



# THE EFFECT OF MOTIVATION AND LEARNING INTEREST ON THE LEARNING OUTCOMES OF GRADE XI MA ALFATTAHIYYAH STUDENTS FOR THE 2024/2025 ACADEMIC YEAR

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**Abstract**— The achievement of optimal learning outcomes is an important indicator of the success of the learning process. Students' motivation and interest in learning are one of the internal factors that play a big role in determining academic success. Based on observations at MA Al Fattahiyyah Tulungagung, most of the students of grade XI have not reached the Minimum Completeness Criteria (KKM) in the subject of Informatics. This study aims to determine the influence of motivation and interest in learning on student learning outcomes. Samples were taken randomly of 20 students. Data were collected through questionnaires and documentation of PTS scores, then analyzed using linear regression with the help of SPSS. The results of the t-test showed that learning motivation had a significant effect on learning outcomes, while learning interest did not. However, the F test showed that both simultaneously had a significant effect. These findings show the importance of motivation in improving student learning outcomes.

**Keywords**— *learning motivation, learning interest, learning outcomes, linear regression, MA students*

## I. INTRODUCTION

Education has an important role in human life because through education, individuals are able to place themselves appropriately in society and family. In Indonesia, education is aimed at developing the quality of human resources through an interactive, inspiring, and motivating learning process for students. One of the important elements in the educational process is the success of learning, which is influenced by the motivation and interest in learning of students.

The learning process requires not only the delivery of the material, but also the active involvement of the students, who are greatly influenced by their internal drive and interest in the subject matter. Students who have high motivation and interest tend to show a consistent enthusiasm for learning, while those who are less interested tend to be passive and have difficulty achieving optimal learning outcomes.

Observations at MA Al Fattahiyyah Tulungagung show that most of the students of grade XI have not reached the Minimum Completeness Criteria (KKM) for the Informatics subject. This is related to the low interest and motivation to learn, considering that the majority of students live in an Islamic boarding school environment that emphasizes religious education. Students' interest is higher when practicing in a computer lab than when learning theory in the classroom. In addition, low motivation is also caused by a lack of support from teachers and parents, because students live far from their families and are in a system that prioritizes religious learning.

According to Martinis, an inner drive, namely motivation to learn, triggers individuals to actively engage in learning and hone their competencies. Motivation encourages a person to change their behavior as a result of the experience of interaction in learning. Important elements of motivation include changes in internal energy, emotional experiences, and behaviors that lead to the achievement of goals. [3]

Meanwhile, interest in learning also plays a big role in determining student success. Interest in learning arises from an individual's interaction with his or her environment, characterized by an interest accompanied by a feeling of pleasure in a particular object or activity. [17]

Based on the problems found, low interest and motivation to learn are believed to be the main cause of low student learning outcomes in Informatics subjects. Therefore, this study aims to examine the influence of motivation and learning interest on the learning outcomes of grade XI students of MA Al Fattahiyyah for the 2024/2025 Academic Year. This research focuses on three main variables, namely learning motivation, learning interest, and learning outcomes in the context of Informatics learning.



## II. LITERATURE REVIEW

### A. Learning Outcomes

Learning outcomes can be interpreted as a form of achievement obtained by students after going through the learning process. Not only does it include academic grades, learning outcomes also reflect changes in attitudes, knowledge, and skills. Learning outcomes show the extent to which educational goals are successfully achieved by students. [14]

In the world of education, learning outcomes have an important role as a benchmark for students' academic success. Learning outcomes are not only used to evaluate and report student achievement, but also become the foundation for designing effective learning. This design includes alignment between learning objectives and applied assessment strategies. As an output of the learning process, learning outcomes reflect the extent to which students are able to understand, master, and develop the knowledge and skills that have been taught. [8]

In the educational process, understanding the learning objectives as a whole is very important so that the teaching methods applied can be effective and on target. One widely used approach to grouping learning objectives is Bloom's taxonomy, which divides these objectives into several different domains. This division helps educators to design comprehensive learning strategies, which focus not only on aspects of knowledge, but also students' attitudes and skills.

- 1) The cognitive realm deals with the intellectual ability of students to think, understand, and solve problems.
- 2) The affective realm includes emotional and attitude aspects that cannot be separated from the learning process and assessment.
- 3) The psychomotor realm focuses on physical skills or abilities that emerge after students have had a certain learning experience. [21]

Students' learning outcomes are influenced by various factors that come from within themselves and the environment around them. These factors can be divided into two main groups, namely:

#### 1. Internal Factors

Internal factors are things that come from within students and play a big role in determining learning success. According to Slameto (in Marlina and Sholehun, 2021), this factor includes the physical and psychological condition of the individual. Some of the important elements in internal factors include:

- a) Talent, which is a natural ability that students have since birth and needs to be continuously developed through utopian practice)
- b) Interest in learning, which is an interest and liking for a learning activity without coercion from other parties
- c) Motivation, encouragement from within that makes students excited and willing to make an effort in learning. [10]

- d) Learning methods are the learning patterns or habits that students carry out to acquire knowledge effectively.

#### 2. External Factors

- a) School environment, which plays an important role in the development of students' intelligence and achievement. Schools provide stimulants and facilities that support the learning process [7]
- b) The family environment, as the main foundation in student life, helps spur children to achieve academic and social success [18]
- c) The community environment, which also affects the learning process with various social and cultural conditions around students.

From the various opinions of these experts, it can be concluded that the success of student learning is the result of the interaction between internal factors that come from within them and external factors from the surrounding environment. Both complement each other and are equally important in creating optimal learning outcomes.

To find out the extent of student success in the learning process, clear and measurable indicators are needed. One of the main indicators is the level of students' understanding of the material presented, both individually and in groups. This level of understanding is usually measured through the Minimum Completeness Criteria (KKM) that have been set previously. In addition, another indicator is the achievement of behaviors or competencies that have been formulated in the learning objectives. This means that students not only understand the material in theory, but also show changes in attitudes or skills according to expectations, both in individual contexts and group cooperation [4]

### B. Learning Motivation

Motivation comes from the word "motivation" in English, with the root word "motive", which means drive or goal. In KBBI, motivation is defined as the encouragement in a person to think or act in order to achieve certain goals, either consciously or unconsciously.

Learning motivation is the mental force that encourages the learning process. Without motivation, learning activities can weaken and the results become less than optimal. McDonald calls motivation a change in energy in the self that is marked by the emergence of feelings and responses to certain goals.

Learning motivation can come from within oneself or from the surrounding environment. This encouragement arouses enthusiasm and directs the learning process so that goals are achieved. If motivation is not there, then the desire to learn will decrease.

Learning motivation is divided into two types:

#### 1. Intrinsic Motivation

An impulse that arises from within a person without outside influence. Students with intrinsically motivated learning because they are aware of the importance of knowledge and want to become an educated person. They



do not study for praise or reward, but out of personal awareness of the benefits of learning. [19]

## 2. Extrinsic Motivation

A drive that arises due to outside influences, such as gifts, grades, or pressure. Learning activities are carried out due to external factors, not personal desires. [19]

The success of the learning process is greatly influenced by the motivation that students have. This motivation does not appear just like that, but is influenced by various factors, both from within the student (internal) and from outside (external) (Rani Syarifah, 2021).

### 1. Internal Factors

Factors from within students have a great influence on their enthusiasm for learning, including:

- a) Character, habits, and intelligence: Personal traits, study habits, and types of intelligence such as IQ (cognitive), EQ (emotional), and SQ (spiritual) greatly influence students' attitudes towards learning.
- b) Physical and psychological conditions: Health, appearance, as well as emotional conditions such as confidence or stress also have an impact on student motivation.

### 2. External Factors

External factors such as the environment and social interaction are also very influential, including:

- a) Teachers: A teacher's friendly and caring attitude, as well as interesting learning methods and media, can encourage students to be more excited.
- b) Learning methods and media: The right approach can make lessons easier to understand and enjoyable.
- c) Learning environment: A comfortable and supportive classroom atmosphere makes students more focused and motivated.
- d) Facilities and infrastructure: Adequate school facilities, such as classrooms, learning aids, and technology, help the learning process be more effective.
- e) Parental role: The support, attention, and encouragement of family is one of the greatest sources of motivation for students.

According to Uno, learning motivation can be recognized through several indicators, namely:

1. A desire to succeed  
Students with high motivation tend to complete their assignments seriously because they really want to achieve achievements, not because of external pressure.
2. Motivation and need to learn  
Students can be driven to learn because they want to avoid failure, embarrassment, or punishment. It is also a form of motivation, although it comes from external pressures.
3. Future hopes and aspirations  
The desire to achieve a better future can be a powerful motivator for students to continue learning and trying.
4. The existence of an award

Praise or recognition from teachers, especially in public, can increase confidence and encourage students to learn better.

## 5. Engaging learning activities

Fun learning such as discussions, simulations, or activities outside of the classroom makes students more engaged and motivated.

## 6. Supportive learning environment

A comfortable and positive environment will help students focus more and overcome difficulties in learning.

## C. Interest in Learning

Etymologically, interest in learning is composed of two words: *interest* which means the impulse or desire of the heart towards something, and *learning* which means an effort to acquire knowledge or knowledge. Thus, interest in learning can be interpreted as a great desire in a person to gain knowledge or skills. [9]

Interest is a sense of liking and interest in something or an activity that arises without coercion. This interest grows because of the perceived connection between the individual and something outside of himself. The stronger the relationship, the greater the interest. Interest can be seen from the attitude of a person who prefers one thing over another, or from his involvement in an activity, for example in the learning process. [16]

Based on the various opinions above, it can be concluded that learning interest is the students' liking and interest in learning activities that arise voluntarily, without coercion, and can be seen from their activeness in the learning process.

Students' learning interests are influenced by various factors, both from within the student himself and from the surrounding environment. According to Setiawan (2021:13), these factors can be divided into two main categories, namely:

### 1. Internal Factors

Internal factors are factors that come from within students and help determine their level of interest in learning. This factor includes two main aspects

#### a) Physical Aspects

The physical condition of students has a great influence on the spirit of learning. A healthy and fit body will help students concentrate and absorb lessons more easily. On the other hand, a weak or sick body condition can hinder the learning process.

#### b) Psychological Aspects

Mental and emotional health also play a big role. Students who are psychologically immature or emotionally disturbed will find it more difficult to understand lessons, especially abstract material. Psychological stability helps students stay focused and able to absorb lessons well.

### 2. External Factors

External factors include everything outside of the student that can affect their interest in learning. These factors are divided into two types:

#### a. Social Factors (Human)



Social environments such as family, peers, and the atmosphere around home or school are very influential. For example, students who study in noisy environments or are often distracted by others will find it difficult to concentrate, which ultimately lowers their interest in learning.

- b. Non-Social Factors (Physical Environment) Physical conditions such as air temperature, lighting, comfort of the study room, and the availability of learning aids also affect student interest. A comfortable learning environment and adequate facilities can encourage students to be more interested in learning.

According to M. A. Nugroho and colleagues (2020), interest in learning can be recognized through several indicators that show the level of interest and involvement of students in the learning process. Some of these indicators include:

1. Feeling Happy  
Students who have an interest in learning will feel pleasure when dealing with subject matter. They enjoy reading books, learning new knowledge, and doing all of that with enthusiasm, without feeling forced.
2. Attention  
One of the signs of interest is a high level of attention to the lesson. Students with great interests will show a strong focus and are not easily distracted by other things around them.
3. Feelings of Attraction  
Interest is also related to the inner drive to engage in an activity. Students who are interested in a particular subject or teacher will show higher enthusiasm in participating in learning.
4. Actively Study  
Students who have a high interest do not only study in school. They also take the initiative to seek additional knowledge through tutoring or independent learning outside of school hours.
5. Awareness of Doing Tasks  
Doing schoolwork well is an important indicator. Students who recognize the importance of the teacher's assignments will take them seriously, because they know they are useful for deepening their understanding.
6. Knowing Learning Objectives  
Students who understand the reasons why they are learning will be more motivated. They realize that the learning process is an effort to achieve certain goals, be it behavior change, skill mastery, or the achievement of future goals.

### III. RESEARCH METODOLOGY

This research was carried out with a quantitative approach through the correlational method, which aims to identify the relationship or influence between two or more variables. In this context, independent variables consist of learning motivation and learning interest, while the dependent variables observed are the learning outcomes of students in Informatics subjects.

The research design applied was a survey, with data collection carried out through the distribution of questionnaires and documentation of students' academic scores. The collected data were statistically analyzed to test the strength of the relationship and the magnitude of the influence between independent variables on bound variables.

#### A. Population and Sampel

Population is understood as a whole generalized area that includes objects or subjects that have certain characteristics that have been established by researchers to be studied and drawn conclusions. In this study, the focus population is all class XI students at MA Al Fattahiyyah

In this study, the sampling technique used is random sampling technique. In taking the number of samples, if the population is less than 100, all are taken as samples, but if the population is more than 100, then samples can be taken between 10-15% or 20-25% of the population, this is in accordance with the opinion of (Arikunto, 2010: 134).

Based on the number of existing populations, since the population is more than 100, a sample is taken from the following calculations:

$$20 \% \text{ of } 109 = x \times 109 = 21.8 = 20 \frac{20}{100}$$

$$20 \text{ divided into } 4 \text{ classes} = 5 \text{ students per class}$$

So from each class, 5 students were taken using random sampling to be used as a sample.

#### B. Data Collection Techniques

Data collection in this study was carried out through two main techniques, namely questionnaires and documentation. The questionnaire instrument was used to measure the level of motivation and learning interest of students in Informatics subjects. The questionnaire was compiled using the Likert scale with four categories of answer choices, namely: strongly agree, agree, disagree, and disagree. For the purposes of quantitative analysis, each response was given a numerical score according to its category, namely: 4 for "Strongly Agree (SS)", 3 for "Agree (S)", 2 for "Disagree (KS)", and 1 for "Disagree (TS)".

In addition to questionnaires, documentation techniques are used to obtain data on student learning outcomes. This data was obtained from the Mid-Semester Assessment (PTS) scores of grade XI students in the Informatics subject at MA Al Fattahiyyah for the 2024/2025 Academic Year.

After all the data from respondents and other sources have been collected, the next stage is data analysis. This process aims to process raw data into information that can be interpreted scientifically. The analysis technique is carried out with the help of SPSS (Statistical Package for the Social Sciences) software, which allows systematic and accurate data processing to draw conclusions relevant to the research objectives.

Table 3. 1 Indicator Table

Yes	Variabel	Indicator	Instrument Type
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1	Learning Motivation (X1)	1. The existence of desire and desire to succeed 2. There is encouragement and need for learning The existence of future hopes and ideals	Questionnaire
		3. There is an appreciation in learning 4. There are interesting activities in learning 5. The existence of a conducive learning environment that allows a student to learn well	
2	Interest in Learning (x2)	1. Feeling Happy 2. Attention 3. Feelings of Attraction 4. Actively studying 5. Doing Tasks 6. Knowing the Learning Goals	Haunted
3	Learning Outcomes (Y)	1. Achievement of absorption of the learning materials taught, both individually and in groups 2. The behaviors outlined in the learning objectives have been achieved by the students, either individually or in groups.	Documentation

### C. Instrument Validity and Reliability

To ensure the quality of the instruments used in this study, a validity and reliability test was carried out on the questionnaire that measured students' motivation and interest in learning. The validity test aims to assess the extent to which the instrument is able to measure what should be measured. Based on the view of Sugiyono (2021:192), an instrument is said to be valid if the data collected reflects the actual condition of the object being studied. The validity of each item was tested by comparing the calculated r-value with the r-table at a significance level of 5% ( $\alpha = 0.05$ ); An item is considered valid if  $r \text{ counts} > r \text{ table}$ . Meanwhile, reliability tests are used to measure the consistency of measurement results over time. According to Sugiyono (2021:193), an

instrument is declared reliable if it produces stable data in repeated measurements. The reliability test in this study used Cronbach's Alpha technique through the SPSS application version 22.0 on the Windows 10 operating system. An instrument is considered reliable if Cronbach's Alpha value is greater than 0.05. Thus, these two tests are used to ensure that the questionnaire instruments used in the study are truly valid and trustworthy.

### D. Hypothesis Test Data Analysis

According to Sugiyono (2017), the implementation of the analysis prerequisite test aims to ensure that the data used in hypothesis testing has met certain basic assumptions, so that the results of the analysis and conclusions obtained have a scientific basis that can be accounted for. The tests carried out include normality tests, linearity tests, and heterokedasticity tests

## IV. RESEARCH DATA RESULT

### A. Presentation of Research Results Data

This study aims to find out the extent of the influence of motivation and interest in learning on the learning outcomes of grade XI students at MA Al Fattahiyyah. The type of research used is quantitative non-experimental, where the researcher does not provide a specific treatment or intervention to the research subject. In this approach, data is collected and analyzed to describe the relationships between variables without manipulating existing conditions. The data collection techniques used include the distribution of questionnaires and documentation of Mid-Semester Assessment (PTS) scores in the 2024/2025 academic year. The results of data collection are presented systematically in the form of a frequency table to facilitate analysis.

The population in this study is all grade XI students at MA Al Fattahiyyah. Sampling was carried out by random sampling technique. Referring to the opinion of Arikunto (2010:134), if the population is less than 100, then all members of the population can be used as samples. However, if the population exceeds 100, then it is enough to take between 10–25% of the total population. Based on the number of students and considering efficiency, the researcher took a sample of 5 students from each class, with a total of 4 classes, so that 20 respondents were obtained.

The questionnaire instrument used consisted of 34 statement items that measured learning motivation and 28 statement items that measured learning interest. Through this instrument, researchers collected data to assess the extent to which the two independent variables had an effect on student learning outcomes. The data obtained from the field is then analyzed to provide an empirical picture that supports the research objectives.

### B. Data Analysis Hypothesis 1) Test Instruments

Based on the results of the validity test of the motivation and learning interest questionnaire instrument conducted using the Pearson Product Moment formula through the help of SPSS software version 22.0, it is known that all statement items have a calculated r value greater than the r of the table



(0.444) at a significance level of 5% with a total of 20 students. The item with the highest r-count value on the learning motivation questionnaire was found in item number 6 of 0.703, while the lowest value was found in item number 3 of 0.445. Meanwhile, in the learning interest questionnaire, the highest score was found in item number 13 of 0.709 and the lowest score in item number 14 of 0.447. Thus, all items in both questionnaires are declared valid because they meet the eligibility criteria for the instrument.

The results of the reliability test using Cronbach's Alpha method showed that both instruments had a very high level of consistency. The Cronbach's Alpha value for the learning motivation questionnaire (X1) was 0.915, while for the learning interest questionnaire (X2) was 0.895. Both exceed the table r-value of 0.005, which indicates that both instruments have excellent reliability.

Based on these results, it can be concluded that the learning motivation and learning interest questionnaire instrument has met the criteria for validity and reliability, so it is suitable for use as a measuring tool in this study.

### 2) Prerequisite Test

Based on the results of the prerequisite test analysis, it is known that the data of this study has met three basic assumptions, namely normality, linearity, and there are no symptoms of heterokedasticity. The normality test conducted using the Shapiro-Wilk method showed that the significance values for the variables of learning motivation (0.368), learning interest (0.200), and learning outcome (0.673) were all greater than 0.05, so that the data was declared to be normally distributed. Furthermore, the linearity test showed that the significance value of *Deviation from Linearity* for learning motivation was 0.157 and for learning interest was 0.864, which means that the relationship between the two independent variables and learning outcomes was linear. The heterokedasticity test conducted using the Glejser method showed that the significance value for learning motivation was 0.121 and for learning interest was 0.874, both above 0.05, so it can be concluded that the regression model does not contain symptoms of heterokedasticity. Thus, the data in this study meet all the assumptions required for multiple linear regression analysis.

### 3) Uji Hypothesis

Based on the results of the partial test (t-test), it is known that the variable of learning motivation has a significant influence on student learning outcomes, shown by a significance value of  $0.000 < 0.05$  and a t-value of 8.444. This means that an alternative hypothesis ( $H_{a1}$ ) is accepted, so it can be concluded that learning motivation partially has a significant effect on learning outcomes. On the other hand, the learning interest variable had a significance value of  $0.224 > 0.05$  with a t-value of 1.263, which indicates that the null hypothesis ( $H_{02}$ ) is accepted, so it can be concluded that learning interest does not have a significant effect on partial learning outcomes.

Meanwhile, the results of the simultaneous test (F test) showed that the overall regression model was significant, with a significance value of  $0.000 < 0.05$  and an F value of 36.037. Thus, the alternative hypothesis ( $H_{a3}$ ) is accepted and the zero hypothesis ( $H_{03}$ ) is rejected, which means that

simultaneously motivation and interest in learning together have a significant effect on student learning outcomes.

### C. Discussion of Research Results

- 1) The results of the t-test showed that the learning motivation variable had a significant effect on learning outcomes with a significance value of  $0.000 < 0.05$ , which means that  $H_0$  was rejected and  $H_a$  was accepted. The regression coefficient of positive learning motivation shows that the higher the student's motivation, the better the learning outcomes. This finding is in line with Abraham Maslow's motivational theory which states that self-actualization drives achievement, both through internal and external motivation. Motivated students show diligent and planned learning efforts, which is also supported by the research of Astuti et al. (2020). In grade XI students of MA Al Fattahiyyah, high motivation is reflected in discipline in doing assignments, active learning, and good time management, which contribute to their academic achievement.
- 2) From the results of the t-test, the variable of student learning interest had a significance value of  $0.224 > 0.05$ , so that  $H_0$  was accepted and  $H_a$  was rejected, which means that learning interest did not have a significant effect on learning outcomes. Although the regression coefficient is positive, the effect is not statistically strong enough. This is in line with the research of Ningsih and Hidayat (2021) and Fatimah (2020) who stated that interest in learning alone is not enough to determine achievement without the support of disciplines, learning strategies, and a conducive environment. In grade XI students of MA Al Fattahiyyah, learning interest has not been followed by real action due to various factors such as lack of effective learning strategies, impaired concentration, limited study time, and inappropriate learning methods.
- 3) The results of the F test showed a significance value of  $0.000 < 0.05$ , so that the regression model in this study was statistically significant, indicating a significant joint influence between motivation and learning interest on learning outcomes. However, the partial t-test only showed a significant influence of learning motivation, while learning interest had no significant effect individually. This indicates that interest in learning alone is not enough to improve learning outcomes without strong motivational support. Interested students may only show passive interest without encouraging optimal learning efforts. This finding is in line with the research of Lestari and Saputra (2022) which also found a significant influence of motivation partially, but not on learning interest, even though the two had a combined effect on learning outcomes.

### CONCLUSION

Based on the results of the tests and analyses that have been previously described, the conclusions of this study can be formulated as follows:



1. Learning motivation has a significant effect on the learning outcomes of grade XI students of MA Al Fattahiyyah for the 2024/2025 academic year
2. Interest in learning does not have a significant effect on the learning outcomes of grade XI students of MA Al Fattahiyyah for the 2024/2025 Academic Year
3. Motivation and interest in learning simultaneously have a significant effect on the learning outcomes of grade XI students of MA Al Fattahiyyah for the 2024/2025 Academic Year

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