The Use of Vocabulary Learning Strategies by Thai EFL Learners Studying Vietnamese as a Third Language

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Abstract

The present study investigated the use of vocabulary learning strategies (VLSs) by undergraduate Thai EFL students studying Vietnamese as their third language (L3) and examined if there is any relationship between the learners' strategy use and their success. A five-point Likert-scale questionnaire containing 39 items adapted from Schmitt's (1997) taxonomy of VLSs that are classified into five main categories (determination, social, memory, cognitive and metacognitive strategies) was administered to a group of 55 Thai undergraduate students who were taking a basic Vietnamese course for 45 hours. A vocabulary test was also used as another research instrument in order to reveal any correlation between strategy use and vocabulary test results. The descriptive statistics like mean and standard deviation and correlation were used in the study. It was found that Thai EFL learners were moderate strategy users when learning Vietnamese as their L3. Cognitive strategies emerged as the most frequently used ones, and metacognitive strategies were the least frequently used ones. Participants also used different sub-strategies with different levels of frequency. Moreover, there was no significant relationship between the use of strategies and the participants' success.

Keywords: Vocabulary learning strategies, EFL learners, Vietnamese as a third language

1. Introduction

The integration of Association of Southeast Asian Nations (ASEAN) in 2015 has made learning ASEAN languages become more important, alongside English. Thai students have been urged to improve a third language such as Vietnamese, Malay or Burmese so that they can compete with people from other Southeast Asian nations. Competence in only one language is no longer sufficient, and being proficient in additional, widely spoken languages is generally required to get a well-paid job (Bağtürk & Gulmez, 2011). For this reason, Vietnamese is one of the third languages that is taught at King Mongkut's University of Technology Thonburi (KMUTT). However, it is plausible that difficulties in learning Vietnamese would arise, since Vietnamese and Thai have syntactic and phonological differences which Thai undergraduate students have to confront in their learning.

There is no doubt that vocabulary plays a critical role in the field of foreign language learning and teaching, because adequate knowledge of vocabulary assists students in communication. Vocabulary teaching is necessary because inadequate

vocabulary causes many difficulties in receptive and productive language (Nation, 1990). In addition, learning how to pronounce, spell and define new vocabulary is important to developing processes in reading (Davis & Kelly, 2003), but other skills such as listening, speaking and writing also depend on vocabulary knowledge. According to Harmer (1991), if language structures make up the skeleton of language, then it is vocabulary that provides the vital organs and the flesh. Words are the most important things students must learn. Grammar is important, but vocabulary is much more important (Flower, 2000, as cited in Nosratinia, Divani & Zaker, 2013). While without grammar very little can be conveyed, without vocabulary nothing can be conveyed (Wilkins, 1972). Acquiring vocabulary is one of the most important challenges that learners have to face as they study a foreign language. Therefore, it is beneficial for language teachers to have a better understanding of how learners learn the target language vocabulary using different strategies.

According to Schmitt (2000), vocabulary has been recognized as crucial to language use, because learners' insufficient vocabulary knowledge leads to difficulties in second language learning. Beginning language learners must store a great deal of vocabulary in their long-term memory within a short amount of time, and vocabulary learning strategies often help (Oxford & Scarcella, 1994). Thus, in the case of learning vocabulary in a second language, students need to be educated with VLSs (Zarrin & Khan, 2014). The idea of VLSs can also be applied to learning a third language since it is influenced by the process and product of second language acquisition (Jessner, 2008; Wei, 2003; Clyne et al., 2004; Cenoz & Jessner, 2000, as cited in Çelik-Korkmaz, 2013). Çelik-Korkmaz (2013) also mentions that making comparisons across languages, transferring knowledge of language structures, vocabulary and phonetics can both facilitate and hamper the L3 learning process.

Vocabulary instruction and learning can be influenced by vocabulary input and VLSs. This is because learning and retaining vocabulary is one of the most challenging tasks that any learner encounters while acquiring another language (Alharthi, 2014). It is believed that students can increase their word power, awareness, and understanding of words by VLSs. This process will increase their success in language learning. One way of tackling a large number of unknown words is through VLSs (Alharthi, 2014). By proper application of VLSs as a specific language learning domain, language learners can make progress in their use of language as well as in communicative competence (Alharthi, 2014).

A number of studies have been conducted to investigate the use of VLSs in second language learning such as Gu and Johnson (1996), Schmitt (2000), Sánchez and Manchón (2007), Lip (2009), Asgari and Mustapha (2011), Nosratinia et al. (2013), Wanpen, Sonkoontod, and Nonkukhetkhong (2013), Yazdi and Kafipour (2014), Alharthi (2014), and Zarrin and Khan (2014). Clearly, this area of language has received significant attention. However, it is surprising to find relatively little research which has focused on strategies used in third language acquisition, including VLSs used in learning Vietnamese as a third language, and this finding led to the investigation of the present study.

In the present study, the aim is to examine the VLSs used by Thai undergraduate KMUTT students when learning Vietnamese as their L3 and to see whether there is a correlation between learners' strategy use and their success (vocabulary test scores). The results from this study could raise language teachers' and learners' awareness of the use of VLSs in target language learning and teaching, especially in teaching and learning Vietnamese. In addition, the results could be

useful for teachers of the Vietnamese language (at KMUTT or a similar context at least) to see which strategies should be incorporated into teaching methods and approaches so as to promote prospective students' learning.

Research questions

1. What are the vocabulary learning strategies used by Thai undergraduate KMUTT students when learning Vietnamese as their L3?
2. Is there any relationship between the learners' strategy use and their success?

2. Literature review

Vocabulary Learning Strategies (VLSs)

According to Nation (2001), VLSs are a part of language learning strategies which in turn are a part of general learning strategies. Nation (2001, p. 326) also states, "It is not easy to arrive at a definition of what a strategy is, but to deserve attention from a teacher, a strategy would need to: (1) involve choice, that is, there are several strategies to choose from and one choice could be not to use the strategy; (2) be complex, that is, there are several steps to learn; (3) require knowledge and benefit from training; and (4) increase the efficiency and effectiveness of vocabulary learning and vocabulary use".

There are different VLS classification systems. Gu and Johnson (1996) divide vocabulary learning strategies into two categories: metacognitive regulation and cognitive strategies, which consist of six subcategories that are guessing, using a dictionary, note taking, rehearsal, encoding and activating. The total number of VLSs in their study was 74 items. Furthermore, Schmitt (1997) developed a taxonomy of vocabulary learning strategies with special reference to Oxford's (1990) social, memory, cognitive, and metacognitive categories. His latest taxonomy was used as the basis for this study. According to Schmitt's (1997) taxonomy, 58 strategies are classified into five types: determination, social, memory, cognitive and metacognitive.

Determination strategies are learning strategies used by an individual to discover a new word's meaning without relying on another person's expertise. Learners determine a new word's meaning through guessing from one's structural knowledge of a language, guessing from an L1 cognate, guessing from context, or using reference materials.

Social strategies use interaction with other people to improve language learning. Learners can ask teachers or classmates for information about a new word, and they can answer in a number of ways (e.g., synonyms and translation). Learners can also study and consolidate vocabulary knowledge with other people.

Memory strategies (traditionally known as mnemonics) involve relating the words to be retained with some previously learned knowledge, using some form of imagery, or grouping. A new word can be integrated into many kinds of existing knowledge (e.g., previous experiences or known words), or images can be custom-made for retrieval (e.g., images of a word's form or meaning attributes).

Cognitive strategies are not focused so specifically on manipulative mental processing, but include repetition and using mechanical means to study vocabulary, including the keeping of vocabulary notebooks.

Metacognitive strategies involve a conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the best ways to study. This includes improving access to input, deciding on the most efficient methods of study/review, and testing oneself to gauge improvement. It also includes

deciding which words are worth studying and which are not, as well as persevering with the words one has chosen to learn.

Research Studies in Vocabulary Learning Strategies

With regards to recent studies, several researchers have investigated the use of vocabulary learning strategies in foreign language teaching and learning. Most recently, Yazdi and Kafipour (2014) conducted a study to examine the real use of vocabulary learning strategies by Iranian EFL learners. Their findings revealed that memory strategies were the most frequently used strategy, and cognitive strategies were the least frequently used strategy. Iranian junior EFL students in the study preferred direct, simple strategies requiring the least mental effort.

Alharthi (2014) has also done a study to find the role of vocabulary learning strategies in EFL learners' word attrition. The research showed fruitful outcomes of vocabulary learning strategies, supporting the significant role they have in effective vocabulary learning. The findings also indicated that the use of rote learning (repeating an English item with its Arabic translation) led to more attrition in receptive word knowledge, while note taking strategies (writing an English item with its synonym and definition) emerged as a positive predictor of learners' retention in receptive and productive word knowledge.

Another study was administered by Zarrin and Khan (2014) to investigate the use of current vocabulary teaching and learning strategies among undergraduate learners at Aligarh Muslim University. Schmitt's VLSs taxonomy was applied in the study, including determination, social, memory, cognitive and metacognitive strategies. They found out that memory strategies were the most frequently used strategy, whereas metacognitive strategies were the least frequently used ones. The findings indicated that the participants of the study need more training in VLSs to become more familiar with all types of VLSs. Effective vocabulary learning and teaching strategies need to be incorporated into learners' vocabulary learning process.

It is apparent that the scope of VLSs has received considerable attention. However, relatively little attention has been paid to vocabulary learning strategies used in third language learning and teaching, and Vietnamese is no exception. The present study is an attempt to investigate the types of vocabulary learning strategies employed by Thai EFL learners studying Vietnamese as their L3, and it attempts to determine the correlation between learners' strategy use and their success.

3. Research Methodology

3.1 Participants

This study was conducted with 55 undergraduate KMUTT students from different departments and faculties, namely, mechanical, chemical, civil, and environmental engineering, architecture and design, science, and information technology. Twenty-nine male students and 26 female students were taking LNG341 Basic Vietnamese as a second or third language in the first semester of the 2015 academic year. These students are proficient in Thai as a native language, and English is their first foreign language. LNG341 is an optional three-credit course which provides students with basic knowledge of Vietnamese language such as how to speak Vietnamese in the right tone, how to introduce themselves, and how to give and ask for directions. The number of instructional hours for this course is 45 hours, and students who were taking this course had limited prior experience in learning Vietnamese. English is used as a medium of instruction in this course. A

questionnaire was distributed to the participants in the last week of the course, which was two weeks before the final exam date. The participants all volunteered to be part of the study. They were all assured that the study was for research purposes only, and that they would remain anonymous.

3.2 Research instruments and data collection

3.2.1 The Vocabulary Learning Strategies Questionnaire (VLSQ)

The VLSQ for the current study was adapted from Schmitt's (1997) taxonomy of VLSs in order to see the frequency of strategy use of Thai undergraduate students learning Vietnamese as a third language. In fact, the original questionnaire consisted of five types of VLSs with 58 items in total. However, based on the nature of the Vietnamese language and the course – for example, Vietnamese has no affixes as English does; there is no requirement of dictionary use in the Vietnamese course; there is no interaction with Vietnamese native speakers except for the teacher; and there are no scales for gradable adjectives in the Vietnamese language system – the researcher decided to use only 39 items for this study which were appropriate for exploration of the topic. The actual questionnaire used in this study included the following strategies: determination (five strategies), social (seven strategies), memory (17 strategies), cognitive (six strategies) and metacognitive (four strategies). Moreover, an open-ended question was administered in order for students to add any other strategies that they also used when learning Vietnamese vocabulary apart from the available list of strategies. The participants were required to write their responses in a five-rank rating-scale form (1. Never; 2. Seldom; 3. Sometimes; 4. Often; or 5. Always) that tells how often they used each strategy. This VLSQ was also translated into Thai in order to avoid misunderstanding. In addition, the questionnaire was piloted with a few students to ensure that they could comprehend it, and to reveal any potential problems or difficulties that the student respondents could face. After the pilot session, the questionnaire was administered to 55 students during a regular Vietnamese lesson in which the researcher was also the teacher of the lesson, in November 2015.

The present VLSQ was proved to be reliable and suitable for use in the main study. According to Devellis (1991), reliability of a questionnaire is good if the alpha (α) is at least equal to 0.70 ($\alpha \geq 0.70$). The data obtained from the VLSQ was calculated with Cronbach's alpha at 0.8502, which indicates a high level of internal consistency.

3.2.2 Vietnamese vocabulary final test results

The vocabulary test results were collected from the instructor of LNG341 at the end of the course. In fact, the final test of LNG341 was composed of three sections, and the vocabulary test – which consisted of 35 test items – was one of these sections. The vocabulary test was designed by the only Vietnamese instructor of LNG341, and it was constructed based on the objective of the course, which is to enable students to use basic Vietnamese grammatical structures and vocabulary in daily life. It included four primary parts which were used to test students' understanding and memory of vocabulary about numbers, days, months, seasons, food, and content words related to the topics of the course such as giving directions, shopping and daily activities. The item test types used were word completion and matching. The content of the entire test was double-checked with the course objectives and approved by the academic

committee of the Department of Language Studies. Apparently, the vocabulary test appeared to have high reliability, with the alpha at 0.8827.

3.3 Data analysis

The quantitative data obtained from the VLSQ was analyzed to identify the averages of each strategy used as well as the overall average, and how often learners used each type of VLS for learning Vietnamese. Since there was no scale provided by Schmitt in order to show the levels of frequency of strategy use, the researcher of the present study decided to apply Oxford's (1990) scale (Table 1), which was found to be useful for the present study. It is the key to understanding mean scores of the SILL (Strategy Inventory for Language Learning) to see whether the participants are high, medium or low strategy users. Actually, the SILL was not used in the present study. However, Oxford's scale was applied in this study because it helps to see the frequency levels of the use of VLSs, which was one of the main purposes of this study, and it also uses the five-point Likert scale which is similar to the VLSQ. In addition, VLSQ was developed in reference to Oxford's SILL.

Table 1

Oxford's scale showing the frequency levels of strategy use

High	Always Often	4.5 to 5.0 3.5 to 4.4
Medium	Sometimes	2.5 to 3.4
Low	Seldom Never	1.5 to 2.4 1.0 to 1.4

In addition, the data from VLSQ was compared with the final exam results to see whether there was a correlation between learners' strategy use and their success. Pearson correlation was then used to find out if there was any relationship between learners' vocabulary strategy use and their vocabulary test scores.

4. Results and Discussion

This section presents the results obtained from the vocabulary learning strategies questionnaire and vocabulary test results. Discussion will also be incorporated in this section and mainly highlight the key points such as the highest frequency of strategy use in each category.

Vocabulary learning strategy use of Thai learners with Vietnamese as their L3

To answer the first research question, the analyzed data has been summarized in six different tables (Tables 2-7) for overall use of strategy and each strategy category.

Table 2
Overall use of strategy in learning Vietnamese vocabulary among Thai learners

Strategy	Mean	Std. Deviation	Level of Strategy use	Rank
Cognitive	3.92	1	High	1
Determination	3.39	1.11	Medium	2
Social	3.26	1.11	Medium	3
Memory	3.12	1.14	Medium	4
Metacognitive	2.45	0.93	Low	5
Overall strategy use *(N = 55)*	3.23	1.1	Medium	-

Table 2 shows the overall use of strategy among the learners, with a mean of 3.23, indicating that they were medium strategy users. The results of the mean scores regarding the strategy categories reveal that the most frequently used strategy was cognitive strategy (mean=3.92, SD=1.00), followed by determination strategy (mean=3.39, SD=1.11), social strategy (mean=3.26, SD=1.11), and memory strategy (mean=3.12, SD=1.14). The least frequently used strategy was metacognitive strategy (mean=2.45, SD=0.93).

The descriptive statistics show that the VLSs most frequently employed by undergraduate Thai EFL students studying Vietnamese as their third language at KMUTT were cognitive strategies. This finding is in line with Ho's (2011) finding, in which seven out of the 10 most common learning strategies were cognitive ones. One possible explanation is that learners are familiar with these traditional learning strategies such as taking notes during class hours, repeating after the instructor, and learning new vocabulary by writing the word many times until they can remember it. These common strategies were also in the most-used list in Schmitt's (1997) findings. Schmitt also concluded that all of these were strategies which learners already use and believe to be beneficial. Furthermore, it might be due to the teaching approach of their Vietnamese instructor, who typically required them to use the vocabulary section of their textbook and master pronunciation of a new word by saying it aloud many times. To clarify, using the vocabulary section of the textbook could help learners to acquire new words in a very systematic way because all the lexical items were listed according to topic. Another factor is that the Vietnamese language consists of six tone markers. Hence, repetition could help learners of Vietnamese distinguish the meaning of one word from other words which have a similar written form but sound different in terms of tone markers. Another explanation for cognitive strategies being the most frequently used could be that learners were aware of the importance of learning Vietnamese as their L3 and then aware of the process of their own learning while taking the course. This is consistent with a study of Wenden (1987a) in which learners who emphasized the importance of learning tended to use cognitive strategies that helped them to understand and remember specific items of language. This is possibly why the participants used cognitive strategies more often than the other types of strategies.

Learners' use of cognitive strategies

With respect to cognitive strategies employed by the participants, the frequency of six individual cognitive strategies is shown in Table 3.

Table 3
Cognitive strategies employed by participants

Cognitive strategy (*N=55*)		Mean	Std. Deviation	Level of strategy use
COG33:	Take notes in class	4.58	0.88	High
COG34:	Use the vocabulary section in your textbook	4.33	0.86	High
COG31:	Write the word many times	4.11	0.98	High
COG30:	Say or repeat the word many times	4.04	0.96	High
COG35:	Keep a vocabulary notebook	4.04	1.12	High
COG32:	Use word lists	2.44	1.23	Medium

COG30-35 refers to cognitive strategy codes in the questionnaire.

From Table 3, among all cognitive strategies, the strategies of taking notes in class (strategy 33, mean=4.58, SD=0.88) and using the vocabulary section in the textbook (strategy 34, mean=4.33, SD=0.86) were reported as being the most frequently employed by the participants. They also wrote the word many times (strategy 31, mean=4.11, SD=0.98). The results showed that strategy 30 of saying or repeating the word many times and strategy 35 of keeping a vocabulary notebook were also employed at a high frequency level, with the same average of 4.04 (SD=0.96 & 1.12, respectively). The least-used strategy was the use of word lists (strategy 32, mean=2.44, SD=1.23).

The results indicate that the participants were high cognitive strategy users. Moreover, the strategy of taking notes in class was shown to be used at the highest frequency level compared with other cognitive strategies. This might be explained by the fact that they were already aware of the importance of taking notes as an effective strategy when learning Vietnamese vocabulary. With the same strategy of note taking, it is possible that each learner can create their notes in different styles in order to easily remember new words. That is to say, taking notes is a learning tool that provides unique information for each individual and facilitates their understanding using their own notes. The result was also in line with Zare's (2012) statement that repetition, resourcing, translation, grouping, note taking, deduction, recombination, imagery, auditory representation, key word, contextualization, elaboration, transfer, and inferencing are among the most important cognitive strategies that learners employ in language learning.

Learners' use of determination strategies

The table below uncovers the frequency of five individual strategies under the determination strategy category employed by the participants in order to discover or learn new lexical items.

Table 4
Determination strategies employed by participants

Determination strategy (*N=55*)		Mean	Std. Deviation	Level of strategy use
DET2:	Check for L1 cognate (e.g. *mutter* in German and *mother* in English from a common parent word) to learn new words	3.85	1.1	High
DET3:	Analyze any available pictures or gestures	3.80	0.95	High
DET5:	Guess the word's meaning from textual context	3.51	1.03	High
DET1:	Analyze part of speech (verb, noun, adjective, etc.)	3.15	1.16	Medium
DET4:	Use word lists to learn new lexical items	2.62	1.31	Medium

DET1-5 refers to determination strategy codes in the questionnaire.

Based on the findings in Table 4, the results of the mean scores regarding the determination strategy categories show that the most commonly used strategies, at the high frequency level, were checking for L1 cognate (strategy 2, mean=3.85, SD=1.10), analyzing any available pictures or gestures (strategy 3, mean=3.80, SD=0.95), and guessing the word's meaning from textual context (strategy 5, mean=3.51, SD=1.03), respectively. The fourth is the strategy of analyzing part of speech (strategy 1, mean=3.15, SD=1.16), followed by using word lists to learn new lexical items (strategy 4, mean=2.62, SD=1.31), at the medium level of strategy use.

In regard to checking for L1 cognate, it is plausible that the participants preferred to employ this strategy quite often. The reason might be that Vietnamese is closely related to Thai in terms of sound and meaning. For example, the following pairs of words sound similarly and have the same meaning: "mẹ" and "แม่", meaning "mother"; "mèo" and "แมว", meaning "cat"; and "mực" and "หมึก", meaning "squid". And, if the target language is closely related to L1, cognates may be an excellent resource for learners both to guess the meaning and to remember new words. In language learning, learners may benefit from cognate awareness. Another reason might be that knowing the L1 equivalent also gives the learner the sense of certainty about the meaning of a word, a certainty that is a vital first step for reinforcing the form-meaning connection and retaining the new word in long-term memory, according to Liu (2008).

Learners' use of social strategies

This section reveals the social strategies employed by the participants. Table 5 shows the frequency of seven individual strategies under the social strategy category.

Table 5
Social strategies employed by participants

Social strategy (N=55)		Mean	Std. Deviation	Level of strategy use
SOC9:	Ask classmates for meaning	4.24	0.82	High
SOC11:	Study and practice meaning in a group	3.47	0.94	Medium
SOC8:	Ask teacher for a sentence including the new word	3.31	1.15	Medium
SOC10:	Discover meaning through group work activity	3.27	1.34	Medium
SOC7:	Ask teacher for paraphrase or synonym of new word	3.09	1.21	Medium
SOC6:	Ask teacher for L1 translation	2.78	1.21	Medium
SOC12:	Ask teacher to check word lists for accuracy	2.64	1.13	Medium

SOC6-12 refers to social strategy codes in the questionnaire.

As shown in Table 5, the results indicate that the participants most commonly employed the social strategy of asking classmates for a word's meaning (strategy 9, mean=4.24).The six remaining social strategies were found to be at the medium level of usage, which included studying and practicing word meaning in group (strategy 11, mean=3.47), asking the teacher for a sentence including the new word (strategy 8, mean=3.31), discovering meaning through group work activities (strategy 10, mean=3.27), asking the teacher for a paraphrase or synonym of the new word (strategy 7, mean=3.09), asking the teacher for L1 translation (strategy 6, mean=2.78) and asking the teacher to check word lists for accuracy (strategy 12, mean=2.64), respectively.

It is obvious that the participants were generally moderate users of social strategies. Among such strategies, asking classmates for word meaning was the only high-frequency strategy used by learners. This is consistent with a study of Schmitt (1997) which reported that the only other frequently used discovery strategy was asking a classmate, at 73 percent. This strategy was used both inside and outside the classroom, indicating that the participants were quite independent of their target language instructor. It may be that participants preferred to use the strategy of asking for help from their classmates because this type of strategy can help them develop cooperative learning, as in reality they can certainly learn from their peers as well. It might also be that they feel more comfortable and less embarrassed when interacting with their classmates instead of directly asking their instructor.

Learners' use of memory strategies

Concerning memory strategies employed by the participants, Table 6 shows the frequency of 18 individual memory strategies.

Table 6

Memory strategies employed by participants

Memory strategy (N=55)		Mean	Std. Deviation	Level of strategy use
MEM13:	Infer meaning through images and pictures	3.95	1.01	High
MEM22:	Study the sound of the word	3.73	1.03	High
MEM28:	Use L1 cognates to remember the word	3.73	1.13	High
MEM15:	Use semantic map (e.g. animals: dogs, tigers, elephants, and monkeys)	3.69	1.2	High
MEM23:	Say new word aloud when studying	3.65	1	High
MEM14:	Associate the word with its coordinates (e.g. apple – with other types of fruit like peaches, cherries or pears)	3.62	1.15	High
MEM19:	Connect the word to its synonyms or antonyms	3.56	1.07	High
MEM27:	Study part of speech of the word	3.25	1.19	Medium
MEM17:	Using Loci Method (e.g. recalling a familiar place like a street and placing item 1 to location 1, item 2 to location 2 and so on)	3.04	1.35	Medium
MEM21:	Study the spelling of the word	2.98	1.11	Medium
MEM20:	Use the new word in sentences	2.91	1.09	Medium
MEM25:	Use Key Word Method (e.g. word in L1 which sounds like word in L2)	2.87	1.25	Medium
MEM16:	Using Peg Method (e.g. "một [one] – bột [flour]", "hai [two] – chai [bottle]", and "ba [three] – ca [mug]")	2.71	1.26	Medium
MEM18:	Group words together to study them	2.64	1.25	Medium
MEM26:	Use physical actions when learning the word	2.53	1.15	Medium
MEM29:	Use semantic feature grid to illustrate the meaning or collocational differences between sets of similar words	2.49	1.09	Medium
MEM24:	Underline initial letter of the word	1.67	1	Low

MEM13-29 refers to memory strategy codes in the questionnaire.

Table 6 shows the memory strategies which were employed by the participants. Of all memory strategies, the results reveal that strategy 13, inferring meaning through images and pictures, was the most frequently used (mean=3.95). The second and third most commonly used strategies were strategy 22, by which they studied the sound of the word, and strategy 28, by which they often used L1 cognates

in study to remember word meaning (mean=3.73). The participants also used semantic maps (strategy 28), and said the new word aloud when studying, with averages of 3.69 and 3.65, respectively. All of these memory strategies reported a high level of use. The remaining memory strategies were reported to be used at a medium level, except for underlining the initial letter of the word, which saw a low level of reported use.

The results reveal that the participants employed several memory strategies at different frequency levels. Inferring meaning through images and pictures appeared to be the memory strategy most commonly used. It is possible that images and pictures are something concrete in learners' minds. These can easily link learners to new target words and help them retain meaning in their memory. Associating visual images and pictures could help learners remember them better. The lecturer of the Vietnamese course also made use of a lot of visual images and pictures. These were found to be very useful in helping learners to easily remember the meaning of new Vietnamese words. Smith and Robinson (2016) also support that associating the use of positive, pleasant images that are vivid, colorful and three-dimensional can facilitate learners to remember new words better.

Learners' use of metacognitive strategies

The last section presents the metacognitive strategies employed by the participants. Table 7 lists the frequency of four individual strategies under the metacognitive strategy category.

Table 7
Metacognitive strategies employed by participants

Metacognitive strategy (N=55)		Mean	Std. Deviation	Level of strategy use
MET39:	Continue to study a word over time	2.96	0.88	Medium
MET38:	Review the word soon after its first appearance, maybe 5-10 minutes later; 24 hours later; one week later or one month later, etc.	2.82	1	Medium
MET36:	Skip or pass the new word	2.04	0.84	Low
MET37:	Use Vietnamese-language media (songs, movies, newscasts, etc.)	1.98	1.01	Low

MET36-39 refers to metacognitive strategy codes in the questionnaire.

The findings in Table 7 reveal that the participants mostly used strategy 39, by which they sometimes continued to study a word over time (mean=2.96), and strategy 38, by which they sometimes reviewed a word soon after they first saw it (mean=2.82). Regarding the two remaining metacognitive strategies, the participants reported that they rarely skipped or passed new words (strategy 36, mean=2.04) or used Vietnamese-language media (strategy 37, mean=1.98).

Metacognitive strategies enable learners to control their own cognition. They are strategies which entail overviewing and linking with material already known, paying attention, delaying speech production, organizing, setting goals and objectives, planning for a language task, looking for practice opportunities, self-monitoring and self-evaluating (Zare, 2012). These strategies are employed for managing the overall learning process (Oxford, 2003). An interesting note regarding metacognitive

strategies is that of the four strategies mentioned in the present study, there was no strategy at the high frequency level. Two strategies that were reported to be employed at the medium level were "continue to study the word over time" and "review the word soon after its first appearance". These strategies were familiar to the participants, whereas the remaining metacognitive strategies saw low levels of use.

Metacognitive strategies were found to be the least-used strategies among the participants. In the context of foreign language learning, this result is consistent with the findings of Rabadi (2016), Al-Khasawneh (2012), and Doczi (2011), all of which reported that metacognitive strategies were the least frequently used among five strategy categories. Metacognitive strategies may see less use because learners have limited exposure to the target language outside class, so they might not learn it consciously. Another reason for the relative neglect of this strategy is that students tend to rely too much on their instructor in class, since they might trust the instructor as a native speaker and as the only person with whom they can often interact in the target language. Furthermore, the students seldom use Vietnamese-language media when learning Vietnamese. With their lack of experience in learning Vietnamese, the participants may not have enough knowledge to productively interact with Vietnamese-language media, and in reality media sources for Vietnamese language learning are rather limited. Finally, the students rarely have opportunities to listen to someone speaking Vietnamese apart from their instructor, as there are relatively few Vietnamese in their Thai surroundings.

Relationship between learners' L3 strategy use and their success

As a prelude, descriptive statistics of the vocabulary test scores obtained were computed. Out of 40, the average score of participants was 28.3 (SD = 7.69), with the median of 28, which suggests that the vocabulary test scores were normally distributed. The minimum score was 7, and the maximum score was 40.

To answer the second research question, Pearson product-moment correlation coefficient was computed to assess the relationship between the vocabulary learning strategies employed by Thai EFL students in learning Vietnamese as their third language, and their vocabulary test scores. The result reveals that there was a non-significant correlation of -.094 (p = .494) between learners' vocabulary strategy use when learning Vietnamese and their success.

The result of no observed relationship between learners' strategy use and their vocabulary test scores can be explained by several reasons. One reason is about a mismatch between strategies used while learning and Vietnamese vocabulary test taking. To clarify, it is believed that each learner used different VLSs at different frequencies to facilitate their learning of Vietnamese vocabulary. Some strategies might be thought of as effective in learning and possibly in tackling a vocabulary test. However, when examining their Vietnamese vocabulary knowledge, those supposedly helpful strategies produced contrasting vocabulary test results (learners got the answers wrong). For example, the mean scores of strategies used by Participant 7 and Participant 52 were at high levels of frequency (4.08 and 3.76, respectively), but they got low vocabulary test scores, which were 7 and 15 (out of 40), accordingly. Another reason is that during the vocabulary test itself, there might be some factors interfering with learners' recall of word meaning, such as test anxiety and familiarity with the test content. The participants had never taken any type of Vietnamese language examination before. This may have caused students to feel worried and anxious during the exam. Thus, it is possible that their results were negatively affected.

As reported, vocabulary strategy use of learners was at the medium level. This may also affect the observed correlation between their use of strategy and their vocabulary test scores. An explanation for this effect might be that Vietnamese and Thai have a lot of shared words to be memorized, and that the participants were familiar with most of the VLSs used in the present study. Once they have become familiar with these strategies, they may learn new vocabulary unconsciously, without paying much attention to which strategy they use. It could be that they did not realize they were actually using learning strategies at that time, and that they did not struggle to use more strategies in their learning. As a result, they may not be just medium strategy users.

5. Pedagogical Implications

These results come from a study of Thai learners; those from other cultures may produce somewhat different patterns of vocabulary learning strategy use. However, it appears that the learners did use VLSs and were aware of the importance of VLSs. The evidence is that they were usually using VLSs either at a high or medium level. Using a strategy at a medium level shows that the learners are aware of the strategies, but need to be encouraged to use them more in their learning process (Oxford, 1990).

Some implications can be drawn from the results. It is possible for language instructors to incorporate strategy training in their classes. Vietnamese instructors should put more emphasis on commonly used VLSs such as taking notes in class (under the cognitive strategy), associating the use of images and pictures (under the memory strategy), asking classmates for meaning (under the social strategy) and checking for L1 cognates (under the determination strategy). The instructors can also encourage learners to work in pairs or groups by implementing more collaborative activities in the classroom. Pair work provides more opportunities for learners to engage in the tasks and encourages more deliberations about language (Lasito & Storch, 2013), while group work prevents learners from resorting to their L1 when encountering a language problem, and helps them resolve their deliberations correctly. By doing so, this could help elevate the use level of social strategy. Cognate-based instruction is also an alternative to incorporate in Vietnamese class since it can positively influence language acquisition (Zoghi & Sahebkheir, 2014). In addition, strategies which are unfamiliar to learners but appropriate in the context of learning Vietnamese, such as metacognitive strategies, should also be incorporated in teaching methods in order to promote prospective students' learning of Vietnamese or another third language. The results of Rasekh and Ranjbry's (2003) study support the notion that explicit metacognitive strategy training has a significant positive effect on the vocabulary learning of EFL students.

When learning a new language, a better understanding of the use of VLSs is crucial for language learners to be aware of their own strategies so that they can get the highest benefit from their process of language learning. Language learning strategies are transferable, and the strategies developed when learning a first foreign language have a valuable contribution in learning a later one (Çelik-Korkmaz, 2013). Hence, language learners can definitely apply the VLSs mentioned in the present study in learning not only a third language but also additional ones, in which English is the main medium of instruction. Language instructors should raise learners' awareness, incorporate appropriate strategies for different contexts of learning, and suggest the various strategies in order to encourage students to employ VLSs more

actively. Finally, learners should be trained in a variety of VLSs so that they can gain the greatest benefit from them.

6. Recommendations for Future Study

Since this study was conducted with a limited number of participants, which may not permit generalization, future research in this matter should be conducted with a broader range of data and larger sample size. Furthermore, comparing the use of vocabulary learning strategies between learners from different disciplines, for example, engineering, science, information technology and architecture, could potentially yield more interesting results. In addition, studying the effects of culture, motivation and effective teaching methods on VLSs is recommended in order to gain better understanding of other relevant learning strategies.

Regarding research instruments, a better approach to conducting similar studies through interview or observation of learners' use of strategies is urgently recommended. This could offer insightful results and yield more potential pedagogical implications.

7. Conclusion

This study aimed to investigate third language VLSs of Thai EFL learners when learning Vietnamese. Based on the results of the study, undergraduate Thai EFL students learning Vietnamese at KMUTT as their L3 were found to be medium-level strategy users. The findings revealed that learners used cognitive strategies most frequently, as they were familiar with these traditional strategies which aligned with the teaching approach of the Vietnamese instructor. The least frequently used strategies were metacognitive ones. The findings also indicated that there was no significant correlation between learners' strategy use and their success. This study could be useful for both language instructors and language learners because it offers information regarding the VLSs preferred by Thai EFL students learning Vietnamese as their L3. Moreover, this study could raise awareness of both teachers and learners regarding the use of VLSs, and significantly contribute to both teaching and learning Vietnamese as a third language.

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