Effects of Proficiency and Motivation on the Choices of Language Learning Strategies

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Abstract

The objectives of this investigation were twofold: 1) to identify language learning strategies commonly used by Thai EFL learners, and 2) to determine the roles of three variables contributing to their strategy use: language proficiency and motivation. A set of questionnaires consisting of the Strategy Inventory for Language Learning (SILL), and the Motivated Strategies for Learning Questionnaire (MSLQ) was given to 1,405 Thai university students studying English. The analysis revealed that, in general, memory strategies were found to be the most common learning strategies, whereas social strategies were the least common. Motivation was reported to be the most significant variables affecting their choices of language learning strategies. The analysis revealed certain elucidating facts that can be utilized in future planning of English language teaching to improve the English performance of Thai learners.

Keywords: learning strategies, proficiency, motivation, Thai learners

Introduction

Recently, teaching English in several countries has shifted from the teacher fronted classroom to the learner-centered orientation. A substantial body of research studies in English as a Second Language (ESL) and English as Foreign Language (EFL), thus, have been geared towards autonomous and independent language learning (Wenden, 1991), particularly how languages are learned differently by individual learners (Chang, 1999; Cohen, 1998, Oxford, 1990; Stern, 1975). In this regard, language learning strategies have gained interest and popularity among teachers, researchers and educators as they believe that learning strategies are a means of achieving learners' autonomy in the process of language learning (Benson & Voller, 1997; Oxford, 1990).

Language learning strategies have been increasing focused and received attention by researchers and scholars in the field of second and foreign language teaching and learning (e.g., Cohen, 1998; Ehrman et al., 2003; Green & Oxford, 1995; Lan & Oxford, 2003; Oxford, 1990). These studies congruently suggested that learning strategies are one of several individual factors contributing to the success and failure in language achievement. Likewise, learning strategies are considered to be an indicator identifying the source of discrepancies between successful and unsuccessful language learners. Selecting appropriate strategies could enhance the learners' performance of second language learning. Thus, the choices of strategies play a crucial role in learning a language (Shen, 2005; Wharton, 2000).

Several variables were reported to affect the choices of language learning strategies. These factors include age (Ehrman & Oxford, 1990; Lan & Oxford, 2003), gender (Green & Oxford, 1995; Khamkhien, 2010; Lan & Oxford, 2003), and learning styles (Khamkhien, 2012; Ko, 2002). Among these affective factors, increased interest in the roles of language proficiency (Chamot et al., 1999; O'Malley & Chamot, 1990), and motivation (Dörnyei, 2001; Gardner, 1985; Khamkhien, 2010; Mochizuki, 1999; Wharton, 2000) has led to a number of studies investigating the relationship between these three strategies.

Despite the fact that research on language learning strategies within EFL and EFL context is common, this line of research and the effects of individual variables within the Thai EFL context is still an apparent paucity. Moreover, previous research seems to yield different results, leading to the limitation of generalizability of the research findings and pedagogical implication. The principle objective of this study is to fill the gap in this line of research by identifying language learning strategies used by Thai students. The study is also a response to a call to determine the roles of these factors on language learning strategies. Results from the study are expected to provide insights into the language learning strategies of foreign language learners in the Thai context in particular.

Related Studies
1. Language Learning Strategies

Researchers and practitioners have attempted to clearly define and explain language learning strategies. For example, Cohen (1996) defines second language learning strategies as "the steps or actions selected by learners either to improve the learning of a second language, the use of it, or both" (Cohen, 1996: 2). Chamot (2005) defined learning strategies as procedures facilitating learning tasks, while Little (1991) agree that learning strategies enable learners to become more independent, autonomous and lifelong learners. These definitions suggest that language learning strategies can help learners achieve their desired learning goals and outcomes.

Different classifications of language learning strategies are also proposed. In this regard, Oxford (1990) developed the most comprehensive and systematic taxonomy of learning strategies (Ellis, 1994; Olivares-Cuhat, 2002). Oxford categorized language learning strategies into two domains: Direct Strategies and Indirect Strategies. Direct Strategies refer to language learning strategies that directly involve the target language. All direct strategies require mental processing of the language (1990: 37). The three groups of direct strategies are as follows:

1. Memory strategies – techniques specifically tailored to help the learner store new information in their memory and retrieve it later on, e.g., placing new words in context, using keywords and representing sounds in memory, etc.

2. Cognitive strategies – skills that allow students to better comprehend and produce language in different ways, e.g., note-taking, repetition, summarizing text, etc.

3. Compensation strategies – behaviors used to compensate and help them to employ the language, e.g., guessing while listening or reading, or using synonyms or paraphrasing while speaking or writing.

Indirect Strategies, on the other hand, provide indirect support for language learning through focusing, planning, evaluating, seeking opportunities, controlling anxiety, increasing cooperation and empathy, and other means (1990: 151). The three groups of Indirect Strategies are as follows.

1. Metacognitive strategies – behaviors used for arranging, planning and evaluating one's learning, e.g., overviewing and linking with already known material.

2. Affective strategies – techniques which regulate emotional behaviors and motivation, e.g., using relaxation techniques, singing songs in a target language to lower one's anxiety, etc.

3. Social strategies – actions allowing better learner interaction with other people in the language learning process, e.g., asking questions, cooperating

with peers, and developing empathy towards target language speaking people, etc.

Oxford's taxonomy has been accepted and used worldwide to collect data on language learning strategies (e.g., Green & Oxford, 1995; Lan & Oxford, 2003; Olivares-Cuhat, 2002; Oxford & Burry-Stock, 1995; Wharton, 2000). This taxonomy has been employed in a number of studies focusing on correlating strategy use with other individual variables including age, gender, attitudes, motivation, learning style, aptitude, career orientation, national origin, language teaching methods, task requirements, duration, and degree of awareness (e.g., (Goh & Foong, 1997; Gu, 2002; Horwitz et al., 1991; Khamkhien, 2010; Mochizuki, 1999; Mullin, 1992; Park, 1997; Pintrich et al., 1991; Shmais, 2003; Wharton, 2000; Yamashiro & McLaughlin, 2001). Given its comprehensiveness and detailed presentation and popular use of Oxford's learning strategy classification, it is adopted in this study.

2. Language Proficiency

A number of research bodies have established the existence of differences in language proficiency related to language learning strategies (e.g., Khalil, 2005; Magogwe & Oliver, 2007; Park, 1997; Shmais, 2003). A number of ways to measure learners' language proficiency were employed in previous studies. At this juncture, the measurements found to be used in the literature include standardized tests (Nisbet et al., 2005), language achievement tests (O'Mara & Lett, 1990), entrance examinations (Mullin, 1992), duration of studies (Khalil, 2005) and students' GPAs (Shmais, 2003).

Park (1997), for example, investigated the relationship between strategy use of Korean university students and language proficiency. A significant relationship between SILL learning strategies and English proficiency as measured by students' TOEFL scores was found. The study revealed that cognitive and social strategies were more predictive of TOEFL scores than other strategies. Shmais (2003), as measured by GPAs, revealed that students with high proficiency differed from less proficient learners only in their use of cognitive strategies. Similarly, Lan & Oxford (2003) found significant effects on language proficiency for Taiwanese elementary school EFL learners who used of metacognitive, cognitive, compensatory and affective strategies.

Although the studies above used different ways to determine students' English proficiency, the results of these studies shared similarities. The similarities showed that the students' language proficiency may be affected by their learning strategies. That is proficient learners used learning strategies significantly more that their low proficient counterparts (e.g., Goh & Foong, 1997; Green & Oxford, 1995, O'Malley & Chamot, 1990; Park, 1997; Shmais, 2003; Wu, 2008). This means that a high level of proficiency has been associated with an increased use of both direct and indirect strategies (Chang,

1990; Green & Oxford, 1995; Park, 1997). However, the relationship between levels of language proficiency and language learning strategies may not be explicit due to the fact that different settings of learning and cultural background of the learners can generate different results of the studies (Wu, 2008). Thus, further studies are needed to investigate the role of language proficiency in determining learning strategies.

3. Motivation

Gardner (1985) describes motivation and attitudes as the primary sources contributing to the success of individual language learning. Motivation can be a matter that explains why people decide to do something, how long they are willing to sustain an activity, or how hard they are going to pursue it (Dörnyei, 2001). Gardner classified the phenomenon of motivation into four components: a goal, effort, want, and attitude toward learning activities. In this case, the concept of motivation can be grouped into two orientations of reasons: instrumental and integrative. An instrumental orientation is more self-oriented. It can be described as when students have utilitarian reasons such as they want to pass an exam or they want to get a job. The latter refers to the individual's willingness and interest in having social interaction with members of learner group. This orientation occurs when students wish to truly become part of the culture of the language being learned. Both instrumental and integrative orientations lead to more proficiency, but integrative orientation motivated students to learn more (Gardner & MacIntyre, 1993).

Research studies on motivation and learning strategies have increased in number. For example, Khamkhien's (2010) study found a significant effect on the use of language learning strategies due to motivation between Thai and Vietnamese students, especially Thai highly-motivated students and lowly-motivated counterparts. Oxford and Nyikos' study (1989) also indicated that learners with high motivation to learn a language will likely use a variety of strategies as they found motivation was the single most important factor influencing strategy use. Similarly, Mochizuki's (1999) study, pointed out that, after being assured by the Second Grade Test of the Society of Testing English Proficiency (STEP) and the 80-item SILL, 44 second-year and 113 first-year Japanese students used compensation strategies the most often and affective ones the least. The study also reported that motivation affected the learner's choices of strategies.

The result of Mochizuki's study is associated with Tamada's (1996) study investigating 24 Japanese ESL college learners' language learning strategies use and the instrumental and integrative motivation. The study suggested that, centering learning, and evaluating learning strategies had certain influences on learning strategy use. The study also indicated that students' gender, integrative motivation, and instrumental motivation affected the choices

of strategies significantly. Concerning the role of motivation, Chang and Huang's study (1999) explored the relationship between instrumental and integrative motivation on learning strategy use of Taiwanese students at a public university in the United States. The results revealed that the use of their learning strategies was associated with motivational level. Supporting Chang and Huang's study, MacLeod (2002) congruently found that strategy use was not influenced by the learners' particular instrumental and integrative motivation, but it was affected by motivational level.

The results of previous studies described above show a wealth of information with regard to the relationship between language learning strategy use and learner's motivation in learning a language. However, most of the studies appear to be conducted in a variety of contexts and learning environment. The implication of the results is relatively limited by nature. Therefore, given the differences of characteristics of learners, further research in this area is still needed.

Methodology
Participants

1,405 undergraduate students were selected from a public university in Thailand. They fulfilled three main criteria to be qualified for the present study. First, they were at the time of study, either first or second year students studying fundamental English courses. Second, their age ranged from 17 to 21 years. Lastly, all of the participants had studied English for at least 12 years.

Instruments

A set of questionnaires was used to collect data for this study. This set of questionnaires consists of the 50-item Strategy Inventory for Language Learning (SILL) developed by Oxford (1990), and the Motivated Strategies for Learning Questionnaire (MSLQ) created by Pintrich et al. (1991).

The SILL was used to determine learners' language learning strategies. It consists of two parts. Part one is a background questionnaire which was adapted to elicit personal information of the participants, including their language proficiency which was intended to investigate in this study for further analysis. Two questions as to previous English grade and overall GPAs of the participants were added in this part. Part two of the questionnaire lists 50 items of learning strategy statements classified into six categories: memory, compensation, cognitive, metacognitive, affective, and social categories. Responses were scored on a five-point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree".

The MSLQ was adopted in this study to assess several aspects of learners' motivational orientations related to learning such as goal orientation and self-efficacy. The original version of the MSLQ has two sections. The first

section contains 31 items regarding motivation, and 50 statements asking about learning strategies, with a seven point Likert scale assigned. However, in the present study, some adaptations on the MSLQ were made. That is, 50 statements were excluded from the questionnaire because the contents were a repeat of the SILL. Also, scores for each item were assigned on a five-point Likert scale instead of a seven point Likert scale.

A pilot study was conducted prior to the main study to ensure that the participants completely understood the content of the questionnaires. The set of questionnaires was given to 37 students. The questionnaire has a reliability coefficient by calculating the Cronbach alpha of .97 which is an acceptable range for the study.

Data collection and analysis

The set of questionnaires was distributed to 1,405 students at a public university in Thailand. Instructions as to how to complete the questionnaire were explained prior to the test administration. The data obtained from all returned questionnaires were statistically analyzed to establish frequency distribution in the form of descriptive and inferential statistics. In addition, the t-test and separate ANOVAs were performed to determine the influences of language proficiency, and motivation, on the strategy use and to determine whether there were any significant differences among learners with regard to strategy use. The data analysis was carried out using the SPSS 15 statistical program.

Results

1. Overall Learning Strategies Used by Thai Learners

In order to interpret all of the responses in terms of the frequency of strategy use, Oxford's (1990) key to understanding mean scores on the SILL questionnaire with response scale range 1 to 5 was used. That is, the average scores of 3.5 to 5.0 are defined as high use, 2.5 to 3.4 are medium use, and 1.0 to 2.4 mean low use of learning strategies. Table 1 presents overall reported use of language learning strategies by Thai learners.

It is indicates that, among the SILL's six major strategy categories, Thai learners preferred to use memory strategies when learning English (M = 3.63). That is, the students indicated a preference to learn English by grouping, imagery, rhyming, and structured reviewing. As for other learning strategy categories, they showed moderate preference. Meanwhile, it is interesting to note that Thai learners least preferred to ask questions, cooperate with native speakers of English and become culturally aware as social category was ranked last (M = 2.73).

Table 1: Overall Learning Strategies Used by Thai Learners

Rank	Strategy Category	Mean	SD	Min	Max	Level
1	Memory Strategies	3.63	0.56	1.78	5.00	High
2	Compensation Strategies	3.22	0.45	2.00	4.50	Medium
3	Metacognitive Strategies	3.09	0.56	1.78	4.44	Medium
4	Cognitive Strategies	2.98	0.64	1.50	4.83	Medium
5	Affective Strategies	2.75	1.17	0.72	4.67	Medium
6	Social Strategies	2.73	1.00	0.63	4.50	Medium
	Average (N = 1,405)	**3.07**	**0.73**	**1.40**	**4.66**	**Medium**

2. Language Proficiency

In determining the roles of language proficiency affecting the choices of language learning strategies, all returned questionnaires were coded into two groups of students based on their GPAs: (1) students with GPAs more than 2.50 to 4.00, and (2) those with GPAs less than 2.49. These criteria were arbitrarily established to serve the purpose of this study. After the data elicited by the SILL were analyzed, a number of interesting points were found. The results of the choices of language learning strategies based on language proficiency are presented in the following table.

Table 2: Variation in Use of Strategy Category by Language Proficiency

Strategy Category	Low-proficiency Level Learners (N = 803)	High-proficiency Level Learners (N = 592)	f	Sig
	Mean (S.D)	Mean (S.D)		
Memory	3.57 (0.55)	3.68 (0.56)	2.59	0.11
Compensation	3.17 (0.47)	3.26 (0.43)	2.61	0.11
Cognitive	2.84 (0.60)	3.10 (0.65)	10.40	0.00*
Metacognitive	3.02 (0.56)	3.15 (0.55)	3.13	0.08
Affective	2.66 (0.70)	2.83 (0.72)	3.43	0.07
Social	2.69 (0.57)	2.76 (0.68)	0.69	0.41
Average	2.99 (0.58)	3.10 (0.60)	3.80	0.07

*$P < 0.05$

As is clear from Table 2, the mean score of strategy use for high-proficiency level students is higher than that of low-level ones in all strategy categories. This finding suggests that high-proficiency level learners use a wider range of all learning strategy categories than low-proficiency level

counterparts when learning English. However, there is not much difference between these two groups of students as the results of a one-way test of ANOVA (F = 3.80, p = 0.07) showed that no significant interaction was obtained in the use of learning strategy category between less proficient learners and high proficient learners, except for the use of cognitive strategies (F = 10.40, p = 0.00). The result of the comparison confirms a close link between language proficiency and the use of language learning strategies.

3 Motivation

     Further analysis was conducted to explore the relationship between the choices of language learning strategies used by the different level of motivation. In order to successfully determine the roles of motivation on language learning strategy choices, the MQSL questionnaires completed by Thai participants were coded into two groups of students, highly-motivated and lowly-motivated students. The differences in the use of six language learning strategy categories by highly-motivated and lowly-motivated Thai EFL students are shown in Table 3.

Table 3: Variation in Use of Strategy Category by Motivation

Strategy Category	Lowly-motivated Learners (N = 457)	Highly-motivated Learners (N = 948)	f	Sig
	Mean (S.D)	Mean (S.D)		
Memory	3.49 (0.53)	3.77 (0.54)	17.20	0.00*
Compensation	3.13 (0.45)	3.32 (0.43)	10.65	0.00*
Cognitive	2.85 (0.61)	3.11 (0.65)	10.09	0.00*
Metacognitive	2.95 (0.55)	3.23 (0.54)	15.39	0.00*
Affective	2.60 (0.72)	2.93 (0.67)	13.66	0.00*
Social	2.65 (0.63)	2.82 (0.62)	4.81	0.02*
Average	2.95 (0.58)	3.20 (0.58)	11.97	0.00*

P < 0.05

     Interestingly, as shown in the table, similar to language proficiency, Thai highly-motivated learners preferred to use a wider range of learning strategies than their counterparts in all of the six learning strategy categories as the mean score of strategy use for highly-motivated learners is 3.20, while 2.95 for lowly-motivated ones. In addition, ANOVA was performed on the mean scores and showed that there is a statistically significant difference between the amount of use of language learning strategies and all of the six categories (F = 11.97, p = 0.00). This finding demonstrates motivation is an effective variable

affecting the use of learning strategies. By extension, this result shows the strong relationship between motivation and language learning strategies reported usage by Thai learners.

Discussion and Implication

The results of this study provide a greater understanding of learning strategy use among Thai EFL learners. Specifically, the study found that the Thai participants relied greatly on memory strategy category. One possible explanation is that most classroom instructions in Thailand which are primarily based on audio-lingual and grammar-translation methods seem to be rooted in English instruction even though the communicative approach has been substantially promoted (Wongsothorn, 2000). Meanwhile, the social strategy category ranked last. A possible underlining reason is that Thai students are too shy to speak English either with Thais or native speakers. Moreover, since most Thai teachers still use a textbook-based, grammar-translation approach whose lessons mostly focus on grammatical structures, vocabulary, and reading, in regular English classrooms, Thai students might not have a chance to practice social interaction with their counterparts (Kanoksilapatham, 2010). The results are in line with Wharton (2000) and Yang's (1999) study revealing that Asian students expressed strong preferences for memory strategies rather than other strategies. In sharp contrast, they are not similar to previous studies of learning strategies, identifying memory strategy items were the least used by ASEAN learners (e.g., Chen, 2005; Griffiths, 2003; Lan & Oxford, 2003; Mullin, 1992; Oxford, 1996). At this juncture, it is possible that time and place the previous studies were conducted are different, yielding the different results of the studies.

With regard to language proficiency, the study found significant correlations between cognitive strategy use and proficiency level. This result is consistent with Peacock and Ho (2003) and Chen's (2002) studies, confirming that cognitive strategies showed very high correlations with the proficiency level of the participants and were used by high-proficiency learners. The reason why cognitive strategies were strongly linked to the learners' proficiency level is that cognitive strategies play an important role in manipulating and transforming learning materials through in class practicing, analyzing, reasoning and elaboration (Park, 1997). Thus, it is plausible that the higher the proficiency level of the students, the more aware they are of the rules and strategies of language learning.

Next, motivation was found to be a significant factor having an effect on the students' use of all of the six learning strategy categories. This result is consistent with Khamkhien (2010), Mochizuki (1999) and Wharton (2000) confirming that motivation affected the learner's choices of strategies the most strongly of all the factors. In this regard, it is ostensible that motivation is a significant factor for highly-motivated students in learning English, which can

cause action and several efforts to be put fourth during the learning process. An explanation for the highly-motivated students' language learning strategies is that they have strong goals in learning English such as in order to complete course requirements and to study abroad, when compared to the lowly-motivated student group.

Identifying learning strategy use and understanding factors that might affect learning is one of the many possible ways classroom teachers can help students become successful learners. The main findings generated from this study also provide language teachers with deeper insights into how they should be aware Thai students' learning strategies. More specifically, given the findings of the present study, teachers should encourage and motivate learners to learn and understand the language learning process in order to improve their skills in the target language. In this regard, non-threatening instructions are good ways to ease learners' anxiety and enhance their learning motivation. In addition, the teachers need to be sensitive to learners' fears and insecurities and help them to overcome those fears (Wu, 2010).

This study is not without caveats. In light of the exploratory nature of this study and the number of the participants, the results should be interpreted carefully. First, given the limited number of the participants, the findings of this study remain inconclusive and call for subsequent studies analyzing a larger group of participants. Next, as mentioned earlier, it is possible that learning strategies identified might be influenced by other variables e.g., nationality, age, field of study, etc. Therefore, further studies could investigate whether students from different backgrounds make full use of learning strategies in their language learning. In addition, the instruments used in the future studies will probably supplement with other research tools and techniques such as think-aloud protocols concurrent with conducting interviews, and other methods which might provide and support the actual use of strategies and more sample-specific data.

Conclusion

This study aimed to identify Thai EFL university student's types of language learning strategies used when learning English and to explore the roles of language proficiency, and on their choices of learning strategies. Based on the responses from the SILL questionnaire and classification suggested by Oxford (1990), it is apparent that the pertinent learning strategies of Thai EFL students were memory strategies. That is, they preferred to make guesses when they needed to understand unfamiliar words. Likewise, it is interesting to note that most Thai students were not familiar with the use of social strategies when learning English. As for the variables contributing to the choice of language learning strategies, it can be concluded that motivation is the most significant affective factors. Moreover, a statistically significant difference was also found

in the use of cognitive strategies among highly-proficient and lowly-proficient learners. These results support the idea that teachers should be aware of individual differences of language learners, particularly the discrepancy of the level of motivation. Teachers and learners should pay attention to the choice of learning strategies, especially memory strategies and these factors as they can influence language achievement and lead to the improvement of language proficiency.

Acknowledgement

References
Benson P. & Voller, P. (1997). *Autonomy and independence in language learning*. London: Longman.

Chamot, A.U. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics, 25*, 112-130.

Chamot, A.U., Barnhart, S., El-Dinary, P.B., & Robbins, J. (1999). The learning strategies handbook. White Plains, NY: Addison Wesley Longman.

Chang, S.J. (1990). *A study of language learning behaviors of Chinese students at the University of Georgia and the relation of these behaviors to oral proficiency and other factors*. Unpublished Doctoral Dissertation, University of Georgia, Athens, GA.

Chang, C. (1999). *Self-directed target language learning in authentic target language environment: The Taiwanese experience*. Unpublished Doctoral Dissertation. University of York, U.K.

Chang, S.J. & Huang, S.C. (1999). *Language learning motivation and language strategies of Taiwanese EFL students*. Washington, DC: Department of Education.

Chen, C.S. (2002). Self-regulated learning strategies and achievement in an introduction to information systems course. *Information Technology, Learning, and Performance Journal, 20*(1), 11-25.

Chen, C.S. (2005). *Relationship between non-native English speaking EFL pre-service teachers' English language learning strategies and believes toward teaching methodologies*. Unpublished Doctoral Dissertation. The Pennsylvania State University.

Chen, S.Q. (1990). A study of communication strategies in interlanguage production by Chinese EFL learners. *Language Learning, 40*, 155-187.

Cohen, A.D. (1996). Second language learning and use strategies: Clarifying the issues. *CARLA Working Paper Series#3*. Minneapolis, Mn.: The University of Minnesota.

Cohen, A.D. (1998). *Strategies in using a second language*. New York: Longman.

Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. NY: Cambridge University Press.

Ehrman, M.L., Leaver, B., & Oxford, R.L. (2003). A brief overview of individual differences in second language learning. *System, 31*, 313-330.

Ehrman, M.L., & Oxford, R.L. (1990). Adult language learning styles and strategies in an intensive training setting. *Modern Language Journal, 74*(3), 311-327.

Ellis, R. (1994). *The study of second language acquisition*. London: Oxford University Press.

Ganschow, L., Anderson, R., Javorshy, J., Skinner, S., & Patton, J. (1994). Differences in language performance among high-, and low-anxious college foreign language learners. *The Modern Language Journal, 78*(1), 41-55.

Gardner, R.C. (1985). *Social psychological aspects of language learning: The role of attitudes and motivation*. London: Edward Arnold.

Gardner, R.C., & MacIntyre, P.D. (1993). On the measurement of affective variables in second language learning. *Language Learning, 43*, 157-194.

Goh, C.C.M. & Foong, K.P. (1997). Chinese ESL students' learning strategies: A look at frequency, proficiency, and gender. *Hong Kong Journal of Applied Linguistics, 2(*1), 39-53.

Green, J.M. & Oxford, R. (1995). A closer look at learning strategies. L2 proficiency, and gender, *TESOL Quarterly, 29*(2), 261-297.

Griffiths, C. (2003). Patterns of language learning strategy use. *System, 31*, 367-383.

Gu, Y. (2002). Gender, academic major, and vocabulary learning strategies of Chinese EFL learners. *RELC Journal, 33*(1), 35-54.

Horwitz, E.K., Horwitz, M.B., & Cope, J.A. (1991) Foreign language classroom anxiety. In E. K. Horwitz & D.J. Young (Eds.), *Language anxiety: From theory and research to classroom implication* (pp. 27-36). Englewood Cliffs, New Jersey: Prentice Hall.

Kanoksilapatham, B. (2010). Examining English pronunciation competence of Thai teachers: Word stress assignment. In G.T. Papanikos & Nicholas C.J. Pappas (Eds.), *Horizons in Education* (pp. 467-477). Athens: Athens Institute for Education and Research (ATINER).

Khalil, A. (2005). Assessment of language learning strategies used by Palestinian EFL learners. *Foreign Language Annals, 38*(1), 108-119.

Khamkhien, A. (2010). Factors affecting language learning strategy reported usage by Thai and Vietnamese EFL learners. *Electronic Journal of Foreign Language Teaching, 7*(1), 66-85.

Khamkhien, A. (2012). Demystifying Thai EFL learners' perceptual learning style preferences. *3L: The Southeast Asian Journal of English Language Studies, 18*(1), 61-74.

Ko, Y.W. (2002). Perceptual style preferences and their relationship to English achievement and learning strategies of junior high EFL learners in Taiwan. Unpublished Master's thesis. National Kaohsiung University of Education, Taiwan.

Lan, R., & Oxford, R.L. (2003). Language learning strategies profiles of elementary school students in Taiwan. *IRAL, 41*, 339-379.

Little, D. (1991). *Learner autonomy 1: Definitions, issues, and problems*. Dublin: Authentik.

Liu, M. (2006). Anxiety in Chinese EFL students at different proficiency levels. *System, 34*(3), 301-316.

MacLeod, P. (2002). Take two language learners: A case study of the learning strategies of two successful learners of English as a second language with instrumental motivation. *Journal of Language and Linguistics, 1*, 1-13.

Magogwe, J. & Oliver, R. (2007). The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study of language learners in Botswana. *System, 35*, 338-352.

Mochizuki, A. (1999). Language learning strategies used by Japanese University students. *RELC Journal, 30*(2), 101-113.

Mullin, P. (1992). *Successful English language learning strategies of students enrolled at the Faculty of Arts*, Unpublished Doctoral Dissertation, Chulalongkorn University, Bangkok, Thailand.

Nisbet, D., Tindall, E., & Arroyo, A. (2005). Language learning strategies and English proficiency of Chinese university students. *Foreign Language Annals, 38*(1), 100-107.

Olivares-Cuhat, G. 2002. Learning strategies and achievement in the Spanish writing classroom: A case study. *Foreign Language Annals, 35*(5), 561-570.

O'Malley, J.M., & Chamot, A.U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.

O'Mara, F., & Lett, J. (1990). *Foreign language learning and retention: Interim results of the language skill change report*. Advanced technology, Inc.: Reston, VA.

Oxford, R.L. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.

Oxford, R.L. (1996). *Language learning strategies around the world: Cross-cultural Perspectives*. Manoa: University of Hawaii Press.

Oxford, R. & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *Modern Language Journal, 73*, 291-300.

Park, G. (1997). Language learning strategies and English proficiency in Korean university students. *Foreign Language Annals, 30*(2), 211-221.

Peacock, M., & Ho, B. (2003). Student language learning strategies across eight disciplines. *International Journal of Applied Linguistics, 13*, 179-200.

Pintrich, P.R., Smith, D.A., Garcia, T., & McKeachie, W.J. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ).* National Center for Research to Improve Postsecondary Teaching and Learning. Ann Arbor: University of Michigan.

Shen, H.H. (2005). An investigation of Chinese-character learning strategies among non-native speakers of Chinese. *System, 33*, 49-68.

Shmais, W. (2003). Language learning strategy use in Palestine. *TESL-EJ*, 7(2). Retrieved from http://tesl-ej.org/ej26/a3.html.

Sparks, R.L., Patton, J., Ganschow, L., & Humbach, N. (2009). Longterm relationships among early first language skills, second language aptitude, second language affect, and later second language proficiency. *Applied Psycholinguistics, 30*, 725-755.

Stern, H.H. (1975). What can we learn from the good language learner? *Canadian Modern Language Review, 34*, 304-318.

Tamada, Y. (1996). The relationship between Japanese learners' personal factors and their choices of language learning strategies. *Modern Language Journal, 80*, 120-131.

Tamijima, M. (2002). Motivation, attitude, and anxieties toward learning English as a foreign learning: A survey of Japanese university students in Tokyo. *Gengo no Sekai, 20*(1/2), 115-155.

Wenden, A.L. (1991). *Learner strategies for learner autonomy*. New York: Prentice-Hall.

Wharton, G. (2000). Language learning strategy use of bilingual foreign language learner in Singapore. *Language Learning, 50*(2), 203-243.

Wongsothorn, A. 2000. 'Thailand'. In Ho Wah Kam & R. L. Wong (Eds.), *Language policies and language education: The impact in East Asian countries in the next decade* (pp. 229-341). Singapore: Times Academic Press.

Wu, Kun-huei. (2010). The relationship between language learners' anxiety and learning strategy in the CLT classroom. *International Education Studies. 3*(1), 174-191.

Wu, Ya-Ling. (2008). Language learning strategies used by students at different proficiency levels. *Asian EFL Journal, 9*(2), 75-95.

Yamashiro, A.D., & McLaughlin, J. (2001). Relationships among attitudes, motivation, anxiety, and English language proficiency in Japanese

college students. In P. Robinson, M. Sawyer, & S. Ross (Eds.), *Second language acquisition research in Japan: JALT Applied Materials Series, Vol. 4.* (pp. 19-33). Tokyo: Japan Association of Language Teachers Press.

Yang, Nae-Dong. (1999). The relationship between EFL learners' beliefs and learning strategy use. *System, 27*(4), 515-535.

Yu, L. (2003). Learning strategies and their relationship to listening comprehension-A report on Non-English majors in a medical university in China. *Teaching English in China, 26*(4), 3-11.