

## Factors Affecting the Learning Motivation of State High School Students in Karanganyar

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### ABSTRACT

Learning motivation is a crucial element in determining students' academic success. This study aims to identify the internal and external factors influencing student motivation and analyze the contribution of teacher interventions in creating a positive learning environment. This research employed a descriptive qualitative approach conducted at SMA Negeri Karanganyar. Data were collected through participant observation in the classroom. The gathered data were analyzed systematically to map the functional relationship between student motivation and the dynamics of the learning environment. The results indicate that student motivation is significantly influenced by internal factors, specifically future goal awareness, and external factors, including family support, peer influence, and the physical conditions of the school environment. Specific teacher interventions, such as the implementation of project-based learning, consistent positive feedback, and counseling guidance, proved effective in increasing students' emotional and cognitive engagement. The study concludes that student motivation plays a central role in shaping a productive learning ecosystem. These findings imply the importance of synergy between teachers' pedagogical strategies and home environment support. Therefore, it is recommended to strengthen teacher training regarding personalized approaches and enhance communication between schools and families to ensure the sustainability of students' learning motivation.

**Keywords:** Learning motivation, positive learning environment, project-based learning, teacher strategies

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## 1. INTRODUCTION

Student learning motivation is an important element that significantly contributes to educational success. In the realm of modern education, motivation not only serves as a measure of student engagement but also as a determinant of their character development and learning outcomes. High motivation allows students to show active participation, enhance critical thinking skills, and achieve better academic results. (Gede Margunayasa et al., 2024; Rosadi, 2023). However, creating and maintaining learning motivation in the school environment requires a comprehensive strategy, including learning approaches, interactions between teachers and students, and the atmosphere of the learning environment. (Šimić Šašić dan Sorić, 2011).

Previous research has identified various factors that influence students' learning motivation. One of the widely used approaches is project-based learning (PBL), which is designed to provide students with meaningful learning experiences through active involvement in collaborative tasks. Imran et al. (2023) reported that PBL significantly increased student motivation during remote learning, as this method combines problem-solving with the development of interpersonal skills. Additionally, differentiated learning strategies, as expressed by Amran et al. (2024), are also effective in increasing student motivation, especially in subjects with a skills focus.

Another important external factor in enhancing learning motivation is the quality of feedback provided by the teacher. A study by Câmpean et al. (2024) shows that positive feedback not only increases student engagement in the learning process but also creates a supportive learning atmosphere. Teachers who appreciate students' efforts can motivate them to continue learning and actively participate in class activities.

However, student motivation is not only influenced by teaching approaches or teacher feedback but also by interpersonal relationships in the school environment. Quality interactions between teachers and students have a significant impact on self-regulation, exam anxiety, and students' academic achievement. (Šimić Šašić dan Sorić, 2011). In this context, the emotional and spiritual intelligence of teachers plays an important role in building supportive relationships with students, as expressed by Rosadi (2023). Teachers who have the ability to understand students' emotional needs can create a comfortable classroom atmosphere that supports intrinsic motivation.

Internal and external factors that influence student motivation. Research Susanti (2020) shows that a classroom atmosphere that supports students emotionally and physically has a direct impact on their engagement in learning. Furthermore, Gede Margunayasa et al. (2024) highlighting that positive social interactions with peers can enhance students' learning motivation, while a lack of social support can be a barrier to active engagement. Therefore, it is important for schools to create an environment that encourages healthy social interactions among students and supports their character development.

While various studies have highlighted individual factors influencing motivation such as the effectiveness of project-based learning (PBL), the importance of feedback, and the role of teachers' emotional intelligence most existing literature tends to be fragmented and partial. These variables are often examined in isolation, failing to account for how they interact simultaneously within a holistic learning ecosystem.

Furthermore, there is a notable scarcity of research exploring how teacher interventions (such as the combination of PBL and personal guidance) intersect with the unique social dynamics of Indonesian public high schools, which often face the dual challenge of resource constraints and high academic expectations. Gede Margunayasa et al. (2024) touched upon school culture, there remains a lack of in-depth descriptive insight into how internal student factors and external teacher interventions converge in the field to foster a positive learning environment.

This study aims to bridge this research gap by offering a more holistic approach. Distinguishing itself from previous research that frequently focuses solely on cognitive outcomes, this case study at SMA Negeri Karanganyar specifically dissects the interaction mechanism between students' internal motivations (such as personal aspirations) and three pillars of teacher intervention: project-based learning, positive feedback, and personal counseling approaches.

This article to the existing literature lies in its mapping of the reciprocal relationship between individual motivation and the creation of a learning environment. Theoretically, this research extends the understanding of motivation theory by contextualizing it within the socio-cultural dynamics of Indonesian secondary education.

Practically, the study offers an operational framework for educators on how to integrate pedagogical strategies with emotional approaches to trigger sustainable student engagement, rather than a mere momentary response to school assignments.

## 2. RESEARCH METHOD

This research uses a qualitative approach to deeply explore the relationship between student motivation and a positive learning environment. This approach was chosen to understand the subjective experiences of students and teachers in the learning context, as well as to explore dynamics that cannot be measured through quantitative data. This approach refers to the research by Shernoff et al. (2017), which shows that student engagement in learning is influenced by various interconnected elements of the classroom environment. In the context of this research, student motivation is analyzed as one of the important elements that influence classroom interactions and the learning atmosphere. This research uses a descriptive analysis design, which aims to provide a comprehensive overview of the influence of student motivation on a positive learning environment. This design allows researchers to systematically analyze observational data to identify patterns of relationships between variables. This descriptive analysis approach is relevant to the method by Abe & Hayashi (2024), which analyzes the relationship between subjective evaluations of the school environment and student learning motivation. In this study, elements such as social interaction, emotional support, and classroom atmosphere will be described in detail based on observational results.

Data were gathered through moderate participant observation over several learning sessions at SMA Negeri Karanganyar. The researcher utilized structured observation guidelines to record specific indicators, including: (1) students' behavioral responses to instructions, (2) the quality of teachers' emotional support, (3) the level of peer collaboration, and (4) the physical classroom conditions. Field data were documented in comprehensive field notes.

The research procedure began with preparations involving the identification of student motivation indicators and positive learning environment elements through a literature review. The observation guide instrument was then developed to ensure that the data collected were relevant to the research objectives. Next, observations were conducted purposively in several classes, with detailed notes on the dynamics of learning through field notes. The collected data were grouped based on the main themes, namely student motivation, interpersonal relationships, and elements of the learning environment. The analysis was conducted using a descriptive analytical approach to illustrate the patterns of

relationships between variables. The patterns found are interpreted to answer the research questions, with the aim of providing relevant recommendations for improving student motivation and creating a more positive learning environment.

### 3. RESULT AND ANALYSIS

This research reveals various factors that influence student learning motivation at SMA Negeri Karanganyar. These factors can be categorized into internal and external factors, each with positive and negative aspects that influence student engagement in learning.

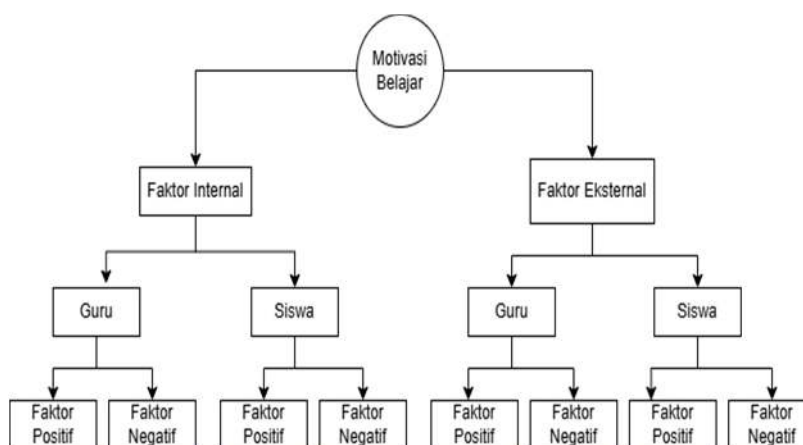


Figure 1. Factors Affecting Learning Motivation

#### 3.1. INTERNAL FACTORS OF STUDENTS

Explained in Figure 2 is the relationship of internal factors of students, which includes various aspects that originate from within themselves, both those that encourage and those that hinder learning motivation. Intrinsic motivation is one of the most important elements in encouraging students to achieve academic goals. Students who have confidence in their learning abilities tend to be more active in the learning process. For example, students who believe that they can complete difficult tasks are more motivated to try them. Kurniawan et al. (2017) research shows that intrinsic motivation plays a significant role in increasing students' active participation, both inside and outside the classroom. For example, student A when responding to the teacher's instructions to do what has been explained. In addition, personality characteristics such as openness to new experiences, curiosity, and discipline also support the enhancement of learning motivation. These traits help students to view academic challenges as opportunities for growth (Kubiatko et al., 2018; Supriyatin et al., 2019).



Figure 2. Relationship of Internal Factors of Students

However, there are also negative factors that hinder students' internal motivation. Academic stress caused by heavy workloads, pressure from parents, and fear of failure are among the main reasons for the decline in motivation. Anxiety, especially when facing subjects considered difficult like mathematics or physics, often makes students feel less confident. Xia Huang et al. (2020) found that this anxiety can significantly impact student engagement, causing them to become passive or even withdraw from the learning process.

### 3.2. TEACHER INTERNAL FACTOR

The internal factors of the teacher also play an important role in building students' learning motivation. Teachers with high professional competence are able to create a conducive learning atmosphere. This professionalism is reflected in their ability to deliver material clearly, use relevant teaching approaches, and provide constructive feedback. Peng (2021) shows that positive feedback from teachers can provide clear direction to students, boost their confidence, and encourage a love of learning.

However, the lack of emotional support from teachers can be a significant barrier for students. Teachers who are unresponsive to students' emotional needs create a distance that can reduce their motivation to learn. According to Yiga et al. (2019), students who feel unappreciated or unsupported by their teachers tend to lose interest in learning, which can ultimately affect their academic performance.

### 3.3. EXTERNAL FACTORS OF STUDENTS

External factors of students, as explained in Figure 3, involve their social environment, including family, peers, and the school community. A supportive family environment is one of the strongest external factors in encouraging students' learning motivation. Parents who provide attention, encouragement, and recognition for their children's efforts help create a home environment conducive to learning. Febriandika et al. (2024) found that students who receive emotional support from their families show higher engagement in learning activities.

In addition to family, positive interactions with peers also make a significant contribution to student motivation. Supportive friends can be a source of inspiration and motivation for students to strive for better. Deng et al. (2022) mention that healthy social relationships among students can enhance a sense of togetherness, cooperation, and active participation in class. Conversely, social pressure from unsupportive peers can become an obstacle. For example, students who feel the need to conform to a certain group often lose focus on their academic goals. Aydeniz & Kaya (2012) show that such social costs can reduce students' motivation to learn.

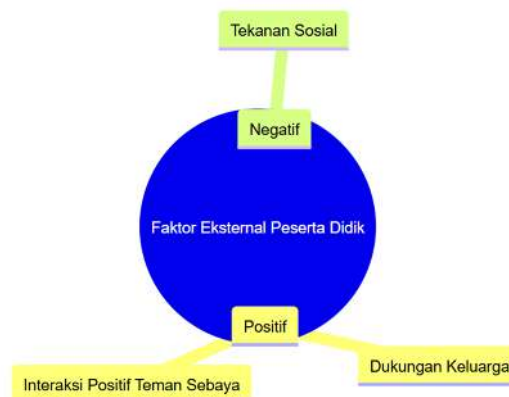


Figure 3. The Influence of External Factors on Students

### 3.4. EXTERNAL FACTORS OF TEACHERS AND SCHOOL CLIMATE

External factors related to teachers and the school climate, as explained in Figure 4, have a significant impact on student motivation. Teachers who create a comfortable classroom atmosphere, support student autonomy, and provide freedom for them to express their ideas can enhance student engagement in learning. A positive school climate, with supportive norms and values, also provides a strong foundation for motivating students. Penelitian Karacan (2022) shows that students who feel accepted in the school environment are more motivated to learn.

However, challenges also arise from the low quality of teaching and monotonous learning methods. Teachers who are unable to adapt to students' needs or fail to introduce innovation in their teaching often make students feel bored and lose interest in learning. Han & Shim (2023) emphasize that innovation in teaching methods is crucial for maintaining students' interest and motivation.

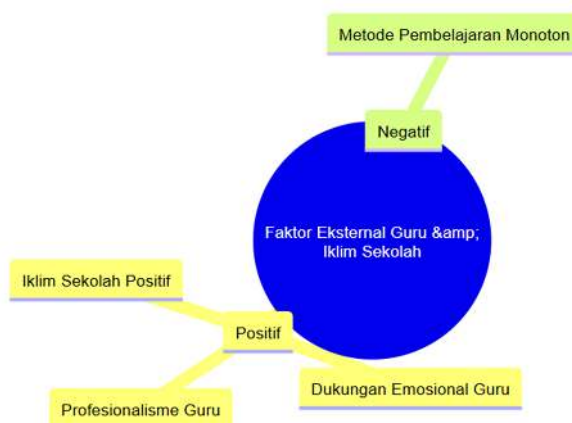


Figure 4. External Factors of Teachers and School Climate

Table 1. Comparison of Internal and External Factors

Category	Positive Factor	Negative Factor
Internal Student Factors	Intrinsic motivation	Academic stress
	Discipline and openness	Anxiety in facing difficult subjects
Teacher's Internal	Professionalism and Constructive Feedback	Lack of emotional support
Category	Positive Factor	Negative Factor
External Students	Family support	Peer pressure
	Positive interaction with peers	
External Teacher	Positive school climate	Monotonous learning methods

#### 4. CONCLUSION

Internal and external factors that influence learning motivation interact with each other in shaping students' learning experiences. Students with strong intrinsic motivation, supported by family, peers, and competent teachers, are more likely to be actively engaged in learning. On the other hand, social pressure, lack of emotional support, and poor teaching quality become major challenges that need to be addressed. A deep understanding of the dynamics of these factors enables the development of more effective strategies to enhance student motivation and overall learning quality.

This study has several limitations that should be acknowledged. First, as a qualitative case study centered at SMA Negeri Karanganyar, the findings may have limited generalizability to other educational contexts, such as vocational schools or private institutions with different socio-economic backgrounds. Second, the data collection relied heavily on participant observation, which, despite efforts to maintain objectivity, may still be susceptible to observer bias or the Hawthorne Effect, where participants alter their behavior due to being observed. Lastly, the study focused on a specific timeframe, thus it does not capture the long-term fluctuations of student motivation over a full academic year.

Future inquiries could employ longitudinal designs to track the stability and changes in student motivation across multiple semesters to understand long-term developmental patterns. Integrating quantitative data through large-scale surveys could provide a broader statistical validation of the motivational factors identified in this study.

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