HNUE JOURNAL OF SCIENCE Educational Sciences, 2023, Volume 68, Issue 3, pp. 17-30 This paper is available online at http://stdb.hnue.edu.vn

AN EXPLORATORY STUDY OF LEARNING STRATEGIES DIFFERENCES BETWEEN ENGLISH MAJORS AND NON-ENGLISH MAJORS

Phan Thi Lan Anh*, Huynh Trung Chanh and Vo Van Viet Faculty of Foreign Studies and Education, Nong Lam University Ho Chi Minh City

Abstract. This study aims to explore the language learning strategies employed by undergraduate students at a university in Vietnam and the varied use of language learning strategies among English major and non-English major students. The Strategy Inventory for Language Learning (SILL) was used to collect data from 296 English-majored students and 1450 non-English-majored students. The data was analyzed using SPSS version 22.0 and the findings showed that students whose main field of study is English use learning strategies more frequently than the ones who study other sciences. Both groups of students apply direct strategies including memory, cognitive, and compensation at a higher rate than indirect strategies of metacognitive, affective, and social. For English learning enhancement, students should be made to increase their consciousness as well as awareness about learning strategies and teachers should manipulate learning activities that fit the strategies so that better efficiency and outcomes would be achieved.

Keywords: English major, learning strategies, non-English major, second language learner.

1. Introduction

Language learning strategies (LLS) have acknowledged special attention and received great recognition in the past few decades as they play a crucial role in the process of learning a language. The use of language learning strategies is considered the most important factor in second language acquisition [1], [2], even more important than language teaching strategies [3]. Language learning strategies, along with learning styles, are major determinants to assess how and how well a student learns a language [4]. Language strategies can enable learners to be more independent, promote learners' autonomy and lifelong learning in acquiring a language [4], [5], and also assist learners achieve better language proficiency [6], [8].

Researchers have found that learners who use more effective strategies are likely to have better learning results [7], [9], [12]. Good learners can find ways to memorize their lessons more easily and make them more meaningful [13]. They have ways to arrange and combine specific kinds of language learning strategies effectively for their learning needs [4]. Learners who have more learning strategies will be more successful in learning a language than others [14]. If other elements are equal, part of this success rate is attributed to various which learners employ to complete their tasks.

There are several ways that students may actively impact their own learning and academic performance [15]. Some students may perform better than others as a result of using more effective learning strategies or picking up tips from other successful peers [14]. This proves that

Received May 24, 2023. Revised June 12, 2023. Accepted July 4, 2023. Contact Phan Thi Lan Anh, e-mail address: anh.phanthilan@hcmuaf.edu.vn

how effectively language teaching and learning is conducted depends on the strategies that are used 16]. However, students are not fully aware that learning strategies might help them learn more quickly and efficiently. Therefore, skilled educators must encourage their students to apply a wider variety of appropriate learning strategies to their study so that learners can employ language learning tactics to support their learning activities and resolve issues that arise during their learning [4], [14]. In order to help students to improve their language proficiency, it is crucial to understand the different language learning techniques they employ.

Several studies have been conducted to investigate the patterns of language learning strategies used by students; however, a very small number of such researches were carried out in Vietnam where the context is extremely different from other countries. Thus, the current study aimed at exploring the language learning strategies employed by undergraduate students at a university in Vietnam and the varied use of language learning strategies among English major and non-major students. The following research question was addressed to achieve the aim of this study: Are there any significant differences in language learning strategies between English major and non-English major students?

2. Content

2.1. Literature review

2.1.1. Concepts of language learning strategies

By 1990, language learning strategies were a newly emerging area of research but received high recognition in language learning and teaching. Researchers have provided a large number of definitions for the concept of learning strategies. One of the earliest researchers, Rubin [13] defines learning strategies as "the techniques or devices which a learner may use to acquire knowledge" [13:43]. In other words, learning strategies are named as a series of techniques that can support second language learning [17]. Oxford [10] clarifies that language learning strategies are the procedures of specific actions taken by the learner in order to complete a particular task, to solve a specific problem, to "make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" [10:8].

O'Malley & Chamot [18] explain language learning strategies are special thoughts and behaviors that learners use to comprehend, learn, or retain new information. Oxford [19] and Chamot [2] share similar viewpoints that language learning strategies are specific behaviors and conscious thought processes and actions that learners use to achieve a learning goal and to enhance their language learning.

2.1.2. Classification of language learning strategies

Rubin [20] classifies learning strategies into direct learning strategies and indirect ones. The direct ones with six kinds of strategies contain clarification, monitoring, memorization, inductive inference, deductive reasoning, and practice. The indirect ones categorize into two kinds of strategies including creating opportunities for practice and production tricks.

O'Malley et al. [7] divide language learning strategies into metacognitive, cognitive, and social-emotional groups with 26 learners' strategies. The strategies in metacognitive and cognitive groups are similar to Rubin's direct and indirect categories; however, the presence of the social-emotional category is an important insight to the great attention to interactional strategies in language learning [21].

Oxford [22] proposes two major classes of language learning strategies, which are direct and indirect ones. Direct learning strategies require mental processing and direct use of the target language. The direct strategies are classified into memory, cognitive and compensation strategies. Memory strategies, which relate to how learners remember language items, are used to store and

retrieve new information. Cognitive strategies, which relate to how students acquire language knowledge, help learners to comprehend and produce language with reasoning, summarizing, etc. In addition, compensation strategies, which enable students to make up for limited knowledge, are utilized to fill the gap of learners' particular limitations in getting their messages through, such as asking for repetition [10], [21].

On the other hand, indirect strategies support and manage learning without involving the target language [10]. They are divided into three subsections including metacognitive, affective, and social strategies. Metacognitive strategies allow learners to take control of their knowledge to centering, arranging and planning, and evaluating their learning process. In this sense, learners can link old and new knowledge. Affective strategies deal with the emotions, attitudes, and values of learners. Social strategies involve using learners' social skills by interacting with other people.

2.1.3. Empirical studies on differences in using language learning strategies between English major and non-English major students

In recent research on language learning strategies, the results show that students used different types of direct and indirect learning strategies among six Oxford categories at the medium level [23], [24] or with high to medium frequency [25], [26]. The meta-cognitive strategies were the most frequently used among others [23], [27]. Pathomchaiwat (2013) found a completely different result that the language learning strategies most regularly applied by the students were affective strategies and compensation strategies. Interestingly, students in social classes used more compensation and social strategies while the ones in science classes employed more metacognitive strategies [29].

The use of language learning strategies is significantly associated with English proficiency levels. Successful and unsuccessful learners were greatly different in using metacognitive strategies but had no considerable difference for cognitive and social strategy groups [30]. The students with higher proficiency levels used language learning strategies more frequently and effectively than those with lower proficiency levels did [23], [31]. The learners who most increased the frequency of their language learning strategies use developed their proficiency most. In other words, more strategic language learners made better progress in their proficiency than less strategic ones [21], [27]. However, Al-buainain's findings (2010)reveal a contemplative result that there was no significant difference in proficiency in overall strategy use.

2.2. Methodology

2.2.1. Participants

Data were collected from two groups of students from Nong Lam University. The first group included 296 English-majored students, and the others were 1450 non-English- majored students. Participants were chosen by single-stage cluster sampling method. Each cluster includes a group of students who registered for the same credit-class in the semester.

2.2.2. Research instrument

The Strategy Inventory for Language Learning (SILL), designed by Oxford, was used for collecting primary data. This instrument has been widely used and often used in investigating second language learning strategies (LLS) [32]. The questionnaire comprises 50 statements on which the respondents rated their LLS using a five-point Likert scale ranging from 'Never or rarely true of me" to 'Always or almost always true of me'. It takes about 30 to 35 minutes to complete the questionnaire.

(1. Never or rarely true of me. 2. Usually not true of me. 3. Somewhat true of me. 4. Usually true of me. 5. Always or almost always true of me.)

2.2.3. Data analysis

All collected data were analyzed by using the Statistical Package for the Social Science (SPSS) version 22.0. Descriptive statistics were employed to display the general language learning strategies of the respondents. Then, T-test was conducted to investigate the differences in language learning strategies between English major and non-English major students. T-test can be performed even when the sample sizes are not equal. The assumptions of a T-test primarily include the normality of the data within each group and the homogeneity of variances between the groups.

2.3. Findings and discussions

2.3.1. Profile of respondents

The total number of respondents is 1746 in which the non-English major students outnumber their English major counterparts, at 83% and 17%, respectively. The gender difference is also great when the percentage of female students (68.4%, equivalent to 1195) is more than twice as much as that of male (31.6%, equivalent to 551). Most of the students in the research are freshmen and sophomore with the collective proportion of more than 70% while the senior students in fourth and fifth year of study constitute less than 20% of total respondents.

Table 1. Respondents' profile

Two to 11 the speciments project									
	Frequency	Percent							
English major	296	17.0							
Non- English major	1450	83.0							
Male	551	31.6							
Female	1195	68.4							
Fifth year	119	6.8							
Fourth year	192	11.0							
Third year	140	8.0							
Second year	607	34.8							
First year	688	39.4							
Total	1746	100.0							

2.3.2. Learning Strategies Use by English Majors and non-English Majors

Memory strategies

Table 2. Memory strategies used by English majors and non-English majors

	Eng	ajors	Non-English majors			
	N	Mean	Std. Deviation	N	Mean	Std. Deviation
I think of the relationship between what I already know and new things I learn in English		3.84	.735	1450	3.44	.897
I use new English words in a sentence so I can remember them	296	3.71	.923	1450	3.43	1.023

I connect the sound of a new English word and an image or picture of the word to help me remember the word.	296	3.57	1.112	1450	3.42	1.080
I remember a new English word by making a mental picture of a situation in which the word might be used.	296	3.75	.923	1450	3.47	1.087
I use rhymes to remember new English words.	296	3.22	1.036	1450	3.31	1.051
I use flashcards to remember new English words.	296	2.89	1.177	1450	3.30	1.192
I physically act out new English words.	296	3.64	.899	1450	3.27	1.076
I review English lessons often	296	3.57	.857	1450	3.40	.997
I remember new English words or phrases by remembering their location on the page, on the board, or a street sign.	296	3.51	1.058	1450	3.34	1.054

As preliminarily seen, the English majors and the non-English majors have the same tendency in utilizing memory strategies to memorize the English lessons. However, the first groups use these strategies more frequently when its mean is significantly higher than that of the second group. It is evident that memory strategies play vital role in learning English. The more a student learns a language, the bigger the need to memorize linguistic materials is to achieve academic success. Despite such frequency difference, both groups share the two most common methods of absorbing English, specifically thinking of relationship between the new and known words and making a mental picture of a situation in which the word might be used. The English majors consider drawing a virtual map between the new and old knowledge as the most crucial technique in learning a new language (Mean = 3.84, SD = .735) while the non-English majors regard such critical mapping as a second option. They prefer the imagination of the context to use the new things (Mean = 3.75, SD = .923) as the subject does not require them to intensively study the linguistic aspect of the language.

After the previous mental memorizing techniques, English major and non-English major students use a realistic method to remember vocabulary. Using new English words in sentences is reported to have been applied regularly with high mean (3.71 and 3.43, respectively). It could be seen as a simplified version of the above strategies because in order to produce sentences containing new words, a student has to activate the knowledge of old lessons related to the new ones and link them together. However, the scale of the context is considerably limited in a sentence compared to a conversation as in the first two strategies.

The less popular memory strategies employed by the 2 groups of respondents are connecting the sound and an image or picture of a new English word, reviewing English lessons often, and physically acting out new English words. The first two strategies in the list are thought to be similarly significant with comparable values (Mean = 3.57 for students specialized in English and Mean = 3.40 for another group of students). The difference which is largely caused by the course requirements lies in the last memory technique of performing the words by gestures. For English major students who are under pressure to completely comprehend vocabulary in both literal and figurative meaning, performing the words in actions (Mean = 3.64, SD = .899) is an effective way to get the actual and symbolic meaning and consequently enhances the possibility to remember the whole. On the other hand, non-English major students apply this strategy less frequently

(Mean = 3.27, SD = 1.076) when their main target is to use these words in their career or everyday conversations.

The above findings particularly correspond to the conclusion of Rubin [13] regarding memory in which he underlined the dramatic impact of finding reasonable ways to memorize lessons. A language student who could use those strategies effectively has more opportunities to achieve good learning outcomes.

Cognitive strategies

Table 3. Cognitive strategies used by English majors and non-English majors

	E	nglish r	najors	Non-	majors	
	N	Mean	Std. Deviation	N	Mean	Std. Deviation
I say or write new English words several times	296	3.46	.938	1450	3.51	1.024
I try to talk like native English speakers.	296	4.08	.937	1450	3.24	1.164
I practice the sounds of English.	296	4.14	.758	1450	3.58	1.025
I use the English words I know in different ways.	296	3.68	.914	1450	3.36	1.041
I start conversations in English.	296	3.22	.959	1450	2.71	1.085
I watch English language TV shows spoken in English or go to movies spoken in English		4.03	.946	1450	3.28	1.133
I read for pleasure in English.	296	3.21	1.045	1450	2.61	1.135
I write notes, messages, letters or reports in English.	296	3.17	1.021	1450	2.56	1.119
I first skim an English passage (read over the passage quickly) then go back and read carefully.	296	3.87	924	1450	3.34	1.117
I look for words in my language that are similar to new words in English.	296	3.50	.960	1450	3.13	1.090
I try to find patterns in English	296	3.62	.991	1450	3.31	1.053
I find the meaning of an English word by dividing it into parts that I understand.	296	3.11	1.058	1450	3.21	1.122
I try not to translate word-for-word.	296	4.01	.856	1450	3.54	1.091
I make summaries of information that I hear or read in English.	296	3.36	1.019	1450	3.07	1.149

Similar to memory strategies, cognitive ones witnessed a higher rate of usage among English major students than non-English majors, but more interestingly, the discrepancy between these 2 groups of students is much wider than the previous aspect. Specifically, although both reported to have practiced the sounds of English most often with highest mean, the gap between 4.14 for English major and 3.58 for non-English major shows significant difference in the way they learn the subject.

Such value is repeated in the remaining research statements for cognitive strategies. While English major students mainly understand the language by [i] trying to talk like native English speakers (Mean = 4.08, SD = .937), [ii] watching English language TV shows spoken in English or going to movies spoken in English (Mean = 4.03, SD = .946), and [iii] trying not to translate word-for-word (Mean = 4.01, SD = .856), the corresponding statistical figures for non-English major are considerably low with the maximum mean of 3.54 for the third statement listed above. That is also the most popular method of English comprehension among the latter group of respondents. This strategy is then followed by the students' attempt to say or write new English words several times ((Mean = 3.51, SD = 1.024) whereas it is less preferable for English major with Mean of 3.46.

The next group of cognitive strategies frequently applied by English major students includes using the English words they know in different way (Mean = 3.68 SD = .914), firstly skimming skim an English passage (reading over the passage quickly) then going back and reading carefully (Mean = 3.87, SD = .924), and trying to find patterns in English (Mean = 3.62, SD = .991). In contrast, non-English major students may think differently about the effects of these strategies on their learning when the related mean values are low, at approximately 3.30.

Evidently, English-major students utilized a larger number of cognitive strategies than their non-English major counterparts. With a variety of subjects in linguistics and language skills, they are either motivated or forced to employ specific strategies to comprehend the lessons effectively. This finding conforms to the research of Kunasaraphan [23]which emphasizes the higher frequency of language learning strategies in learners with better competence. However, it is slightly contradictory the conclusion of Khadari et al [30] who found no considerable difference in cognitive strategies between successful and unsuccessful students. The contradiction is completely comprehensible because academic achievement is not a constituted factor in this study.

The results also reveal that grammar-translation method is not regarded as an appropriate way to understand the language materials. Otherwise, English comprehension could be boosted by access to authentic resources of sounds, conversations, or reading passages as well as the students' endeavor to learn from them. Notably, for students of other majors, repetitive speaking and writing exercises possibly play a vital role in gaining knowledge as this process can reinforce their English and make it available for future use.

Compensation strategies

Table 4. Compensation strategies used by English majors and non-English majors

	English majors			Non	h majors	
	N	Mean	Std. Deviation	N	Mean	Std. Deviation
To understand unfamiliar English words, I make guesses.	296	3.77	.890	1450	3.45	1.056
When I can't think of a word during a conversation in English, I use gestures.	296	3.71	.941	1450	3.32	1.115
I make up new words if I do not know the right ones in English	296	2.73	1.219	1450	2.73	1.182
I read English without looking up every new word.	296	2.61	1.092	1450	2.61	1.140
I try to guess what the other person will say next in English	296	3.07	1.074	1450	2.99	1.101
If I can't think of an English word, I use a word or phrase that means the same thing	296	3.83	.844	1450	3.26	1.052

The compensation strategies for both English major and non-English major students can be classified into two groups. The first group which implies more preference among the research respondents in language enhancement consists of 3 statements concerning [i] guessing to understand unfamiliar English words, [ii] using gestures in case of incapability of a word during a conversation in English, and [iii] using a synonym for an unknown word in English. Despite similar point of view about the strategies, there exists a significant variation in statistical frequency between English major students whose mean ranges from 3.71 to 3.83 and those of other studies with mean from 3.26 to 3.45. The result is greatly in line with the studies of Pathomchaiwat[28] and Rachmawati [29] in which both authors concluded the higher application of compensation strategies in language learning, especially in social classes. Better language basis allows students in these classes to put their guessing skill in operation and produces more reliable outcomes than those of other sciences.

The second group in this table includes less popular methods of making up language products or guessing the possible content of a conversation. Not so many students support them when the mean of each statement is relatively low, at under 3.0, except for guessing strategy among English major students that reaches 3.07. It is recognizable that the students regardless of what profession they are studying have strong awareness of the risk of communication breakdown or misunderstanding when they use too much make-up language or guessing. A better way for language compensation, then, is to use gestures or to alter unknown phrases with familiar ones.

Metacognitive strategies

Table 5. Metacognitive strategies used by English majors and non-English majors

	English majors			Non-English majors			
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	
I try to find as many ways as I can to use my English.	296	3.70	.925	1450	3.28	1.045	
I notice my English mistakes and use that information to help me do better	296	3.90	.815	1450	3.46	1.019	
I pay attention when someone is speaking English.	296	4.33	.771	1450	3.77	1.023	
I try to find out how to be a better learner of English	296	4.32	.787	1450	3.83	1.029	
I plan my schedule so I will have enough time to study English.	296	3.55	.966	1450	3.29	.991	
I look for people I can talk to in English	296	3.46	1.098	1450	3.00	1.124	
I look for opportunities to read as much as possible in English.	296	3.33	1.008	1450	3.13	1.088	
I have clear goals for improving my English skills	296	3.66	.986	1450	3.35	1.024	

Compared to the mentioned above, the metacognitive strategies show surprisingly more positive results with the maximum mean at 4.33 and the minimum at 3.00. This is compelling evidence for the importance of such strategies in language learning. Moreover, there is a similar pattern of interests of both English major and non-English major students. Despite a critical difference in mean (approximately 0.5), paying attention when someone is speaking English (Mean = 4.33 for English major and mean = 3.77 for non-English major) and trying to find out

how to be a good learner of English (Mean = 4.32 and 3.83, respectively) are the two most common strategies for English acquisition. With high values as above, all of the respondents in the research implicitly asserted the need to find out appropriate learning methods that have decisive role in the overall success, and paying attention to the world around them could be seen as a simple but most effective way to achieve it. This result is remarkably relevant to the findings of many authors [25] [26] [24] who all confirmed the vital role of cognitive strategies as well as their highest frequency in language learning.

The statistics of the remaining strategies in this table provide another positive picture of metacognitive exercise of the respondents. The most useable tacks involve particular levels of self-correction and self-direction in learning. Although non-English major students do not apply these strategies as regularly as their English major peers do, the Mean of all remaining statements is more than 3.00. Likewise, the students specializing in English share the same perspective. This group also highlights the significance of their self-efforts to use English as much as possible and of the planning process to increase English learning time. From such description, it is obvious that mature English learners have adequate thinking about the subject, and they tend to find suitable and applicable strategies to learn it better. The implication from the table results may, to some extent, contribute to the finding of Griffiths [21]that the rising frequency of language learning strategies could enhance proficiency.

Affective strategies

Table 6. Affective strategies used by English majors and non-English majors

	English majors			Non-English majors			
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	
I think about my progress in learning English.	296	3.97	.883	1450	3.46	1.000	
I try to relax whenever I feel afraid of using English.	296	3.67	1.160	1450	3.43	1.067	
I encourage myself to speak English even when I am afraid of making a mistake.	296	3.90	.977	1450	3.35	1.068	
I reward myself or treat when I do well in English.	296	3.00	1.251	1450	2.98	1.200	
I notice if I am tense when I am studying or using English.	296	3.72	1.178	1450	3.37	1.105	
I write down my feelings in a language learning diary.	296	2.70	1.244	1450	2.77	1.183	
I talk to someone else about how I feel when I am learning English	296	3.28	1.137	1450	2.94	1.147	

In terms of affective strategies, it is clear that non-English major students do not regularly use them when the Mean of all statements in the table reaches the peak of only 3.46. In contrast to that low frequency, English major students used them more often with significantly higher results. The most preferred strategies in the latter student group are self-thinking about English learning progress (SD = .883) and self-encouragement to speak English even when there is fear of mistakes (SD = .997) with Mean at 3.97 and 3.90, respectively. These two are followed by the solution of stress in learning English whose Mean fluctuates around 3.70. As a matter of fact, the English major students are under more pressure than the others in English learning as it is their

main academic duty and objective while, for other students, it is only a small part of their programs. Consequently, the ability to manage stress and to maintain learning pleasure in language learning can determine the overall outcomes. Being able to take care of their learning, they know when to stop learning due to tension and relax their minds in using English.

Other effective strategies such as self-rewarding, keeping a diary in English, or telling others about their feelings about English learning are reported to not apply to both groups of students. It can be inferred that emotions have little influence on the respondents in this study when they learn English. Instead, more focus is placed on the direct learning strategies of cognition, memory and compensation as classified by Oxford [10]. For better learning outcomes in English, a variety of strategies should be used [7], [9], [10], and in this circumstance, English teachers and learners have tremendous opportunities to boost the outcomes by making good use of emotional factors of learning habits and interests. By utilizing these affective effects, the students may find learning a new language is deeply enjoyable and motivational, from which potential strengths in learning style are likely to be discovered. The combination of adequate learning skills and useful strategies shown in this table could make a substantial leap in English learning.

Social strategies

Table 7. Social strategies used by English majors and non-English majors

	E	nglish r	najors	Non-English major				
	N	Mean	Std. Deviation	N	Mean	Std. Deviation		
If I do not understand something in English, I ask the other person to slow down or say it again.	296	3.77	1.043	1450	3.50	1.084		
I ask English speakers to correct me when I talk.	296	2.53	1.309	1450	2.49	1.256		
I practice English with other students.	296	3.23	1.027	1450	2.74	1.119		
I ask for help from English speakers	296	2.47	1.254	1450	2.51	1.231		
I ask questions in English	296	3.26	1.088	1450	2.84	1.136		
I try to learn about the culture of English speakers.	296	3.56	1.091	1450	3.04	1.150		

The limited application of indirect learning strategies is also indicated in the statistical table of social strategies. Among the 6 surveyed statements, only 2 have high frequency. Specifically, asking the other person to slow down or repeat unknown ideas in English (Mean = 3.77, SD = 1.043 for English major students) is the most common way of the respondents in communication. The corresponding values for the non-English major group are slightly lower, at Mean = 3.50 and SD = 1.084. Except for this strategy, the students of other sciences exercise other social methods in learning English on a remarkably low basis. For instance, they rarely ask for help from English speakers or ask questions in English (Mean at 2.50 and 2.84, respectively), and they do not try to seek the chances to practice English with their peers (Mean = 2.74), either.

This tendency is also visible in the group of English major students. Except for the attempts to learn about the culture of English speakers (Mean = 3.56, SD = 10.91), they sometimes use the interpersonal relationships to improve their English competence by asking for help or practicing with other students with Mean of less than 3.30. Amazingly, the interaction between these students and English speakers hardly takes place when the statistical mean for the relevant

strategies is significantly low, at approximately 2.50 that is equivalent to that of non-English major students.

Such results are somehow conflicting with the assertion of Rachmawati [29] in which the social strategies are used at higher rate by students in social classes than their counterparts in science classes. The difference might arise from cultural traits that form various learning habits between countries. However, once again, this issue implies special treatments which English teachers could take to promote social strategies in English learning. As widely agreed by a number of language educators, authentic materials and contexts are a critical part of language learning. The proper use of social strategies can create some small communities where English is spoken and written naturally. From this viewpoint, more strategic learning is augmented, more progress in language proficiency could be made [21] [27].

2.3.2. Test for differences in learning strategies between English major and non-English major students

An independent samples t-test was administrated to see the differences between English majors and non-English majors in terms of their learning strategies.

In term of memory strategies, English majors and non-English majors do show statistically significant difference (sig.=0.00). The mean of English majors' is 3.5210, significantly higher than that of non-English majors (M=3.3762). This can be said that English major students are more frequently used memory strategies.

The cognitive and compensations strategies also witness that statistically significant difference (sig.=0.00) between English major and non-English major students regarding frequency. The mean of both strategies in the former group of students is 3.602 and 3.288, respectively while that in the latter group only reaches 3.175 and 3.058, respectively. This difference indicates that these strategies are employed by English majors at a higher rate than by non-English majors.

In terms of indirect strategies, namely metacognitive, affective, and social, the mean of English major students is 3.781, 3.462, and 3.136, respectively. These figures are higher than those of non-English major students, at 3.389, 3.185, and 2.854. It can be concluded that the first group of students apply these strategies more often than the second group in their English learning. The difference is also statistically significant (sig.=0.00), which highlights the preferences in learning strategies between 2 groups.

Table 8. Group Statistics										
		N	Mean	Std. Deviation	Std. Error Mean					
Memory	English majors	296	3.521	.546	.031					
	Non-English majors	1450	3.376	.718	.018					
Cognitive	English majors	296	3.602	.536	.031					
	Non-English majors	1450	3.175	.737	.019					
Compensation	English majors	296	3.288	.636	.036					
	Non-English majors	1450	3.058	.779	.020					
Metacognitive	English majors	296	3.781	.614	.035					
	Non-English majors	1450	3.389	.779	.020					
Affective	English majors	296	3.462	.698	.040					
	Non-English majors	1450	3.185	.802	.021					
Social	English majors	296	3.136	.759	.044					
	Non-English majors	1450	2.854	.875	.023					

Table 8. Group Statistics

Table 9. Independent Samples Test

Tubic 7. Independent Samples 16st												
Levene's Test for Equality of Variances				T-test for Equality of Means								
									95%	CID		
		F	Sig.	t	df	Sig.	MD	SeD	Lower	Upper		
Memory	EVA	20.872	.000	3.277	1744	.001	.144	.044	.058	.231		
	EVNA			3.920	527.288	.000	.144	.036	.072	.217		
Cognitive	EVA	31.867	.000	9.476	1744	.000	.427	.045	.339	.516		
	EVNA			11.649	549.833	.000	.427	.036	.355	.499		
Compensation	EVA	10.157	.001	4.752	1744	.000	.229	.048	.134	.324		
	EVNA			5.428	493.887	.000	.229	.042	.146	.312		
Metacognitive	EVA	26.688	.000	8.144	1744	.000	.391	.048	.297	.486		
	EVNA			9.515	509.435	.000	.391	.041	.311	.472		
Affective	EVA	5.553	.019	5.530	1744	.000	.277	.050	.178	.375		
	EVNA			6.060	468.478	.000	.277	.045	.187	.367		
Social	EVA	7.751	.005	5.160	1744	.000	.282	.054	.174	.389		
	EVNA			5.666	469.649	.000	.282	.049	.184	.379		

Note: EVA: Equal variances assumed; EVNA: Equal variances not assumed; SeD: Std. Error Difference; MD: Mean Difference, CID: Confidence Interval of the Difference

3. Conclusion

This study aimed at exploring the learning strategy differences between English major and non-English major students. The findings indicated that the students whose main field of study is English use learning strategies more frequently than the ones who study other sciences. Both groups of students apply direct strategies including memory, cognitive and compensation at a higher rate than indirect strategies of metacognitive, affective and social.

The gap between English major and non-English major students is significant and seeable in their English competence. It is obvious from this research that the students with higher language competence use learning strategies more regularly than the ones with lower competence. For English learning enhancement, students should be made to increase their consciousness as well as awareness about learning strategies.

Among the learning strategies mentioned above, the cognitive and metacognitive strategies are more dominant than the others. Therefore, teachers should manipulate learning activities that fit the strategies so that better efficiency and outcomes would be achieved. In addition, the less popular use of the other strategies could serve as a potential development in English learning. The students, by direction and instruction of the teachers, can acknowledge the significance of these strategies and consequently use them more regularly. This could result in higher academic performance in this subject.

Declaration of conflicting interest: The researchers declare that there is no conflict of interest regarding the publication of this study.

*Acknowledgment: This study was funded by Science and Technology Development Fund, Nong Lam University Ho Chi Minh City; research topic: Assessing Language Learning Strategy Used by Non-English Major students at Nong Lam University in Ho Chi Minh City; Grant number: CS-CB22-NNSP-01.

REFERENCES

- [1] R. Ellis, 2003. The Study of Second Language Acquisition. Oxford: Oxford University Press.
- [2] A. Chamot, 2004. "Issues in language learning strategy research and teaching," *Electron. J. Foreign Lang. Teach.*, vol. 1, no. 1, pp. 14–26.
- [3] A. Hapsari, 2019. "Language Learning Strategies in English Language Learning: A Survey Study," *Ling. Pedagog. J. English Teach. Stud.*, vol. 1, no. 1, pp. 58–68, doi: 10.21831/lingped.v1i1.18399.
- [4] R. Oxford, 2003. "Language Learning Styles and Strategies: an Overview," *Learning*, pp. 1–25.
- [5] H. Holec, Autonomy and Foreign Language Learning. Oxford, UK: Pergamon Press, 1981.
- [6] S. Bremner, 1998. "Language Learning Strategies and Language Proficiency: Causes or Outcomes?," *Asian Pacific J. Lang. Educ.*, vol. 12, pp. 490–514.
- [7] J. M. O'Malley, A. U. Chamot, G. Stewner-Manzanares, L. Kupper, and R. P. Russo, 1985. "Learning strategies used by beginning and intermediate ESL students," *Lang. Learn.*, vol. 35, no. 1, pp. 21–46.
- [8] R. L. Politzer, 1983. "An Exploratory Study of Self-reported Language Learning Behaviors and their Relation to Achievement," *Stud. Second Lang. Acquis.*, vol. 6, no. 1, pp. 54–65.
- [9] M. H. Gerami and S. M. G. Baighlou, 2011. "Language learning strategies used by successful and unsuccessful Iranian EFL students," *Procedia Soc. Behav. Sci.*, vol. 29, pp. 1567–1576, doi: 10.1016/j.sbspro.2011.11.399.
- [10] R. Oxford, 1990. Language Learning strategies: what every teacher should knows. Heinle & Heinle.
- [11] O. Pannak and T. Chiramanee, 2011. "Language Learning Strategies Used by First Year Students at Thaksin University, Songkhla Campus, Thailand," in *The 3rd International Conference on Humanities and Social Sciences*, pp. 1–12.
- [12] M. Pawlak, 1990. "Designing and Piloting a Tool for the Measurement of the Use of Pronunciation Learning Strategies," *Res. Lang.*, vol. 8, no., pp. 1–14, 2010, doi: 10.2478/v10015-010-0005-6.
- [13] J. Rubin, 1975. "What a Good Language Learners Can Teach Us," *TESOL Q.*, vol. 9, no. 1, pp. 41–51, [Online]. Available: http://www.jstor.org/stable/3586011.
- [14] C. Griffiths and J. M. Parr, 2001. "Language-learning strategies: Theory and perception," *ELT J.*, vol. 55, no. 3, pp. 247–254, doi: 10.1093/elt/55.3.247.
- [15] B. Mclaughlin, 1975. "The Monitor Model: Some Methodological Considerations," *Lang. Learn.*, vol. 28, no. 2, pp. 309–332.
- [16] B. T. K. Giang and V. Van Tuan, 2018. "Language Learning Strategies of Vietnamese EFL Freshmen," *Arab World English J.*, vol. 9, no. 3, pp. 61–83, doi: 10.24093/awej/vol9no3.5.
- [17] S. Kean, 2018. "Understanding the Language Learning Strategies of English Language Learners in the Community College System".
- [18] J. M. O'Malley and A. U. Chamot, 1990. *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- [19] Oxford, 2003. "Language Learning Styles and Strategies: an Overview," *Learning*, pp.1-25.

- [20] J. Rubin, 1981. "Study of Cognitive Processes in Second Language Learning," *Appl. Linguist.*, vol. 11, pp. 117–123.
- [21] C. Griffiths, 2003. Language Learning Strategy Use and Proficiency: The Relationship between Patterns of Reported Language Learning Strategy (LLS) Use by Speakers of Other Languages (SOL) and Proficiency with Implications for the Teaching/Learning Situation. Auckland: University of Auckland.
- [22] R. Oxford, 1990. Language Learning strategies: what every teacher should knows. Heinle & Heinle.
- [23] K. Kunasaraphan, 2015. "English Learning Strategy and Proficiency Level of the First Year Students," *Procedia Soc. Behav. Sci.*, vol. 197, no. February, pp. 1853–1858, doi: 10.1016/j.sbspro.2015.07.246.
- [24] D. L. Quang, 2017. "The relationships between language learning strategies and learning styles of ethnic students at Thai Nguyen University, Viet Nam," *Int. J. Sci. Res. Publ.*, vol. 7, no. 8, pp. 159–163.
- [25] H. Al-buainain, "Language Learning Strategies Employed by English Majors at Qatar University: Questions and Queries," *Asiat. IIUM J. English Lang. Lit.*, vol. 4, no. 2, pp. 92–120, 2010.
- [26] A. Nacera, 2010. "Languages learning strategies and the vocabulary size," *Procedia Soc. Behav. Sci.*, vol. 2, no. 2, pp. 4021–4025, doi: 10.1016/j.sbspro.2010.03.634.
- [27] K. Hong-Nam and A. G. Leavell, 2006. "Language learning strategy use of ESL students in an intensive English learning context," *System*, vol. 34, no. 3, pp. 399–415, doi: 10.1016/j.system.2006.02.002.
- [28] P. Pathomchaiwat, 2013. "English Language Learning Strategies Used by University Students: A Case Study of English and Business English Major at Suan Sunandha Rajabhat in Bangkok," *Int. J. Ind. Syst. Eng.*, vol. 7, no. 5, pp. 1157–1161.
- [29] D. L. Rachmawati, 2015. "Language Learning Strategy Adopted By Non-English Department Students in Learning English for Specific Purposes," vol. 7, no. 1, pp. 25–37.
- [30] A. Khadari, A. B. Setiyadi, and A. Nurweni, 2015. "Identifying Learning Strategies between Successful and Unsuccessful Learners in Reading Comprehension," *Unila J. English Teach.*, vol. 4, no. 6.
- [31] N. Thi and B. Hoang, 2013. "English Learning Strategies of Vietnamese Tertiary Students," no. January.
- [32] R. Ellis, 1994. "A theory of instructed second language acquisition," in *Implicit and explicit learning of languages*, N. Ellis (Ed.), Ed. Academic Press.