The Correlation Between Self-Regulated Learning and Academic Achievement of English. A Picture of Vietnamese High School Students.

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Abstract- Self-regulated learning significantly enhances academic achievement. This study aimed to explore the relationship between self-regulated learning and English academic performance among 322 Vietnamese high school students. Data were gathered using the Motivated Strategies for Learning Questionnaire (MSLQ) and self-reported final official English scores. The findings revealed a positive correlation between self-regulated learning constructs and academic achievement. Notably, effort regulation emerged as the predominant self-regulated learning strategy across high, medium, and low achievers. The results were analyzed with a focus on interpretation and recommendations for educational practice.

Index Terms- self-regulated learning, academic achievement, dominant, Vietnamese students.

I. Introduction

Education Systems aim to empower students to become self-regulated learners by actively engaging in the learning process to achieve academic success. Self-regulated learning is defined as an active and constructive process where learners set goals, monitor progress, and regulate their cognitive, motivational, and behavioral processes (Karabenick, 2003; Wolters, Pintrich, &). Numerous studies have demonstrated significant relationships between self-regulated learning and academic achievement across various age groups and educational levels (Ariani, 2017; Schmitt, McClelland, Tominey, & Acock, 2015; Zimmerman & Martinez-Pons, 1986; Zimmerman, 1990, 2001, 2008). Recognizing the critical role of self-regulation in learning, this study examines the relationship between self-regulated learning and English academic achievement among Vietnamese high school students.

Theoretical Framework

This study is grounded in Bandura's (1986) social cognitive theory, which posits that humans learn through interactions within a social context that shapes behaviors. According to this theory, learning is influenced by the dynamic interaction of behaviors, social environments, and internal factors. Each individual has a self-regulating system that impacts their beliefs, motivation, and actions (Glynn, Taasoobshirazi, & Brickman, 2007).

Self-regulated learning reflects the human ability to exert agency by controlling behaviors and environments (Bandura, 1991). This agency is achieved through intentional thought and action (Usher & Schunk, 2018). Furthermore, self-regulated learning is influenced not only by personal processes but also by environmental and behavioral factors, which highlights the reciprocal nature of the theory (Bandura, 1997).

The processes of self-regulated learning align closely with the cyclical model proposed by Zimmerman and Moylan (2009), which includes phases of self-monitoring, self-evaluation, and self-reaction. This model emphasizes the reciprocal interactions among personal, behavioral, and environmental factors (Usher & Schunk, 2018). Bandura's social cognitive theory underscores the role of knowledge in shaping performance, emphasizing proactive cognitive regulation through effective self-monitoring, self-evaluation, and self-reaction.

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1. Literature Review

1.1 Self-Regulated Learning

The significance of self-regulated learning lies on students' ability to employ certain strategies to improve their academic achievement (Hart, 2012). In self-regulated learning, there is a great emphasis on the role of the learners as active participants in the process of learning. Students regulate their learning process by setting their own goals, developing learning strategies, managing the time, the environment and assessing their understanding and performance (Roick & Ringeisen, 2018; Veenman, 2017; Zimmerman, 1995).

Researchers have proposed various models to explain self-regulated learning (SRL). Zimmerman and Schunk (2011) defined SRL as the systematic use of thoughts, feelings, and actions by students to achieve academic goals. It involves being "metacognitively, motivationally, and behaviorally active participants in their own learning process" (Zimmerman, 2001, p. 5). Schunk (2012) further simplifies SRL by highlighting the roles of self-monitoring, self-instruction, and self-reinforcement in academic engagement. Self-monitoring involves setting targets for specific behaviors, while self-instruction refers to "discriminative stimuli produced by the individual that set the occasion for responses leading to reinforcement." Self-reinforcement involves rewarding oneself, thereby enhancing academic engagement (Schunk, 2012, p. 498). In all, self-regulated learners are able to identify their goals, engage in self-monitoring and use effective strategies to achieve them (Losenno et al., 2020).

1.2 The Relationship Between Self-Regulated Learning and Academic Achievement.

Research on self-regulated learning indicates that specific behaviors and beliefs contribute to successful academic achievement. High-achieving students are consistently found to use more self-regulatory skills and strategies than their low-achieving counterparts (Zimmerman & Martinez-Pons, 1986; Schunk & Zimmerman, 1994).

A plethora of studies have explored the relationship between self-regulated learning (SRL) and academic achievement among graduate and undergraduate students, consistently revealing positive results (Ariani, 2017; Schmitt, McClelland, Tominey, & Acock, 2015; Zimmerman & Martinez-Pons, 1986). Pintrich and De Groot (1990) examined the relationship between motivational orientation, self-regulated learning, and academic performance in a sample of 173 students from English and science classes. They identified self-regulation, self-efficacy, and test anxiety as key predictors of academic performance. Similarly, Jensen et al. (2019) analyzed 126 empirical studies and concluded that SRL is the strongest predictor of academic achievement.

In line with these findings, Alotaibi, Tohmaz, and Jabak (2017) determined that among SRL constructs such as goal setting, planning, monitoring, memorization, rehearsal, and social assistance, goal setting and planning were the most significant predictors of academic success. Moghadari-Koosha et al. (2020) also investigated the effects of SRL, motivation, and self-efficacy on academic achievement, using Grade Point Average (GPA) data from 400 paramedical undergraduate students. They found SRL to be the most significant predictor of academic performance. Collectively, these studies underscore the strong correlation between self-regulated learning and academic achievement.

Conversely, researchers have found that a lack of SRL skills negatively impacts academic achievement (Busse & Walter, 2017; Dresel & Grassinger, 2013; Rizkallah & Seitz, 2017). Students who lack self-regulation often face academic challenges and tend to achieve poor results. Such students are likely to act as passive recipients of knowledge rather than proactive learners who take responsibility for their own education. Consequently, there is a widely held belief that deficiencies in SRL skills lead to poor academic performance. In this context, the present study addresses the following research questions:

- Is there a significant relationship between self-regulated learning and academic achievement?
- What is the dominant self-regulated learning strategy used by high, medium and low achieving students?

Based on the research questions, the following hypotheses were reformulated:

- H1. There is a significant relationship between SRL and Academic achievement.
- H2. Vietnamese students demonstrate a dominant self-regulated learning strategy.

II. METHODOLOGY

2.1. Descriptive Statistics of Participants

In this study, 322 randomly selected students from various high schools in Ha Long City, Quang Ninh Province, Vietnam, participated. Responses were collected anonymously to ensure the privacy of the participants. The students ranged in age from 15 to 18 years. Table 1 presents a breakdown of gender, grades, percentages, and cumulative percentages for each group.

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Table 1: Demographic Background of Participants

	Frequency	Percentage	Valid percentage
Male	134	41.6	41.6
Female	188	58.4	58.4
Grade 10	235	73.0	73.0
Grade 12	87	27.0	27.0

2.2 Research Tools

To address the research questions, two instruments were used to collect data on self-regulated learning strategies and academic achievement. These included the Motivated Strategies for Learning Questionnaire (MSLQ) and self-reported academic scores in the English subject.

2.2.1 The Motivational Strategies for Learning Questionnaire (MSLQ)

To gather information on participants' SRL strategies, the Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich and De Groot (1991) was used. The MSLQ is a self-report tool with 81 items: 50 for motivational beliefs and 31 for self-regulated learning strategies. It employs a seven-point Likert scale ranging from 1 ("Not at all true of me") to 7 ("Very true of me"). The researcher selected the MSLQ for its reliability and effectiveness in assessing students' SRL strategies. For this study, five constructs were examined: metacognitive strategies, time and study environment, effort regulation, help seeking, and peer learning. The questionnaire consisted of 31 items, translated into Vietnamese to ensure accurate responses. Three Vietnamese English teachers reviewed and validated the translation, agreeing on its accuracy.

2.2.2 Official English Subject Grades

Academic achievement data were collected through self-reported English scores from the first semester of the 2022/2023 academic year. Participants were asked to provide their official English grades, which were used as a measure of their academic performance.

2.3 Procedures

Permission was obtained from the principals of the selected high schools in Vietnam to collect data. Participants were informed that their involvement was voluntary and would not impact their grades. Before administering the questionnaire, students were thoroughly instructed on how to complete it and were briefed about the project. The data were subsequently analyzed using SPSS Statistics 25 to address the research questions.

2.4 Data Analysis

Descriptive statistics (mean and standard deviation) was used to analyze the data collected through (MLSQ) and Academic achievement score. The Pearson product moment coefficient (r) correlation was used to examine the relationship between SRL strategies and academic achievement. Furthermore, descriptive statistic was used to determine the dominant self-regulated learning strategy among high, medium and low achieving students.

III. Results

3.1 Academic achievement score

One of the main objectives of this study was to examine the relationship between self-regulated learning strategies and academic achievement in English. To achieve this, self-reported final official English scores were analyzed. Table 2 displays the grouping of students based on their scores, categorized into high, medium, and low achievers. The results indicate that 43.4% (140 students) belonged to the high-achievement group, scoring between 8 and 10. The medium group included 33.8% of participants (109 students) with scores between 5 and 7. Lastly, the low group, representing 22.8% (73 students), scored between 1 and 4. These results reflect the distribution of academic achievement levels in English.

Table 2: Grouping of Participants Based on Academic Achievement Scores

Groups	Range	Frequency	Percentage	Valid Percentage	Cumulative Percentage
High	8-10	140	43.4	43.4	43.4
Med	5-7	109	33.8	33.8	77.2
Low	1- 4	73	22.8	22.8	100.0
Total	322	100.0	100.0	100.0	

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3.2 Self-regulated learning score

The students' self-regulated learning strategies were assessed using the Motivated Strategies for Learning Questionnaire (MSLQ). Table 3 presents the means and standard deviations of the academic achievement in English for the first semester, based on SRL subscales, including metacognitive strategies, time and study environment management, effort regulation, peer learning, and help seeking. The results indicate that participants generally demonstrated a medium level of self-regulated learning strategies, with the mean scores of the five subscales ranging from 3.78 to 4.26.

Table.3: Mean and Standard Deviation Score of SRL Constructs

Variables	Number of Items	Mean	Standard Deviation
Meta-cognitive Strategies	12	3.8134	1.0703
Time & study environment	8	4.1836	1.0679
Effort regulation	4	3.7811	1.1601
Peer learning	3	4.1222	1.5635
Help seeking	4	4.2686	1.3378

3.3 The relationship between SRL and academic Achievement

The Pearson correlation coefficient was used to assess the strength of the relationship between self-regulated learning strategies and academic achievement in Vietnamese students. The SRL subscales included metacognitive strategies, time and study environment management, effort regulation, peer learning, and help seeking. Table 4 shows that all correlation coefficients between SRL subscales and academic achievement were positive and significant. Specifically, the strongest correlations were observed for time and study environment management ($r = .096$, $p < .01$) and effort regulation ($r = .076$, $p < .05$). Moderate correlations were found for help seeking ($r = .067$, $p < .01$), metacognitive strategies ($r = .072$, $p < .01$), and peer learning ($r = .035$, $p < .05$). These results support the hypothesis that self-regulated learning strategies positively contribute to academic success.

Table.4: Pearson Correlation Coefficient of SRL Constructs and Academic Achievement

Variables	Academic Achievement	Meta-cognitive strategies	Time & study management	Effort management	Peer learning	Help seeking
Academic Achievement	1	.072**	.096**	.076*	.035*	.067**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed)

4.4 The dominant SRL strategy used by High, Medium and Low Achieving Students

To identify the dominant self-regulated learning strategy among high, medium, and low achievers, descriptive statistics were employed. Table 5 reveals that high achievers most frequently used help seeking ($M = 4.32$, $SD = 1.29$), while medium achievers preferred effort regulation ($M = 4.40$, $SD = 1.34$). Similarly, effort regulation emerged as the most commonly used strategy among low achievers. These findings suggest that effort management is the dominant self-regulated learning strategy overall, as reflected in its highest mean score ($M = 3.72$, $SD = 1.34$). Consequently, the second hypothesis is accepted.

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Table.5: Descriptive Statistics of High, Medium and Low Achieving Students.

	Descriptive Statistics	Meta-cognitive strategies	Time & study management	Effort management	Peer learning	Help Seeking
High Achievers	*Mean*	3.87	4.24	3.72	4.17	4.32
	S.Deviation	1.02	1.03	1.10	1.55	1.29
Medium Achievers	*Mean*	3.49	3.87	4.40	3.95	4.07
	S.Deviation	1.18	1.14	1.34	1.49	1.44
Low Achievers	*Mean*	2.72	2.79	3.04	2.33	2.41
	S.Deviation	1.60	1.58	1.60	1.63	1.77
Total	*Mean*	3.36	3.63	3.72	3.48	3.60
	S.Deviation	1.26	1.25	1.34	1.55	1.50

IV. DISCUSSION AND CONCLUSION

Numerous studies have emphasized the importance of setting learning goals, regulating the learning process, and maintaining control over it to achieve academic success (Cheng, 2011; Tekbiyik, Camadan & Gulay, 2013; Zimmerman & Martinez-Pons, 1986; Schunk & Zimmerman, 1994). In alignment with this, the current study explored the relationship between self-regulated learning (SRL) and academic achievement in English. Descriptive statistical analysis indicated that students demonstrated a moderate level of self-regulated learning behaviors. Correlation analysis further revealed a positive relationship between the five SRL constructs—metacognitive self-regulation, time and study environment management, effort regulation, peer learning, and help seeking—and academic achievement in English. Notably, the overall mean score suggested that effort management was the dominant self-regulated learning strategy employed by students.

The findings confirmed a positive correlation between SRL constructs and English academic achievement among Vietnamese high school students, consistent with previous research highlighting the strong link between self-regulated learning and academic performance (Alotaibi, Tohmaz & Jabak, 2017; Schmitt, McClelland, Tominey & Acock, 2015; Zimmerman & Martinez-Pons, 1986; Schunk & Zimmerman, 1994). High- and medium-achieving students were shown to effectively regulate their learning processes. However, low-achieving students require more targeted support to understand the importance of taking responsibility for their own learning. It is crucial for parents and teachers to guide students in setting academic goals, employing effective learning strategies, and monitoring their learning progress, especially during the transition from secondary to high school. Teachers should address the needs of students across all achievement levels—low, medium, and high—by providing tailored training on effective learning strategies and fostering a sense of independence and autonomy in learning. Such efforts could enhance self-regulated learning skills in all students, ultimately improving their academic outcomes.

The second major finding of this study highlights the dominant self-regulated learning strategy among high, medium, and low achievers. Results showed that effort management was the most commonly used strategy. Students demonstrated the ability to control their effort and attention in challenging situations, such as managing distractions, and showed strong commitment to completing study goals. Efforts should be made to train students to effectively use a variety of self-regulated learning strategies, which can positively impact their academic achievement.

The concept of self-regulated learning remains underrecognized, particularly in developing countries like Vietnam. It is recommended that self-regulated learning strategies be integrated into the content of all subjects and actively taught by teachers and parents. Students need to understand the importance of these strategies to achieve academic success (Paris & Oka, 1986). It is

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widely acknowledged that students often lack self-regulation skills. However, with proper guidance from teachers and parents, students can achieve satisfactory outcomes through the effective use of these skills.

This study demonstrated a clear association between self-regulated learning and academic achievement in English among high school students. It also identified the self-regulated learning strategies most preferred by students. A limitation of this study was the sole reliance on the MSLQ questionnaire as the data collection tool. Future research should incorporate diverse methods, such as classroom observations, think-aloud protocols, and interviews, to obtain more accurate and comprehensive results.

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