AN INVESTIGATION OF ESL READING STRATEGIES USED BY VIETNAMESE NON-ENGLISH MAJORED STUDENTS

Nguyen Thi Bich Hanh*

Ha Tinh University

Received: 04/02/2022; Revised: 30/03/2022; Accepted: 29/04/2022

Abstract: This study investigated Vietnamese non-English majored students' English reading strategy use and its relationship with their self-perceived English reading ability. Sixty-seven Vietnamese freshmen self-rated their reading ability and completed the Survey of Reading Strategies measuring their use of global, problem-solving, and support strategies. The results revealed a fairly regular use of reading strategies for English texts by Vietnamese non-English majors, with support strategies being the most frequently employed and followed by global and problem-solving strategies. In addition, students with self-rated reading ability at pre-intermediate level used global and problem-solving strategies at a significantly higher frequency than did students with self-rated reading ability at elementary level, while no significant differences were shown for support strategies. These suggested that Vietnamese non-English majored students are fairly strategic readers in English and students who perceive themselves as better readers appear to have higher strategic awareness and thus, more frequently employ reading strategies.

Keywords: ESL reading strategies, strategy preference, reading ability, Vietnamese non-English majored students

1. Introduction

Given the additional linguistic barrier of a second language (L2) and potential differences in cultural and educational backgrounds, reading in a L2 is generally more challenging than reading in the first language (L1). Then, the active role of the reader, specifically, the reader's ability to employ appropriate strategies to tackle reading difficulties and avoid comprehension failures, is crucial to successful comprehension (Grabe, 1991). A vast body of research has been done to examine reading strategy use by learners of different L1s, including Vietnamese (Do Hieu Manh & Phan Le Thu Huong, 2021; Nguyen Thi Bich Thuy, 2018, 2020; Nguyen Thi Ngoc Minh & Nguyen Thuy Nga, 2020; Pham Thi Kieu Oanh, 2017). However, current evidence of Vietnamese learners' ESL reading strategies is limited to high-school students or students at higher education institutions from the northern and southern regions of Vietnam. In addition, reading in English is often of great challenge to students who do not major in English-specialized degrees (i.e., non-English majors), as they receive quite limited formal instruction for and exposure to English during their undergraduate programs. Nevertheless, it is unclear whether there exists a relationship between Vietnamese non-English majored students' reading strategies and reading ability. This study, therefore, aimed to investigate the perceived use of ESL reading strategies by Vietnamese non-English majored students from universities in the central region of Vietnam and the relationship between their reading strategy use and self-perceived reading ability. Specifically, the study answered the following research questions:

* Email: hanh.nguyenthibich@htu.edu.vn

1. What are Vietnamese non-English majored university students' preferences for reading strategies when reading in English?

2. Is there a relationship between Vietnamese non-English majored university students' reading strategy use and their self-perceived English reading ability?

2. Literature review

2.1. Reading strategy use by ESL learners

Cohen (1990) defines reading strategies as the mental procedures that readers deliberately prefer to employ to monitor and accomplish a reading task. The employment of reading strategies indicates how readers understand a reading task, what they think they can do to achieve their reading goal, and what they decide to do to tackle comprehension challenges. Based on a metacognitive framework, researchers identify two types of strategies: cognitive strategies and metacognitive strategies (Garner, 1987). Cognitive strategies are used to construct meaning of text, while metacognitive strategies are used to monitor understanding and overcome problems which may arise during reading.

Developing the Survey of Reading Strategies (SORS) to examine strategy use in L2 reading, Mokhtari and Sheorey (2002) specify reading strategies into three subtypes: global (metacognitive), problem-solving (cognitive), and support strategies. Global strategies refer to "intentionally, carefully planned techniques by which learners monitor or manage their reading" (Mokhtari & Sheorey, 2002, p.4), for example, having a reading purpose. Problem-solving strategies are "localized" and used when the text becomes difficult to read, for instance, re-reading. Support strategies are tools to aid comprehension such as the use of outside reference materials (e.g., dictionaries) and note-taking. The SORS has been used extensively in studies concerning reading strategy use by ESL learners (Chumworatayee, 2012; Do Hieu Manh & Phan Le Thu Huong, 2021; Jafari & Shokrpour, 2012; Karbalaee Kamran, 2012; Madhumathi & Ghosh, 2012; Malcolm, 2009; Okyar, 2021; Poole, 2010; Sheorey & Baboczky, 2008; Zhang & Wu, 2009).

By means of the SORS, researchers have identified some prominent tendencies in the use of reading strategies by ESL learners of various L1s. One of these tendencies shows that, regardless of differences in their L1s, ESL learners share a common preference for support strategies. This trend is supported by the findings of studies with Hungarian (Sheorey & Baboczky, 2008), Iranian university students (Jafari & Shokrpour, 2012), and ESL learners of different nationalities who were studying at US higher education institutions (Sheorey & Mokhtari, 2001). According to Sheorey and Mokhtari (2001), this tendency suggests that many ESL learners use supportive tools to compensate for their lack of linguistic competence in comprehending a written text in the target language.

Another trend, found among a body of other studies, shows a preference for problem-solving strategies among ESL learners. Zhang and Wu (2009) found that Chinese ESL learners preferred problem-solving strategies the most, global strategies the second and support strategies the least. The same results were replicated for Moroccan (Mokhtari & Reichard, 2004), Thai (Chumworatayee, 2012), Arabian (Malcolm, 2009), Indian (Madhumathi & Ghosh, 2012),

Indonesian (Par, 2020), and Turkish (Okyar, 2021; Yüksel & Yüksel, 2012) ESL learners. This suggests that some groups of ESL learners are able to take actions when they encounter reading difficulties to avoid comprehension failures while reading English texts.

In addition, previous research has also provided valuable observations about ESL learners' preferences regarding the use of individual reading strategies. Indian ESL learners frequently used strategies involving visualizing information from the text, re-reading, and adjusting their reading speed, while they rarely thought in both English and L1 or translated from English to their mother tongue (Madhumathi & Ghosh, 2012). Differently, Iranian students showed a higher preference for some support strategies such as using reference materials, thinking in both English and their native language, and translating, whereas they less favored strategies like adjusting the reading speed, reading aloud, evaluating what is read, using visuals and distinguishing between what should be read closely and what should be ignored (Jafari & Shokrpour, 2012). The diversity of preferences for strategy types and individual strategies suggest that ESL learners' strategic behaviors may differ under the influence of their L1s and educational and cultural backgrounds.

2.2. Relationship between ESL learners' reading strategy use and reading ability

Research has documented that L2 readers' reading ability influences their use of reading strategies (Alfarwan, 2021; Karbalaee Kamran, 2012; Madhumathi & Ghosh, 2012; Rastegar, Kermani, & Khabi, 2017; Sheorey & Mokhtari, 2001). Good readers tend to employ strategic reading to a greater extent than do poor readers. In a study by Sheorey and Mokhtari (2001), 150 native-English-speaking US and 152 ESL students completed the SORS and self-rated their reading ability. The results showed that both ESL and US high-reading-ability students show comparable degrees of higher reported usage for global and problem-solving reading strategies than lower-reading-ability students in the respective groups. In addition, while the US high-reading-ability students seem to consider support strategies to be relatively more valuable than their low-reading-ability US counterpart, ESL students attribute high value to support reading strategies, regardless of their reading ability level. A positive relationship between reading strategy use and self-perceived reading efficacy was also found in a recent study with Turkish learners (Okyar, 2021).

Madhumathi and Ghosh (2012) examined the relationship between Indian student's ESL reading strategies measured via the SORS and their reading performance assessed via a modified TOEFL reading test. They found that high performing readers employed all three types of reading strategies, especially global strategies, significantly more frequently than their lower level counterparts. In a study with a similar design and conducted with Iranian undergraduate and graduate students of various disciplines, Karbalaee Kamran (2012) also found that the overall use of reading strategies and the use of global strategies are predictors of ESL learners' reading performance. More recent studies in which participants' strategic awareness measured by the SORS also found a positive relationship between ESL learners' reading strategy use and reading performance (Alfarwan, 2021; Par, 2020; Rastegar *et al.*, 2017). These results suggest that proficient readers are more aware of their reading purposes and are better at monitoring their reading process through the effective use of reading strategies. Besides, other factors such as language proficiency and genders may also play a role in the use of reading strategies by L2

readers. ESL learners with higher English proficiency are shown to employ more strategies and achieved a significantly higher performance on reading comprehension tests than do their lower English proficiency counterpart (Razi & Grenfell, 2012; Zhang, 2001). Female ESL learners are found to use reading strategies more frequently than do their male counterpart (Alfarwan, 2021; Do & Le, 2021; Poole, 2010).

2.3. ESL reading strategy use by Vietnamese university students

There has been growing interest in examining reading strategy use by Vietnamese ESL learners at tertiary level. Some of these studies (Do Hieu Manh & Phan Le Thu Huong, 2021; Nguyen Hong Chi & Phung Trieu Vy, 2021; Pham Thi Kim Oanh, 2017) were concerned with strategic awareness of students who are enrolled in English-specialized degrees. For example, using the SORS (Mokhtari & Sheorey, 2002), Do and Le (2021) examined reading strategy use by Vietnamese students whose major was English Teaching in relation to their reading proficiency. They found that overall, the participants used readings strategies at a moderate level, with the high usage of problem-solving strategies, followed by medium usage of support and global reading strategies. In addition, students who had high reading ability measured by a TOEFL reading test used reading strategies more frequently than did their poor-reading-ability counterpart, but the significant difference was found for global strategies only. It is noted that the findings of these studies might not be representative of Vietnamese ESL learners at tertiary-level, as the selected sample was students specializing in English Teaching or pre-service English teachers. It is likely that, as a result of teacher training courses, they had acquired a higher level of metacognitive awareness than the average English language learners in the Vietnamese educational system.

Other studies (Nguyen Thi Bich Thuy, 2018, 2020; Nguyen Thi Minh Ngoc & Nguyen Thuy Nga, 2020) have examined reading strategies used by Vietnamese non-English majored students. By means of the SORS, Nguyen Thi Ngoc Minh and Nguyen Thuy Nga (2020) investigated reading strategies used by non-English majors at a university in Southern Vietnam. The results from 120 sophomores showed that overall, the participants were medium strategy users, and they most preferred problem-solving strategies followed by global and support strategies. In a large-scale study by Nguyen Thi Bich Thuy (2020), the survey results from 963 students from 6 universities in Northern Vietnam (Hanoi) revealed that the participants were moderate users of reading strategies, with cognitive (problem-solving) strategies being the most frequently used. Noticeably, the aforementioned studies have been conducted with non-English majors at higher education institutions in the northern and southern regions of Vietnam. To the best of the researchers' knowledge, there seems to be lacking evidence about ESL reading strategies among non-English majors from universities in the central region of Vietnam. In addition, none of the previous studies have examined the relationship between non-English majored students' reading strategies and their reading ability. This study, therefore, endeavored to shed some light on these unexplored issues.

3. Methods

3.1. Participants

Due to the impact of the Covid-19 pandemic during the academic year 2020-2021, it was difficult to recruit participants and meet them in person, and additionally, this study was carried out at a small-sized public university being the only university in one province in Central Vietnam. Then, for practical consideration, a rather small sample of 67 students, including 41 females and 26 males aged 19-21 (M=19.78, SD=.78), were recruit to take part in the study. Participants were freshmen of various majors other than English, including pre-school education, primary education, construction engineering, environmental engineering, and computer science. Before attending tertiary education, all participants had studied English for at least 7 years during secondary education. At university, they were required to complete two mandatory English courses which aimed to improve their language proficiency to at least at intermediate level, and at the time of the study, they were enrolled in the second course. Regarding their reading proficiency in English, participants were asked to rate their reading ability at either elementary, pre-intermediate, intermediate, upper-intermediate or advanced level. 33 participants rated their English reading ability as at the elementary level and 34 as pre-intermediate.

3.2. Materials

In order to assess participants' metacognitive awareness of reading strategy use, the SORS developed by Mokhtari and Sheorey (2002) was employed in this study. Mokhtari and Sheorey categorize thirty items in the inventory into the three following subtypes:

- 13 global reading strategies (e.g., having a purpose in mind, previewing length and organization of the text);

- 8 problem-solving strategies (e.g., adjusting the reading speed, guessing the meaning of unknown words, and rereading the text);

- 9 support strategies (e.g., using a dictionary, taking notes, underlining, or highlighting textual information).

The frequency level of readers' strategy use is measured on a five-point Likert scale available after each statement, ranging from 1 ("I never or almost never do this") to 5 ("I always or almost always do this") (Mokhtari & Sheorey, 2002). According to Mokhtari and Sheorey's scoring instruction, the frequency level of strategy use is grouped as follow: 3.5 or higher = High; 2.5 - 3.4 = Medium; 2.4 or lower = Low. The internal reliability of the SORS was reported to be 0.89, "indicating a reasonable degree of consistency in measuring awareness and perceived use of reading strategies among non-native students of English" (Mokhtari & Sheorey, 2002, p.4).

This study used a bilingual English-Vietnamese version of the SORS. The researcher translated the survey into Vietnamese, and a colleague of the researcher reviewed the translation and modified it if necessary, while another colleague back-translated the Vietnamese version into English to ensure that the Vietnamese version preserved the original meaning of the items in the survey. In the survey provided to the participants, the translated Vietnamese statements appeared

right after the English statements they paired with, for example, I have a purpose in mind when I read (Tôi có mục đích đọc rõ ràng khi tôi đọc).

3.5. Data collection and analysis

Before the fieldwork, permission from the university administrator was obtained and participants' consent forms were collected. After answering a short background questionnaire (e.g., age, gender, reading ability, etc.), participants responded to the SORS by reading each statement and then, circling the number that applied to them. The whole procedure was expected to last up to 30 minutes.

R - a programming language environment for statistical computing (R Core Team, 2018) was used to analyze the data. Descriptive and frequency statistics provided means, standard deviations, and frequency distributions for their overall scores of the use of each strategy subtype (global, problem solving, and support) as well as mean scores of 30 individual items in the Survey of Reading Strategies. Independent sample t-tests were used to compare the frequency means of each strategy subtype between the elementary and pre-intermediate reading ability groups.

4. Findings and discussion

4.1. Vietnamese non-English majored students' ESL reading strategy use

The purpose of the first research question was to identify Vietnamese non-English majored students' preference for ESL reading strategies. Table 1 summarizes the descriptive statistics for the three subtypes of reading strategies, and Table 2 presents the reading strategies with the reported frequency of use in the descending order.

Table 1. Descriptive statistics for three types of reading strategies

Types of reading strategies	n	min.	max.	mean	sd
Global strategies	67	2.85	4.31	3.49	.37
Problem solving strategies	67	2.38	4.13	3.46	.42
Support strategies	67	2.67	4.11	3.64	.32

Note: n: number of participants, sd: standard deviation

As shown in Table 1, none of the three types of reading strategies was reported with a low frequency of use, and in Table 2, all the 30 individual reading strategies were reported to be frequently used by the participants, with 14 being used at high frequency. The mean scores of 3.49 and 3.64 for global and support strategies, respectively, reveal that these two types of reading strategies were used more than 50% of the time, approaching the point of "often" use. The results also show that, of all three strategy subtypes, support strategies were used most frequently, whereas problem-solving strategies least frequently. As presented in Table 2, the most frequently used strategy is a support one, namely, underlining or circling information in the text to help me remember it, followed by a problem-solving strategy - picturing/visualizing information, two global strategies - having a reading purpose and making guesses about the content of the text. On the other hand, reading aloud (support), paying closer attention when text becomes difficult (problem-solving), and using tables, figures, and pictures to increase understanding of the text (global) were the three least preferred strategies by the participants.

Based on the frequency statistics, it appears that Vietnamese undergraduate students whose majors were not English employed reading strategies quite frequently when reading in English. Readers' active engagement in the reading process is reflected in their attempt to use different types of reading strategies to maximize their comprehension of a reading text. Then, it is encouraging that, with frequent use of reading strategies, Vietnamese non-English majored students have a pretty high level of awareness of their own reading process and are able to monitor and manage their reading in a second language.

The fairly high use of reading strategies by Vietnamese non-English majored students in this study could be a result of their long-term English education. At the time of the study, all participants had studied English for 7 years or more at secondary level and completed one English course at tertiary level; therefore, they were likely to have substantial experience in reading in English. Additionally, because participants were college-level students, they all had acquired literacy skills in their L1 to a high degree. As found in prior studies (Mokhtari & Reichard, 2004; Sheorey & Mokhtari, 2001), skilled readers in both L1 and L2 tend to have a relatively unitary pattern of metacognitive knowledge and are more aware that "information and strategies learned or acquired in one language could be used to comprehend text written in another language" (Garcia, Jimenez & Pearson, 1998, p.204). Thus, it is possible that the participants in this study could have transferred some of their strategies from L1 to L2 reading.

Table 2. ESL reading Strategies used by Vietnamese non-English majored students

Type	Strategies	Mean	Rank
SUP	10. I underline or circle information in the text to help me remember it.	**4.53**	1
PROB	19. I try to picture or visualize information to help me remember what I read.	**4.16**	2
GLOB	1. I have a purpose in mind when I read.	**4.15**	3
GLOB	24. I try to guess what the content of the text is about when I read.	**4.06**	4
PROB	25. When text becomes difficult, I re-read it to increase my understanding.	**3.97**	5
GLOB	27. I check to see if my guesses about the text are right or wrong.	**3.88**	6
SUP	2. I take notes while reading to help me understand what I read.	**3.84**	7
GLOB	23. I check my understanding when I come across new information.	**3.75**	8
SUP	22. I go back and forth in the text to find the information presented in the text.	**3.69**	9
GLOB	3. I think about what I know to help me understand what I read.	**3.66**	10
SUP	29. When reading, I translate from English into my native language.	**3.66**	11
GLOB	12. When I read, I decide to read closely and what to ignore.	**3.63**	12
SUP	30. When reading, I think about information in both English and my L1.	**3.59**	13
PROB	7. I read slowly and carefully to make sure I understand what I am reading.	**3.56**	14
GLOB	4. I take an overall view of the text to see what it is before reading it.	3.47	15
GLOB	6. I think about whether the content of the text fits my reading purpose.	3.41	16
SUP	18. I paraphrase to better understand what I read.	3.41	17
SUP	26. I ask myself questions I like to have answered in the text.	3.38	18
GLOB	20. I use typographical features like bold face… to identify key information.	3.34	19
GLOB	21. I critically analyze and evaluate the information presented in the text.	3.34	20
SUP	13. I use reference materials to help me understand what I read.	3.34	21
PROB	11. I adjust my reading speed according to what I am reading.	3.43	22
PROB	16. I stop from time to time and think about what I am reading.	3.28	23
PROB	9. I try to get back on track when I lose concentration.	3.19	24
PROB	28. When text becomes difficult, I guess the meaning of the unknown words or phrases.	3.16	25
GLOB	17. I use context clues to help me better understand what I am reading.	3.03	26

GLOB	8. I review the text first by noting its characteristics like length & organization.	3.00	27
SUP	5. When text becomes difficult, I read aloud to help me understand what I read.	2.91	28
PROB	14. When text becomes difficult, I pay closer attention to what I am reading.	2.66	29
GLOB	15. I use tables, figures, and pictures in text to increase my understanding.	2.47	30

*Note: **Bold** means indicate high frequency of strategy use. The reading strategies are presented in the descending order of reported frequency of use.*

The result shows that, for English texts, support strategies were the most preferred by the participants, followed by global and problem-solving strategies. The exactly same pattern of reading strategy preference is also revealed for a number of ESL learners at university level such as Iranian (Jafari & Shokrpour, 2012) and Hungarian students (Sheorey & Baboczky, 2008). Similarly, Sheorey and Mokhtari (2001) found that ESL learners studying English in the US, regardless of their reading ability, made use of support strategies more often than of the two other strategy types. The consistent preference for support strategies among ESL learners of different first languages suggests that support strategies may play an important role in assisting some ELS leaner groups to comprehend written materials in the target language.

Participants in this study showed a relatively high frequency of use of reading strategies for English texts. In contrast, both Vietnamese English-majored (Do Manh Hieu & Phan Le Thu Huong, 2021) and non-English majored students at universities in Southern and Northern Vietnam (Nguyen Thi Bich Thuy, 2018, 2020; Nguyen Thi Minh Ngoc & Nguyen Thuy Nga, 2020) were found to be moderate strategy users in previous studies. The finding of support strategy preference among Vietnamese non-English majors in this study was also not in line with prior findings of Vietnamese English-majored and non-English majored students who favored problem-solving strategies the most. These discrepant results between this study and prior studies with Vietnamese university students might reflect the effect of differing instructions and training from individual institutions and/or regions on students' strategic behavior in L2 reading. Students who study at large-scale universities or at location where there are more opportunities to use English might read differently from students from small-scale universities or at location with limited language practice opportunities. More importantly, students' language proficiency level was not measured/reported in either this study or previous studies. As ESL learners with differing levels of language proficiency have been shown to employ reading strategies at different frequency (Razi & Grenfell, 2012; Zhang, 2001), it is possible that participants in this and prior research were at different levels of English competence, and thus, showed differing patterns of their strategy use when reading in English.

Different from the support strategy preference of the participants in this study, some other ESL learner groups also appear to favor problem-solving strategies. Turkish (Okyar, 2021; Yüksel & Yüksel, 2012) and Thai (Chumworatayee, 2012) university students both are found to have the highest frequency for problem-solving strategies, global strategies the second and support strategies the least. Likewise, Moroccan (Mokhtari & Reichard, 2004), Indian (Madhumathi & Ghosh, 2012), and Arabian ESL learners (Malcolm, 2009) reported the most frequent use of cognitive strategies. In short, similarities and differences in strategy preferences of ESL learners confirms both the universality and uniqueness of the use of reading strategies by different groups of ESL learners. In some ways, they share similar choices of reading

strategies; in other ways, they are likely to have different preferences for certain reading strategy types and particular strategies.

4.2. Relationship between Vietnamese non-English majored students' reading strategy use and self-rated English reading ability

The second research question investigated the relationship between Vietnamese non-English majored university students' reading strategy use and their self-rated reading ability. Haft of the participants rated their reading ability as at elementary level and half as pre-intermediate level. The descriptive statistics of each self-rated reading ability group and the comparisons of reading strategy use between the groups are summarized in Table 3.

The results of independent samples t-tests showed a significant difference in the participants' use of global strategies, t (63.21) = -3.38, p = .001 and problem-solving strategies, t (63.68) = -2.42, p = .018, but no difference in their use of support strategies, t (63.53) = -.24, p=.811. These indicates that students who self-rated their reading ability at pre-intermediate level significantly used reading strategies at a higher frequency than did students who rated their reading ability at elementary level. These two groups, however, used support strategies at a similar frequency.

Table 3. Vietnamese non-English majored students' reading strategy use in relation to their self-rated reading ability

Reading strategy use	Elementary reading ability		Pre-intermediate reading ability	
	mean	sd	mean	sd
Global strategies	3.35	.32	3.63	.38
Problem-solving strategies	3.34	.43	3.58	.39
Support strategies	3.63	.36	3.65	.3

Note: sd: standard deviation

The findings of this study generally are in line with previous findings about higher use of reading strategy by ESL learners with higher self-rated reading ability (Sheorey & Mokhtari, 2001; Okyar, 2021) or ESL learners with higher performance on reading tests (Do Manh Hieu & Phan Le Thu Huong, 2021; Karbalaee Kamran, 2012; Madhumathi & Ghosh, 2012). These suggests that, as compared to students with lower or lower self-perceived L2 reading ability, students with better L2 reading ability or with higher perception of their L2 reading ability appear to have a higher metacognitive awareness of their reading process and thus, frequently use reading strategies to assist them in understanding the texts in that language.

In this study, university students who rated their reading ability at elementary and pre-intermediate level were not found to use support reading strategies differently when reading English texts. It is noted that support reading strategies were the ones that they, as the whole group, reported to use the most frequently. The fact that these students rated their reading performance as elementary and pre-intermediate level, the first two levels, on the given scale, indicates that their reading ability or perhaps, more exactly, their confidence in their reading ability in English was not really high. This suggests that students, in general, on the lower side of their reading ability in the target language may have to rely more on supportive tools to

compensate for their lacking linguistic and reading competence and assist them in comprehending texts in the target language.

5. Conclusion and suggestions

This study has provided more insight into the way Vietnamese non-English majored university students read in English and offered further empirical evidence about reading strategy use by different groups of ESL learners. The results of this study showed that Vietnamese non-English majors had a relatively frequent use of reading strategies, suggesting that Vietnamese university students are rather metacognitively strategic when reading academic English texts. They use most reading strategies at a high or average frequency and tend to favor support strategies. The study observed a preferred pattern of reading strategy use by Vietnamese ESL learners which is both similar to and different from that of other ESL learner populations. In addition, the study revealed that students with higher self-rated reading ability in the target language showed higher frequency of reading strategy use. This suggests that higher metacognitive awareness of reading strategies appears to result in higher confidence in reading in the target language and possibly, better performance in that language.

This study has several pedagogical implications for teaching ESL reading. The finding of greater use of reading strategies by higher reading ability self-raters suggests an instructional approach that include strategy improvement as a focus. To increase students' confidence in reading and reading ability in the target language, students should be explicitly instructed to use reading strategies more frequently when reading in English. However, the diverse preference of strategy use among ESL learners implies that it might not be always effective to apply the same approaches and methods in English classrooms for different groups of ESL learners. Designing ESL reading materials and teaching ESL reading should consider both universality and uniqueness of different groups of ESL learners, in this case, their preferences for reading strategies. Besides, the SORS can be a useful tool for assessing metacognitive awareness for ESL learners. At the beginning of a reading course, teachers can require students to assess their own frequency of use of reading strategies using the SORS. Based on the results, ESL teachers can better prepare a proper plan to help empower their learners' strategic awareness.

This study has provided the missing piece of information about reading strategy use of non-English majors from universities in the central region of Vietnam. However, given that the study used a rather small sample size of the participants from only one university in the region, further research is required to provide a more comprehensive picture of reading strategy use by university students in Central Vietnam, taking into consideration the difference in socioeconomic and educational conditions as compared to other regions of Vietnam. In addition, the use of reading strategies may depend on many different factors, including L2 proficiency and L2 reading proficiency. This study has revealed a preferred pattern of strategy use by Vietnamese non-English majors and its relationship with their self-perceived reading ability in English. However, it remains unclear whether there is a relationship between their frequent use of reading strategies and their actual reading ability and language proficiency. Moreover, the data in this study was elicited through a survey in which participants had to draw on their past experiences of reading strategy use, and therefore, it is possible that the reported frequency of use may not reflect accurately whether and how Vietnamese students employ reading strategies during reading.

Future research may try to triangulate data from different instruments such as interviews, observations and think-aloud protocols and consider the effect of other factors for a more accurate and comprehensive account of strategy use by Vietnamese ESL learners.

References

Alfarwan, S. (2021). Tertiary level Saudi EFL learners' reading strategies in relation to gender and proficiency. *Reading Psychology*, *42*(6), 577–605. https://doi.org/10.1080/02702711.2021.1888350.

Chumworatayee, T. (2012). Thai adult EFL learners' metacognitive awareness of reading strategies. *International Journal of Interdisciplinary Social Sciences*, *6*(9), 83–95. https://doi.org/10.18848/1833-1882/cgp/v06i09/52148.

Cohen, A. (1990). *Language learning: Insights for learner, teachers, and researchers*. Boston: Heinle & Heinle Publishers.

Do, H.M., & Phan, H.L.T.. (2021). Metacognitive awareness of reading strategies on second language Vietnamese undergraduates. *Arab World English Journal*, *12*(1), 90–112. https://doi.org/10.24093 /awej/vol12no1.7.

Garcia, G.E., Jimenez, R.T., & Pearson, P.D. (1998). Metacognition, childhood bilingualism, and reading. In D. Hacker, J. Dunlowsky, & A. Graesser (Eds.), *Metacognition in Educational Theory and Practice*. Mahwah, NJ: Lawrence Erlbaum Associates.

Garner, R. (1987). *Metacognition and reading comprehension*. Westport, CT: Ablex Publishing.

Grabe, W. (1991). Current developments in second language reading research. *TESOL Quarterly*, *25*(3), 375. https://doi.org/10.2307/3586977.

Jafari, S.M., & Shokrpour, N. (2012). The reading strategies used by Iranian ESP students to comprehend authentic expository texts in English. *International Journal of Applied Linguistics and English Literature*, *1*(4), 102–113. https://doi.org/10.7575/ijalel.v.1n.4p.102.

Karbalaee, K.S. (2012). Does reading strategy use predict and correlate with reading achievement of EFL learners? *International Journal of Research Studies in Language Learning*, *2*(1), 29–38. https://doi.org/10.5861/ijrsll.2012.118.

Madhumathi, P., & Ghosh, A. (2012). Awareness of reading strategy use of Indian ESL students and the relationship with reading comprehension achievement. *English Language Teaching*, *5*(12), 131–140. https://doi.org/10.5539/elt.v5n12p131.

Malcolm, D. (2009). Reading strategy awareness of Arabic-speaking medical students studying in English. *System*, *37*(4), 640–651. https://doi.org/10.1016/j.system.2009.09.008.

Mokhtari, K., & Reichard, C. (2004). Investigating the strategic reading processes of first and second language readers in two different cultural contexts. *System*, *32*(3), 379–394. https://doi.org/10.1016/j.system.2004.04.005.

Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of reading strategies. *Journal of Developmental Education*, *25*(3), 2-10.

Nguyen, C.H., & Phung, V.T. (2021). The relationships between metacognition and reading strategies: The case of English-majored students at a private university in Vietnam. *European Journal of Educational Research*, *10*(3), 1561-1578. https://doi.org/10.12973/EU-JER.10.3.1561.

Nguyen, T.B.T. (2018). Reading strategies used by Vietnamese EFL and ESL university students. *VNU Journal of Foreign Studies*, *34*(2). https://doi.org/10.25073/2525-2445/vnufs.4250.

Nguyen, T.B.T. (2020). The application of S2R strategies in English reading comprehension by university students in Vietnam. *Journal of Language and Linguistic Studies*, *16*(3), 1534-1546. https://doi.org/10.17263/jlls.803893.

Nguyen, T.N.M., & Nguyen, T.N. (2020). An investigation into reading strategies used by Vietnamese non-English major students at Kien Giang University. *Ho Chi Minh City Open University Journal of Science*, *9*(2), 100-107. https://doi.org/10.46223/hcmcoujs.soci.en.9.2.265.2019.

Okyar, H. (2021). Turkish EFL learners' reading strategy use and its relation to reading self-efficacy and

gender. *The Reading Matrix: An International Online Journal*, *21*(1), 116-130. Retrieved from https://www.readingmatrix.com/files/24-6jory9o4.pdf.

Par, L. (2020). The relationship between reading strategies and reading achievement of the EFL students. *International Journal of Instruction*, *13*(2), 223-238. https://doi.org/10.29333/iji.2020.13216a.

Pham, T.K.O. (2017). Reading comprehension strategies used by first year English majors at Thai Nguyen University of Education. *Journal of Inquiry into Languages and Culture*, *1*(2), 79-88.

Poole, A. (2010). The reading strategies used by male and female English language learners: A study of Colombian high school students. *New England Reading Association Journal*, *46*(1), 55-63. Retrieved from: http://ezproxy.lib.utexas.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=508130039&site=ehost-live.

R Core Team (2018). R: A language and environment for statistical computing. R Foundation for statistical computing, Vienna, Austria. Vienna: R Foundation for Statistical Computing. Retrieved from https://www.r-project.org/.

Rastegar, M., Kermani, E.M., & Khabi, M. (2017). The relationship between metacognitive reading strategies use and reading comprehension achievement of EFL learners. *Open Journal of Modern Linguistics*, *7*(2), 65-74. https://doi.org/10.4236/ojml.2017.72006.

Razi, O., & Grenfell, M.J. (2012). The impact of linguistic knowledge on learner strategy deployment. *Procedia - Social and Behavioral Sciences*, *47*, 818-822. https://doi.org/10.1016/j.sbspro.2012.06.741.

Sheorey, R., & Baboczky, S.E. (2008). Metacognitive awareness of reading strategies among Hungarian college students. In K. Mokhtari & R. Sheorey (Eds.), *Reading strategies of first- and second- language learners: See how they read* (pp. 161–173). Norwood, MA: Christopher-Gordon.

Sheorey, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System*, *29*(4), 431–449. https://doi.org/10.1016/S0346-251X(01)00039-2.

Yüksel, I., & Yüksel, I. (2012). Metacognitive awareness of academic reading strategies. *Procedia - Social and Behavioral Sciences*, *31*(2011), 894–898. https://doi.org/10.1016/j.sbspro.2011.12.164.

Zhang, L.J. (2001). Awareness in reading: EFL students' metacognitive knowledge of reading strategies in an acquisition-poor environment. *Language Awareness*, *10*(4), 268–288. https://doi.org/10.1080/09658410108667039.

Zhang, L.J., & Wu, A. (2009). Chinese senior high school EFL students' metacognitive awareness and pdf. *Chinese Senior High School EFL Students' Metacognitive Awareness and Reading-Strategy Use*, *21*(1), 37–59.

CHIẾN LƯỢC ĐỌC TIẾNG ANH CỦA SINH VIÊN KHÔNG CHUYÊN NGỮ

Tóm tắt: Nghiên cứu này xem xét việc sử dụng chiến lược đọc Tiếng Anh của sinh viên không chuyên và mối quan hệ với khả năng đọc của họ. 67 sinh viên năm nhất không chuyên tự đánh giá khả năng đọc Tiếng Anh và trả lời bảng điều tra sử dụng ba nhóm chiến lược đọc chính trong Tiếng Anh. Kết quả nghiên cứu chỉ ra rằng sinh viên không chuyên sử dụng chiến lược đọc tương đối thường xuyên, trong đó sử dụng nhóm chiến lược hỗ trợ nhiều nhất, tiếp theo nhóm chiến lược tổng quát nhận thức và chiến lược giải quyết vấn đề. Những sinh viên tự đánh giá khả năng đọc Tiếng Anh tốt sử dụng nhóm chiến lược đọc tổng quát nhận thức và giải quyết vấn đề nhiều hơn những sinh viên tự đánh giá khả năng đọc kém.

Từ khoá: Chiến lược đọc Tiếng Anh, khả năng đọc hiểu, sinh viên không chuyên Tiếng Anh