Research Article

Minh Hoang Dong* and Anita Habók

Investigating the relationship between self-regulated learning and language proficiency among EFL students in Vietnam

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Abstract: Self-regulated learning (SRL) strategies have received significant attention among researchers and become the topic of many empirical studies, since they are believed to significantly influence achievement levels in acquiring a foreign language. The current research investigated the SRL strategies most commonly employed by Vietnamese English as a foreign language (EFL) students, as well as any potential correlation between these strategies and language proficiency levels. The study randomly selected 140 undergraduate students. The participants had different levels of English proficiency and learning backgrounds. They completed an SRL questionnaire consisting of 50 items, which is comprised of two parts. Quantitative methods were used to collect data, and descriptive statistics and correlation analysis were employed to determine the correlation between learners' SRL and language proficiency. Results indicated that the participants often employed a range of self-regulation strategies for language learning. The three strategies that were most frequently used were elaboration, help-seeking, and time and study environment management, while critical thinking and effort regulation were the least common. Furthermore, a notable positive relation was observed between students' SRL strategies and language proficiency. It was clear that language proficiency and elaboration correlated most significantly, while the lowest correlation was found between language proficiency and effort regulation. Therefore, key adjustments should be made to curricula by educators and institutions to strengthen students' SRL skills. Educators should also receive specialized training in incorporating SRL strategies into language instruction to support learners' SRL skills development.

***Corresponding author: Minh Hoang Dong**, Doctoral School of Education, University of Szeged, Szeged, Hungary; and Hanoi Law University, Hanoi, Vietnam, E-mail: minh.hoang.dong@edu.u-szeged.hu. https://orcid.org/0009-0006-8999-9528
Anita Habók, Institute of Education, University of Szeged, Szeged, Hungary; and MTA-SZTE Digital Learning Technologies Research Group, Szeged, Hungary, E-mail: habok@edpsy.u-szeged.hu. https://orcid.org/0000-0003-0904-8206

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1 Introduction

In the global context of internationalization, English has become an essential tool for employees in a range of occupations. To foster students' English as a foreign language (EFL) learning, governments have implemented measures to raise the standard of EFL instruction. Nonetheless, Lim and Bakar (2004) and Siti Zaidah et al. (2019) have shown that graduates often face high unemployment rates due to their poor communication skills and limited command of English. Zainuddin et al. (2019) additionally emphasised the shared belief among businesses and students that proficiency in English is crucial for securing employment opportunities. In the Vietnamese context, despite the wide range of EFL programmes available offered by English learning institutions, the level of English proficiency remains low and uneven, especially among non-English studies students (Nguyen and Habók 2021; Trinh and Mai 2018). The theory of self-regulated learning (SRL) emerged in the 1980s as an effort to gain a deeper insight into how learners attain mastery over their own learning process. Self-regulation can be defined as "the process whereby students activate and sustain behaviours, cognitions and affects that are systematically oriented toward the attainment of their goals" (Zimmerman et al. 2017: 313). Research has shown that learners' academic success is greatly influenced by SRL (Ngo 2019). SRL methods are also shown to be essential in enabling students to enhance their language competency through self-regulation, especially within the framework of second and foreign language (L2/FL) instruction (Oxford 2013). In the classroom, students who exhibit self-regulation and autonomy are better equipped, thereby furthering the aim of lifelong learning (Cornford 2002; Lüftenegger et al. 2012).

The aim of this research is to investigate the SRL strategies employed by Vietnamese EFL students and to explore any potential causal link between learners' self-regulated language learning and language proficiency. In recent years, there has been a surge in captivating studies that focus on the basis, nature and advancement of learners' capacity to self-regulate their learning with the aim of facilitating the learning process (Alotaibi et al. 2017; Fukuda 2018; Habók and Magyar 2018; Habók et al. 2022; Kim et al. 2015; Lin 2019). However, not many studies have investigated SRL strategies and the correlation between self-regulation and language proficiency among undergraduate language learners, especially in EFL settings in the Vietnamese context. In reality, practical EFL teaching in Vietnam has shown that students face many problems with English learning. It has been observed that a significant portion of students' responsibilities involves attending classes and attentively following the teacher's instructions. However, this does not guarantee the best possible learning outcomes, since students may not remember or grasp all of the new or significant

information the instructor is attempting to convey (Tran and Long 2020). When it comes to independent study at home, achieving the highest level of student learning entails dedicating a substantial amount of time to one's studies and implementing advanced self-regulatory language learning strategies when working independently (Schunk 1995; Zimmerman 2000). Alongside lifelong learning, SRL has emerged as a worldwide approach to improving teaching and learning in the wake of the COVID-19 pandemic; however, further study is necessary to determine whether SRL will influence future developments in education (Carter et al. 2020). In addition, Vietnam has been implementing major educational reforms, including a transition to competency-based education and the incorporation of 21st century skills. As a result, studies on SRL can help evaluate whether students possess the skills needed for independent learning and successfully adapting to these educational reforms. To fill in this gap, the researchers decided to carry out a study about the correlation between SRL strategies among Vietnamese university students and their language proficiency. The findings of this study are key to highlighting how SRL strategies are used by EFL learners and to proposing effective teaching methods to enhance their SRL skills.

2 Literature review

2.1 Self-regulated learning

In situations where students have the ability to be autonomous, SRL involves being conscious of employing appropriate actions and being driven to attain goals. It provides a comprehensive perspective on student abilities, motivation and knowledge and covers topics, such as cognition, metacognition, motivation, task engagement and social support (El-Adl and Alkharusi 2020; Lin and Zhang 2020; Paris and Paris 2001). Indeed, the definition of SRL can be emphasised based on the particular language learning skills that are the primary focus, including which components or cyclical processes within SRL are being described. By employing SRL techniques, including organising, repeating, self-monitoring, self-planning, self-motivation and self-evaluation, students can actively engage in the learning process (Artino and Stephens 2009; Öztürk and Çakıroğlu 2021). Several interpretations of self-regulation and learning strategies have been proposed, yet Pintrich (2000) synthesized commonalities among them to create a comprehensive definition that outlines the SRL paradigm. This definition comprises four stages – forethought, monitoring, control, and reaction and reflection – along with four domains for regulation within each stage – cognition, motivation, behaviour and context. Learners engage in these processes both overtly and covertly, with every stage assumed to occur sequentially, although they are undoubtedly dynamic processes in operation (Fukuda 2018).

2.2 Self-regulated learning conceptual framework

There have been many frameworks proposed to describe the SRL process. A conceptual framework consisting of four primary stages for learners' SRL was suggested by Pintrich (2004). Learners strategize in the initial phase, establish objectives for assignments and bring forth pertinent prior knowledge and knowledge of context. The second phase of metacognitive awareness is used to keep an eye on education procedures, followed by the third stage, when students exhibit the ability to oversee and control various facets of their educational activities. During the fourth phase, introspection and further actions are carried out. Similarly, Zimmerman's (2000) SRL model consists of three stages: forethought, performance and self-reflection. In the *forethought* stage, students evaluate the task, set goals and design approaches to accomplish those goals. Various motivational beliefs influence this process and affect the use of learning strategies. In the following stage of *performance*, students carry out the work, keep track of their progress and employ various self-control techniques to maintain cognitive engagement and task motivation. The last stage of *self-reflection* is where learners evaluate their performance and assign blame for either success or failure. These acknowledgements produce self-reactions that can impact whether students handle an assignment positively or negatively in future.

These two models share some similarities in different aspects. First, they have three distinct stages: (a) preparatory, encompassing task analysis, planning, goal activation and setting objectives; (b) performance, where the task is carried out while managing progress; and (c) appraisal, involving student reflection, regulation and adjustment for future performance (Panadero 2017; Puustinen and Pulkkinen 2001). Another common feature between them is that they highlight a more evident differentiation among the phases and subprocesses that take place within each of them, each possessing distinct characteristics for every phase. Therefore, these models could potentially enable more precise interventions since measuring their effects might be more manageable (Panadero 2017).

2.3 Self-regulated learning strategies

2.3.1 Cognitive and metacognitive self-regulated strategies

The process by which learners adjust information handling based on task requirements, as described by Pintrich et al. (1991), is known as cognitive and metacognitive self-regulatory methods. These methods are aimed at evaluating and regulating the application of cognitive strategies. Cognitive techniques are typically

used for memory tasks of varying levels of difficulty. Specifically, organising, elaboration and rehearsal make up cognitive strategies. According to Pintrich (1999), rehearsal strategies include repeating learning materials or reading words aloud when reading a passage, and these techniques assist students in choosing key information from texts and maintain it fresh in working memory, even though they might not demonstrate an extremely complex degree of processing. Elaboration strategies involve rearranging and connecting concepts from the note, as well as summarizing or paraphrasing the content to be learned (Mousoulides and Philippou 2005). Choosing the main idea of a text, summarizing the text or lesson material, and employing a range of particular methods to select and arrange the ideas in the text are a few examples of organisational strategies (Pintrich 1999). Additionally, research has shown that students' accomplishments are significantly impacted by metacognitive and self-regulated techniques (Kitsantas et al. 2017). Metacognitive strategies are the techniques that help students manage their own thought processes and the cognitive processes they can access to fulfil the requirements of specific tasks (Habók and Magyar 2018; Habók et al. 2022; Lin and Zhang 2020; Winne 2011).

2.3.2 Resource management strategies

Resource management techniques show how capable students are at creating environments conducive to learning (Pintrich et al. 1991). Time and study environment management (TE), effort regulation (effort), peer learning (peer) and help-seeking (help) are components of these techniques. TE is the term used to describe how students organise their time for study and the classroom. Effort is a measure of how dedicated they are to reaching their learning objectives. Peer reflects the frequency with which students are open to studying alongside their peers, and help signifies the frequency with which they are inclined to seek assistance from either classmates or instructors.

2.4 The relationship between SRL and learner proficiency

The relationship between SRL and learner proficiency is well acknowledged, and it is seen as a necessary skill in studying any subject (Zimmerman and Schunk 2011). Numerous empirical studies have demonstrated the link between SRL and academic achievement. For example, Aljarrah (2010) examined how well SRL components predict academic performance in the Jordanian educational context and whether there are variations in academic achievement between students with low versus

high levels of SRL. The Purdie et al. (1996) SRL scale was administered to a sample of 331 undergraduate students at Yarmouk University in Jordan. According to the findings, there was a statistically significant variation in students' academic achievement depending on their performance on the SRL components of goal setting and planning, rehearsing, and memorizing, with high-level SRL students performing better. Additionally, students' academic achievement was predicted by maintaining records and monitoring, as well as by goal setting and planning components. Likewise, Peng (2012) examined the link between academic achievement and SRL. The study involved 101 undergraduate students from Jilin Normal University in China as a sample, of whom 54 % were male. The findings showed that anxiety, cognitive strategies and self-regulation were considerable predictors of academic performance in science. According to his research, SRL boosts students' motivation as well as their sense of self-worth, which in turn improves academic accomplishment. Further, Muhammad and Abu Bakar (2015) explored the correlation between academic performance and SRL among undergraduate students at UniSZA in Malaysia. A total of 364 individuals were chosen at random from nine colleges to make up the sample. The findings demonstrated a substantial correlation between academic success and SRL and showed that SRL is a reliable indicator of higher academic performance (GPA). In the same vein, according to research by Morshedian et al. (2016), SRL intervention was highly beneficial in improving the reading comprehension of Iranian EFL students.

On the other hand, Nejati (2022) found no statistically significant correlation between students' SRL and reading comprehension and virtual courses in Iran. This result could be attributed to outside variables, such as students' lack of interest in online learning, poor Internet connectivity and the lack of readiness for a novel learning approach, which may have hindered teacher-student interaction.

3 Research questions

The objective of this study is to examine the self-regulated strategies Vietnamese EFL learners adopt in a university setting and its relationship with their language proficiency. The study thus aims to addresses the questions below:

1. Which self-regulated language learning strategies are most commonly employed by Vietnamese EFL learners?
2. Is there a relationship between the participant's SRL strategies and their language proficiency?

4 Research methodology

4.1 Participants

The study involved 140 university students with varying levels of English proficiency categorized according to the CEFR (Common European Framework of Reference for Languages) as beginner, elementary, intermediate, upper-intermediate, advanced and proficient (thus ranging from A1 to C2 levels), from five different courses of study (*general law, business law, international trade law, English studies and high-quality law training program*) and learning backgrounds at Hanoi Law University (HLU). They were randomly selected using convenience sampling. Their ages were between 18 and 25 with a mean of 20.03 (SD = 1.330). 100 out of 140 respondents were female, while the rest were male. Nearly half of them (44.3 %) had had over ten years of learning English, and 36.4 % of them had learned English for six to ten years. Meanwhile, a low percentage of them (below 20 %) had only spent a few years engaged with English. Most of the participants (80.7 %) devoted between thirty minutes and an hour per day to English, whereas the rest spent more time on it (Table 1).

4.2 Research instruments

A questionnaire survey containing 50 different SRL items was designed to gather data from the respondents. The Motivated Strategies for Learning Questionnaire by Pintrich et al. (1991) served as the model for the instrument, and there were two parts. Part 1 collected personal information from the participants, such as their age, course of study, length of time learning English and English level based on the results of international tests. Part 2 measured the participants' frequency of SRL strategy usage. A five-point Likert scale was used for 50 close-ended questions in part 2, which were classified into two main groups of strategies: meta-cognitive and resource management strategies. The items for the SRL strategies were further categorized into nine smaller groups of different strategies. The questionnaire was sent to the Institutional Review Board (IRB) at Doctoral School of Education, University of Szeged for approval. The structure of the questionnaire has already been explored in previous research (Hilpert et al. 2013; Pintrich et al. 1993; Thomas and Cassady 2019), so we have now analysed it to confirm the factor structure. A confirmatory analysis (CFA) of the model indicated good fit indices (χ^2 = 173.043; df = 6; CFI = 0.998; RMSEA = 0.035; SRMR = 0.020), and the reliability analysis demonstrated high reliability for the questionnaire (α = 0.96; ω = 0.96). Participants completed the questionnaire online by indicating their responses on a scale ranging from 1 (Strongly

Table 1: Respondents' demographic information.

		N	%
Gender	Male	37	26.4
	Female	100	71.4
	Prefer not to say	3	2.1
	Total	140	100
Course of study	General law	50	35.7
	Business law	13	9.3
	English studies	66	47.1
	International trade law	6	4.3
	High-quality law training	5	3.6
	Total	140	100
English learning period	1–3 years	12	8.6
	3–5 years	15	10.7
	6–10 years	51	36.4
	Over 10 years	62	44.3
	Total	140	100
English learning time per day	30 minutes–1 hour	113	80.7
	1–2 h	21	15
	Over 2 h	6	4.3
	Total	140	100
English level	Beginner	28	20
	Elementary	9	6.4
	Intermediate	39	27.9
	Upper-intermediate	40	28.6
	Advanced	22	15.7
	Proficient	2	1.4
	Total	140	100

Disagree) to 5 (Strongly Agree) for all items. The questionnaire was translated into Vietnamese to avoid any misunderstanding and to facilitate the process. The translated version was sent to experienced researchers in the same field for review and improvements to guarantee translation accuracy. Subsequently, descriptive statistics were employed, followed by the use of the Pearson correlation to examine the relations between the factors surveyed.

4.3 Data collection procedure

The anonymous questionnaire was delivered to students online on Google Forms. The objectives of the study were conveyed to all respondents, and it was made clear to them that the information gathered would be kept private. Questionnaire

reliability was assessed using Cronbach's alpha, yielding a reliability index of 0.862, which is highly satisfactory, according to Gliner et al. (2016).

The Kaiser–Meyer–Olkin Measure of Sampling Adequacy yielded a value of 0.872, and Bartlett's test of sphericity, with a significance level of $p < 0.01$, further confirmed the reliability of the questionnaire items to a high degree. Therefore, it can be concluded that the current sample size is sufficient for conducting factor analysis. Exploratory factor analysis showed that the instrument possessed an appropriate factorial structure, thus confirming construct validity.

4.4 Data analysis

The Vietnamese version of the questionnaire was delivered to the students at their convenience. The respondents completed it online and submitted it via Google Forms. After one week of sharing the form online, one of the researchers received 140 responses as the data for the research analysis. The collected data was processed by SPSS version 26, using descriptive statistics and the Pearson correlation to address the questions and indicate the main findings. T-tests were also employed to investigate discrepancies in the frequency of using different groups of SRL strategies.

5 Results

5.1 The most frequently used SRL strategies among the students

According to the research results, SRL strategies were adopted relatively often by the participants. The statistics indicate that the students employed various self-regulation strategies for language learning to a great extent. It is clear that metacognitive and resource management strategies were almost equally used by the students ($M = 3.212$; $SD = 0.647$ for metacognitive strategies and $M = 3.213$; $SD = 0.564$ for resource management strategies). The frequency of using SRL strategies was compared between the two groups using t-tests to determine any distinctions between them. The results were $t = –0.036$, and $p = 0.971$, which indicated no notable distinction between the frequency of employing the two sets of SRL strategies.

There was not much difference between the nine groups of SRL strategies as regards their frequency of respondent use in language learning (see Table 2). In addition, the three most adopted strategies were elaboration ($M = 3.379$, $SD = 0.746$), help-seeking ($M = 3.305$, $SD = 0.735$), and time and study environment management ($M = 3.303$, $SD = 0.562$). In contrast, critical thinking and effort regulation were the

Table 2: The frequency of using metacognitive and resource management SRL strategies among the respondents.

No.		*N* = 140	
		M	**SD**
1	Rehearsal (1)	3.208	0.718
2	Elaboration (1)	3.379	0.746
3	Organisation (1)	3.173	0.810
4	Critical thinking (1)	3.048	0.807
5	Metacognitive self-regulation (1)	3.250	0.642
6	Time and study environment management (2)	3.303	0.562
7	Effort regulation (2)	3.044	0.683
8	Peer learning (2)	3.200	0.793
9	Help-seeking (2)	3.305	0.735

Note: (1) = metacognitive strategies, (2) = resource management strategies.

least employed strategies with the lowest figures (M = 3.048, SD = 0.807 for the former; and M = 3.044, SD = 0.683 for the latter). T-tests were used to examine whether significant disparities existed between pairs of the most frequently and least frequently used strategies. No noteworthy disparity was found between pairs of SRL strategies ($p > 0.05$) (Table 3).

Specifically, the participants were generally good at elaboration skills, such as connecting the class material to what is already known, composing concise summaries of key points from the readings and class notes, and attempting to comprehend the material by linking concepts from lectures with those from the readings, with the highest mean scores among all the metacognitive strategies surveyed (M = 3.55, M = 3.51 and M = 3.50, respectively). However, critical thinking skills were the skills on which students performed the worst among the five groups of metacognitive strategies, with mean scores just above 3.00 (ranging from 3.01 to 3.08). The students were also relatively good at metacognitive self-regulation, which is demonstrated by a low mean score of those missing important points because they are preoccupied with other things (M = 2.65). Another striking point is that the respondents were limited in their ability to create basic charts, diagrams or tables to organise the course information (M = 2.86).

Table 3: Comparisons between the frequency of using different pairs of SRL strategies.

Groups of strategies	***t***	***p***
Elaboration and help-seeking	1.396	0.165
Elaboration and time and study environment management	1.527	0.129
Help-seeking and time and study environment management	0.037	0.971
Critical thinking and effort regulation	0.057	0.954

In terms of metacognitive strategies, the students demonstrated relatively strong proficiency in time and study environment management, peer learning and help-seeking strategies, as indicated by the high mean scores for these sub-groups of resource management strategies, which were 3.303, 3.200 and 3.305, respectively. In contrast, at just 3.044, the figure for effort regulation is lower compared to other sub-groups. In particular, a large number of respondents frequently showed up for a class, studied in an area where they can focus on course work and had a dedicated space for study every day (M = 3.92, M = 3.63 and M = 3.42, respectively). Clearly, a small number of them gave up before completing what they intended to do because they were too lazy or bored (M = 2.71) or seldom ever had time to revise readings or notes before an exam (M = 2.69). In comparison, fewer students mastered peer learning skills, such as trying to co-operate with their classmates to do homework (M = 3.35), managing to convey the topics they are learning to a classmate or friend (M = 3.21) and making time during a course to go over content with a group of classmates (M = 3.04).

5.2 The correlation between the participants' SRL strategies and language proficiency

According to Cohen (1988), r ranging from 0.10 to 0.29, from 0.30 to 0.49 and from 0.50 to 1.00 should be viewed as representing small, medium and large magnitudes of a correlation, respectively. A notably positive correlation was found between students' SRL strategies and language proficiency at the medium level (r = 0.35). Thus, more proficient EFL learners generally rely on self-regulation and employ more SRL strategies compared to less proficient learners.

All SRL constructs and language proficiency were positively correlated, except for effort regulation (Table 4). As can be seen, language proficiency had significant correlations with (1) rehearsal, (2) elaboration, (3) organisation, (4) critical thinking, (5) metacognitive self-regulation, (6) time and study environment management, (8) peer learning and (9) help-seeking. However, a modest positive correlation was observed between language proficiency and (7) effort regulation (r = 0.05). In addition, language proficiency had the most significant correlation with elaboration (r = 0.46) and the least correlation with effort regulation (r = 0.05).

Table 4: Correlation coefficients between SRL constructs and language proficiency.

Correlations	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Language proficiency	0.361	0.464	0.321	0.220	0.292	0.239	0.053	0.270	0.344

Note: (1) = rehearsal, (2) = elaboration, (3) = organisation, (4) = critical thinking, (5) = metacognitive self-regulation, (6) = time and study environment management, (7) = effort regulation, (8) = peer learning, (9) = help-seeking. Correlation is significant at the 0.01 level.

6 Discussion

The study aimed to investigate the SRL strategies employed by Vietnamese students learning EFL at the university level, as well as their connection to language proficiency. The findings indicated that Vietnamese EFL students employed SRL strategies quite often. Metacognitive strategies were almost equally used compared to resource management strategies. This finding suggests the students strongly relied on a range of SRL strategies for language acquisition. The respondents clearly had positive attitudes towards employing different types of SRL strategies at the same level in their language learning. Furthermore, the participants predominantly used elaboration, help-seeking, and time and study environment management strategies, while critical thinking and effort regulation were the least frequently employed. This shows that the Vietnamese EFL learners were limited in using higher-order thinking skills to be evaluative, creative and innovative in their language learning. This finding aligns with outcomes from several previous research projects (Ngo 2019; Tran and Long 2020). This can be explained by the fact that exam-centred education is prevalent in many Asian educational systems, including Vietnam, and the power dynamic between educators and learners sometimes positions language instructors as the exclusive providers of knowledge, potentially impeding students' autonomous learning activities (Le 2013; Ngo 2019). Additionally, a highly structured curriculum would limit learners' practice with SRL (Le 2013; Ngo 2019; Zimmerman 1989). Since SRL plays a critical role in learning, it is crucial that students should be encouraged to acquire a diverse range of SRL strategies, including higher-order thinking skills, such as critical thinking and effort regulation. Teachers should instil in them a strong sense of the necessity of regulating their own work and developing critical thinking ability. Thus, teachers should be more flexible in teaching by designing more learning activities that stimulate learners' creativity and learning motivation. Language classes need to be transferred from being teacher-centred to being student-centred, where students become more autonomous and self-regulated. Curriculum developers and material producers can contribute to this goal by incorporating exercises and assignments that are specially created to encourage students' self-regulation capacity.

As regards the link between students' SRL strategies and language proficiency, a strong positive correlation was observed between the variables. This result is consistent with findings from earlier research conducted by Mirhassani et al. (2007) and Abbasian and Hartoonian (2014). Clearly, more proficient students employ more SRL strategies and primarily rely on self-regulation as opposed to external regulation. That is, students control their own learning process without waiting for instructors, course materials or learning settings (Abbasian and Hartoonian 2014). This finding also indicates that students who employ SRL strategies are more inclined to

adopt an active and autonomous approach to their learning, which can gradually improve their language skills. In addition, the effective use of SRL strategies can aid students in addressing challenges in language learning by recognising weaknesses, refining approaches and maintaining motivation, thus leading to improved proficiency. It should be highlighted that all the SRL subscales, except for effort regulation, exhibited a positive correlation with language proficiency. Elaboration demonstrated the most significant correlation with language proficiency, while effort regulation and language proficiency showed the smallest correlation. Therefore, SRL training should be further promoted in language learning to improve students' language proficiency. Also, more training can be provided to educators in employing strategic self-regulated instruction in teaching languages and facilitating the cultivation of higher-order thinking skills to ensure a learning environment that enhances students' attainment of SRL components. One effective technique is to organise workshops or seminars focused on SRL strategies that cover such themes as SRL principles, pedagogic techniques, higher-order thinking and collaborative learning. Educators should be encouraged to model SRL behaviours in the classroom, demonstrating to students how to engage in self-regulation. In the school curricula, the role of SRL strategies and the methods for applying them should be emphasised to help students develop a clear understanding of them.

7 Conclusions

This study demonstrates that the respondents frequently employed self-regulated learning strategies. The use of metacognitive strategies among the participants was nearly on par with their employment of resource management strategies. It was shown that Vietnamese EFL students had good awareness of using a variety of SRL strategies in learning a language. Generally, they primarily used elaboration, help-seeking and managing time and study environments as their main strategies, whereas higher-order thinking skills, such as critical thinking and regulating effort, were less frequent. This fact can be ascribed to exam-centred education that possibly hinders students' independent learning endeavours and the long-standing conventional teacher-fronted teaching and rote learning approach. Hence, educators and educational institutions can provide help by implementing essential modifications to the curriculum to enhance learners' SRL ability. Research findings also suggest a significant positive correlation between students' SRL strategies and language proficiency, which means that those who are more proficient tend to use a greater number of SRL strategies and depend on self-regulation more than their less

proficient peers. Therefore, educators should be offered additional training on implementing strategic self-regulated instruction in language teaching to assist learners in acquiring SRL components.

The present research comes with some constraints that need to be acknowledged while interpreting the findings. First, because of the limited number of participants, care must be taken in generalizing the findings. Abbasian and Hartoonian (2014) involved the participation of 115 Iranian EFL students from different branches of the Islamic Azad University, including 60 MA students and 55 BA students, all studying teaching English as a foreign language (TEFL), to examine the relationship between SRL strategies, language proficiency and reading comprehension. In situations where the population is relatively homogeneous, smaller sample sizes can still produce reliable results and generate hypotheses for future research. A bigger sample size would have been necessary to obtain the data in our study, and the sample size should have been drawn from various universities and educational contexts. In addition, since the respondents were asked to evaluate the level of language proficiency based on the results of international tests, the assessment might not be completely objective. A language proficiency test could be designed and adopted in future studies for more reliable assessment. In this study, the empirical approach relies on self-reports, which are recognised as being prone to bias. Another limitation is the gender imbalance, which can be attributed to the significant gender gap at HLU. Subsequent research may delve into the correlation between SRL and additional variables, such as the EFL students' gender, age and learning motivation, or other aspects of SRL.

Our study has significant implications for teaching and learning practice. Educators should adopt a more flexible approach to instruction by incorporating learning activities that foster students' creativity and motivation. Language classes should shift from a teacher-centred model to a student-centred one, enabling learners to become more autonomous and self-regulated. The strong correlation between SRL strategies and language proficiency suggests that promoting SRL skills through targeted instruction or practical activities could improve students' language learning outcomes. Thus, educators should benefit from further training in implementing self-regulated instructional strategies, fostering the development of higher-order thinking skills and creating a learning environment that supports students in mastering SRL components.

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Appendix: Questionnaire

(adapted from the Motivated Strategies for Learning Questionnaire, Pintrich et al. 1991)

Dear respondents,

The following questionnaire is designed as a survey for my research project, "Investigating the relationship between self-regulated learning and language proficiency among EFL students at Hanoi Law University". The results of this survey will only serve as data for my research and not for any other purposes. I look forward to hearing from you. Thank you very much for your help.

PART I: PERSONAL INFORMATION

Gender: ☐ Male ☐ Female ☐ Prefer not to say

Age: _____

Course of study: _____

Please choose the correct answer

How long have you been learning English?

☐ *1–3 years* ☐ *3–5 years* ☐ *6–10 years* ☐ *Over 10 years*

How many hours do you learn English per day?

☐ *30 minutes–1 hour* ☐ 1–2 hours ☐ *More than 2 hours*

What is your English level? (Please select the answer that best applies to your self-assessment or based on the result of internationally recognised certificates like IELTS.)

☐ *Beginner (equivalent to IELTS band score 0–2.5)*

☐ *Elementary (equivalent to IELTS band score 3.0–3.5)*

☐ *Intermediate (equivalent to IELTS band score 4.0–5.0)*

☐ *Upper-intermediate (equivalent to IELTS band score 5.5–6.0)*

☐ *Advanced (equivalent to IELTS band score 6.5–7.5)*

☐ *Proficient (equivalent to IELTS band score 8.0–9.0)*

PART II: SELF-REGULATED LANGUAGE LEARNING STRATEGIES

The following items are based on your self-regulated language learning strategies. Please rate them on a five-point scale, where **1 = Strongly Disagree, 2 = Disagree,**

3 = Neutral, 4 = Agree and 5 = Strongly Agree. Please choose the correct number for each item and do not leave out any items.

SELF-REGULATED LEARNING STRATEGIES	1	2	3	4	5
META-COGNITIVE STRATEGIES					
I. Rehearsal					
1. I repeatedly say the material to myself while I study for a class.					
2. I do the course readings and read my class notes numerous times while studying for a course.					
3. I commit crucial terms to memory to help me remember the key concepts covered in a lesson.					
4. I compile lists of key concepts for a course and commit the lists to memory.					
II. Elaboration					
1. I compile materials for a class from a variety of sources, including books, lectures and discussions.					
2. Whenever possible, I make an effort to connect concepts from a course to those from other courses.					
3. I attempt to connect the readings for a class to what I already know.					
4. I jot down concise synopses of the key points from the readings and my class notes when studying for a course.					
5. I make an effort to comprehend the material in a class by drawing connections between the ideas presented in the lectures and the readings.					
6. In other class activities, like lectures and discussions, I try to incorporate concepts from the course readings.					
III. Organisation					
1. I make an overview of the readings for a course to help me keep my thoughts in order while I study.					
2. I review the texts and my class notes to identify the key ideas as I study for a course.					
3. I use basic tables, charts and diagrams to help me arrange the course material.					
4. I review my class notes and create an overview of key ideas when studying for a course.					
IV. Critical thinking					
1. I frequently find myself debating what I read or hear in a course to determine whether it's credible.					

(continued)

SELF-REGULATED LEARNING STRATEGIES	1	2	3	4	5
2. I attempt to determine whether there is strong supporting evidence for a theory, interpretation or conclusion that is offered in class or in the readings.					
3. I attempt to develop my own opinions about the course material by using it as a starting point.					
4. I make an effort to experiment with my own concepts in relation to what I'm learning in a course.					
5. Whenever I read or hear an assertion or conclusion in a class, I think about possible alternatives.					
V. Metacognitive self-regulation					
1. I frequently overlook crucial information in class because I'm preoccupied with other things. (REVERSED)					
2. I make up questions as I read for a course to stay on task.					
3. When I'm uncertain about something I'm reading for a class, I go back and try to understand it.					
4. I read the content differently if the course texts are hard to understand.					
5. I often skim new course material to get a sense of how it's laid out before delving into it.					
6. To make sure I comprehend the materials I've been learning in a session, I pose questions to myself.					
7. I make an effort to modify my study methods to meet the demands of the course and the teaching style of the instructor.					
8. Frequently, I discover that even though I've read the material for a class, I still don't understand it. (REVERSED)					
9. When I prepare for a course, I attempt to consider a topic and choose what I should learn from it instead of just reading it again.					
10. My goal in studying for a course is to identify the concepts that I don't fully grasp.					
11. I make goals for myself while I study for a class so that I can direct my activities throughout each study session.					
12. When taking notes in class, if I feel confused, I make sure to figure it out later.					
RESOURCE MANAGEMENT STRATEGIES					
I. Time and study environment management					
1. I typically study in a space where I can focus on my course work.					
2. I use my study time wisely for a course.					

(continued)

SELF-REGULATED LEARNING STRATEGIES	1	2	3	4	5
3. I have trouble keeping to a study schedule. (REVERSED)					
4. I have a dedicated space where I study every day.					
5. I make sure to complete the readings and tasks for a course on a weekly basis.					
6. I frequently show up for classes.					
7. Frequently, I find that I don't dedicate much time to a course due to other commitments. (REVERSED)					
8. Before an exam, I seldom have time to go over my readings or notes. (REVERSED)					
II. Effort regulation					
1. When I study for this subject, I frequently give up before completing what I intended to do because I'm too lazy or bored. (REVERSED)					
2. Even if I disagree with what we're doing in a class, I put a lot of effort into doing well.					
3. I either give up on difficult coursework or just focus on the material that's simple. (REVERSED)					
4. I'm able to work through course materials that are boring and uninteresting.					
III. Peer learning					
1. I frequently try to convey the topics I'm learning for a class to a classmate or friend.					
2. I make an effort to collaborate with my classmates in doing the homework for a class.					
3. I usually make time in studying for a course to go over the content with a group of classmates.					
IV. Help-seeking					
1. Even when I find it difficult to understand the topics covered in a class, I still make an effort to complete the assignments by myself. (REVERSED)					
2. I ask the teacher to explain any concepts I don't fully comprehend.					
3. I jot down concise synopses of the key points from the readings and my class notes when I'm studying for a course.					
4. I make an effort to find fellow students in a class that I may approach for assistance if necessary.					

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