



## Self-Regulated Learning Strategies, Engagement, and Grammar Competence of Senior High School Learners

Arah C. Jumahali<sup>1\*</sup>, Maribeth M. Cabrejas, PhD<sup>2</sup><sup>1, 2</sup> Liceo de Cagayan University, Cagayan de Oro City, Philippines\*Corresponding Author e-mail: [arahjumahali@gmail.com](mailto:arahjumahali@gmail.com)**Received:** 27 October 2025**Revised:** 29 November 2025**Accepted:** 04 December 2025**Available Online:** 06 December 2025**Volume IV (2025), Issue 4, P-ISSN – 2984-7567; E-ISSN - 2945-3577**<https://doi.org/10.63498/etcor504>

### Abstract

**Aim:** This study investigated the relationship among self-regulated learning strategies, classroom engagement, and grammar competence of senior high school learners ( $N = 362$ ) in a private university in Cagayan de Oro City.

**Methodology:** A predictive correlational design was used. Data were collected using an adapted 5-point Likert questionnaire on self-regulated learning (planning, monitoring, evaluating) and classroom engagement (cognitive, behavioral, emotional), and a researcher-made grammar test based on Yan (2007). Proportionate stratified random sampling was applied. Descriptive statistics summarized scores; Pearson product-moment correlation examined bivariate relationships; and multiple regression identified predictors of grammar competence.

**Results:** Overall, respondents reported moderate-to-high use of self-regulated learning strategies (highest: monitoring) and high cognitive and emotional engagement (behavioral engagement lower). Grammar competence was assessed as *good* overall, with strongest performance in verb tenses and weakest in prepositions and subject-verb agreement. Pearson correlations showed small but significant positive relationships between grammar competence and planning ( $r = .288$ ,  $p < .001$ ), monitoring ( $r = .274$ ,  $p < .001$ ), evaluating ( $r = .231$ ,  $p < .001$ ), cognitive engagement ( $r = .208$ ,  $p < .001$ ), and emotional engagement ( $r = .206$ ,  $p < .001$ ); behavioral engagement was not significant ( $r = .079$ ,  $p = .135$ ). Multiple regression produced a significant model,  $R = .325$ ,  $R^2 = .105$ ,  $F(6, 355) = 6.97$ ,  $p < .001$ ; planning ( $B = 2.51$ ,  $p = .008$ ) and monitoring ( $B = 2.74$ ,  $p = .047$ ) were the only significant predictors, explaining 10.5% of the variance in grammar competence.

**Conclusion:** Learners who set goals and actively monitor their grammar learning tend to achieve higher grammatical proficiency. Findings underscore the value of integrating self-regulation training and engagement-focused strategies into grammar instruction to support student outcomes.

**Keywords:** Grammar competence; engagement; self-regulated learning strategies

### INTRODUCTION

Mastery of grammar has been recognized as essential for effective communication, academic achievement, and participation in various social contexts, as it enables learners to construct meaning clearly and accurately (Ly, 2020). This priority aligns with Sustainable Development Goal 4, which emphasizes equitable and quality education for all (United Nations, 2015). Despite these global commitments, scholars have observed a continuing decline in grammar proficiency among students worldwide (Jones, 2020). This concern has prompted renewed attention to the factors that influence learners' grammatical performance.

In the ASEAN region, recent analyses have reported persistent challenges in students' grammatical accuracy and overall communicative competence (Ozaki, 2022). This concern is also evident in the Philippine context, where senior high school learners continue to struggle with grammar, particularly in academic writing (Joven et al., 2025). Post-pandemic evaluations further revealed that prolonged remote learning contributed to weakened study habits and reduced mastery of foundational language skills (Bernardo, 2023). These findings highlight the need to examine learner-related variables that may support or hinder grammar development in senior high school contexts.

Self-regulated learning (SRL) has been identified as a crucial factor that shapes how effectively students manage their learning through strategies such as goal setting, self-monitoring, and time management (Schunk & Greene, 2018). Student engagement has also been shown to influence learning outcomes by sustaining motivation,

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effort, and active participation in academic tasks (Reeve, 2019). When students display strong SRL skills and high levels of engagement, they are more likely to invest time and cognitive resources in developing language skills, including grammar (Kahu & Nelson, 2020). Although these constructs are theoretically connected, empirical research combining grammar competence, SRL, and engagement within senior high school settings remains limited in the Philippine context.

The review of literature indicated three major gaps. First, few local studies have examined grammar competence in relation to both SRL and classroom engagement, resulting in limited understanding of how these learner variables jointly influence linguistic outcomes (Ariola & Dizon, 2021). Second, predictive approaches that determine the extent to which SRL and engagement explain variations in grammar competence are scarce in secondary education research (Tran & Duong, 2021). Third, context-specific investigations focusing on senior high school learners, particularly those studying in private schools in rapidly developing urban areas, remain insufficient (Education First, 2023).

To address these gaps, the present study examined the relationship between self-regulated learning strategies, classroom engagement, and grammar competence among senior high school learners using a predictive correlational design. By employing multiple regression analysis, the study generated an evidence-based model explaining the learner factors associated with grammar performance. The findings aimed to contribute to English language pedagogy by offering insights that may support the design of SRL-informed grammar instruction, strengthen engagement-oriented classroom practices, and align teaching strategies with current curriculum reforms such as the MATATAG initiative, which emphasizes foundational skills and learner agency (DepEd, 2023).

### Review of Related Literature and Studies

Self-Regulated Learning (SRL) refers to the process in which learners take control of their learning by setting goals, monitoring progress, and regulating their efforts to achieve academic objectives (Zimmerman, 2022). It includes cognitive, metacognitive, motivational, and behavioral components that shape how students engage with learning environments (Panadero, 2017). Effective SRL involves both individual strategies and the ability to adapt these strategies across different learning contexts (Järvelä et al., 2016). Research has shown that SRL strategies improve academic performance in various educational settings (Chen & Huang, 2022). A study of students in a distance education university in China found that self-evaluation and metacognitive regulation strongly predicted academic progress (Zhang et al., 2022). Instructional methods also influence SRL development, as students in flipped classrooms demonstrated higher levels of self-regulation compared with peers in traditional classrooms (Hwang & Lai, 2020). Experiments with middle school learners further indicated that flipped-classroom environments improved cognitive and metacognitive self-regulation, including planning and monitoring skills (Sletten et al., 2020).

Student Engagement refers to learners' interest, motivation, and active participation in learning activities (Briggs, 2015). It is commonly described in three dimensions: behavioral, emotional, and cognitive engagement (Wang & Eccles, 2016). Behavioral engagement involves participation in academic tasks, emotional engagement reflects attitudes and feelings toward learning, and cognitive engagement concerns the mental effort invested in learning (Wang & Eccles, 2016). According to Bowden et al. (2021), higher behavioural engagement among tertiary students predicts greater self-efficacy and self-esteem; the study conceptualizes engagement in four dimensions — behavioural, cognitive, social, and affective — and links them to broader indicators of student success. Self-regulation and engagement are linked, as students with stronger SRL tend to engage more actively in learning activities (Winne & Hadwin, 2018). Interactive teaching methods, such as collaborative learning and technology integration, enhance student engagement (Mandernach et al., 2017). Positive teacher-student relationships also foster engagement and improve learning outcomes (Hattie & Timperley, 2019). In online learning, engagement may decline due to limited social interaction and unfamiliarity with digital tools, requiring educators to create stimulating online environments (Campeanu & Călin, 2023). Strategies to enhance engagement include active learning opportunities, thoughtful technology integration, and continuous monitoring of student engagement (Baker et al., 2019).

Grammar Competence is a foundational skill that enables learners to communicate ideas accurately and construct grammatically correct sentences (Sukesi et al., 2019). Students with strong grammar skills can express their thoughts more clearly in writing and speaking (Pamuji, 2020). A study at Basilan State College found that freshmen students with limited grammar competence still performed satisfactorily in English courses, and grammar ability moderately correlated with overall academic performance (Alqahtani, 2022). Recent international assessments by EF Education First show that the Philippines' ranking in English proficiency has fluctuated, reflecting persistent variability in English language skills nationwide (EF Education First, 2023). Weak grammar usage may reduce perceived competence and professionalism, which may in turn affect employability (Bleske-Rechek et al., 2019).



Targeted grammar instruction improves proficiency and is positively associated with academic success (Andilab & Amante, 2024). These findings indicate that grammar competence is influenced by both instruction and learners' self-regulation and engagement, highlighting the need to examine these variables collectively.

The reviewed literature shows that self-regulated learning supports active engagement, which in turn facilitates the development of academic skills, including grammar competence. Despite evidence on the importance of SRL and engagement individually, few studies in the Philippine senior high school context have examined how these factors together predict grammar performance. Furthermore, research integrating self-regulated learning, student engagement, and grammar competence using predictive models is scarce. This gap highlights the need for context-specific studies that explore the combined effects of SRL and engagement on grammar competence, particularly in post-pandemic learning environments.

### Theoretical Framework

Self-Determination Theory (SDT), developed by Deci and Ryan, emphasizes the importance of intrinsic motivation in fostering autonomous learning behaviors (Ryan & Deci, 2019). According to SDT, motivation is influenced by three fundamental psychological needs: autonomy, competence, and relatedness (Vansteenkiste et al., 2020). When these needs are satisfied, students are more likely to engage deeply and invest effort into learning tasks, which is crucial for developing complex skills like grammar. Autonomy, in particular, fosters self-regulated strategies as students take ownership of their learning goals, set personal standards, and seek mastery over grammar concepts (Niemiec & Ryan, 2021).

The Social Cognitive Theory of Self-Regulation, often associated with Zimmerman, views self-regulation as a cyclic process where students proactively set goals, monitor their progress, and adapt strategies as needed (Schunk & DiBenedetto, 2020). Recent studies continue to support Zimmerman's three-phase model of self-regulation—forethought, performance, and self-reflection—emphasizing that these stages guide learners in planning, monitoring, and evaluating their learning processes (Alotaibi, 2022). In terms of grammar competencies, this cycle enables the students to plan how to approach grammar exercises, evaluate their understanding, and modify strategies to improve. According to the SCT of Self-Regulation, grammar competency development is not passive but active engagement in planning, self-monitoring, and reflection in mastering language.

Social Cognitive Theory (SCT) emphasizes the relationship among personal factors, behaviors, and environmental factors (Bandura, 1986). One of the most salient elements of this model is self-efficacy, which is defined as a person's belief regarding their ability to succeed at specific tasks. High levels of self-efficacy have been found to enhance student engagement and persistence; students who believe in their capabilities to learn grammar use more self-regulated strategies (Schunk & Usher, 2019). This theoretical model further suggested that grammar competencies can be developed by a model, constructive feedback, and motivational support, and students are likely to show more perseverance when completing grammar-related activities to master if they believe so. Bandura's SCT also underlines the role of social interactions; therefore, support from peers and instructors plays a role in developing grammar skills.

Integrating SDT, SCT of Self-Regulation, and Bandura's SCT provides a holistic framework to examine how intrinsic motivation, self-regulated strategies, and self-efficacy interact to enhance student engagement and grammar competence. This approach highlights how motivation, cognitive strategies, and social support collectively contribute to developing grammar skills in senior high school learners.

### Conceptual Framework

The conceptual framework of this study is built on three primary constructs: Self-Regulated Strategies, Student Engagement, and Grammar Competence, which together explain how students' learning behaviors influence grammar skills.

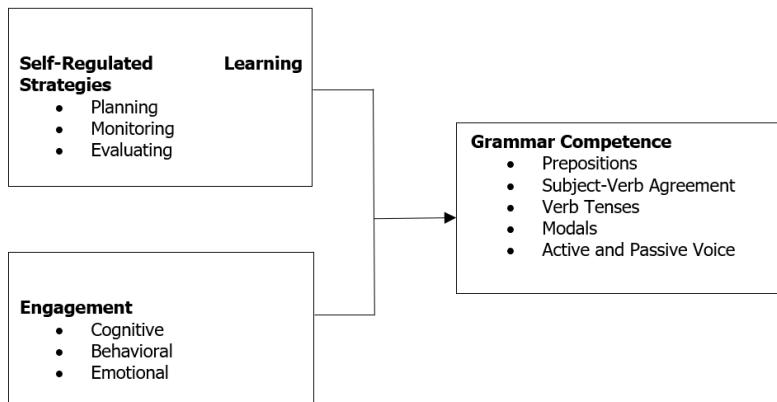
Self-Regulated Learning Strategies include planning, monitoring, and evaluating. Planning involves setting goals and choosing strategies for learning grammar; monitoring tracks progress, and evaluating reflects on outcomes to improve performance.

Student Engagement consists of cognitive, behavioral, and emotional dimensions. Cognitive engagement refers to mental effort in mastering grammar, behavioral engagement involves participation in learning activities, and emotional engagement reflects interest and motivation toward grammar tasks.

Grammar Competence represents students' ability to construct correct sentences and communicate ideas clearly. The framework shows how self-regulation and engagement collectively support the development of grammar skills in senior high school learners.



**Figure 1.** The schematic diagram hypothesizes the relationship between the independent variable and the dependent variable.



### Statement of the Problem

Mastery of grammar is essential for clear communication and academic success; however, many learners continue to struggle with core grammatical structures such as verb tenses, subject-verb agreement, and sentence construction. These persistent challenges indicate deeper issues related to how students regulate their learning and engage in classroom activities. Although global initiatives such as the United Nations' Sustainable Development Goal (SDG) 4 promote quality education and literacy, many learners still fall short of expected grammar proficiency levels. Research has shown that self-regulated learning (SRL) strategies and classroom engagement can improve academic achievement, yet limited studies have examined their combined influence on grammar competence, particularly among senior high school learners in the Philippine context. This gap underscores the need to investigate how SRL strategies and engagement relate to grammar performance. Addressing this problem will provide empirical evidence that can support instructional improvements and enhance grammar learning outcomes in senior high school settings.

### General Objective:

To investigate the relationship among self-regulated learning strategies, classroom engagement, and grammar competence of senior high school learners.

### Specific Objectives:

1. To assess how frequently and effectively students utilize planning, monitoring, and evaluating strategies as part of their self-regulated learning behaviors in grammar learning.
2. To identify the degree to which students are cognitively, behaviorally, and emotionally engaged in grammar-related classroom activities.
3. To measure the students' proficiency in key areas of English grammar, including prepositions, subject-verb agreement, verb tenses, modals, and active-passive voice.
4. To determine whether and to what extent students' use of self-regulated learning strategies and their classroom engagement are significantly related to their grammar competence.
5. To determine the predictive power of self-regulated learning strategies and classroom engagement variables on learners' grammar competence and identify which variable serves as the strongest predictor.

### Research Questions

1. To what extent do senior high school learners apply self-regulated learning strategies in terms of:
  - 1.1 planning,
  - 1.2 monitoring, and
  - 1.3 evaluating?
2. What is the learners' level of classroom engagement in terms of:
  - 2.1 cognitive,

- 2.2 behavioral, and
- 2.3 emotional engagement?
3. What is the level of learners' grammar competence in terms of:
  - 3.1 prepositions,
  - 3.2 subject-verb agreement,
  - 3.3 verb tenses,
  - 3.4 modals, and
  - 3.5 active and passive voice?
4. Is there a significant relationship between learners' grammar competence and:
  - 4.1 self-regulated learning strategies; and
  - 4.2 classroom engagement?
5. Which among the variables, singly or in combination, best predict senior high school learners' grammar competence?

## Null Hypotheses

H<sub>01</sub>: There is no significant relationship between learners' grammar competence and their self-regulated learning strategies and classroom engagement.

$H_02$ : None of the variables, singly or in combination, significantly predict grammar competence.

## METHODS

## Research Design

**Research Design:** This study utilized a predictive correlational research design to examine the relationships among self-regulated learning strategies, student engagement, and grammar competence. This design allowed the researchers to determine the extent to which the variables were interrelated and to predict grammar competence based on self-regulation and engagement (Tabachnick & Fidell, 2019). In this study, data were collected from senior high school learners, and correlation and multiple regression analyses were conducted to identify patterns and predict how self-regulated strategies and engagement influenced grammar competence (Hill, 2022).

## Population and Sampling

The participants of this study were officially enrolled senior high school students from one of the private universities in Cagayan de Oro City, which had a total population of 5,897 students. Students were drawn from all strands and tracks offered by the university: Humanities and Social Sciences (HUMSS), Science, Technology, Engineering, and Mathematics (STEM), Accountancy, Business, and Management (ABM), Technical Vocational Livelihood Track (TVL), and Arts and Design (A&D). The study employed proportionate stratified random sampling to ensure that each strand was adequately represented in the final sample. Stratification was necessary because some strands had significantly fewer students than others, minimizing bias and improving the precision and generalizability of the findings (Creswell & Creswell, 2018).

The sample size ( $n = 362$ ) was determined using the Cochran formula, with a Z-score of 1.96 (95% confidence level),  $p = 0.5$  (maximum variability), and a margin of error of 0.05. Students were first classified into their respective strands using enrollment records, and the proportional sample size for each strand was computed. Within each strand, students were randomly selected using a lottery method.

## Instruments

Data for this study were collected using two instruments: a 5-point Likert scale questionnaire and a researcher-made grammar test. The questionnaire, adapted from Mendoza and Cabrejas (2023), measured self-regulated learning strategies and student engagement, consisting of 30 items for each construct. Self-regulated learning strategies included 10 items each for planning, monitoring, and evaluating, while engagement comprised 10 items each for cognitive, behavioral, and emotional engagement. The grammar test, adapted from Yan (2007), assessed students' competence in five areas: prepositions, subject-verb agreement, verb tenses, modals, and active/passive voice, with 10 items per area, totaling 50 items. Responses to the questionnaires were scored on a 5-point Likert scale, while grammar test items were scored as 1 for correct and 0 for incorrect, and overall competence levels were categorized as Excellent, Good, Fair, Needs Improvement, or Poor. Both instruments underwent content validation by three experts in language education, research, and linguistics, who evaluated the items for clarity,

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relevance, and alignment with the study's objectives, providing recommendations that were incorporated into the final instruments. The revised instruments were then pilot-tested with a small group of students from a similar population to ensure clarity and appropriateness. Reliability testing using Cronbach's alpha yielded 0.982 for the self-regulated learning strategies questionnaire, 0.976 for the engagement questionnaire, and 0.880 for the grammar test, with weak items removed to improve overall reliability. The validated and reliable instruments were used to gather data, which were subsequently analyzed using Pearson Product-Moment Correlation and Multiple Regression to examine relationships and predictive effects between self-regulated learning strategies, engagement, and grammatical competence.

## Data Collection

Data collection: Data were collected after the instruments were finalized and validated. The questionnaires and grammar tests were administered at the start of each class session. Each session began with a brief orientation explaining the instructions and how to complete the instruments. Participants were given sufficient time to answer the questionnaires and complete the grammar test, while the researchers were present to clarify any questions or concerns. Completed questionnaires and tests were collected immediately after each session for scoring and analysis, ensuring consistent administration across all groups.

## Statistical Techniques

Data were analyzed to address the specific research questions. For Research Question 1 ("To what extent do senior high school learners apply self-regulated learning strategies in terms of planning, monitoring, and evaluating?"), means and standard deviations were computed for each component to determine the extent of strategy application. For Research Question 2 ("What is the learners' level of classroom engagement in terms of cognitive, behavioral, and emotional engagement?"), means and standard deviations were calculated for each engagement dimension. For Research Question 3 ("What is the level of learners' grammar competence in terms of prepositions, subject-verb agreement, verb tenses, modals, and active and passive voice?"), means and standard deviations were computed for each grammar area. For Research Question 4 ("Is there a significant relationship between learners' grammar competence and self-regulated learning strategies and classroom engagement?"), Pearson Product-Moment Correlation was applied to determine the strength and direction of relationships between grammar competence and the independent variables. For Research Question 5 ("Which among the variables, singly or in combination, best predict senior high school learners' grammar competence?"), multiple regression analysis was conducted to identify the predictive contribution of self-regulated learning strategies and engagement components on grammar competence. Each statistical technique was applied directly to the collected data to generate results aligned with the corresponding research questions.

## Ethical Considerations

The study was reviewed and approved by the University Research Ethics Committee to ensure adherence to ethical standards in research. Before administering the instruments, the researcher obtained approval from key school officials, including the principal and the vice president for research and extension. This process involved submitting formal letters detailing the study's purpose, methodology, and schedule. After approval, the researcher coordinated with administrators and teachers to schedule sessions with participants. During these sessions, students were provided with informed consent forms and received clear explanations of the study's objectives, procedures, and ethical considerations. Participants were assured that their involvement was voluntary, their responses would remain confidential and anonymous, and they could withdraw at any time without penalty. The study followed national and institutional ethical guidelines.

## RESULTS and DISCUSSION

This section presents, analyzes, and interprets the data gathered from the survey questionnaires and grammar test to determine the relationship among self-regulated learning strategies, engagement, and grammatical competence.

## **Extent of Senior High School Learners' Application of Self-Regulated Learning Strategies**

Table 1 presents the mean and standard deviation scores reflecting senior high school students' use of self-regulated learning (SRL) strategies in grammar tasks. The overall mean fell within the "agree" range, indicating a

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generally positive application of SRL strategies such as planning, monitoring, and evaluating. However, the relatively high standard deviation suggested considerable variation among students in the consistency of strategy use.

**Table 1**

*Standard Deviation and Mean Distribution of the extent of Senior High School Learners' application of Self-Regulated Learning Strategies*

Sub-variables	N	Mean	SD	Description	Interpretation
Planning	362	3.75	0.99	Agree	Applied
Monitoring	362	3.92	0.94	Agree	Applied
Evaluating	362	3.82	0.93	Agree	Applied
Over-all	362	3.83	0.95	Agree	Applied

Legend:

Scale	Range	Description	Interpretation
5	4.51-5.00	Strongly Agree	Strongly Applied
4	3.51-4.50	Agree	Applied
3	2.51-3.50	Slightly Agree	Moderately Applied
2	1.51-2.50	Disagree	Slightly Applied
1	1.00-1.50	Strongly Disagree	Did Not Apply

Among the three components, monitoring obtained the highest mean ( $M = 3.92$ ,  $SD = 0.94$ ), indicating that students are most engaged in tracking and adjusting their grammar-related performance. Evaluating followed ( $M = 3.82$ ,  $SD = 0.93$ ), reflecting students' tendency to assess the quality and correctness of their outputs. Planning received the lowest mean ( $M = 3.75$ ,  $SD = 0.99$ ), suggesting relatively less focus on goal-setting and preparatory strategies before engaging in grammar tasks.

The findings of this study align with Teng and Zhang (2021) emphasized the critical role of monitoring and evaluating strategies in improving learners' writing performance, noting that students who consistently review their progress and assess their output against language goals tend to exhibit stronger grammatical accuracy and coherence. Similarly, Wardani et al. (2023) found a significant relationship between self-regulated learning strategies and grammar achievement, highlighting that learners who actively check and refine their work tend to perform better in grammar tasks. Additionally, Agudelo-Correa (2020) demonstrated that integrating planning, monitoring, and evaluation in the writing process significantly enhances linguistic outcomes among English as a Foreign Language learners, resulting in improved structure and reduced errors.

The results suggest that encouraging students to actively monitor and evaluate their grammar learning can enhance competence and confidence in language use. Teachers may consider designing activities that strengthen planning strategies, such as goal-setting exercises and structured preparatory tasks, to address the relatively lower engagement in planning.

### The Participants' Level of Engagement in the Classroom

Table 2 presents the mean and standard deviation scores for students' classroom engagement. The overall mean fell within the "agree" range, indicating a generally high level of engagement among respondents. However, the relatively high standard deviation suggested notable variation, with some students consistently engaged across different dimensions and others showing selective engagement based on task or context.

**Table 2**

*Standard Deviation and Mean Distribution for the Level of Senior High School Learners' Engagement in the Classroom*

Sub-variables	N	Mean	SD	Description	Interpretation
Cognitive engagement	362	3.90	0.97	Agree	Highly Engaged
Behavioral engagement	362	3.55	1.05	Agree	Highly Engaged
Emotional engagement	362	3.90	0.88	Agree	Highly Engaged



Overall Engagement		362	3.78	0.97	Agree	Highly Engaged
Legend:						
Scale	Range	Description	Interpretation			
5	4.51-5.00	Strongly Agree	Very Highly Engaged			
4	3.51-4.50	Agree	Highly Engaged			
3	2.51-3.50	Slightly Agree	Moderately Engaged			
2	1.51-2.50	Disagree	Least Engaged			
1	1.00-1.50	Strongly Disagree	Not Engaged			

Among the three dimensions, cognitive engagement and emotional engagement were highest ( $M = 3.90$ ), indicating that students demonstrate strong mental investment in learning grammar and maintain a positive emotional attitude toward the subject. Behavioral engagement was slightly lower ( $M = 3.55$ ), implying that while students are mentally and emotionally engaged, their actual participation in classroom activities such as volunteering for grammar-related events may be less consistent. This discrepancy could be influenced by confidence, access to opportunities, or personal learning preferences.

These findings align with Wang et al. (2023), who found that cognitive and emotional engagement were positively correlated with improved performance in areas such as memorization, comprehension, and application of knowledge. This reinforces the idea that students' internal investment—in terms of both thinking processes and emotional connection—is critical for effective learning. Hasanov et al. (2021) similarly found that cognitive and emotional engagement are significant predictors of academic success, with behavioral engagement contributing to a lesser extent.

The results suggest that fostering cognitive and emotional engagement is critical for enhancing grammar competence. Teachers should design differentiated instructional strategies that actively engage students mentally and emotionally, while also providing opportunities to strengthen behavioral participation in classroom activities.

### Participants' Grammar Competence

Table 3 presents the mean and standard deviation scores related to students' grammar competence. The overall mean suggested that students generally possess a good level of grammar proficiency. However, the relatively high standard deviation indicated substantial variability in performance, possibly due to differences in prior knowledge, grammar exposure, or learning strategies.

**Table 3**

*Mean Distribution and Standard Deviation of the Level of Senior High School Learners' Grammar Competence*

	N	Mean	SD	Interpretation
Preposition	362	6.59	2.02	Fair
Subject-Verb Agreement	362	6.38	2.28	Fair
Verb Tenses	362	7.85	2.65	Good
Modals	362	7.12	2.18	Good
Active and Passive Voice	362	7.41	2.54	Good
Grammar Competence (Total)	362	35.37	9.67	Good

Legend:

Score Range	Competence Level
9-10	Excellent
7-8	Good
5-6	Fair
3-4	Needs Improvement
0-2	Poor

Among the five grammar categories, students performed best in Verb Tenses ( $M = 7.85$ ,  $SD = 2.65$ ), indicating familiarity with expressing time-related concepts. This was followed by Active and Passive Voice ( $M = 7.41$ ,  $SD = 2.54$ ), showing students' ability to transform sentence structures while maintaining meaning. Modals received a moderately high mean ( $M = 7.12$ ,  $SD = 2.18$ ), reflecting a fair understanding of expressing necessity, possibility, and permission. In contrast, Prepositions ( $M = 6.59$ ,  $SD = 2.02$ ) and Subject-Verb Agreement ( $M = 6.38$ ,  $SD = 2.28$ ) had



the lowest mean scores, suggesting persistent challenges in maintaining correct word relationships and grammatical agreement, which could affect sentence clarity and accuracy.

These findings are supported by previous research. Hidayatullah et al. (2017) found that students frequently committed errors in subject-verb agreement, with omission, misinformation, and addition being the most common types. Hasanah and Habibullah (2020) observed similar results in descriptive writing tasks, where students often made errors in grammatical structure, particularly in subject-verb agreement and sentence formation. Chele (2015) also reported frequent subject-verb agreement errors in students' written English, especially when using complex sentences. Prayuda (2020) identified misinformation errors as the most dominant error type in the use of the simple present tense among university students, aligning with the challenges noted in verb tense use. Nasution and Amri (2021) confirmed that omission and addition errors in subject-verb agreement were common in students' speaking performances, reflecting ongoing difficulty in mastering grammar rules in both spoken and written communication.

The findings highlight the need for targeted grammar instruction, particularly in areas such as prepositions and subject-verb agreement. Educators may consider focused exercises, formative assessments, and corrective feedback to address these gaps and promote more consistent grammatical accuracy across both written and spoken communication.

#### **Significant Relationship between Learners' Grammar Competence and their Self-Regulated Learning Strategies, and Engagement**

**Table 4**

*Results of Pearson R Correlation Analysis for the Significant Relationship among Senior High School Learners' Grammar Competence, Self-Regulated Learning Strategies, and Engagement*

Variables	n	R	Effect Size	P-value	Interpretation
Planning	362	.288	Small	.001	Significant
Monitoring	362	.274	Small	.001	Significant
Evaluating	362	.231	Small	.001	Significant
Self-Regulated Learning Strategies	362	.288	Small	.001	Significant
Cognitive engagement	362	.208	Small	.001	Significant
Behavioral engagement	362	.079	Small	.135	Not Significant
Emotional engagement	362	.206	Small	.001	Significant
Engagement in the Classroom	362	.182	Small	.001	Significant

*Legend: p<.05 is significant and p>.05 is not significant*

Correlation Coefficient Range      Effect Size/Strength of Relationship (Cohen, 1988)

.50 and Above      Strong/Large Correlation

.30 to .49      Moderate Correlation

.10 to .29      Weak/Small Correlation

Table 4 presents the results of the Pearson's correlation analysis, which revealed that among the self-regulated learning strategies, planning ( $r = .288$ ,  $p < .001$ ) had the strongest association with grammar competence, followed by monitoring ( $r = .274$ ,  $p < .001$ ) and evaluating ( $r = .231$ ,  $p < .001$ ). The overall SRL strategies score also showed a small but statistically significant positive relationship with grammar competence ( $r = .288$ ,  $p < .001$ ). These findings suggest that students who actively plan, monitor, and evaluate their learning are more likely to demonstrate better grammar performance, supporting the role of metacognitive control in language development.

In terms of classroom engagement, cognitive engagement ( $r = .208$ ,  $p < .001$ ) and emotional engagement ( $r = .206$ ,  $p < .001$ ) were positively and significantly correlated with grammar competence, whereas behavioral engagement ( $r = .079$ ,  $p = .135$ ) was not. The overall engagement score also showed a small but significant relationship ( $r = .182$ ,  $p < .001$ ). These results imply that mental investment and emotional connection to learning are more closely linked to grammar competence than observable behaviors alone, such as participation or attendance.



These results align with previous research. Chansri et al. (2024) found that self-regulated learning strategies positively impact English language abilities and knowledge among undergraduate students. Similarly, Truong (2022) reported a positive relationship between self-regulated learning strategy use and English grammar self-efficacy among high school students in Vietnam. Regarding engagement, Zheng et al. (2023) highlighted that SRL strategies positively correlate with learning engagement, which predicts outcomes, while Han and Hyland (2015) emphasized the critical role of cognitive and emotional engagement in learning, particularly in interaction with teacher feedback.

Although the correlations are small, the results highlight the importance of fostering both self-regulated learning strategies and internal forms of engagement (cognitive and emotional) to support grammar competence. Educators should design learning activities that enhance metacognitive control and encourage mental and emotional investment in tasks, as these factors are likely to contribute to improved grammar outcomes. Behavioral engagement, while valuable, may need to be supported with structured participation strategies to translate into stronger academic performance.

### Variables that Best Predict Senior High School Learners' Grammar Competence

Table 5 presents the results of a multiple regression that was conducted to predict senior high school learners' grammar competence from self-regulated learning strategies and engagement. The analysis yielded a significant model,  $F(6, 355) = 6.97, p < .05, R^2 = .105$ . The individual predictors were examined further and indicated that planning ( $t = 2.68, p < .05$ ) and monitoring ( $t = 1.98, p < .05$ ) were significant predictors but, evaluating ( $t = -.259, p = .796$ ), behavioral engagement ( $t = -.1.43, p = .153$ ), emotional engagement ( $t = -.486, p = .627$ ), and engagement in the classroom ( $t = .429, p = .668$ ) were not.

**Table 5**

*Results of Multiple Regression Analysis for the Variables that Singly or in Combination Best Predict Senior High School Learners' Grammar Competence*

Variables	Unstandardized Coefficients		Standardized Coefficients		Interpretation	
	B	Std. Error	Beta	T	Sig.	
(Constant)	22.2	2.79		7.95	.000	Significant
Planning	2.51	.938	.212	2.68	.008	Significant
Monitoring	2.74	1.38	.222	1.98	.047	Significant
Evaluating	-.354	1.36	-.027	-.259	.796	Not Significant
Behavioral Engagement	-2.11	1.47	-.187	-.1.43	.153	Not Significant
Emotional Engagement	-.889	1.82	-.068	-.486	.627	Not Significant
Engagement Classroom	1.39	3.26	.102	.429	.668	Not Significant
$R=.325 \quad R^2=.105 \quad F(6, 355)=6.97 \quad P=.001$						

The  $R^2$  value of 0.105 implied that the significant predictors, namely planning and monitoring, only predicted 10.5% of Senior High students' grammar competence, and around 89.5 % could be attributed to other factors not included in the study. Meanwhile, when all other variables are held constant, the best significant predictor of senior high learners' grammar competence is monitoring (beta=.222) followed by planning (beta=.212).

The regression equation of this study is  $Y = 22.2 + 2.51X_1 + 2.74X_2$

Where

$Y$  = SH students' Grammar Competence

$22.2$  = is the B constant

$X_1$  = Planning

$X_2$  = Monitoring

The regression equation indicated that at the constant value of 22.2, for every 1-point increase of planning, the SH students' grammar competence increases by 2.51 and for 1-point increase of monitoring, the SH students' grammar competence increases by 2.74. These results affirm that monitoring is a slightly stronger predictor of grammar competence than planning.





## REFERENCES

Agudelo-Correa, M. (2020). The effect of planning, monitoring, and evaluating as metacognitive strategies on the EFL writing process. *Revista Virtual Universidad Católica del Norte*, 59, 61–85.

Alotaibi, K. N. (2022). Self-regulated learning strategies and academic achievement: The mediating role of motivation among university students. *Education Sciences*, 12(4), 257. <https://doi.org/10.3390/educsci12040257>

Alqahtani, M. (2022). Analyzing the demographic-based grammatical competence and its correlation with academic performance among first-year college students in Basilan State College. *Forum for Linguistic Studies*, 6(3), 1–15.

Andilab, D. L., & Amante, E. C. (2024). Grammatical knowledge of senior secondary students in the new normal: Learning interventions. *Journal of Ongoing Educational Research*, 1(2), 92–103.

Ariola, J., & Dizon, M. (2021). Grammar proficiency of senior high school students in the Philippines: Challenges and interventions. *Philippine Journal of Education Research*, 15(2), 45–59.

Baker, R., Inventado, P., & Mott, B. (2019). Educational data mining: A review of recent research trends and future directions. *Journal of Educational Data Mining*, 11(1), 1–20.

Baker, R., Smith, L., & Jones, P. (2019). Strategies for enhancing student engagement in diverse classrooms. *International Journal of Educational Research*, 98, 45–56.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.

Bernardo, L. (2023). Post-pandemic learning losses in Philippine secondary education. *Journal of Southeast Asian Educational Studies*, 10(1), 23–38.

Bleske-Rechek, A., Paulich, K., Shafer, K., & Kofman, C. (2019). Grammar matters: Grammar usage errors taint judgments of applicants' writing, employability, and character. *Personality and Individual Differences*, 141, 47–50. <https://doi.org/10.1016/j.paid.2018.04.041>

Bowden, J. L., Tickle, L., & Naumann, K. (2021). The four pillars of tertiary student engagement and success: A holistic measurement approach. *Studies in Higher Education*, 46(6), 1207–1224. <https://doi.org/10.1080/03075079.2019.1672647>

Briggs, S. (2015, February 11). Ten ways to overcome barriers to student engagement online. Online Learning Consortium. [https://onlinelearningconsortium.org/news\\_item/ten-ways-overcome-barriers-student-engagement-online/](https://onlinelearningconsortium.org/news_item/ten-ways-overcome-barriers-student-engagement-online/)

Campeanu, S., & Călin, M. (2023). Student engagement during online learning: Challenges and strategies for improvement. *Journal of Educational Technology*, 12(1), 45–60.

Chansri, C., Kedcham, A., & Polrak, M. (2024). The relationship between self-regulated learning strategies and English language abilities and knowledge of undergraduate students. *LEARN Journal: Language Education and Acquisition Research Network*, 17(1), 286–307. <https://files.eric.ed.gov/fulltext/EJ1415587.pdf>

Chele, M. I. (2015). An analysis of subject-verb agreement errors in English: A case study of first year students at the National University of Lesotho. *International Journal of Language and Linguistics*, 2(3), 45–52.



Chen, L., & Huang, H. (2022). A meta-analysis of the efficacy of self-regulated learning interventions on academic achievement in online education. *Educational Psychology Review*, 34(1), 1–25.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

DepEd. (2023). *MATATAG curriculum framework: Strengthening foundational skills and learner agency*. Department of Education, Philippines.

Dignath, C., & Büttner, G. (2018). Teachers' direct and indirect promotion of self-regulated learning in primary and secondary school mathematics classes. *Metacognition and Learning*, 13(2), 127–157. <https://doi.org/10.1007/s11409-018-9181-x>

EF Education First. (2023). 2023 English proficiency index [PDF]. <https://www.ef.com/assetscdn/WIBIwq6RdJvcD9bc8RMd/cefcom-epi-site/reports/2023/ef-epi-2023-english.pdf>

Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.

Han, Y., & Hyland, K. (2015). Engagement with teacher feedback: Behavioral, emotional, and cognitive perspectives. *Language Teaching Research*, 19(5), 572–591. <https://doi.org/10.1177/1362168814541730>

Hasanah, N., & Habibullah, R. (2020). An analysis of grammatical errors in writing descriptive text made by the tenth grade students of SMK Negeri 1 Kragilan. *PROJECT (Professional Journal of English Education)*, 3(6), 742–748.

Hasanov, F., Ismayilov, R., & Mammadova, G. (2021). Cognitive, emotional, and behavioral engagement as predictors of academic success: Evidence from Azerbaijani undergraduate students. *Educational Research International*, 2021, 1–12. <https://doi.org/10.1504/IJKL.2021.10037816>

Hattie, J., & Timperley, H. (2019). The power of feedback. *Review of Educational Research*, 77(1), 81–112.

Hidayatullah, H., Pratolo, B. W., & Ahmad, I. (2017). An analysis of grammatical errors in English writing made by senior high school students. *Pedagogy: Journal of English Language Teaching*, 5(1), 56–65.

Hill, R. (2022). Predictive correlational research design: Understanding variable relationships in education. *Journal of Educational Research and Practice*, 12(3), 45–58. <https://doi.org/10.5590/JERAP.2022.12.3.45>

Hwang, G.-J., & Lai, K.-W. (2020). Investigating self-regulated learning and academic achievement in an online flipped classroom environment. *Computers & Education*, 148.

Järvelä, S., Malmberg, J., & Koivuniemi, M. (2016). Self-regulated learning in collaborative contexts: An analysis of the interplay between individual and group regulation. *Educational Psychologist*, 51(4), 439–462.

Jones, A. (2020). Grammar education: A global issue in language acquisition. *Journal of Educational Development*, 23(3), 1–15.

Joven, R., Manulat, T., Monredondo, L., & Bacatan, A. (2025). Grammar gaps: An error analysis of grammar difficulties in academic writing among senior high school students. *ECSENet Education Journal*. <https://ecsenet.com/index.php/2576-683X/article/view/522>



Kahu, E. R., & Nelson, K. (2020). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education*, 79(4), 583–599.

Ly, C. K. (2020). The importance of grammar in language teaching and learning. *Workshop on Innovation in Language Teaching and Learning*, 186–195. <https://doi.org/10.5281/zenodo.3947215>

Mandernach, B. J., Donnelly-Sallee, M., & Dailey-Hebert, A. (2017). The impact of course structure on student satisfaction: An exploratory study in online education. *International Journal for the Scholarship of Teaching and Learning*, 11(1), Article 5.

Mendoza, L., & Cabrejas, R. (2023). Student engagement and self-regulated learning strategies: Predictors of academic performance in this flexible learning modality. *Journal of Educational Research and Innovation*, 8(2), 115–130.

Nasution, N. F., & Amri, Z. (2021). An analysis of students' subject-verb agreement error in speaking performance. *Journal of English Language Teaching*, 10(3), 541–548.

Niemiec, C. P., & Ryan, R. M. (2021). Self-determination theory and the processes of goal pursuit: An integrative approach to learning motivation. *Educational Psychologist*, 56(4), 247–262.

Ozaki, S. (2022). The impact of English on the economic development of the Philippines. *South Asian Research Journal of Arts, Language and Literature*, 4(1), 20–25. <https://doi.org/10.36346/sarjall.2022.v04i01.003>

Pallant, J. (2020). *SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS* (7th ed.). Routledge.

Pamuji, L. (2020). Grammar competence as a predictor of writing proficiency in higher education. *Journal of Language Teaching*, 12(3), 112–125.

Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology*, 8, 422. <https://doi.org/10.3389/fpsyg.2017.00422>

Prayuda, R. (2020). An analysis on students' subject-verb agreement error in writing sentence using simple present tense. *Journal of English Language Teaching*, 9(3), 442–450.

Reeve, J. (2019). A self-determination theory perspective on student engagement. In *Handbook of student engagement interventions* (pp. 79–95).

Reeve, J. (2019). *Understanding student engagement: Theory, research, and practice*. Routledge.

Ryan, R. M., & Deci, E. L. (2019). Brick by brick: The origins, development, and future of self-determination theory. *Advances in Motivation Science*, 6, 111–156.

Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 61, 101–111.

Schunk, D. H., & Greene, J. A. (2018). *Handbook of self-regulation of learning and performance* (2nd ed.). Routledge.

Schunk, D. H., & Usher, E. L. (2019). Social cognitive theory and motivation. *Educational Psychologist*, 54(1), 78–92.

Sletten, S., Hwang, G.-J., & Lai, K.-W. (2020). The role of self-regulated learning strategies in flipped classroom settings: A systematic review. *Educational Technology Research and Development*, 68(3), 1233–1255.

Spada, N. (2015). Communicative language teaching: Current trends and future directions. *Language Teaching*, 48(3), 349–365. <https://doi.org/10.1017/S0261444815000075>



Sukesi, S., Widya, W., & Wahyuni, S. P. (2019). The relationship between grammatical competence and academic writing skills: Evidence from high school students in Indonesia. *International Journal of Learning Technology*, 14(1), 1-15.

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.

Teng, F., & Zhang, L. J. (2021). Using a self-regulated writing strategies questionnaire to examine the relationship between strategy use and writing performance in EFL learners. *Contemporary Educational Psychology*, 64, 101953. <https://doi.org/10.1016/j.cedpsych.2021.101953>

Tran, H., & Duong, L. (2021). Self-regulated learning and academic performance in Southeast Asian secondary schools. *Journal of Educational Psychology*, 113(5), 875-888.

Truong, T. N. N. (2022). Psychometric properties of self-regulated learning strategies in learning English grammar and English grammar self-efficacy scales. *Frontiers in Education*, 7, Article 801570. <https://doi.org/10.3389/feduc.2022.801570>

United Nations. (2015). *Sustainable development goals: Goal 4 – Quality education*. <https://sdgs.un.org/goals/goal4>

Vansteenkiste, M., Ryan, R. M., & Soenens, B. (2020). The development of self-determination theory: The emergence of a human motivation framework. *Review of Educational Research*, 90(4), 653-675.

Wang, M.-T., & Eccles, J. S. (2016). Social support matters: Longitudinal effects of social support on academic adjustment during college transition. *Journal of Educational Psychology*, 108(4), 522-536.

Wang, Y., Liu, X., & Zhang, L. (2023). Student engagement and learning outcomes: An empirical study applying a four-dimensional framework. *Frontiers in Psychology*, 14, Article 10563621.

Wardani, A. D., Munir, A., Lestari, L. A., & Anam, S. (2023). Self-regulated learning strategies and their relationship to grammar achievement of undergraduate English department students. *LLT Journal: A Journal on Language and Language Teaching*, 26(2), 634-649. <https://doi.org/10.24071/llt.v26i2.6638>

Winne, P. H., & Hadwin, A. F. (2018). Self-regulated learning and the 21st century classroom: A critical review of the literature. *Educational Psychologist*, 53(1), 1-14. <https://doi.org/10.1080/00461520.2018.1437084>

Yan, E. P. (2007). Grammatical competence of fourth year English majors of Benguet State University (Unpublished undergraduate thesis, Benguet State University). Benguet State University Library Archives.

Zhang, Y., Wang, H., & Liu, X. (2022). The impact of student engagement on English achievement among non-English majors: Evidence from China. *International Journal of Learning Technology*, 17(4), 345-362.

Zheng, Y., Li, M., & Wang, J. (2023). Relationships among self-regulated learning strategies, engagement, and learning outcomes in high school students. *Educational Psychology*, 43(2), 189-204. <https://doi.org/10.1080/01443410.2022.2109876>

Zimmerman, B. J. (2022). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64-70.