

Demystifying Thai EFL Learners' Perceptual Learning Style Preferences

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ABSTRACT

Language learning styles are considered one of the affective factors contributing to learners' learning outcome. The objectives of this study are twofold: to identify Thai learners' English learning style preferences and to determine the impact of three variables: gender, field of study and learning experiences on preferred learning styles. 262 Thai university students studying English as a foreign language randomly selected, participated in this study. A 30-item Perceptual Learning-Style Preference Questionnaire was administered to elicit information for the study. The results indicated that Thai EFL learners preferred auditory learning most, followed by kinesthetic, group, tactile, visual and individual learning, respectively. Among these three variables, field of study is the most significant factor affecting the choice of learning styles. However, no statistically significant difference was found in learning experience, or between the mean scores of male and female students in all of the six learning styles. The results have significant implications in that the description of language learning style contributes to a better understanding of how Thai learners learn English. Pedagogically, to be successful in English language teaching, teaching styles should be matched to students' learning styles. Materials and classroom activities should also be compatible with their learning styles to help learners improve learning outcome. In addition, the three variables identified were highlighting, shedding light on pedagogical implications and the awareness of individual differences in learning and teaching a language.

Keywords: perceptual learning style preference; gender; affective factors; learning experience; fields of study

INTRODUCTION

Over the past two decades, many researchers have investigated learning styles in various studies, reflecting their importance in the field of second and foreign language as they are believed to play an important role in language learning, the outcome of learning and achievement (Bidabadi & Yamat 2010; Reid 1987; 1998; Oxford 1999). Students may prefer one learning style to another when performing certain tasks. Since every individual has preferred ways of getting and processing information, learning preferences always influence the way an individual makes decisions and what learning tasks will be comfortable for the learner (Reid 1995). For example, some learning preferences are advantageous in traditional classrooms, while others are more effective in real-life learning situations. Therefore, if students' learning style is known, academics could anticipate their students' preferences, take advantage of their strengths and minimise their weaknesses (Birkey & Rodman 1995; Hartman 1995).

Research in this defined discipline, focusing on examining and understanding language learning style preferences has yielded a plethora of publications (e.g., Bidabadi & Yamat 2010; Hong 2007; Manfat W, 2010; Riazi & Riasat, 2007), and revealed congruent results showing that learners of English were different in their patterns of language learning styles. Moreover, a multitude of studies (Jackson & Lawty-Jones 1996, Jaju et al. 2002; Slater et al. 2007) indicated that personality, gender, fields of

study, motivation, and age are common learner characteristics that have an influence on language learning styles. Given the role of cultural background, nationality and different learning environments, the results of this line of research show different frequencies for the overall language learning style preferences as well as the type and frequency of learning style categories used by learners in EFL and ESL contexts (Man-fat Wu 2010; Wintergerst et al. (2003). Taken together, the incongruent results of these studies leave the picture of learning styles of learners from different background fragmented and mixed (Huang, 1997). In addition, the generalisation of the findings is somewhat limited. As a result, studies focusing specially on particular learners from different settings are needed.

Most people are not aware of their learning style preferences, which can help determine an individual's preferred way of learning (Honey & Mumford 1992). In Thailand, moreover, learners' learning styles seem to be sparse and marginalized. To the best of our knowledge, very few studies have been conducted to identify Thai EFL learners' English learning styles, which would help not only learners' learning but also help improve teachers' teaching. Given the importance of knowing learning styles, this study identified Thai learners' English learning styles using Reid's Perceptual Learning-Style Preference Questionnaire. Since a number of factors were claimed to be impeding or contributing factors to the use of learning styles, this study also aims to determine the roles of three factors, namely, gender, fields of study and learning experience. It is crucial to understand and explore each individual's learning styles as analyzing particular learning styles can be very helpful and beneficial to the students, enabling them to become more focused and attentive learners, which ultimately will increase educational success. The findings of this study are particular valuable for Thai teachers, by providing practical suggestions to accommodate the different learners and their needs.

LANGUAGE LEARNING STYLES

CLASSIFICATION OF LANGUAGE LEARNING STYLES

It is a truism that the classification of language learning styles differs from one researcher to the other. According to Tuan (2011), the definition of learning styles vary in terms of scope and depth, leading to confusion since it is difficult to control and focus on all of them simultaneously. However, some classifications of language learning styles provided by scholars are widely used and accepted. For example, James and Gardner (1995) differentiate learning styles according to perceptual, cognitive, and affective dimensions. Another useful method is to categorize various learning style models by using personality models, information processing modes, social interaction models, and instructional preference models (Griggs 1991; Swanson 1995). Others categorize learning style by physical and sensory preferences, e.g., visual, auditory, tactile and kinesthetic (Gentry 1990). Moreover, in the field of psycholinguistics and education, brain hemisphericity is also used as a component in categorizing learning styles (Asselin and Mooney 1996), stating that right brain and left brain can be associated with global and analytic learners, respectively.

One of the classifications which is widely accepted and adopted in this line of research studies is suggested by Nunan (1991). His classification of learning styles is based on the way learners learn or expose to a language. The four types of learners suggested are as follows.

- 1) **Concrete** which refers to learners who employ very direct means of processing information. Concrete learners will record information received using their senses of sight, smell, touch, taste, and hearing. They view things in a tangible, factual and literal way.
- 2) **Analytical** which means learners whose cognitive strengths lead them not only to analyze carefully and demonstrate great interest in structures but to put a great deal of value in revealing their

independence by performing these things themselves, autonomously. Learners in this group would like to study individually, find their own mistakes and work on assigned task problems.

- 3) **Authority-oriented** which denotes learners who would like their teacher to explain everything to them. This group of learners tend to write everything in their notebook, prefer to study grammar rules and learn by reading.
- 4) **Communicative** which refers to learners who have a desire for the communicative and social learning approach. These learners prefer learning a language by watching, listening to native speakers, talking to friends in English and watching television in English, using English outside class, learning new words by hearing and learning by conversation.

REID'S LANGUAGE LEARNING STYLES CLASSIFICATION

As an initial effort to understand and examine learners' learning styles, Reid's (1995) learning styles are defined as internally based characteristics, often not perceived or used consciously. According to Reid (1995), learning styles can be divided into three major categories: cognitive learning styles, sensory learning styles, and personality learning styles.

Cognitive learning styles can be further classified into *Field-independent and Field-dependent*, *Analytic and Global*, and *Reflective and Impulsive*. *Field-independent* learners learn more effectively step by step, beginning with analyzing facts and proceeding to ideas, whereas *Field-dependent* learners prefer to learn in context and holistically. *Analytic* learners learn individually, and prefer setting objectives. *Global* learners learn more effectively through concrete experience, and by interaction with other people. *Reflective* learners possibly learn more effectively when they have time to consider things before responding, while *Impulsive*, in contrast, are able to respond immediately and prefer taking risks.

Meanwhile, Sensory learning styles can also be categorized into three main classifications; Perceptual learning styles, Environmental learning styles, and Personality learning styles. These three learning styles also have subcategories of learning style preferences depending on characteristics and learners' learning.

Perceptual learning styles refer to *Auditory, Visual, Tactile, Kinesthetic, Group, and Individual* learners. These kinds of learners refer to those who learn a language more effectively by hearing, seeing, hands-on, learning with others and learning alone respectively.

Environmental learning styles can be divided into *Physical* and *Sociological*. The former refers to learners who learn effectively when variables such as temperature, light, time and classroom management are taken into account. The latter learn more effectively when variables such as group, individual, team work, and level of teacher authority are regarded in learning.

Personality learning styles can be classified into a number of learning types based on learners' personality. *Extrovert* learners are interested in concrete experiences, contact with outside, and relationship with others. *Introvert* learners, on the other hand, are more interested in independent situations. *Sensing* learners learn best from reports of observable facts and happenings, and rely on their five senses, while *perception* learners learn more effectively from meaningful experiences. *Thinking* learners learn best from impersonal circumstances and logical consequences. On the other hand, *feeling* learners prefer personalized circumstances and social values. *Judging* learners learn by reflection, analysis, and processes that involve closure, whereas *perceiving* learners learn through negotiation, feeling, and inductive processes that postpone closure. *Ambiguity-tolerant* learners learn best when opportunities for experience and risk, as well as interaction, are present, however, *ambiguity-intolerant* learn most effectively when in less flexible, less risky, and more structured situations. *Left-*

brained learners tend toward visual, analytic, reflective, self-reliant learning, whereas *right-brained* learners are more interested in auditory, global, impulsive and interactive learning.

As illustrated earlier, scholars describe and classify different learners learning styles in different ways. As a result, measurement instruments used in previous studies are also widely different. However, the classification of learning styles provided by Reid (1995) has made remarkable contributions to the field as it seems to be exhaustive and acceptable for a number of reasons. First, it can cover the distinct categories of learning behavior and environment in different situations (Chen 1999). In addition, Reid's learners learning styles' classification can be used to describe learners from different cultures and language backgrounds. Therefore, the present study is based on Reid's classification of learning style preference to describe how Thai EFL learners study English.

FACTORS CONTRIBUTING TO LANGUAGE LEARNING STYLES

A number of studies have examined factors that have an influence on students' language learning styles. These learners' individual differences include learning strategies, learning aptitude, age, gender, culture and affective domain (motivation, anxiety, self-efficacy, etc.). Among these individual-difference variables, gender, fields of study and learning experience are claimed to be crucial and seem to have a great effect in language learning process.

GENDER

Studied have reported on the role of gender in successful language learning and achievement (Bailey, Onwuegbuzie, & Daly (2000); Chamber 1995). These studies indicated that, from the socialization perspective, superiority has been attributed to females' stronger motivation and desire to conform to social structures and norms through language; and thus females are more sensitive in their language use. From the results of these studies, it can be concluded that where there are differences, female students are favored in learning process.

A number of studies focusing on the relationship between gender and language learning styles reveal that gender differences in learning style preferences partially exist among learners. Investigating undergraduate physiology majors, Wehrwein, Lujan, & DiCarlo (2007), for example, found that a majority of male students preferred multimodal instruction, specifically visual, auditory, read-write and kinesthetic learning, whereas a majority of female students preferred single-mode instruction with a preference towards Kinesthetic learning. The results of this study also indicate that male and female students have significantly differently styles. Congruent with Knight, Elfenbein, & Martin (1997) and Brew's (2002) study showed that Learning Style Inventory was sensitive to gender and the validity of instrument score varies for females and males. Brew suggested that for males, a preference for concrete experience is not mutually exclusive from a preference for abstract conceptualization as it is for the female participants.

Incongruent with the above studies, the relationship between gender differences and learning styles is not found in some research studies. Tuan (2011) reported that there was no significant difference between Vietnamese EFL male and female students in auditory learning styles. This means that the use of auditory learning style was equally preferred by both genders. Another study conducted by Knight et al. (1997), using the Learning Style Inventory also found no relationship between separate knowing and abstract conceptualization for males and females. For connected knowing a positive relationship was found for males, but not for females. Thus, the issue of gender differences in learning style preferences is not inconclusive. Taken together, the inconsistent results of this line of research yield the generalisability of the results. These reasons call for more studies to assess for the role of gender differences in learning style preferences.

FIELDS OF STUDY

A further factor worth investigating is fields of study, which have been shown to play a significant role in language learning and the use of learning styles. Fazzaro and Martin (2004) suggested that learning style preferences of the students were likely to differ in the different chosen majors. That is, similar learning styles were likely to be found among the students who are in the same major.

Studies have also shown the existence of a predominant learning style among fields of study. Reid (1987), investigated Japanese, Malay and Korean EFL students and showed that a large number of these students preferred tactile and kinesthetic learning styles. Reid's study also showed that, apart from their language background, discipline (engineering and computer science) played an important role in identifying types of cognitive learning styles. Congruent with Reid's study, Demirbas and Demirkan (2007), propose that when the characteristics of different fields of study are considered, different learning styles may be more effective. Baker et al. (1987) and Stout and Ruble (1991), also examined the difference in learning style preferences between accounting students and other students. These studies revealed that accounting students often had different learning styles compared to other business majors. That is, most of these students belong to the converger and accommodator type of learning styles.

In sharp contrast, some previous studies indicate that the groups belonging to the same field of study do not coincide in their sensory or perceptual and personality preferences for language learning. Rossi-Le (1995) and Peacock (2001), for instance, indicated that the learning style preferences of adult language learners were influenced by their educational and occupational engagement. In short, these studies suggested that, even though the student groups belong to the same field of study, they did not coincide in their perceptual and personality preferences for their language learning.

Although research studies on learning styles and fields of study are common, reflecting a distinction in the use of learning styles between students from different majors and fields of study, the relationship between learners' fields of study and learning styles are not explicit due to conflicting results generated by previous studies. Therefore, more studies are needed to verify the role of fields of study in determining language learning styles.

LEARNING EXPERIENCE

Learning experience is another significant factor which is claimed to have an influence on the use of language learning style. According to Fazzaro and Martin (2004), the development of learning styles of most learners resulted from their past life experiences and the needs of their present environment. Their study revealed that the more experiences the learner has in EFL education, the more students would be able to use various strategies that suit their own learning styles.

Previous studies have examined the relationship between language learning styles and language learning experience. For instance, Tuan (2011) examined EFL students' preferred learning styles, and the relationship between learning style preferences and individual attributes. The findings revealed that perceptual learning style preferences were impacted by some attributes, particularly fields of study and length of tertiary study. The higher levels of English EFL students preferred kinesthetic and tactile learning, whereas the students with the shortest length of studying English tended to be those with a variety of preferred learning styles, except individual learning style.

Keane (1993) examined learning styles, learning strategies and specific background variables like primary language, ethnic background, and length of time in the United States. The results revealed positive associations between length of time in the United States and language learning styles and strategies. Said and Ghani (2009), using questionnaire survey on accounting and engineering students, also confirmed the realization that learning experience might have an effect on the use of learning styles

of learners. Although a few of the studies on learning styles and learning experience were conducted in different learning courses, the numbers of similar study is limited. This limitation warrants the current study to revisit this issue.

Research from the above-review literature has drawn our attention to language learning styles, including several factors particularly gender, fields of study and learning experience. However, some issues were raised about this line of research. For instance, one factor is generally studied in a study. The results of previous studies also vary according to learning environment and cultural background (Bailey et al. (2000). As most of previous studies are grounded on examining language learning styles used by ESL students; therefore, more work is needed on these factors in the context where English described as a foreign language. In the light of the discussion above, the objective of this study is to investigate Thai EFL learners' learning styles and the relationship of three factors, namely, gender, fields of study and learning experience. Specifically, the study was designed to address the following questions:

- 1) What are the perceptual learning style preferences of Thai learners?
- 2) What are the roles of gender, fields of study, and learning experience on their perceptual learning style preferences?

METHODOLOGY

PARTICIPANTS

The participants of this study were 262 Thai university students (male = 102 and female = 160). This group of Thai students was from a government university, randomly selected from nine English classes to take part in this study. Their age ranged from 18 to 20 years. The study was conducted through the regular freshman year courses which are the beginning level of tertiary education. These participants shared common characteristics in a number of ways. First, they had experiences in studying English as a compulsory subject from Grade 1 onwards. Second, they constituted a representative sample of Thai learners in that they were admitted from all over the country to study in the university. In addition, their mother tongue was Thai, and they were studying English as a foreign language.

INSTRUMENT

The 30 item PLSPQ was adapted and used to identify participants' perceptual learning style preferences. The PLSPQ examines four perceptual (auditory, visual, tactile and kinesthetic) and two social (group and individual) learning style preferences. It was selected for this study because it has been reviewed by non-native speaker informants and United States consultants in the fields of linguistics, education, and cross-cultural studies (Reid, 1995). Additionally, it was the most widely used learning styles instrument for non-native speakers of English (DeCapua & Wintergerst, 2004). It has become one of the popular instruments to examine ESL/EFL students' learning styles, which is related to the present study.

The questionnaire consists of two parts. The first part was designed by the author to identify participants' demographic information such as gender, age, fields of study, English grade, and length of English education. The second part comprised 30 items of learning strategy statements classified into 6 categories: Auditory Learning, Visual Learning, Tactile Learning, Kinesthetic Learning, Group Learning, and Individual Learning. Each category provides information on how individuals prefer to learn a language. The type of response scale is based on the Likert scale containing five items with

regard to the degree of agreement or disagreement. That is, the participants were asked to indicate: (1) strongly agree; (2) agree; (3) neutral; (4) disagree; and (5) strongly disagree. The questionnaire was piloted prior to the actual data collection and the reliability Cronbach's Alpha was obtained at 0.873.

DATA COLLECTION AND ANALYSIS

Data were collected with permission from lecturers and students in English classes. The questionnaires were distributed to students enrolled in Foundation English courses. The researcher provided instructions on how to complete the questionnaire. To obtain the reliability of the data, this group of participants was informed that there was no right or wrong answer, and the questionnaire was only for the research purposes. The data obtained from the questionnaires were coded and statistically analyzed to establish frequency distribution in the form of descriptive statistics. Separate *t*-tests and separate ANOVAs were performed to determine the main effect of the three factors: gender, fields of study and learning experience, respectively.

RESULTS

This section presents the results of the descriptive statistics. Generally, some of the responses received rendered significant results, while some others did not.

OVERALL PERCEPTUAL LEARNING STYLES OF THAI LEARNERS

In order to discover the types of perceptual learning styles of Thai learners, the descriptive statistic (means and standard deviations) of the six distinct categories were computed. The general tendency of the distribution showed that of 262 participants, in general, auditory learning style preference ranked first ($M = 3.87$), followed by kinesthetic learning ($M = 3.72$), group learning ($M = 3.66$), tactile learning ($M = 3.50$), visual learning ($M = 3.41$), while responses to individual learning style had the lowest mean score of 3.20. The result of the analysis is presented in the following table.

TABLE 1. Thai learners' perceptual learning style preferences

Rank	Learning Styles	Means	SD	Min	Max
1	Auditory	3.87	0.55	2.20	5.00
2	Kinesthetic	3.72	0.67	1.20	5.00
3	Group	3.66	0.62	1.40	5.00
4	Tactile	3.50	0.66	1.80	5.00
5	Visual	3.41	0.66	1.80	5.00
6	Individual	3.20	0.85	1.00	5.00
	N= 262	3.56	0.44	1.57	5.00

Table 1 demonstrates that the overall mean value of perceptual learning styles was 3.56 with a standard deviation of 0.44. It can be concluded from the table that Thai EFL learners seem to favor learning from hearing words spoken and from oral explanations as auditory major learning style preference ranked first ($M=3.87$). As suggested by Reid (1995), auditory learners may remember information by reading aloud or moving their lips as they read, especially when they are learning new materials. In the meantime, as is clear from the table, it can be implied that the majority of Thai learners

prefer to learn in groups or at least one other student since group major learning style preference ranked third ($M = 3.66$), compared to learning or working alone as individual major learning style preference which ranked last ($M = 3.20$).

THAI LEARNERS' LEARNING STYLES AND GENDER

To successfully determine and get a clearer picture of the roles of gender differences on the choices of language learning styles, the PLSPQ questionnaires completed by Thai EFL students were coded into two groups of students based on their gender. The difference in the use of six language learning strategy categories by Thai male and female students is presented in Table 2.

TABLE 2. Thai learners' learning styles and gender

Learning Styles	Male (N=102)	Female (N=160)	F	Sig.
	Mean (SD)	Mean (SD)		
Auditory	3.77 (0.61)	3.91 (0.52)	2.54	0.11
Visual	3.21 (0.56)	3.51 (0.68)	3.30	0.07
Tactile	3.34 (0.77)	3.58 (0.65)	2.69	0.10
Kinesthetic	3.57 (0.74)	3.79 (0.62)	1.08	0.30
Group	3.60 (0.65)	3.69 (0.61)	0.07	0.80
Individual	2.99 (0.30)	3.30 (0.85)	0.30	0.58
Average	3.41 (0.61)	3.63 (0.66)	1.66	0.32

* $P < 0.05$

As is evident in Table 2, of 262 participants, most of them (61.07% or 160 students) are female, and 102 participants are male (38.93%). With regard to their learning style preferences, the female participants, with the close range of the mean score, preferred to use more learning styles than the male counterparts in all of the six learning style categories. Similarly, the mean scores across the six categories of learning styles, as analyzed by ANOVA, were not significantly different, $F = 1.66$, $p = 0.32$. However, the table shows that both male and female students reported higher use of auditory learning style category. As for the least used learning style category, both male and female students are not different in the use of individual learning style.

THAI LEARNERS' LEARNING STYLES AND FIELD OF STUDY

In determining the roles of fields of study to the choices of language learning styles, all returned questionnaires were coded into five groups according to their fields of study that is, Agriculture, Liberal Arts, Engineering, Education, and Sports Science. The results of the analysis of their language learning styles in each of the six categories are demonstrated in the following table.

TABLE 3. Thai learners learning styles and fields of study

Learning Styles Categories	Agriculture (N = 95)	Liberal Arts (N = 89)	Engineering (N = 38)	Education (N = 28)	Sports Science (N = 12)	F	Sig.
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)		
Auditory	3.95 (0.53)	3.85 (0.51)	3.28 (0.70)	3.74 (0.72)	3.93 (0.51)	3.85	0.05
Visual	3.52 (0.57)	3.37 (0.71)	2.96 (0.83)	3.14 (0.64)	3.72 (0.44)	0.13	0.72
Tactile	3.64 (0.63)	3.48 (0.66)	2.60 (0.89)	2.97 (0.80)	3.61 (0.56)	3.53	0.64
Kinesthetic	3.89 (0.65)	3.66 (0.53)	2.95 (0.96)	3.17 (0.98)	3.70 (0.58)	5.93	0.01*
Group	3.74 (0.65)	3.63 (0.55)	3.30 (0.70)	3.46 (0.98)	3.38 (0.70)	4.66	0.34
Individual	3.30 (0.78)	3.20 (0.89)	2.40 (0.90)	2.94 (0.80)	3.82 (0.45)	1.40	0.24
Average	3.67 (0.64)	3.53 (0.64)	2.92 (0.83)	3.24 (0.82)	3.69 (0.54)	3.25	0.33

* $P < 0.05$

Table 3 shows the distribution of learning style preferences based on fields of study. As shown in the table, statistical analysis did not show statistically significant differences in the use of language learning styles all of the six categories ($p < 0.05$) as anticipated except kinesthetic category ($P = 0.01$). This finding indicates that overall the Thai students from different fields of study are not different in their English learning styles categories except the use of kinesthetic category. Moreover, it is noteworthy to say that the relationship between auditory learning and fields of study of the participants should be taken into account as the ANOVA analysis merely revealed a statistically significant interaction ($p = 0.05$).

THAI LEARNERS' LEARNING STYLES AND LEARNING EXPERIENCE

Under this variable of learning experience, there are two subcategories: students who had less than 12 years of studying English, and those who had more than 12 years of studying English. Basically, the Thai government suggests that students study English as a compulsory subject from Grade 1 onwards. The result shows that (73.28%) of the participants or 192 students had more than 12 years of studying English, and 70 students (26.72%) studied English for less than 12 years. The result of the analysis is shown in Table 4.

TABLE 4. Thai learners learning styles and learning experience

Learning Styles	Studying English Less than 12 years (N=70)	Studying English More than 12 years (N=192)	F	Sig.
	Mean (SD)	Mean (SD)		
Auditory	4.04 (0.59)	3.84 (0.54)	0.15	0.70
Visual	3.44 (0.71)	3.41 (0.65)	0.82	0.37
Tactile	3.79 (0.56)	3.45 (0.71)	3.54	0.06
Kinesthetic	3.86 (0.60)	3.69 (0.68)	1.02	0.32
Group	3.68 (0.63)	3.66 (0.63)	0.80	0.38
Individual	3.12 (0.83)	3.21 (0.86)	0.06	0.81
Average	3.66 (0.65)	3.54 (0.68)	1.07	0.44

* $P < 0.05$

Table 4 illustrates the results of the participants' perceptual learning styles in terms of their learning experience. The table demonstrates that most of the participants who had experience in studying English less than 12 years seem to have a wider range of learning styles than those having experience in learning English more than 12 years, except for individual category. This means that students who had studied English over 12 years were more individual in their learning style preference than those who had studied English for shorter periods of time. However, when the *t*-test was calculated, the results show that learning experience does not affect the participants' learning style preferences. However, as can be seen from the table, it can be said that the use of tactile learning of Thai EFL learners is also crucial ($p = 0.06$). With regard to this result, it can be said that Thai students tend to prefer handling materials, and physical involvement in the class can play a major role in their retention of the information when studying English.

DISCUSSION

Empirically, the current study demonstrated that of all perceptual learning style categories, Thai EFL learners were the most auditory in their learning style preferences. It can be said that Thai learners preferred learning English from hearing words spoken and from oral explanation. In this regard, since studies (Rassool & Rawaf 2007; Zhang & Lambert 2008) indicate that a better understanding of learning styles can be beneficial to both teachers and students, when in an English classroom, Thai English teachers may have Thai students learn English from hearing, audio tapes, lectures, and class discussions. It is possible that the learners can benefit from making tapes to listen to, by teaching other students, and by conversing with their teachers. Liu's (2008) study on students in Taipei reported that responses to the statements of authority-oriented type of learning styles were the highest. However, this result is not in line with studies conducted by Wasanasomsithi (2003), focusing on Thai learners' learning styles. If this is the case, it is possible that the difference of learning environments and teaching styles could have an effect on the choice of learners' learning styles.

With regard to variables affecting the use of language learning styles, the analysis shows no significant difference between Thai learners' perceptual learning styles and gender differences. This finding is congruent with Knight et al.'s (1997) study. However, the present study found that Thai male students are as auditory as females. This appears to be partially compatible with a study conducted by Tuan (2011) on Vietnamese EFL learners, revealing there was no meaningful significant relationship between male and female students in the auditory learning style. However, it was found that males tend to learn less by listening, while females, more than males, tend to be auditory, authority-oriented, need significantly more quiet while concentrating their learning. Meanwhile, unlike many studies (Brew 2002; Isman & Gundogan 2008; Price 1996; Wehrwein et al. 2007), showing that male and female students learn differently from each other, these studies showed that females showed clear differences in their approaches to learning tasks and preferred a more structured environment and kinesthetic learning. A possible explanation is that the participating Thai students are homogeneous throughout the years of their English instruction. Moreover, English is described as a compulsory subject for Thai students, which means that both Thai male and female students are required to study English from Grade 1 onwards. Thus, they might be trained and learned English with teaching styles provided by Thai teachers in the same way, particularly perhaps audio-lingual method which is commonly found in elementary schools in Thailand (Khamkhien 2010).

Fields of study was identified as one of the contributing factors to the use of kinesthetic category at the .05 level of significance. This result is in line with Fazarro and Martin's study (2004), suggesting that people with certain learning styles probably prefer different content areas. It is also in line with a

number of studies suggesting the existence of a predominant learning style among students from various fields of study (Demirbas & Demirkan 2007; Stout & Ruble 1991). Thus, the teachers should take this into account when teaching English to Thai learners. As stated by Slaats et al. (1999), this awareness would provide the teachers with the opportunities to modify their teaching materials and classroom practices according to the learning preferences and their differences in fields of study to achieve optimum results. Therefore, as suggested by the results of the current study, to effectively teach Thai students, activities that allow and support them use language learning styles which suit their preference through appropriate learning activities should be substantially created and used systematically in class. To be precise, teachers should allow these students to move around and change groups frequently in a language classroom. The teachers might use techniques such as question-generating activities and activities that make students act physically, which probably help them improve their language learning and ability.

Although the results indicated that Thai learners preferred auditory learning most, other learning styles, individual learning which ranked last should not be overlooked. According to Reid (1995) and Ramburuth (1998), their studies suggest that learners' learning styles can be changed if a different learning environment is offered. Therefore, learners should try to adjust their learning styles guided by teachers' advice so that they would be familiar with and practice the use of other types of learning styles. The teachers should help students discover their own learning preferences and provide constructive feedback about the advantages and disadvantages of using various learning styles. Moreover, to promote individual learning style, it is strongly recommended that the teachers exert their utmost effort to promote and encourage Thai students to work and study alone as, by this way, autonomous learning is possibly promoted.

Moreover, Marshall (1991) pointed out that teaching styles seem to have an effect on the choice of learners' learning styles. Given the fact that English in Thailand is a foreign language, and English teachers in Thailand might be Thai teachers or native speakers, there might be mismatches or gaps between teachers of English and learners. Hence, there should be further studies focusing on the differences of teaching styles of the teachers of English who are native speakers of the language and Thai English teachers as this might have an effect on the difference in the use of Thai learners' learning styles.

This study calls for a step forward towards developing teacher-student co-operation and effective classroom management. English teachers should be aware of the individual differences of learners and pay more attention to learning and teaching styles. The awareness of learning styles will benefit all stakeholders including students, teachers, educators, education policy makers, course developers to improve the teaching approach and results of English outcomes of Thai learners. For instance, teachers should provide Thai learners with the opportunities to share knowledge needed and how they would like to learn it. Teaching should be tailored to accommodate their needs. Meanwhile, these teachers should be cautioned that the individual differences of learners should not be overlooked since they have an impact on their learning performance and subsequently their language proficiency.

CONCLUSION

This study aimed to identify Thai EFL university students' types of perceptual learning style preferences. The study also aimed to discover whether there were significant differences between male and female students, fields of study and experience in learning English and the choices of language learning styles. Based on the perceptual learning styles' classification which is categorized by Reid (1995), the dominant learning style preferences of Thai EFL students indicated that the majority of Thai EFL

students considered themselves as auditory learners. They preferred learning English as a foreign language by listening to lectures, audiotapes or native speakers of English because they feel that this approach would be useful for their needs, facilitating them to improve their English skills. Meanwhile, Thai students might not prefer study English alone. As for the factors contributing to the choice of language learning style preferences, it can be concluded from the study that field of study is the most significant factor affecting the use of learning styles. No statistically significant difference was found in learning experience, and between the mean scores of male and female students in all of the six perceptual learning styles. Thus, these results support the idea that Thai students from different fields of study have different learning styles, and thus teachers should be aware of these results suggested which should be taken into account when teaching English.

LIMITATIONS OF THE STUDY

The findings of this study enhance our understanding how Thai EFL learners learning English, but limitations need to be acknowledged. The results of this study should be interpreted with caution. First, the instrument used in the present study is the PLSPQ using a Likert scale. It is likely that there is an underlying answer which might affect validity of the results. Specifically, there should be further studies on language learning styles at all levels using greater sample sizes to verify the results of this study.

In addition, it is likely that the language learning styles are influenced by the learners' age, cultural backgrounds, as well as the language learning contexts or circumstances (Dörnyei 2005; Wenden 1999). Therefore, further empirical exploration of other variables, aside from the ones used in the present study, could be conducted in learning English. Moreover, as discussed earlier, further research is needed to focus on teachers' teaching styles and learners' learning styles to see the similarities and differences, and investigate whether they mismatch or not. If this is the case, various suggestions should be provided for teachers with approaches to teaching to accommodate the diversity. Lastly, other learning style preference questionnaires and other methods such as think-aloud protocol, journals and longitudinal study may be employed to explore how learners learn English.

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