197,2 | Very Low |
| 8.197,2 – 11.840,4 | Low |
| 11.840,4 – 15.483,6 | Medium |
| 15.483,6 – 19.126,8 | High |
| 19.126,8 – 22.270 | Very High |

Source: Results of Research Data Processing

Based on this table, it can be seen that students in grades X and XI social studies of SMA Negeri 8 Tasikmalaya in the 2022/2023 school year have a good school environment. These results are obtained based on indicators of school discipline, student relations with teachers, student relations with students, building atmosphere, and learning tools.

### 4.1.1. Prerequisite Test Analysis

1. Normality Test

**Table 5. Normality Test Results**

| Model | Variable | Asymp. Sig. (2-tailed) | Conclusion |
|---|---|---|---|
| X1, X2, and Z | Unstandardized Residual | 0,200 | Normal |
| X1, X2, and Z on Y | Unstandardized Residual | 0,200 | Normal |

Source: Results of Research Data Processing, 2023

Based on the summary of the calculation results above, the value of Asymp. Sig. (2-tailed) of the two equation models used in this study is greater than 0.05 so it can be concluded that the data is normally distributed.

2. Linearity Test

**Table 6. Linearity Test Results**

| No | Variable | | Sig | Conclusion |
|---|---|---|---|---|
| | Independent | Dependent | | |
| 1. | Learning Style (X1) | Learning Motivation (Z) | 0,116 | Linear |
| 2. | School Environment (X2) | Learning Motivation (Z) | 0,816 | Linear |
| 3. | Learning Style (X1) | Learning Outcomes (Y) | 0,408 | Linear |
| 4. | School Environment (X2) | Learning Outcomes (Y) | 0,442 | Linear |
| 5. | Learning Motivation (Z) | Learning Outcome (Y) | 0,149 | Linear |

Source: Results of Research Data Processing, 2023

Based on the summary of the calculation results above, it shows that the significance value of the four interrelated variables each has a value> 0.05, so it can be concluded that the research variables have a linear relationship.

3. Multicollinearity Test

**Table 7. Multicollinearity Test Results**

| No | Independent Variable | Dependent Variable | Tolerance | VIF |
|---|---|---|---|---|
| 1. | Learning Style | Learning Motivation | 0,997 | 1,003 |
| 2. | School Environment | Learning Motivation | 0,997 | 1,003 |
| 3. | Learning Style | Learning Outcomes | 0,989 | 1.011 |
| 4. | School Environment | Learning Outcome | 0,952 | 1,051 |
| 5. | Learning Motivation | Learning Outcome | 0,946 | 1,057 |

Source: Results of Research Data Processing, 2023

Based on the summary of the calculation results above, it can be seen in the tolerance value section that all values are> 0.10, which means there is no

multicollinearity. Furthermore, the VIF value in the table above shows all values < 10, so it can be concluded that there is no multicollinearity between variables.

4. Heteroscedasticity Test

**Table 8. Heteroscedasticity Test Results**

| No | Independent Variable | Dependent Variable | Significance Value |
|---|---|---|---|
| 1. | Learning Style | Learning Motivation | 0,983 |
| 2. | School Environment | Learning Motivation | 0,817 |
| 3. | Learning Style | Learning Outcome | 0,591 |
| 4. | School Environment | Learning Outcome | 0,082 |
| 5. | Learning Motivation | Learning Outcome | 0,566 |

Source: Results of Research Data Processing, 2023

Based on the summary of the test results above, it can be seen that all significance values> 0.05, it can be concluded that the regression model does not occur symptoms of heteroscedasticity.

### 4.1.2. Path Analysis

1. Direct Effect

**Table 9. Path Analysis Test Results (Direct Effect)**

| Variable | | Sig. | t statistic | Conclusion |
|---|---|---|---|---|
| Independent | Dependent | | | |
| Learning Style | Learning Motivation | 0,218 | 1,235 | Ha rejected |
| School Environment | Learning Motivation | 0,002 | 3,099 | Ha accepted |
| Learning Style | Learning Outcomes | 0,323 | 0,991 | Ha rejected |
| School Environment | Learning Outcome | 0,006 | 2,806 | Ha accepted |
| Learning Motivation | Learning Outcome | 0,001 | 4,250 | Ha accepted |

Source: Results of Research Data Processing, 2023

Based on the table of Path Analysis results (direct influence) above, it can be concluded that:

**a. Analysis of the influence of learning styles on learning motivation:**
Based on the analysis above, it was found that the t-value is 1.235 < t-table (1.971603), and the significance value is 0.218, which is greater than 0.05. Therefore, it can be concluded that there is no significant direct influence between learning styles (X1) and learning motivation (Z). This means that the

first hypothesis, which suggests that there is no significant influence between learning styles and learning motivation of students (Ha), is **rejected**.

b. **Analysis of the influence of the school environment on learning motivation:** From the analysis above, it was obtained that the t-value is 3.099 > t-table (1.971603), and the significance value is 0.002, which is smaller than 0.05. Thus, it can be concluded that there is a significant direct influence of the school environment (X2) on learning motivation (Z). This means that the second hypothesis, which states that there is a significant influence of the school environment on learning motivation of students (Ha), is **accepted**.

c. **Analysis of the influence of learning styles on learning outcomes:** Based on the analysis above, it was found that the t-value is 0.991 < t-table (1.971603), and the significance value is 0.323, which is greater than 0.05. Therefore, it can be concluded that there is no significant direct influence between learning styles (X1) and learning outcomes (Y). This means that the third hypothesis, which suggests that there is no significant influence between learning styles and learning outcomes of students (Ha), is **rejected**.

d. **Analysis of the influence of the school environment on learning outcomes:** From the analysis above, it was obtained that the t-value is 2.806 > t-table (1.971603), and the significance value is 0.002, which is smaller than 0.05. Hence, it can be concluded that there is a significant direct influence of the school environment (X2) on learning outcomes (Y). This means that the fourth hypothesis, which states that there is a significant influence of the school environment on learning outcomes of students (Ha), is **accepted**.

e. **Analysis of the influence of learning motivation on learning outcomes:** Based on the analysis above, it was found that the t-value is 4.250 > t-table (1.971603), and the significance value is 0.001, which is smaller than 0.05. Therefore, it can be concluded that there is a significant direct influence of learning motivation (Z) on learning outcomes (Y). This means that the fifth hypothesis, which suggests that there is a significant influence of learning motivation on learning outcomes of students (Ha), is **accepted**.

2. Indirect Effect

**Table 10. Path Analysis Test Results (Indirect Effect)**

| Model | t statistic | t table | Conclusion |
|---|---|---|---|
| X1 - Z → Y | 0,969 | 1,971603 | Ha rejected |
| X2 - Z → Y | 2,149 | 1,971603 | Ha accepted |

Source: Results of Data Processing, 2023

The results showed that the direct effect given by X1 on Y is 0.065 and the effect of X1 through Z on Y is the multiplication of the beta value of X1 on Z with the beta value of Z on Y, namely: 0,084 x 0,283 = 0,024. Then the total effect given by X1 on Y is the direct effect plus the indirect effect, namely: 0,065 + 0,024 = 0,089. Meanwhile, the direct effect X2 has on Y is 0.186, and the effect of X2 through Z on Y is the multiplication of the beta value of X2 on Z and the beta value of Z on Y, namely: 0,211 x 0,283 = 0,059. Then the total effect that X2 has on Y is the direct effect plus the indirect effect, namely: 0,186 + 0,059 = 0,245.

And to calculate the effect of variable Z as mediating variable X on Y, Sobel test is used manually using the following formula:

$$Z = \frac{ab}{\sqrt{b^2sa^2 + a^2sb^2 + sa^2sb^2}}$$

a. The Effect of Learning Style on Learning Outcomes Through Learning Motivation

$$Z = \frac{ab}{\sqrt{b^2sa^2 + a^2sb^2 + sa^2sb^2}}$$
$$Z = \frac{(0{,}093)(0{,}472)}{\sqrt{(0{,}472)^2(0{,}075)^2 + (0{,}093)^2(0{,}111)^2 + (0{,}075)^2(0{,}111)^2}}$$
$$Z = \frac{0{,}043896}{\sqrt{0{,}002052}}$$
$$Z = \frac{0{,}043896}{0{,}045299}$$
$$Z = 0{,}969$$

Because $t_{statistic}$ (0.969) < $t_{table}$ (1.971603), it can be concluded that variable Z does not significantly mediate the relationship between X1 and Y, which means that the 6th hypothesis, namely that there is no significant influence between learning styles on learning outcomes through learning motivation (Ha) is **rejected**.

b. The Effect of School Environment on Learning Outcomes Through Learning Motivation

$$Z = \frac{ab}{\sqrt{b^2sa^2 + a^2sb^2 + sa^2sb^2}}$$
$$Z = \frac{(0{,}257)(0{,}472)}{\sqrt{(0{,}472)^2(0{,}083)^2 + (0{,}257)^2(0{,}111)^2 + (0{,}083)^2(0{,}111)^2}}$$
$$Z = \frac{0{,}121304}{\sqrt{0{,}003187}}$$
$$Z = \frac{0{,}121304}{0{,}0564535207050}$$
$$Z = 2{,}149$$

Because $t_{statistic}$ (2.149) > $t_{table}$ (1.971603), it can be concluded that variable Z significantly mediates the relationship between X2 and Y, which means that the 6th hypothesis, namely that there is a significant influence between the school environment on learning outcomes through learning motivation (Ha) is **accepted**.

## 4.2. Discussion

### 4.2.1. The Effect of Learning Style on Learning Motivation

Based on the research conducted on students in grades X and XI of the Social Science programs, it was found that learning styles do not have a significant influence on

students' learning motivation. This conclusion is supported by the results obtained from Path Analysis, where the t-statistic is smaller than the t-table (1.235 < 1.971603), with a significance value of 0.218 > 0.05. Thus, there is no significant impact of learning styles on students' learning motivation.

According to the NJI calculation, learning styles are categorized as high. Among the learning styles dominant in the students of grades X and XI in SMA Negeri 8 Tasikmalaya for the Academic Year 2022/2023, visual learning style stands out. Visual learners tend to use visual aids or images to facilitate their understanding of information.

However, in the actual learning environment, during teacher-led activities (PLP), the teaching method mostly relies on lectures, which is less effective considering the dominance of visual learners. Visual learners prefer learning through images or visuals, observing objects directly, and connecting everything they have seen in real-life situations. As a result, the mismatch between the teaching method and the students' learning style leads to a decline in learning motivation.

This finding is supported by the research conducted by (Pamungkas & Mahmud, 2017), which also showed no significant influence of learning styles on learning motivation. The research explained that the lack of awareness about one's own learning style might lead to a lack of motivation to utilize their learning abilities effectively. If students do not recognize their individual learning styles, they might not be motivated to leverage their learning style for effective learning.

According to Wulandari's theory (Pamungkas & Mahmud, 2017), students are more motivated to learn when they know how to utilize their learning abilities optimally. Thus, when students are aware of their learning style and how to make the best use of it, their learning outcomes can be optimized. On the other hand, if students are not familiar with their learning style, the motivation to learn and utilize their learning abilities effectively will be lacking.

### 4.2.2. Influence of School Environment on Learning Motivation

Based on the research, it was found that the school environment significantly influences students' learning motivation. The Path Analysis calculation resulted in a t-value larger than the t-table (3.099 > 1.971603), with a significance value of 0.002 < 0.05. This indicates that the better the school environment, the higher the students' learning motivation. Conversely, a less favorable school environment can lead to decreased learning motivation among students.

Uno's theory (Dewi & Yuniarsih, 2020) explains that personal motives generally emerge in individuals after being shaped by environmental influences. Therefore, individual motives for doing something, such as learning well, can be developed, improved, and changed through learning and practice, mainly influenced by the school environment. A conducive school environment, a good curriculum, and qualified teachers can enhance students' learning motivation. A positive learning atmosphere within the school motivates students, making them enthusiastic about the learning process.

The NJI calculation supports the classification of the school environment as good. One of the indicators supporting this is that the students maintain discipline by following the school rules. This means that students behave well in accordance with the rules set by the school. Adhering to these rules creates a safe and comfortable atmosphere for everyone in the school. When students follow the rules, it fosters discipline in their learning process, leading to increased learning motivation and diligence.

This research is consistent with the studies conducted by (Pakiding, 2016; Sholehuddin & Wardani, 2023), showing a significant influence of the school environment on learning motivation. A conducive school environment, a well-implemented curriculum, and qualified teachers play essential roles in boosting students' learning motivation. Thus, the school environment significantly affects the motivation of students to learn.

### 4.2.3. Influence of Learning Styles on Learning Outcomes

Based on the research, it was found that learning styles do not have a significant influence on students' learning outcomes. The Path Analysis calculation resulted in a t-value smaller than the t-table (0.991 < 1.971603), with a significance value of 0.323 > 0.05. This indicates that there is no significant direct impact of learning styles on students' learning outcomes.

The research revealed that most students tend to have a visual learning style. The visual learning style scored highest in the indicator of learning in an organized and orderly manner. This means that students consistently maintain well-organized class notes and write down the lessons explained by the teacher neatly. However, there are still students who do not take notes after the teacher's explanation. Consequently, without proper note-taking, students lack study materials, and the learning style they adopt does not significantly influence their learning outcomes.

This finding is supported by the research conducted by (Sholehuddin & Wardani, 2023), which also showed no significant influence of learning styles on learning outcomes. The research explained that the learning style does not always have a significant impact on learning outcomes because each individual's learning style is different, and determining the most suitable learning style for oneself can be challenging, hindering effective knowledge absorption. Additionally, the study found that motivation also varies among individuals and becomes one of the factors that do not influence learning outcomes.

### 4.2.4. Influence of School Environment on Learning Outcomes

Based on the research, it was found that the school environment significantly influences students' learning outcomes. The Path Analysis calculation resulted in a t-value larger than the t-table (2.806 > 1.971603), with a significance value of 0.006 < 0.05. This indicates that the better the school environment, the higher the students' learning outcomes. Conversely, a less favorable school environment can lead to lower learning outcomes among students.

As with the theory revealed by Dalyono (Yana & Nurjanah, 2014), "The school environment where learning takes place also affects the level of learning success. The quality of teachers, their teaching methods, the alignment of the curriculum with students' abilities, the condition of school facilities or equipment, the state of classrooms, the number of students per class, the implementation of school regulations, and so on, all these factors also influence the students' success." Based on this theory, it can be concluded that the school environment can influence students' learning outcomes.

Based on the NJI calculation, the school environment is categorized as good. From the results, it was found that one statement can prove that the school environment of the students falls into the high category. The indicator mentions that students maintain

discipline by always behaving according to the rules in the school. This means that students behave well and follow the rules implemented in the school. When students behave in a disciplined manner, it enhances their learning outcomes because disciplined students are consistent in their studies, leading to improved learning outcomes.

This research is supported by the studies conducted by Pakiding (2016) and Martina et al. (2019), which show a significant influence of the school environment on learning outcomes. A better school environment correlates with better learning outcomes achieved by students. The school environment plays a crucial role in students' learning outcomes. A conducive school environment, a well-structured curriculum, and qualified teachers contribute to the improvement of students' learning outcomes.

### 4.2.5. Influence of Learning Motivation on Learning Outcomes

Based on the research conducted on students in grades X and XI of the Social Science programs, it was found that learning motivation significantly influences students' learning outcomes. This was evidenced by the results obtained from Path Analysis, where the t-statistic is larger than the t-table (4.250 > 1.971603), with a significance value of 0.001 < 0.05. Therefore, it can be concluded that the higher the learning motivation of students, the higher their learning outcomes. Conversely, if students' learning motivation is low, their learning outcomes tend to be lower as well.

As expressed in Sardiman's theory (Suprihatiningrum, 2013), motivation serves as a driving force in achieving success. In this context, learning motivation acts as a driving force for students to achieve good learning outcomes. Learning outcomes do not improve without an accompanying increase in learning motivation. Additionally, according to Tavris and Carole (Suprihatiningrum, 2013), highly motivated individuals set goals with high standards of achievement and perfection. As we know, motivation is the impetus for someone to undertake something with enthusiasm. Thus, if students have high motivation for learning, they will continue to study, make efforts, and remain consistent in pursuing their desired goals, leading to better learning outcomes.

Based on the NJI calculation, students' learning motivation is categorized as high. From the results, it was found that one statement can prove that the students' learning motivation falls into the high category. The indicator mentions that students always want to learn to progress to higher levels. This indicates that students have high learning motivation to achieve their aspirations in advancing to higher levels of education. With high learning motivation, students can attain better learning outcomes as a process toward achieving their goals.

This research is supported by the studies conducted by Kurniawan (2013) and Alim & Rachmawati (2018), which demonstrate a significant influence of learning motivation on learning outcomes. Learning motivation affects learning outcomes; when the learning motivation is positive, students' learning outcomes improve. The higher the learning motivation within an individual, the more their learning improves. Learning motivation also plays a pivotal role in students' learning outcomes, as it instills diligence in their learning activities, leading to improved learning results.

### 4.2.6. Influence of Learning Styles on Learning Outcomes through Learning Motivation

Based on the analysis conducted on students in grades X and XI of the Social Science programs, it was found that learning styles do not have a significant influence on students' learning outcomes through learning motivation. This was evident from the Path

Analysis (indirect influence) through the Sobel Test between learning styles and students' learning outcomes through learning motivation, with a t-statistic (0.969) < t-table (1.971603), thus concluding that there is no significant impact of learning styles on students' learning outcomes through learning motivation.

This finding is supported by the research conducted by Khotimah & Wahjudi (2021), which indicates that learning motivation cannot mediate the influence of learning styles on learning outcomes. The study explains that learning styles cannot always mediate learning outcomes through learning motivation because many students are not familiar with their own learning styles. Learning styles do not always have a direct impact on learning outcomes since each individual's learning style is different, and determining the most suitable learning style for oneself can be challenging, hindering effective knowledge absorption. Moreover, learning motivation as a mediating variable does not significantly influence learning outcomes due to the variance in motivation among individuals, becoming one of the factors that does not influence learning outcomes.

### 4.2.7. Influence of School Environment on Learning Outcomes through Learning Motivation

Based on the analysis conducted on students in grades X and XI of the Social Science programs, it was found that the school environment significantly influences students' learning outcomes through learning motivation. This was evident from the Path Analysis (indirect influence) through the Sobel Test between the school environment and students' learning outcomes through learning motivation, with a t-statistic (2.149) > t-table (1.971603), thus concluding that there is a significant influence of the school environment on students' learning outcomes through learning motivation.

According to the results, the school environment indirectly affects learning outcomes but must pass through learning motivation first. In other words, a good school environment will increase learning motivation, so if the learning motivation of students increases, their learning outcomes will improve as well. This aligns with previous research on the influence of parental upbringing and the school environment on mathematics learning outcomes through learning motivation by Pakiding (2016), which states that the school environment significantly influences learning outcomes through students' learning motivation. To improve learning outcomes, the school environment and the school's condition itself play an essential role, making students feel comfortable during the learning process and fostering their learning motivation.

In this regard, when students experience a positive school environment with conducive surroundings and adequate facilities, it directly contributes to increasing their learning motivation because they have a comfortable learning atmosphere and access to learning resources. Consequently, students' learning outcomes improve, driven by the positive school environment and good learning motivation. In conclusion, the better the school environment, the higher the level of learning motivation, and the better the learning outcomes achieved by students in the learning process.

## 5. CONCLUSION

The conclusions drawn from this research indicate that learning styles do not significantly influence students' learning motivation in economics subjects for students in grades X and XI of SMA Negeri 8 Tasikmalaya, Social Science Program. However, the school environment does have a significant impact on students' learning motivation in the same subjects and grades. Moreover, learning styles do not significantly affect students' learning outcomes, while the school environment does significantly influence students' learning outcomes in economics subjects for grades X and XI of SMA Negeri 8 Tasikmalaya, Social Science Program. Furthermore, learning motivation has a significant influence on students' learning outcomes in the mentioned subjects and grades.

The research findings are expected to make valuable contributions to the academic realm by supporting studies related to learning styles and the school environment's influence on learning motivation, as well as understanding how these factors ultimately impact students' learning outcomes. For future researchers, it is recommended to explore different and broader research subjects, and also consider incorporating other variables to investigate how learning styles can affect students' learning outcomes in various contexts.

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