

## **The Influence of Homeroom Teachers' Role as Learning Coaches on Ninth-Grade Students' Academic Grit**

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### **Abstract**

This study aims to analyze the influence of the homeroom teacher's role as a learning coach on the academic grit of ninth-grade students. In addition, this study examines the role of self-regulated learning as a mediating variable in the relationship between learning coaching and academic grit. The research employed a quantitative explanatory design complemented by qualitative analysis to deepen the interpretation of findings. Quantitative data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), while qualitative data were collected through interviews, observations, and documentation.

The results indicate that the homeroom teacher's role as a learning coach has a positive and significant effect on students' self-regulated learning and academic grit. Self-regulated learning also shows a significant influence on academic grit and functions as a mediating variable. Qualitative findings support the quantitative results, revealing that reflective and personalized learning coaching practices enhance students' learning autonomy, perseverance, and consistency in facing academic challenges. This study highlights the importance of optimizing the homeroom teacher's role as a learning coach to strengthen academic grit and improve student support management in junior secondary schools.

**Keywords:** homeroom teacher, learning coach, self-regulated learning, academic grit, junior high school students.

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### **INTRODUCTION**

Education fundamentally aims not only to enhance students' cognitive abilities but also to cultivate character and non-cognitive competencies that play a crucial role in long-term academic success (Upreti et al., 2024). Within the context of twenty-first-century education, student success is determined not solely by intellectual ability but also by the capacity to persevere through challenges, regulate emotions, and sustain commitment toward long-term learning goals. Consequently,

strengthening non-cognitive competencies has become an integral component of efforts to improve educational quality (Vittadini et al., 2022).

Among the non-cognitive competencies receiving increasing attention in contemporary educational research is **grit**. Grit is defined as the combination of perseverance and consistency in pursuing long-term goals despite encountering difficulties, setbacks, and obstacles (Datu, 2021). In educational settings, **academic grit** reflects students' ability to persist in learning, remain resilient in the face of academic challenges, and consistently maintain their interest and commitment throughout the learning process. Students with high levels of academic grit are more likely to demonstrate sustained effort, resilience when confronted with academic difficulties, and stable academic performance over time (Montas et al., 2021).

Academic grit is particularly important during lower secondary education, especially among ninth-grade students. At this educational stage, students experience a critical academic and psychosocial transition (Tang et al., 2020). They encounter increasingly demanding academic workloads, greater pressure associated with academic evaluations, and preparation for progression to higher levels of education. These circumstances require students to possess strong learning resilience, effective self-regulation, and consistent motivation to sustain their academic efforts. However, evidence from educational practice indicates that many students struggle to meet these demands effectively (Rahayu & Hardina, 2024).

Several school-based observations indicate that a considerable proportion of ninth-grade students continue to experience difficulties in maintaining learning persistence (Albright & DiNapoli, 2023). Many students tend to give up when confronted with challenging learning materials, exhibit declining academic motivation, and demonstrate inconsistency in completing assignments and achieving academic targets. These conditions suggest that students' academic grit has not yet developed optimally and requires more structured support from the school environment (Tang et al., 2020).

The relatively low level of students' academic grit cannot be separated from the student support systems implemented within schools. As educational institutions, schools play a strategic role in creating learning environments that foster character development and academic resilience (Naqvi, 2021). Schools should therefore move beyond focusing exclusively on academic instruction and establish systematic mentoring mechanisms that encourage perseverance, self-discipline, and sustained commitment to learning. Within this context, teachers assume a particularly significant role, especially those who maintain continuous and close interactions with students (Romanovska & Novak, 2024).

Alongside the growing emphasis on student-centered learning, **learning coaching** has emerged as an effective mentoring approach that promotes students' self-awareness, personal responsibility, and independent learning (Nehrusingh P, 2024). Learning coaching positions teachers as facilitators who guide students in

recognizing their strengths and challenges, reflecting on their learning experiences, and establishing realistic learning goals and strategies. Rather than functioning solely as recipients of information, students are encouraged to become active agents in directing their own learning processes (Yasin et al., 2025).

Within the context of the homeroom teacher's responsibilities, the learning coaching approach is particularly relevant because it enables homeroom teachers to perform their mentoring role more effectively and meaningfully (Kadron, 2023). Through continuous and personalized interactions, homeroom teachers acting as learning coaches can assist students in developing awareness of their educational goals, managing academic difficulties, and cultivating perseverance when facing challenges. Such an approach has considerable potential to foster resilient and consistent learning behaviors, which constitute the fundamental characteristics of academic grit (Wang, 2021).

Although the role of homeroom teachers as learning coaches is conceptually expected to contribute positively to strengthening students' academic grit, empirical evidence examining this relationship through quantitative approaches remains relatively limited, particularly at the lower secondary school level (Lofthouse et al., 2022). Existing studies have predominantly examined grit as an individual psychological characteristic or have focused on teachers' instructional roles within classroom settings. Comparatively little research has specifically investigated how the structural mentoring role of homeroom teachers influences students' academic grit (Ngo et al., 2024).

This limitation highlights the need for more comprehensive investigations into the relationship between the role of homeroom teachers as learning coaches and students' academic grit (Naqvi, 2021). A deeper understanding of this relationship is essential for informing educational policy and improving student mentoring practices within schools. Empirical evidence regarding the influence of homeroom teachers functioning as learning coaches would enable schools to design more targeted, systematic, and student-centered mentoring programs that effectively address learners' developmental needs (Kurtz, 2024).

Based on these considerations, strengthening students' academic grit represents an urgent educational priority in addressing the challenges of contemporary education. Through the implementation of learning coaching, homeroom teachers possess significant potential to cultivate students' perseverance and consistency in learning. Nevertheless, empirical evidence is required to determine the extent to which this mentoring role effectively enhances the academic grit of ninth-grade students.

Accordingly, this study aims to examine the influence of the homeroom teacher's role as a learning coach on the academic grit of ninth-grade students. The findings are expected to contribute theoretically to the advancement of educational management literature, particularly in the area of student mentoring, while also providing practical implications for schools in designing and optimizing the role of

homeroom teachers as learning coaches to strengthen students' academic resilience and promote continuous educational quality improvement.

## METHODOLOGY

This study employed a quantitative approach with an explanatory research design to examine the causal relationships among variables in the proposed research model (Duckett, 2021). This approach was selected to obtain empirical evidence regarding the influence of the homeroom teacher's role as a learning coach on students' self-regulated learning and academic grit (Manuel et al., 2024). The population of this study comprised all ninth-grade students at SMP Negeri 4 Kendari. The sample was determined using purposive sampling by considering students' involvement in the homeroom teacher mentoring program. The sample size was considered adequate for Partial Least Squares-Structural Equation Modeling (PLS-SEM), as it exceeded ten times the largest number of indicators in a single construct (Lin et al., 2020). The research variables consisted of learning coach as the exogenous variable, self-regulated learning as the mediating variable, and academic grit as the endogenous variable. Data were collected using a five-point Likert-scale questionnaire developed based on relevant theories and previous studies. Prior to structural analysis, the validity and reliability of the instrument were assessed through measurement model evaluation (Alabi & Jelili, 2022).

Data were collected by distributing questionnaires directly to respondents within the school setting. The data collection process was conducted in accordance with research ethics, including providing relevant information to respondents and ensuring the confidentiality of the data obtained (Eungoo & Hwang, 2021).

Data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS software. PLS-SEM was selected because it is suitable for testing predictive structural models, does not require normally distributed data, and is appropriate for studies with relatively limited sample sizes.

The PLS-SEM analysis consisted of two main stages: evaluation of the measurement model, or outer model, and evaluation of the structural model, or inner model. The outer model evaluation was conducted to assess convergent validity and construct reliability through factor loadings, Average Variance Extracted (AVE), Composite Reliability, and Cronbach's Alpha. Subsequently, the inner model evaluation was performed to examine the relationships among latent variables through path coefficients, R-square ( $R^2$ ) values, and significance testing using the bootstrapping procedure. The decision criteria were based on t-statistics greater than 1.96 and p-values below 0.05 at the 5% significance level (Wiguna & Dewi, 2024). Based on the conceptual framework developed in this study, the role of the learning coach is assumed to make an important contribution to shaping students' learning processes and learning character. The learning coach is expected to encourage students to manage their learning processes more independently, thereby positively influencing the development of self-regulated learning. Furthermore, students' ability to regulate and control their learning processes independently is believed to contribute to greater perseverance and consistency in facing academic challenges, as reflected in academic grit. In addition, the role of the learning coach is also expected to have a

direct positive effect on students' academic grit through mentoring, motivational reinforcement, and continuous support within the learning context. Therefore, this study proposes that the role of the learning coach positively influences self-regulated learning, self-regulated learning positively influences academic grit, and the role of the learning coach directly and positively influences students' academic grit.

## RESULTS AND DISCUSSION

### 1. Results of Quantitative Analysis Using PLS-SEM

The quantitative analysis in this study was conducted using the Partial Least Squares-Structural Equation Modeling (PLS-SEM) approach to examine the relationships between variables in the research model. The variables analyzed included the role of the homeroom teacher as a learning coach, self-regulated learning, and students' academic grit.

#### a. Evaluation of Measurement Model (Outer Model)

The results of the measurement model evaluation indicate that all indicators in each construct have factor loading values that meet the criteria ( $> 0.70$ ). The *Average Variance Extracted* (AVE) value for each construct is also above the minimum limit of 0.50, indicating that the construct is able to adequately explain the variance of its indicators. The results of the reliability test indicate that *the Composite Reliability and Cronbach's Alpha values* for all variables have met the reliability criteria ( $> 0.70$ ) (Didin H. P, 2023). Thus, the research instrument is declared valid and reliable for use in structural model analysis.

**Table 1.** Results of the Measurement Model Evaluation (Outer Model)

Construct	Indicator	Loading Factor	AVE	Composite Reliability	Cronbach's Alpha
Learning Coach	LC1	$> 0.70$			
	LC2	$> 0.70$	$> 0.50$	$> 0.70$	$> 0.70$
	LC3	$> 0.70$			
Self-Regulated Learning	SRL1	$> 0.70$			
	SRL2	$> 0.70$	$> 0.50$	$> 0.70$	$> 0.70$
	SRL3	$> 0.70$			
Academic Grit	GA1	$> 0.70$			
	GA2	$> 0.70$	$> 0.50$	$> 0.70$	$> 0.70$
	GA3	$> 0.70$			

Source: 2025 research data

#### Information

1. All indicators have a factor loading value  $> 0.70$ , thus fulfilling convergent validity.
2. The Average Variance Extracted (AVE) value for each construct is above 0.50, indicating the construct's ability to adequately explain the indicator variance.
3. The Composite Reliability and Cronbach's Alpha values for all constructs exceeded 0.70, which indicates that the research instrument is reliable.

The results of the measurement model evaluation indicate that all indicators in each construct meet the validity and reliability criteria. The factor loading values of all indicators are above the threshold of 0.70, indicating that the indicators have a strong contribution in representing the latent construct. The Average Variance Extracted (AVE) value for each construct is also above 0.50, thus meeting convergent validity. In addition, *the Composite Reliability and Cronbach's Alpha values* for all variables show good internal consistency, with values above 0.70 (Cheung et al., 2023). Thus, the research instrument is declared valid and reliable for use in testing the structural model.

#### b. Structural Model Evaluation (Inner Model)

Structural model evaluation was conducted to determine the strength of the relationship between latent variables (Yalçın, 2025). The analysis results showed that learning coaches had a positive effect on self-regulated learning, and self-regulated learning had a positive effect on students' academic grit. Furthermore, learning coaches also had a direct effect on academic grit, although the indirect effect through self-regulated learning showed a stronger contribution (Boru et al., 2025). The R-square ( $R^2$ ) value for the academic grit variable was in the moderate category, indicating that the learning coach and self-regulated learning variables together were able to substantially explain variations in students' academic grit.

**Table 2.** Results of the Structural Model Significance Test (PLS-SEM Bootstrapping)

Hypothesis	Relationship between variables	Path Coefficient	t-statistics	p-value	Decision
H1	Learning Coach → Self-Regulated Learning	Positive	$> 1.96$	$< 0.05$	Accepted
H2	Self-Regulated Learning → Academic Grit	Positive	$> 1.96$	$< 0.05$	Accepted

H3	Academic Grit Learning Coach→	Positive	> 1.96	< 0.05	Accepted
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Source: 2025 research data

#### Information

1. A t-statistics value  $> 1.96$  indicates that the relationship between variables is significant at the 5% significance level.
2. A p-value  $< 0.05$  confirms that the research hypothesis is accepted.
3. The path coefficient is positive, indicating the direction of the relationship is in line with the research conceptual framework.

The results of the significance test using the bootstrapping procedure in the PLS-SEM analysis showed that all main paths in the research model had t-statistics values above 1.96 and p-values below 0.05 (Hossan et al., 2020). These findings indicate that the relationship between the role of homeroom teachers as learning coaches on self-regulated learning, the influence of self-regulated learning on academic grit, and the direct influence of learning coaches on students' academic grit are statistically significant. Thus, all hypotheses proposed in this study are accepted.

## 2. Qualitative Analysis Results

Qualitative analysis was conducted to deepen and explain the quantitative findings of PLS-SEM. Data were obtained through in-depth interviews, observations, and documentation with homeroom teachers, students, and guidance counselors.

### a. The Role of the Homeroom Teacher as a Learning Coach

The qualitative analysis results show that homeroom teachers act as learning coaches through a personal and reflective approach. Homeroom teachers actively build positive relationships with students, facilitate reflection on learning difficulties, and help students set realistic academic goals (Provost, 2022). This coaching practice is carried out informally but continuously in daily interactions. This strengthens the PLS-SEM results which indicate that learning coaches have a significant influence on students' self-regulated learning and academic grit (Obeng et al., 2025).

### b. Strengthening Students' Self-Regulated Learning

The mentoring of homeroom teachers encourages students to be more capable of managing their learning process independently. Students demonstrate the ability to plan learning, manage time, monitor progress, and evaluate learning outcomes. Self-regulated learning develops as a result of the coaching process that emphasizes self-awareness and responsibility for learning. This qualitative analysis explains the mediating relationship mechanism found in the PLS-SEM analysis, where self-regulated learning acts as a connecting variable between learning coach and academic grit.

### c. Strengthening Students' Academic Grit

Observations and interviews showed increased student persistence and consistency in facing academic challenges. Students became more resilient

when facing learning difficulties, did not give up easily, and had a stronger commitment to long-term academic goals. This reflects a strengthening of two key dimensions of academic grit: *perseverance of effort* and *consistency of interest*. (Andrianie et al., 2025).

### 3. Integration of Quantitative and Qualitative Results

The combination of PLS-SEM results and qualitative analysis indicates that learning coaches play a strategic role in improving students' academic grit, both directly and through strengthening self-regulated learning. Quantitative results provide empirical evidence of the relationships between variables, while qualitative results explain the processes and contexts in which these relationships occur. This integration strengthens the validity of the research findings and demonstrates that optimizing the role of homeroom teachers as learning coaches is an effective approach in managing student mentoring in junior high schools (Kadroon, 2023).

This discussion provides a comprehensive interpretation of the research findings by integrating the quantitative and qualitative results and situating them within the broader context of educational theory and practice. The discussion focuses on the influence of the homeroom teacher's role as a learning coach on the self-regulated learning and academic grit of ninth-grade students.

### **Instrument Validity and Reliability as the Basis for the Robustness of the Research Findings**

The measurement model evaluation indicated that all constructs in this study met the required validity and reliability criteria. The factor loadings of all indicators exceeded 0.70, indicating that each indicator contributed strongly to representing the latent construct being measured. In addition, the Average Variance Extracted (AVE) values for all constructs exceeded 0.50, suggesting that the variance of the indicators was explained more by their respective constructs than by measurement error.

The Composite Reliability and Cronbach's Alpha values, which were above the threshold of 0.70, demonstrated good internal consistency of the research instrument. Therefore, the instrument used in this study can be considered capable of measuring the homeroom teacher's role as a learning coach, self-regulated learning, and academic grit accurately and reliably. This condition provides an important foundation for testing the structural relationships among variables, as structural model results can only be validly interpreted when the measurement instrument meets adequate quality standards.

### **The Effect of the Homeroom Teacher's Role as a Learning Coach on Self-Regulated Learning**

The structural model analysis showed that the homeroom teacher's role as a learning coach had a positive and significant effect on students' self-regulated

learning. This finding indicates that the more effectively homeroom teachers perform their role as learning mentors, the stronger students' ability to manage their own learning processes becomes.

This finding can be explained through the characteristics of the learning coaching approach, which emphasizes reflection, self-awareness, and student responsibility in learning. Homeroom teachers who function as learning coaches do not merely provide direction or control; rather, they assist students in setting learning goals, planning strategies, monitoring progress, and evaluating learning outcomes. This process directly strengthens the core dimensions of self-regulated learning, including learning planning, time management, self-monitoring, and self-evaluation.

The qualitative findings support these quantitative results. Interviews and observations revealed that homeroom teachers actively developed personal communication with students, facilitated reflective discussions about learning difficulties, and encouraged students to take responsibility for their academic decisions (Wahid & Raj, 2025). This approach creates a mentoring environment that supports the development of students' learning autonomy. Thus, self-regulated learning does not develop spontaneously but through a continuous and structured mentoring process (Saftari et al., 2025).

### **The Effect of Self-Regulated Learning on Students' Academic Grit**

The findings showed that self-regulated learning had a positive and significant effect on students' academic grit. This result confirms that students' ability to manage their own learning process contributes directly to their perseverance and consistency in facing academic challenges.

Self-regulated learning enables students to understand that learning difficulties are part of the process of achieving academic goals. Students who are able to plan, monitor, and evaluate their learning tend to demonstrate stronger resilience when facing failure or academic obstacles. They are less likely to give up and are more capable of adjusting their learning strategies while maintaining commitment to long-term goals.

The findings also indicate that students who received learning coaching support from homeroom teachers demonstrated meaningful changes in their learning attitudes (Ainley & Schulz, 2025). Students became more disciplined in managing their study time, more reflective about their learning outcomes, and more consistent in completing academic tasks. These changes reflect the strengthening of the two main dimensions of academic grit: perseverance of effort and consistency of interest. Therefore, self-regulated learning functions as a psychopedagogical mechanism that connects homeroom teacher mentoring with the development of students' academic grit (Zhou & Hou, 2025).

## The Direct Effect of the Homeroom Teacher's Role as a Learning Coach on Academic Grit

In addition to the indirect effect through self-regulated learning, the findings also showed that the homeroom teacher's role as a learning coach had a significant direct effect on students' academic grit. This finding indicates that mentoring interactions conducted by homeroom teachers influence not only how students manage their learning but also their mental attitudes and psychological resilience.

Personal, empathetic, and continuous mentoring enables homeroom teachers to become significant figures in students' academic lives. Emotional support, motivational reinforcement, and constructive feedback from homeroom teachers contribute to the development of students' self-confidence and persistence (Ramaila, 1 C.E.). This is reflected in the qualitative findings, which showed that students felt more confident, more willing to face challenges, and less likely to give up when encountering academic difficulties. These findings confirm that the homeroom teacher's role as a learning coach is not merely technical or administrative but also has strong pedagogical and psychological dimensions in shaping students' learning character.

### Integration of Quantitative and Qualitative Findings

The integration of quantitative and qualitative findings shows consistency and mutual reinforcement across the results. The quantitative analysis provides empirical evidence regarding the strength and direction of the relationships among variables, whereas the qualitative analysis explains the processes, contexts, and dynamics underlying these relationships.

Overall, the findings demonstrate that the homeroom teacher's role as a learning coach contributes significantly to improving students' academic grit, both directly and indirectly through the strengthening of self-regulated learning. This finding confirms that optimizing the role of homeroom teachers is an effective strategy for managing student mentoring in lower secondary schools.

## CONCLUSION

Based on the research findings and discussion, it can be concluded that the role of the homeroom teacher as a learning coach has a significant influence on the academic grit of ninth-grade students. This influence occurs not only directly but also indirectly through the strengthening of students' self-regulated learning.

The measurement model evaluation showed that the research instrument met the required validity and reliability criteria, indicating that the findings can be interpreted with confidence. The structural model analysis demonstrated that the homeroom teacher's role as a learning coach positively influences self-regulated learning, self-regulated learning positively influences academic grit, and the

homeroom teacher's role as a learning coach also has a direct positive effect on students' academic grit.

The qualitative findings further support the quantitative results by showing that reflective, personal, and continuous mentoring by homeroom teachers encourages students to become more independent in learning, more persistent in facing challenges, and more consistent in achieving their academic goals. Therefore, optimizing the role of homeroom teachers as learning coaches represents a relevant and effective strategy for strengthening students' learning character and improving the quality of education in lower secondary schools.

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